

# **PARTS MANUAL**

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**H40XT, H50XT, H60XT  
(A380)**

**CUSTOMER EDITION**

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***HYSTER***



## SECTIONS

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**ABBREVIATIONS QUICK REFERENCE SHEET**

Listed below are abbreviations used in parts manuals to denote the following expressions:

| <b>TERM</b> | <b>DEFINITION</b>                                   | <b>TERM</b> | <b>DEFINITION</b>                  |
|-------------|-----------------------------------------------------|-------------|------------------------------------|
| Amp         | Amperes                                             | FRE         | Freezer Environment                |
| AR          | As Required                                         | in.         | inches                             |
| BDI         | Battery Discharge Indicators                        | LPG         | Liquefied Petroleum Gas            |
| BWI         | Brush Wear Indicator                                | MAP         | Manifold Absolute Pressure         |
| CE          | Communicator End                                    | mm          | millimeters                        |
| CRE         | Corrosive Environment                               | MSTS        | Microprocessor Spark Timing System |
| D/B         | Date Break                                          | NPT         | National Pipe Threads              |
| dbA         | Decibel "A" Scale                                   | O/S         | Oversize                           |
| DE          | Drive End                                           | PTO         | Power Take Off                     |
| ECH         | Empty Container Handler                             | RPM         | Revolutions per Minute             |
| ECH-3       | Empty Container Handler - 3 High Stacking           | S/N         | Serial Number                      |
| ECH-4       | Empty Container Handler - 4 High Stacking           | TMM         | Truck Management Module            |
| ECH-5       | Empty Container Handler - 5 High Stacking           | UL Type D   | Diesel-Powered Safety Rating       |
| ECH-6       | Empty Container Handler - 6 High Stacking           | UL Type DS  | Diesel-Powered Safety Rating       |
| ECH-7       | Empty Container Handler - 7 High Stacking           | UL Type E   | Battery-Powered Safety Rating      |
| ECM         | Electronic Control Module                           | UL Type EE  | Battery-Powered Safety Rating      |
| ECN         | Engineering Change Notice                           | UL Type ES  | Battery-Powered Safety Rating      |
| EEPROM      | Electrically Erasable Programmable Read Only Memory | UL Type G   | Gasoline-Powered Safety Rating     |
| EPA         | US Environmental Protection Agency                  | UL Type GS  | Gasoline-Powered Safety Rating     |
| EPROM       | Electrically Programmable Read Only Memory          | UL Type LP  | Gas-Powered Safety Rating          |
|             |                                                     | UL Type LPS | LP Gas-Powered Safety Rating       |
|             |                                                     | U/S         | Undersize                          |
|             |                                                     | UL          | Underwriters Laboratory            |
|             |                                                     | V           | Volts                              |

## HOW TO USE THE ILLUSTRATED PARTS MANUAL

This parts manual describes and illustrates assemblies, subassemblies, and detail parts needed for service replacement.

The different constructions are indicated by keys and footnotes. The callouts correspond to descriptions found on the next page.

**HYSTER** UNIT CODE D001 NORTH AMERICA 06/2001

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**FRAME**

**ELECTRICAL SYSTEM**

**TRANSMISSION HOUSING** ⇒ S/N D001H-2628

**KEY:**  
A: Diesel  
B: Gasoline and LPG

| ITEM | PART NO. | DESCRIPTION                         | QTY |
|------|----------|-------------------------------------|-----|
| 1    | 2022547  | Transmission                        | 1   |
| 2    | 2023329  | Transmission                        | 1   |
| 3    | 2021670  | Case                                | 2   |
| 4    | 2023418  | Bearing Cap                         | 4   |
| 5    | 296426   | Washer                              | 1   |
| 6    | 293991   | Bolt                                | 2   |
| 7    | 2021390  | Cover                               | 2   |
| 8    | 1371656  | Colter Pin                          | 4   |
| 9    | 2021915  | O-Ring                              | 1   |
| 10   | 2021329  | Plug                                | 4   |
| 11   | 2021675  | Housing                             | 22  |
| 12   | 2021336  | Pin                                 | 39  |
| 13   | 287860   | Bolt                                | 1   |
| 14   | 292682   | Lockwasher                          | 1   |
| 15   |          | Hydraulic Pump                      | 1   |
| 16   |          | ⇒ Figure 5-3                        | 8   |
| 17   | 2021345  | Gasket                              | 1   |
| 18   | 214364   | Bolt                                | 1   |
| 19   | 296418   | Washer                              | 1   |
| 20   | 2021388  | Temperature Switch                  | 1   |
| 21   | 2021389  | Breather                            | 9   |
| 22   | 2021383  | Dipstick                            | 9   |
| 23   | 292515   | Bolt                                | 2   |
| 24   | 136692   | Nut                                 | 3   |
| 25   | 292527   | Bolt                                | 3   |
| 26   | 292531   | Capscrew                            | 2   |
| 27   | 292583   | Lockwasher                          | 4   |
| 28   | 293637   | Bolt                                | 4   |
| 29   | 296420   | Washer                              | 4   |
| 30   | 996403   | Transmission Kit (Includes item 7)  | 1   |
| 31   | 996405   | Transmission Kit (Includes item 14) | 1   |

This Parts Manual is divided into 11 major sections which are listed above. Quick be made by placing the right thumb on the tab of the desired section, bending the pages to the corresponding tab.

©Copy Right Date HYSTER COMPANY See Service Manual for service procedures 5-15

HP990004

## HOW TO FIND THE DESIRED PART NUMBER

### WHEN THE PART NUMBER AND THE NEXT HIGHER ASSEMBLY IS NOT KNOWN:

1. Determine the function and application of the part required. Turn to the Sections Page. Choose the general area of reference most likely to include the part.
2. Turn to the section you chose. Use the Section Table of Contents to determine the assembly which would normally contain the part required. Then locate the part on the assembly breakdown page.

### WHEN THE PART NUMBER IS NOT KNOWN AND THE NEXT HIGHER ASSEMBLY IS KNOWN:

3. Determine the assembly the required part is used on. Turn to the Table of Contents (Page i).
4. Locate the assembly the required part is used on and turn to the page indicated for that assembly. Then locate the part on the assembly breakdown page.

### WHEN THE PART NUMBER IS KNOWN:

5. Use the Numerical Index (Page 15-1) to find the part number. Turn to the page listed and locate the part as indicated by the item number.

### GENERAL:

The assembly breakdowns include part numbers, descriptions, quantities required, keys and footnotes to help in selecting correct parts.

6. Parts Supersession Information. Part numbers that have this history will be displayed in the parts list in the order that they were superseded (from oldest to newest). The superseded part numbers will be shown with a line through them.

Five periods in the PART NO. column (. . . . .) indicate that the part is either *Not Serviced Separately* or there is a reference to another figure. A figure reference is denoted by a pointing hand followed by a figure number in the DESCRIPTION column (☞ Figure 10)

7. Keys are used to show two or more similar assemblies, RH and LH assembly parts, etc. Select the appropriate key, "A", "B", "C", "D", or "E" and the corresponding quantity column to find the required parts. Two periods in the QTY column (..) indicate that the part is not used for that assembly.
8. Indented descriptions under the DESCRIPTION column are used to indicate assemblies and

subparts of assemblies. In the example on the previous page, *BEARING CAP* (Item 2) is a subpart of the major assembly *CASE*.

9. Quantities shown are for one assembly. The quantities of the subpart *BEARING CAP* are indicated as two and two. This means two per *CASE* assembly.
10. Serial number breaks identify the most current parts information and are shown as follows:
  - **S/N D001H2628**  
Indicates last serial number affected.
  - S/N D001H2629** →  
Indicates the first serial number affected.
  - S/N D001H1553 ↔ S/N D001H3291**  
Indicates a range of serial numbers affected.

ECN numbers for pending serial numbers are shown to allow for the inclusion of the most current parts information and are identified as follows:

→ **S/N Pending Per ECN 63243**

Indicates a pending serial number for last unit affected.

**S/N Pending Per ECN 63243** →

Indicates a pending serial number for first unit affected.

Date breaks are used to indicate when a change occurred but a subsequent serial number break was not recorded. This is an arbitrary date usually based on the ECN release and are identified as follows:

→ **D/B 3/00**

Indicates that a change occurred sometime within that month for the item affected.

**D/B 3/00** →

Indicates that a change occurred sometime within that month for the item affected.

**D/B 3/00 ↔ D/B 4/00**

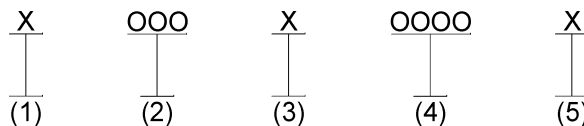
Indicates a range of production dates of the item affected.

Contact your local dealer for Hyster lift trucks for serial number information for items with a ECN or a date break.

### ORDERING PARTS:

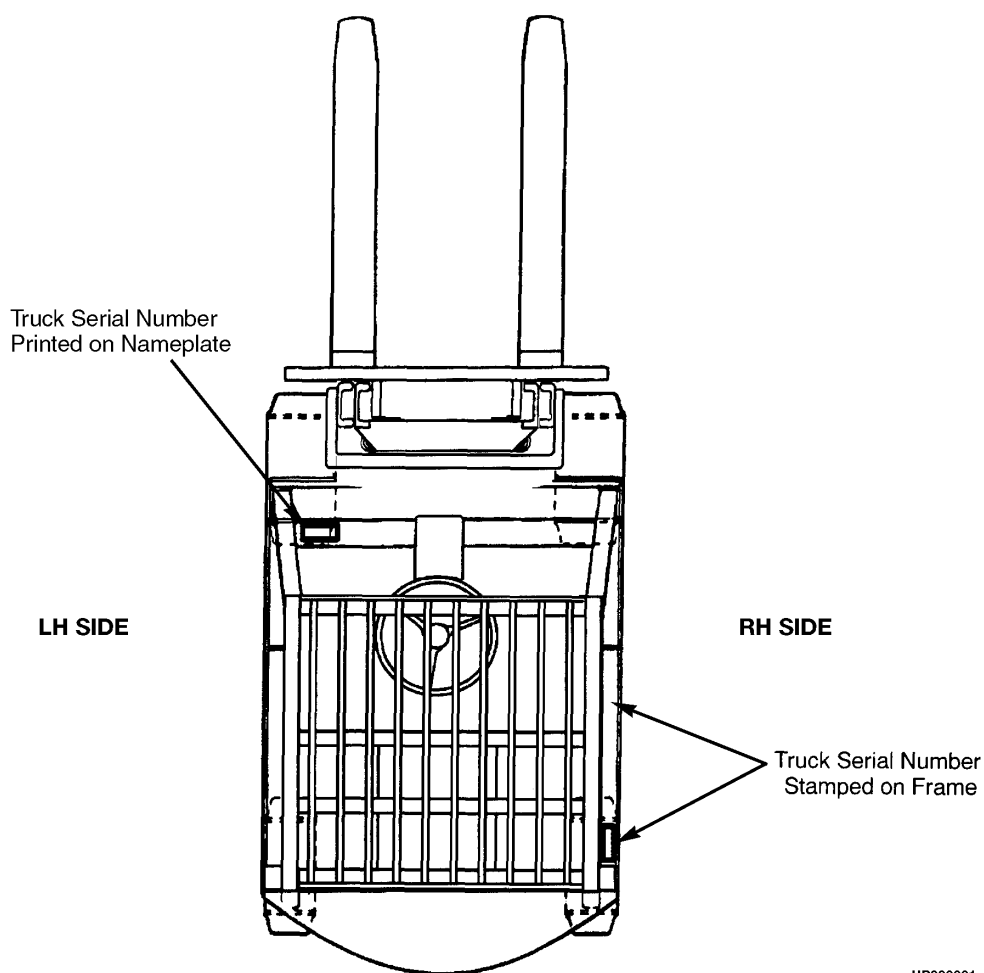
When ordering replacement parts, give the unit serial number, part number, name of part and quantity required.

For any further information on parts, service, or ordering, consult your local dealer for Hyster lift trucks.

**IDENTIFICATION OF TRUCK SERIAL NUMBERS**

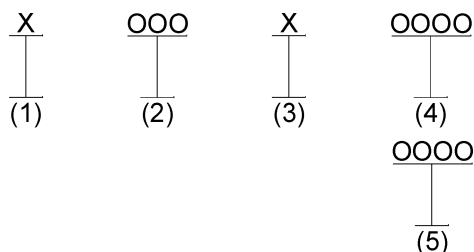
- (1) and (2) The first letter and three numbers indicate the truck unit code.
- (3) The second letter indicates the plant of manufacture.
- (4) The four or five digit number indicates the production sequence number of the truck.
- (5) The final letter indicates the year of manufacture starting with "A" in 1957, 1980, and 2003.  
The letters "I", "O", and "Q" will not be used.

For pending serial numbers contact your local dealer for Hyster lift trucks.



HP990001

Parts referred to in this book as right or left hand parts are in accordance with the illustration above.

**IDENTIFICATION OF MAST SERIAL NUMBERS**

- (1) and (2) The first letter and number indicates the mast unit code.
- (3) The second letter indicates the plant of manufacture.
- (4) The four or five digit number indicates the production sequence number of the mast.
- (5) Carriage travel in millimeters stamped just below the serial number.

Mast Group identification consists of mast unit code (1) and (2) plus carriage travel (5).

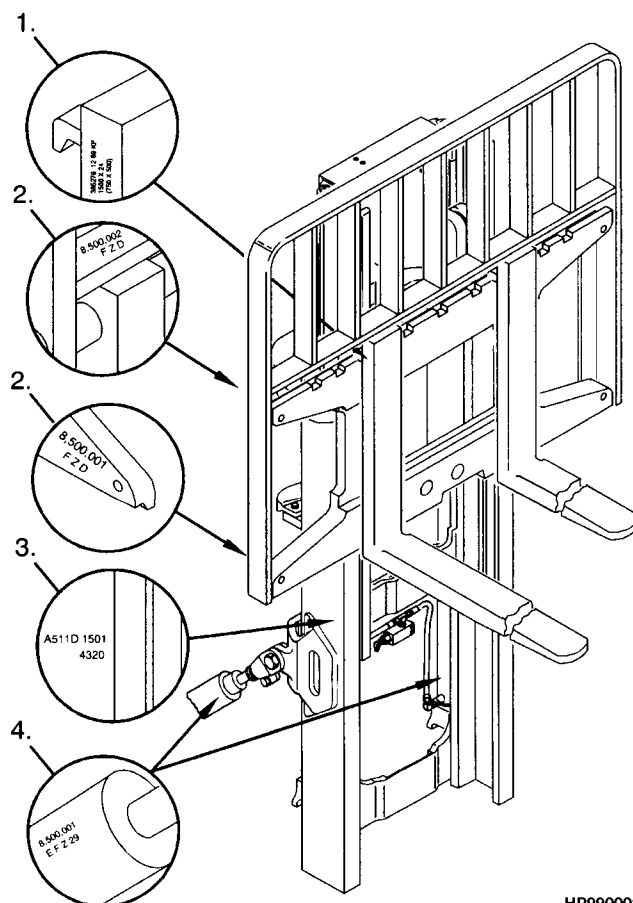
For pending production sequence numbers contact your local dealer for Hyster lift trucks.

**LIFT EQUIPMENT IDENTIFICATION**

1. Fork part number, capacity rating, plant code letter, and date of manufacture are stamped approximately six inches below the top of most forks.
2. The carriage group number is stamped on the right hand side of the top crossmember (pin type) or on the back of the right hand end of the bottom crossmember (hook type). A date code has two letters in line with or below the carriage group number.
3. The mast identification number has a unit code, a letter indicating the plant of manufacture, and a serial number. Underneath the production sequence number is a four digit number that indicates the carriage travel in millimeters.
4. Tilt and lift cylinder group numbers are stamped on the cylinder shell.

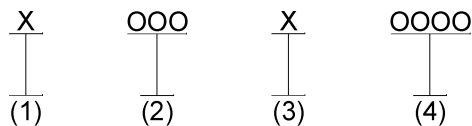
Always refer to the group, serial, or part number when ordering service parts.

Modification of masts and carriages by SPED (Special Products Engineering Department) are identified by a model prefix code beginning with the letter "S". contact your dealer for Hyster lift trucks for information on these assemblies.



HP990002

## IDENTIFICATION OF ATTACHMENT AND SIDE-SHIFT CARRIAGE SERIAL NUMBERS

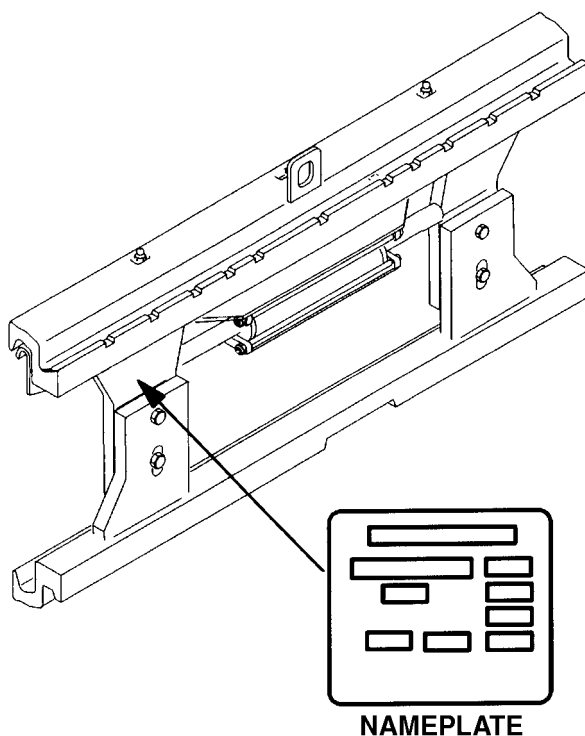


(1) and (2) The first letter and three numbers indicate the attachment unit code.

(3) The second letter indicates the plant of manufacture.

(4) The four or five digit number indicates the production sequence number.

For pending production sequence numbers contact your local dealer for Hyster lift trucks.



HP990003

Side-shift carriages and attachments have nameplates. Use the serial number found on the nameplate to identify the attachment.

Always refer to the group, serial, or part number when ordering service parts.

Modifications of attachments and side-shift carriages by SPED (Special Products Engineering Department) are identified by a model prefix code beginning with the letter "S". Contact your dealer for Hyster lift trucks for information on these assemblies.



**PUBLICATIONS**

Every new lift truck is provided with an **OPERATING MANUAL**. This manual has information that the operator must know for inspection and operation of the lift truck.

**SERVICE MAINTENANCE MANUALS**, which provide service and overhaul procedures, and **PARTS**

**MANUALS** with complete replacement part identification, are available at a nominal fee from your Hyster dealer to assist users in effectively maintaining Hyster lift trucks in a safe, useful condition. See the list below for information on ordering specific publications for this model lift truck.

| <b>PUBLICATION</b>             | <b>HYSTER PART NUMBER</b> |
|--------------------------------|---------------------------|
| Operating Manual.....          | 4150900                   |
| Service Manual (Complete)..... | 4150970                   |
| Parts Manual.....              | 4150962                   |

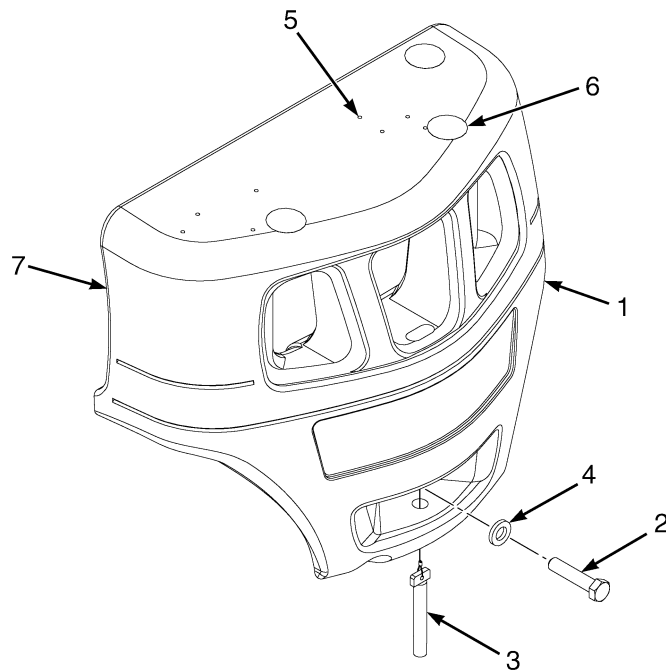
[illegible]

|   |       |
|---|-------|
| 1 | FRAME |
|---|-------|



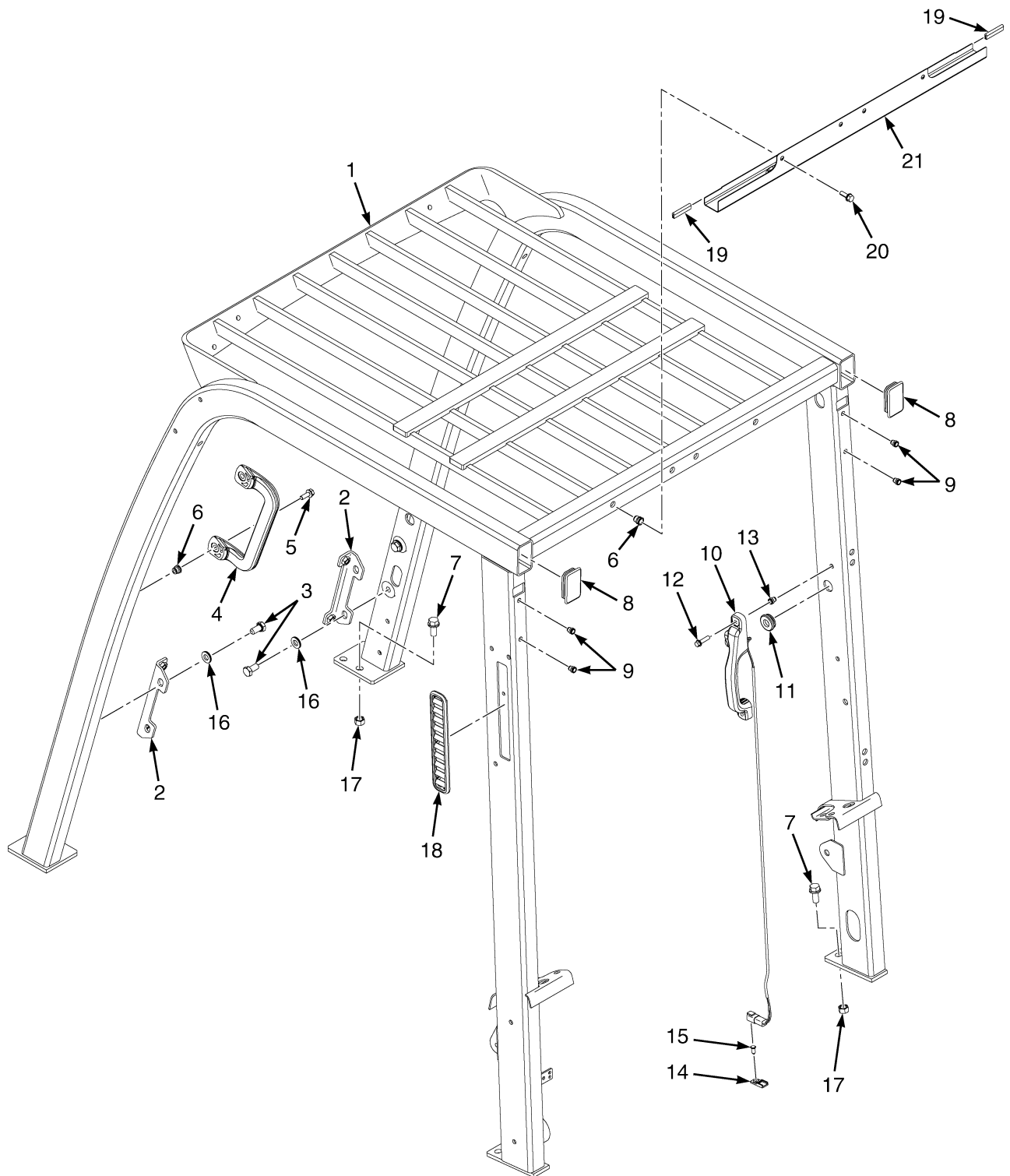
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**COUNTERWEIGHT (FIGURE 1-1)**

BP121478

| ITEM | PART NO. | DESCRIPTION                 | QTY |
|------|----------|-----------------------------|-----|
| 1    | 4115893  | Counterweight (H40XT) ..... | 1   |
| 1    | 4115894  | Counterweight (H50XT) ..... | 1   |
| 1    | 4115895  | Counterweight (H60XT) ..... | 1   |
| 2    | 292629   | Capscrew .....              | 1   |
| 3    | 2111847  | Pin .....                   | 1   |
| 4    | 4161345  | Washer .....                | 1   |
| 5    | 1347045  | Fastener .....              | AR  |
|      | 2021395  | Cap .....                   | 3   |
|      | 4156845  | Seal (Counterweight) .....  | 1   |

**OVERHEAD GUARD (FIGURE 1-2)**

BP121771

| ITEM | PART NO. | DESCRIPTION | QTY |
|------|----------|-------------|-----|
|------|----------|-------------|-----|

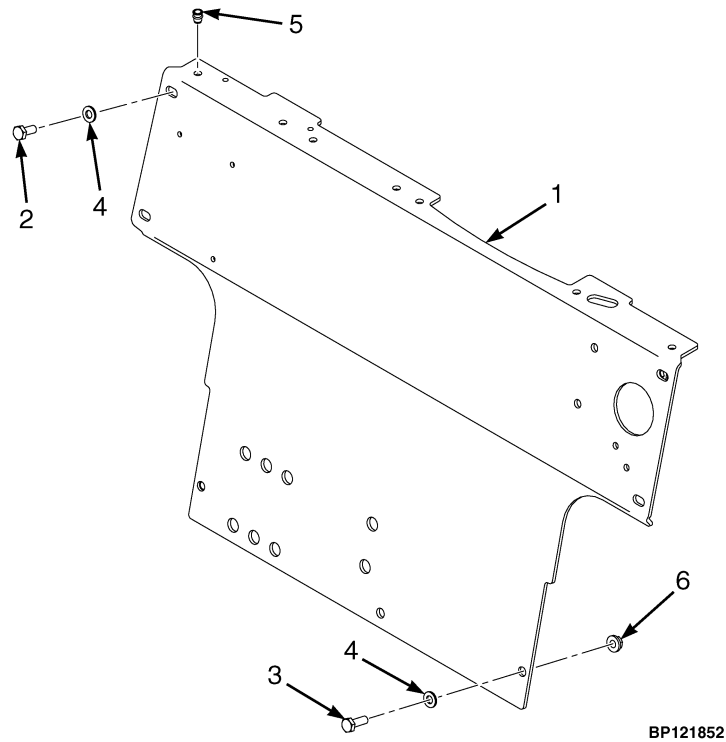
| ITEM | PART NO.           | DESCRIPTION                                    | QTY |
|------|--------------------|------------------------------------------------|-----|
| 1    | 4108995            | Overhead Guard (Low) .....                     | 1   |
| 1    | 4108996            | Overhead Guard (High without Cab) .....        | 1   |
| 1    | 4133263            | Overhead Guard (High with Cab) .....           | 1   |
| 2    | 4108941            | Plate Wldmt .....                              | 2   |
| 3    | 1581590            | Capscrew .....                                 | 4   |
| 4    | 1536813            | Handle (Grab) .....                            | 1   |
| 5    | 1586627            | Capscrew .....                                 | 2   |
| 6    | 1530243            | Insert .....                                   | 4   |
| 7    | 1613433            | Capscrew .....                                 | 6   |
| 8    | 4649269            | Cap .....                                      | 2   |
| 9    | 1531001            | Insert .....                                   | 4   |
| 10   | 2070223            | Handle (Assembly) .....                        | 1   |
| 10   | 2069454            | Handle .....                                   | 1   |
| 10   | 1566726            | Push Button Switch .....                       | 1   |
| 10   | 1493465            | Connector (2 Pin) .....                        | 1   |
| 10   | 1330414            | Connector (Secondary Lock) .....               | 1   |
| 10   | 1330437            | Terminal (Pin) .....                           | 2   |
| 11   | 2021719            | Grommet .....                                  | 1   |
| 12   | 4167139            | Capscrew .....                                 | 2   |
| 13   | 1531001            | Insert .....                                   | 2   |
| 14   | 1500912            | Clip .....                                     | 1   |
| 15   | 1582464            | Fastener .....                                 | 1   |
| 16   | 4154502            | Lockwasher .....                               | 4   |
| 17   | 4318914            |                                                |     |
|      | 216877             | Nut .....                                      | 6   |
| 18   | 4151588            | Grille , Air Intake .....                      | 1   |
| 19   | 4217509            | Trim .....                                     | 2   |
| 20   | 1583611            | Capscrew .....                                 | 2   |
| 21   | <b>b</b> . . . . . | Wire Harness Duct w/ blind slit grommets ..... | 1   |
|      | <b>a</b> 1363916   | Plug .....                                     | AR  |
|      | <b>a</b> 1558219   | Grommet .....                                  | AR  |
|      | <b>a</b> 1574301   | Plug (Yellow) .....                            | AR  |
|      | <b>a</b> 1363918   | Plug .....                                     | AR  |
|      | <b>a</b> 4170282   | Plug .....                                     | AR  |

## FOOTNOTES:

**a** Not Illustrated

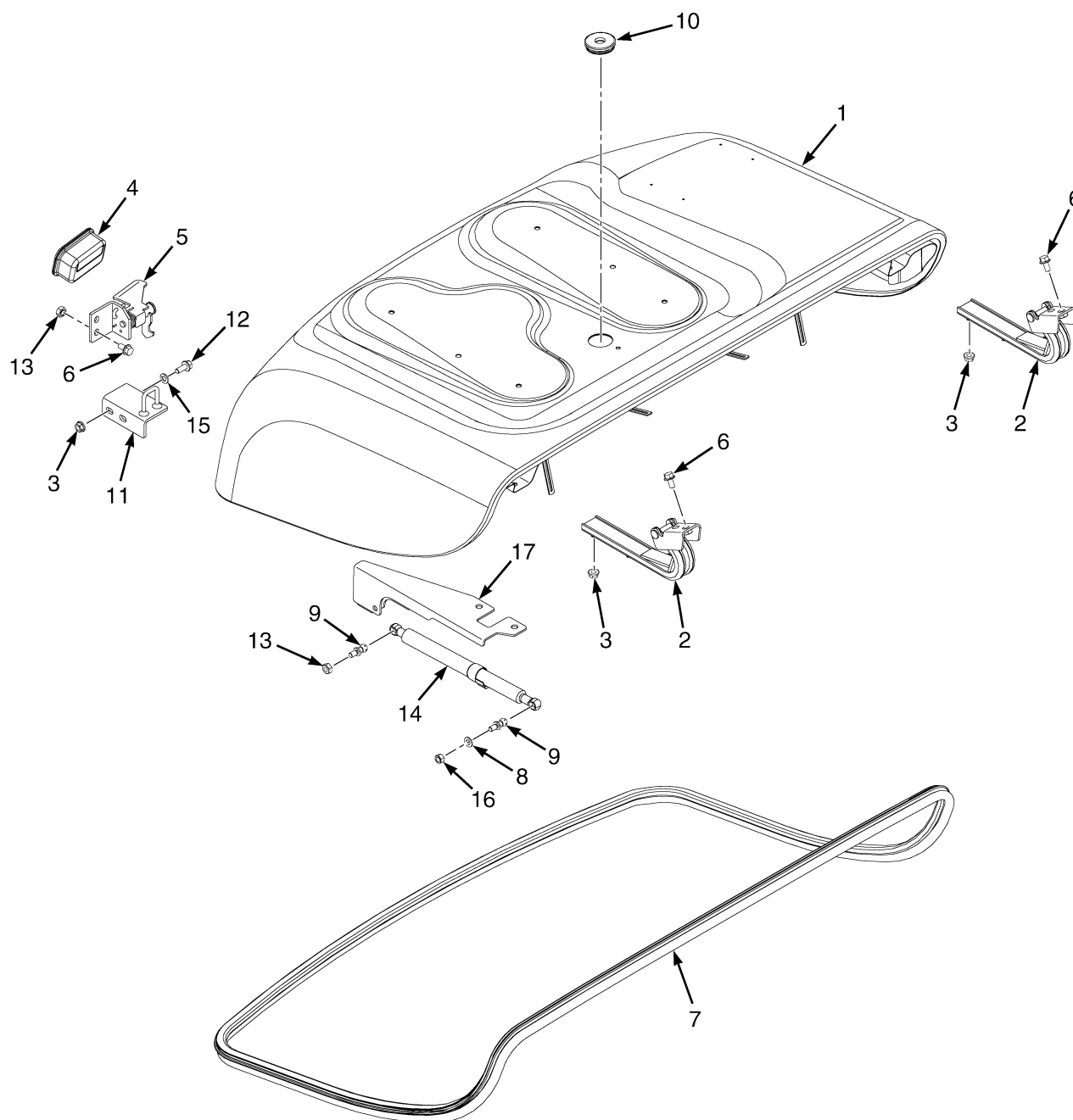
**b** PENDING PER ECN 162833 →



**COWL MOUNT (FIGURE 1-3)**

| ITEM | PART NO. | DESCRIPTION      | QTY |
|------|----------|------------------|-----|
| 1    | 4147376  | Cowl .....       | 1   |
| 2    | 1581586  | Capscrew .....   | 4   |
| 3    | 1581587  | Capscrew .....   | 2   |
| 4    | 4154501  | Lockwasher ..... | 6   |
| 5    | 1531001  | Insert .....     | 7   |
| 6    | 1586431  | Nut .....        | 2   |

## HOOD ASSEMBLY (FIGURE 1-4)



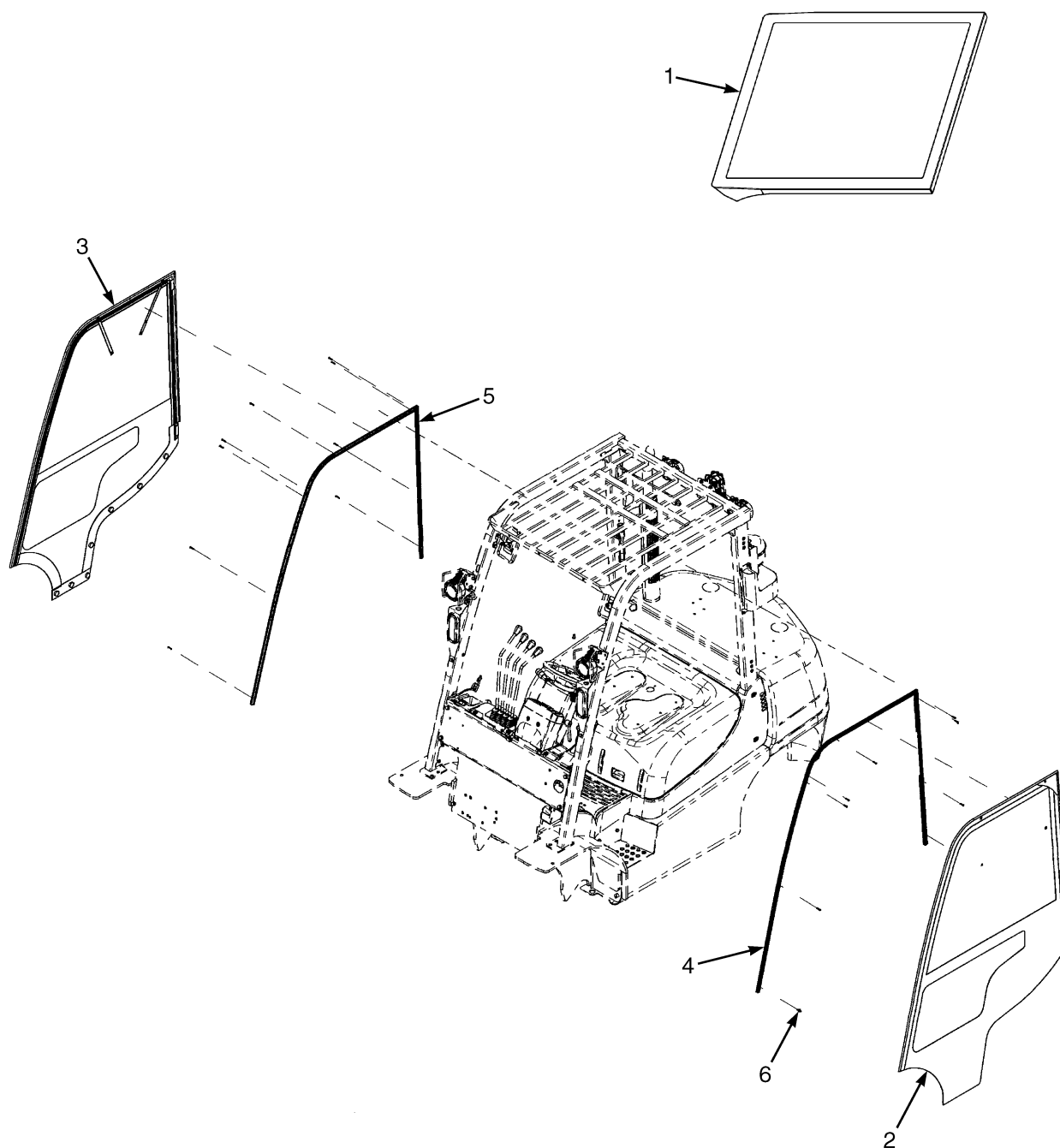
BP121580

**HOOD ASSEMBLY**

| ITEM | PART NO.           | DESCRIPTION                                           | QTY |
|------|--------------------|-------------------------------------------------------|-----|
| 1    | 2082050            | Hood .....                                            | 1   |
| 2    | 2082044            | Hinge .....                                           | 2   |
| 3    | <del>1382472</del> |                                                       |     |
|      | 1502543            | Nut .....                                             | 6   |
| 4    | 2082045            | Cover .....                                           | 1   |
| 5    | 2089745            | Lock .....                                            | 1   |
| 6    | <del>4109993</del> |                                                       |     |
|      | 1527879            | Capscrew .....                                        | 6   |
| 7    | 2094225            | Trim .....                                            | 1   |
| 8    | 296418             | Washer .....                                          | 1   |
| 9    | 1563369            | Ball Stud (For 750N Gas Spring) .....                 | 2   |
| 9    | <b>a</b> 4011397   | Ball Stud (For Lift and Latch 1100N Gas Spring) ..... | 1   |
| 10   | 2082043            | Grommet .....                                         | 1   |
| 11   | 2083949            | Hook .....                                            | 1   |
| 12   | 1527880            | Capscrew .....                                        | 2   |
| 13   | 2066599            | Nut .....                                             | 2   |
| 14   | 4134989            | Gas Spring (750N Gas Spring) .....                    | 1   |
| 14   | <b>a b</b> 4011395 | Gas Spring (Lift and Latch) .....                     | 1   |
| 14   | <b>a c</b> 4170275 | Gas Spring (Lift and Latch) .....                     | 1   |
| 15   | 292681             | Lockwasher .....                                      | 2   |
| 16   | 313828             | Nut .....                                             | 1   |
| 17   | 4170600            | Bracket Wldmt (Hood Reinforcement) .....              | 1   |

**FOOTNOTES:****a** Optional**c** 12/2016 →**b** → 12/2016

## PVC DOOR KIT (FIGURE 1-5) AND TOP SCREEN

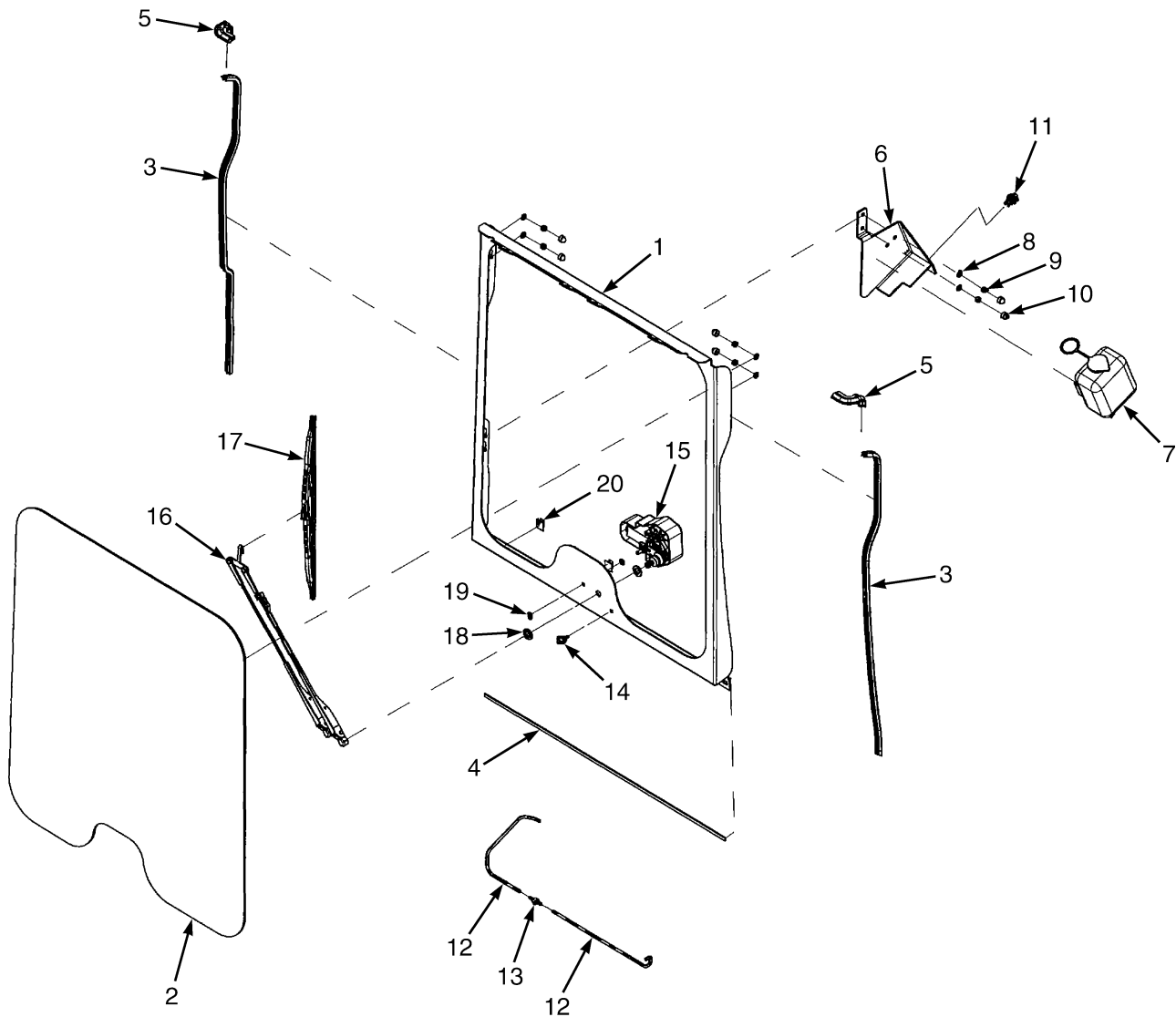


BP200308

**PVC DOOR KIT  
AND TOP SCREEN**

| ITEM | PART NO. | DESCRIPTION                | QTY |
|------|----------|----------------------------|-----|
| 1    | 4119704  | Kit-Top Screen (PVC) ..... | 1   |
| 2    | 4146354  | Door Pvc (LH Door) .....   | 1   |
| 3    | 4146355  | Door Pvc (RH Door) .....   | 1   |
| 4    | 4146334  | Kit-Seal PVC Door .....    | 1   |
| 5    | 4146335  | Kit-Seal (PVC Doors) ..... | 1   |
| 6    | 4001976  | Screw .....                | 18  |

## FRONT SCREEN KIT (FIGURE 1-6) FOR RAISED OVERHEAD GUARD



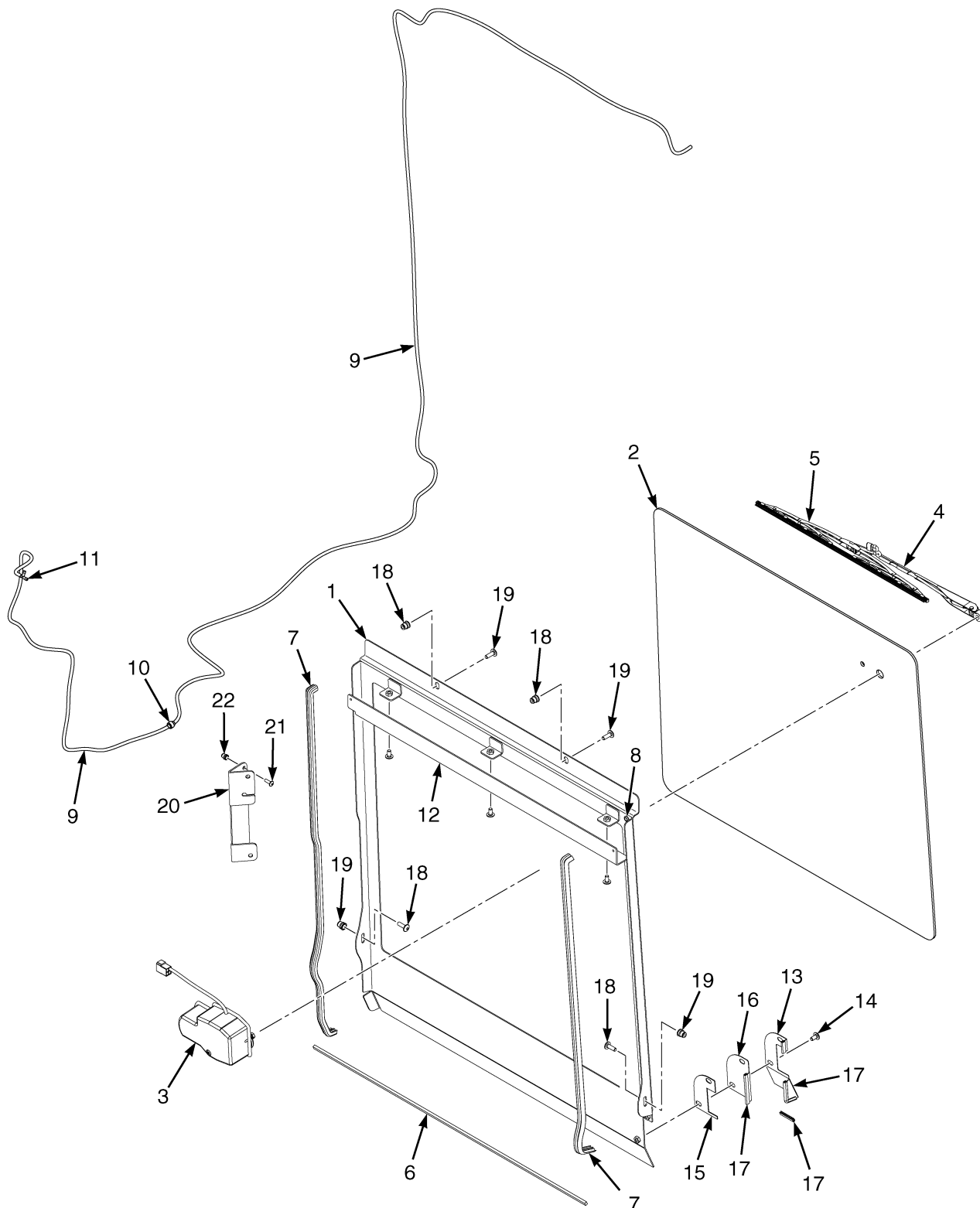
BP200377

**FRONT SCREEN KIT  
FOR RAISED OVERHEAD GUARD**

| ITEM | PART NO.           | DESCRIPTION                        | QTY |
|------|--------------------|------------------------------------|-----|
|      | <b>b</b> 4119701   | Kit-Front Screen With Wipers ..... | 1   |
|      | <b>c</b> 4683556   | Kit-Front Screen .....             | 1   |
| 1    | 4146326            | Window Frame .....                 | 1   |
| 2    | 4146327            | Front Window .....                 | 1   |
| 3    | 4146328            | Seal-Bulk (M) (2.098 M) .....      | 1   |
| 4    | 1653646            | Seal (.911 M) .....                | 1   |
| 5    | 1393539            | Seal (.248 M) .....                | 1   |
| 6    | 4146329            | Bracket (Washer Bottle) .....      | 1   |
| 7    | 1653632            | Pump (With Reservoir) .....        | 1   |
| 8    | 296419             | Washer .....                       | 6   |
| 9    | 316835             | Nut .....                          | 6   |
| 10   | 1476584            | Cover (Capscrew Head) .....        | 6   |
| 11   | 4146330            | Push Button .....                  | 1   |
| 12   | 1393509            | Hose (.767 M) .....                | 1   |
| 13   | <del>1393495</del> |                                    |     |
|      | 1301685            | Check Valve .....                  | 1   |
| 14   | 1493336            | Connector (Spray Nozzle) .....     | 1   |
| 15   | 4146331            | Wiper Motor .....                  | 1   |
| 16   | 4146332            | Wiper Arm .....                    | 1   |
| 17   | 1498348            | Wiper Blade .....                  | 1   |
| 18   | 4146333            | Washer .....                       | 2   |
| 19   | 320158             | Washer .....                       | 2   |
| 20   | 1558036            | Clip .....                         | 2   |
|      | <b>a</b> 4144722   | Label (Window washer) .....        | 1   |

**FOOTNOTES:****a** Not Illustrated**c** PENDING PER ECN 16256117 →**b** → PENDING PER ECN 16256117

## REAR SCREEN KIT (FIGURE 1-7) FOR RAISED OVERHEAD GUARD



BP200318

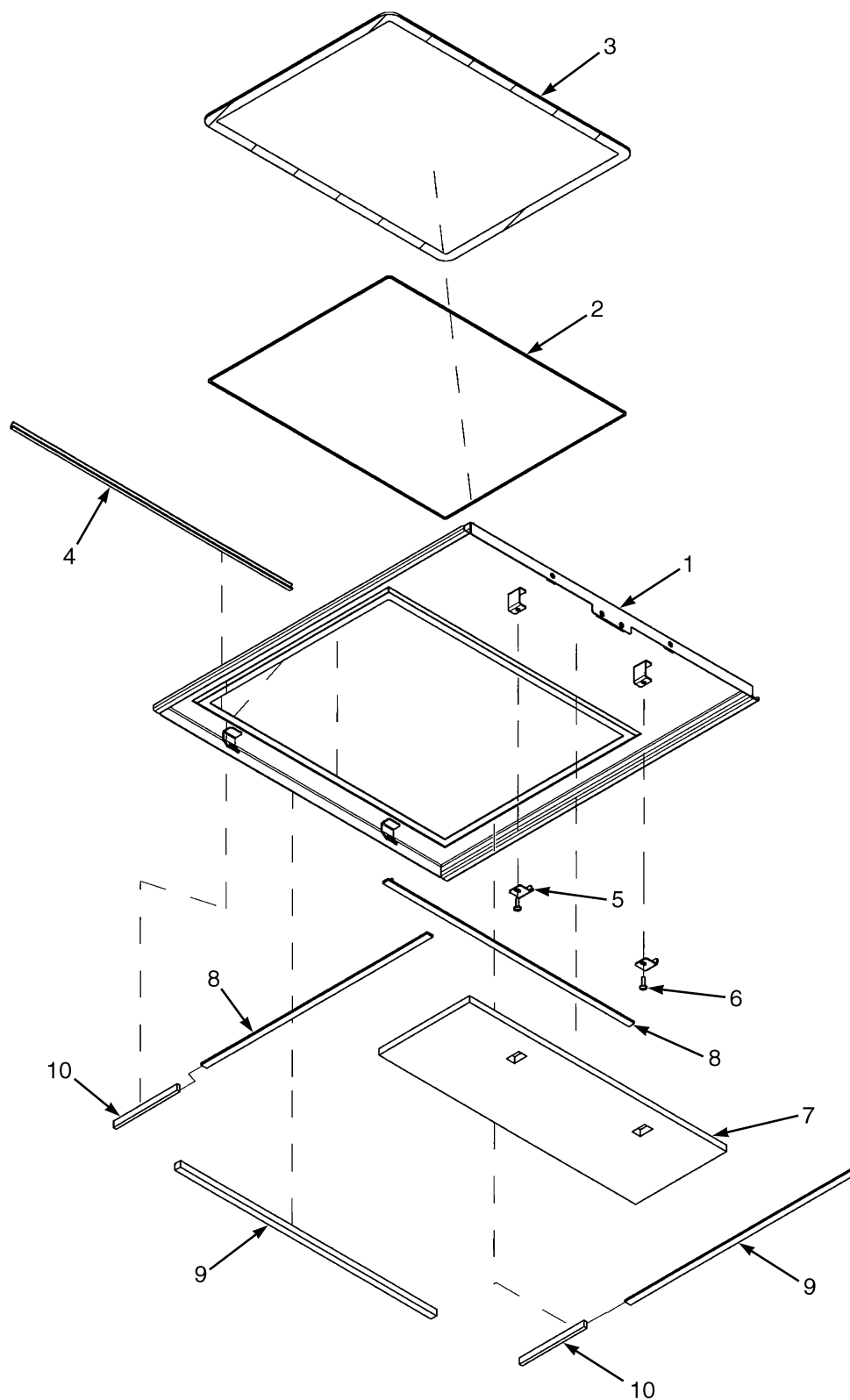


**REAR SCREEN KIT  
FOR RAISED OVERHEAD GUARD**

| ITEM | PART NO.           | DESCRIPTION                               | QTY |
|------|--------------------|-------------------------------------------|-----|
|      | 4151152            | Kit-Rear Screen .....                     | 1   |
| 1    | 4153839            | Window Frame .....                        | 1   |
| 2    | 4153838            | Rear Screen .....                         | 1   |
| 3    | 4153837            | Wiper Motor .....                         | 1   |
| 4    | 4153836            | Wiper Arm .....                           | 1   |
| 5    | 4153835            | Wiper Blade .....                         | 1   |
| 6    | 4153834            | Foam Rubber (.886 m each) .....           | 1   |
| 7    | 4146328            | Seal-Bulk (M) (1.814m) .....              | 1   |
| 8    | 1393517            | Grommet .....                             | 1   |
| 9    | 1393509            | Hose (4.371m) .....                       | 1   |
| 10   | <del>1393495</del> |                                           |     |
|      | 1301685            | Check Valve .....                         | 1   |
| 11   | 1311260            | Fitting .....                             | 1   |
| 12   | 4153833            | Cover Plate .....                         | 1   |
| 13   | 4153832            | Plate .....                               | 1   |
| 14   | 4153831            | Screw .....                               | 5   |
| 15   | 4153830            | Seal (.151m each) .....                   | 1   |
| 16   | 4153829            | Plate .....                               | 1   |
| 17   | 1492167            | Trim-Bulk (.250m) .....                   | 1   |
| 18   | 1530243            | Insert .....                              | 4   |
| 19   | 2109744            | Capscrew .....                            | 4   |
| 20   | 4143517            | Bracket - Grab handle (Grab Handle) ..... | 1   |
| 21   | 4613617            | Capscrew .....                            | 2   |
| 22   | 1531001            | Insert .....                              | 2   |
|      | <b>a</b> 4165411   | Gasket (Grab Handle Fixed LPG) .....      | 1   |
|      | <b>a</b> 4165412   | Gasket (Grab Handle Swingout LPG) .....   | 1   |
|      | <b>a</b> 4176807   | Kit - Adaptation-Rear screen .....        | 1   |

**FOOTNOTES:****a** Not Illustrated

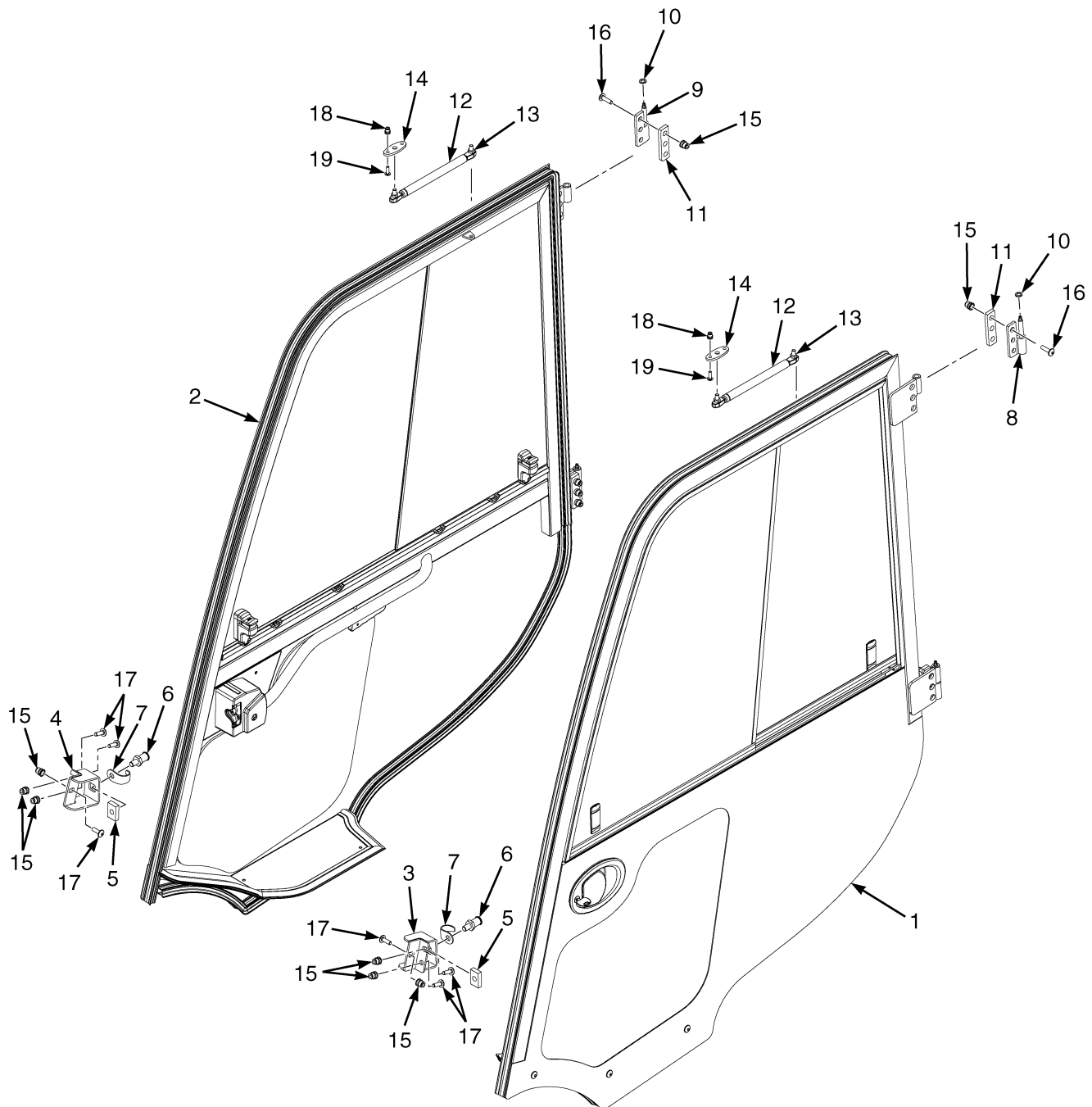
## TOP SCREEN KIT (FIGURE 1-8)



BP121667

**TOP SCREEN KIT**

| ITEM | PART NO. | DESCRIPTION                          | QTY |
|------|----------|--------------------------------------|-----|
|      | 4119696  | Kit-Top Screen (Polycarbonate) ..... | 1   |
|      | 4119699  | Kit-Top Screen (Glass) .....         | 1   |
| 1    | 4146324  | Window Assembly (Roof) .....         | 1   |
| 2    | 1558294  | Seal Bulk (2.413 M) .....            | 1   |
| 3    | 4146325  | Window (Glass) .....                 | 1   |
| 3    | 4146353  | Window (Polycarbonate) .....         | 1   |
| 4    | 1651735  | Seal (.997 M) .....                  | 1   |
| 5    | 4156413  | Bracket .....                        | 2   |
| 6    | 1468311  | Screw .....                          | 2   |
| 7    | 4156415  | Sound Liner .....                    | 1   |
| 8    | 1512820  | Seal (1.610 M) .....                 | 3   |
| 9    | 1508229  | Seal (.914 M) .....                  | 1   |
| 10   | 4156414  | Seal-Bulk (M) (.460 M) .....         | 2   |

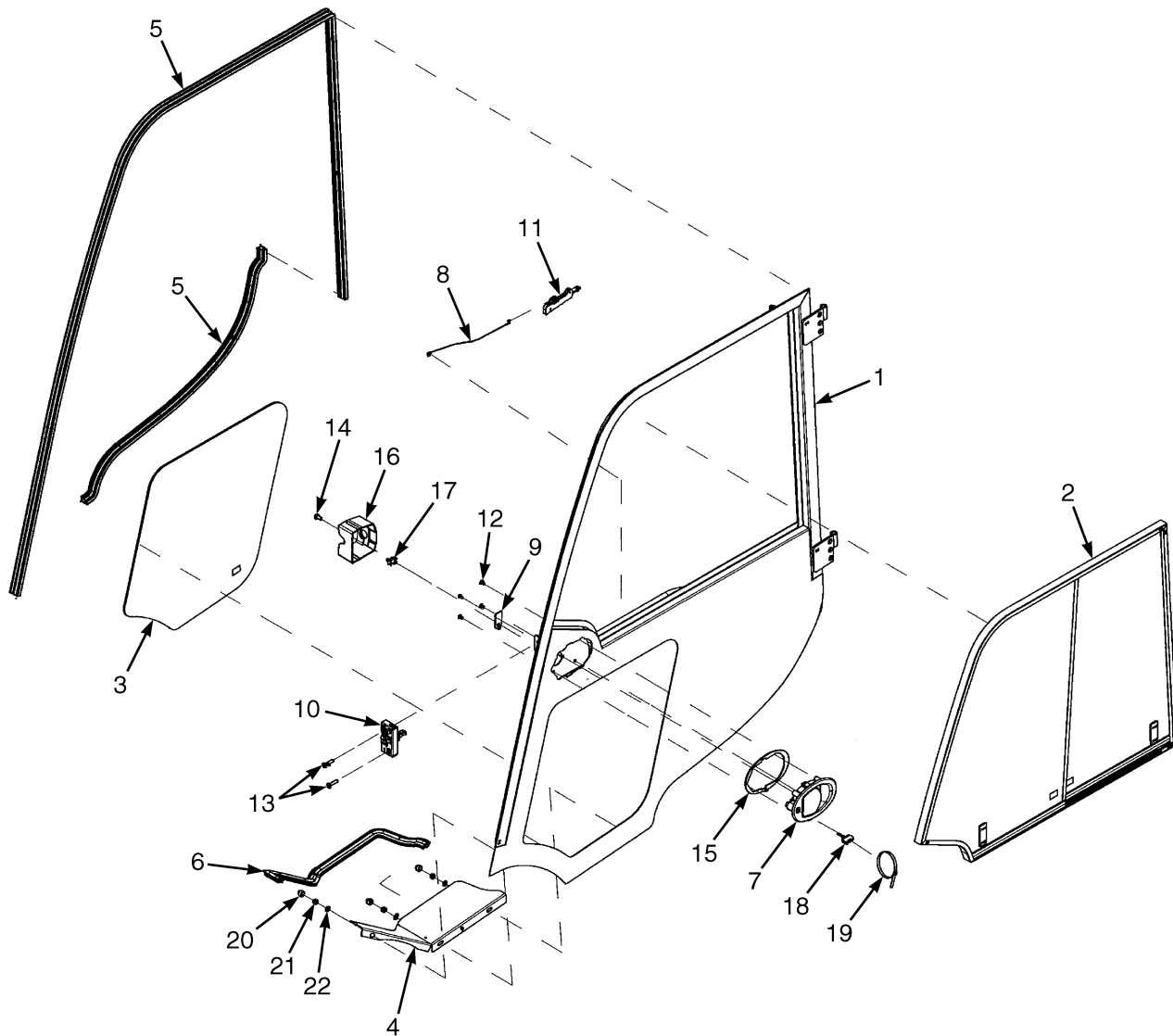
**STEEL DOOR ASSEMBLIES (FIGURE 1-9)  
FOR RAISED OVERHEAD GUARD**

BP200317

**STEEL DOOR ASSEMBLIES  
FOR RAISED OVERHEAD GUARD**

| ITEM | PART NO. | DESCRIPTION                             | QTY |
|------|----------|-----------------------------------------|-----|
| 1    | 4153876  | Door Assembly (LH) (☞ Figure 1-10)..... | 1   |
| 2    | 4153875  | Door Assembly (RH) (☞ Figure 1-11)..... | 1   |
| 3    | 4153606  | Striker Bolt (LH) .....                 | 1   |
| 4    | 4153605  | Striker Bolt (RH) .....                 | 1   |
| 5    | 1504953  | Block (Tapped) .....                    | 2   |
| 6    | 4646493  | Striker Bolt .....                      | 2   |
| 7    | 1504954  | Guard .....                             | 2   |
| 8    | 1503958  | Hinge (LH) .....                        | 2   |
| 9    | 1503959  | Hinge (RH) .....                        | 2   |
| 10   | 1468312  | Washer .....                            | 4   |
| 11   | 4146344  | Striker Plate .....                     | 4   |
| 12   | 1366618  | Gas Spring .....                        | 2   |
| 13   | 1468313  | Nut .....                               | 2   |
| 14   | 1694706  | Bracket (Gas Spring) .....              | 2   |
| 15   | 1530243  | Insert .....                            | 18  |
| 16   | 4645302  | Capscrew .....                          | 12  |
| 17   | 2109744  | Capscrew .....                          | 6   |
| 18   | 1531001  | Insert .....                            | 4   |
| 19   | 4613617  | Capscrew .....                          | 4   |
|      | 2064554  | Loctite .....                           | AR  |

## STEEL DOOR LH (FIGURE 1-10) FOR RAISED OVERHEAD GUARD



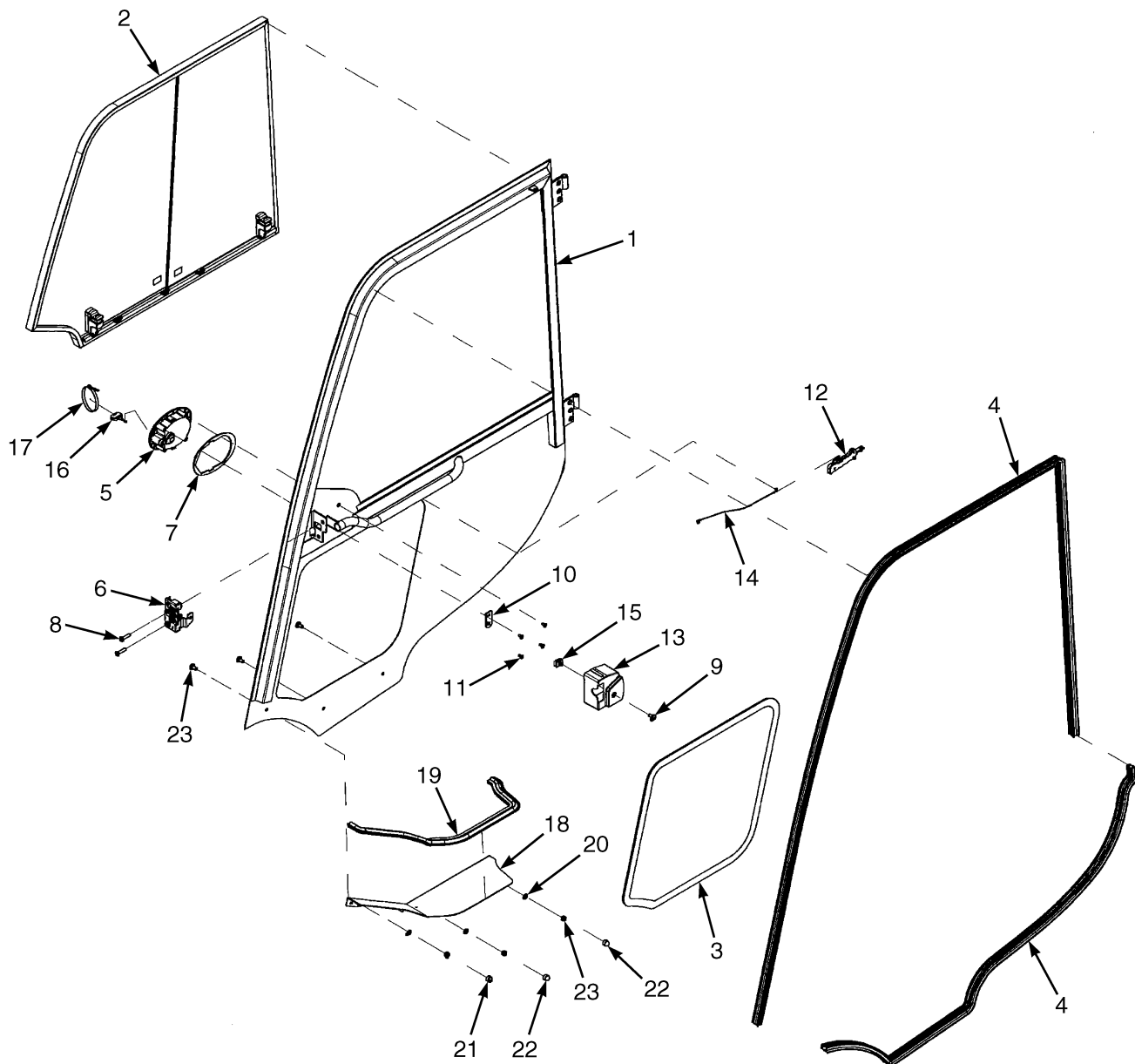
BP200307

**STEEL DOOR LH  
FOR RAISED OVERHEAD GUARD**

| ITEM | PART NO.         | DESCRIPTION                   | QTY |
|------|------------------|-------------------------------|-----|
|      | 4153876          | Door Assembly (LH) .....      | 1   |
| 1    | 4161201          | Door Frame .....              | 1   |
| 2    | 4153880          | Sliding Window (LH) .....     | 1   |
| 3    | 4153879          | Door (Door Bottom) .....      | 1   |
| 4    | 4153878          | Door (Bottom Plate) .....     | 1   |
| 5    | 1515337          | Seal (Bulk) (4.555m) .....    | AR  |
| 6    | 1393539          | Seal (.822m) .....            | AR  |
| 7    | 1695059          | Grip , Door Handle .....      | 1   |
| 8    | 4153877          | Cable .....                   | 1   |
| 9    | 4146308          | Plate .....                   | 1   |
| 10   | 1558446          | Latch .....                   | 1   |
| 11   | 1558305          | Lock .....                    | 1   |
| 12   | 1708221          | Screw .....                   | 4   |
| 13   | 4146309          | Screw .....                   | 2   |
| 14   | 1468311          | Screw .....                   | 1   |
| 15   | 1695060          | Seal .....                    | 1   |
| 16   | 4004140          | Kit-Cover .....               | 1   |
| 17   | 4146310          | Nut .....                     | 1   |
| 18   | 1593629          | Key (For Cab Door Grip) ..... | 1   |
| 19   | 1506825          | Strap Clamp .....             | 1   |
| 20   | 296419           | Washer .....                  | 3   |
| 21   | 316835           | Nut .....                     | 3   |
| 22   | 1476584          | Cover (Capscrew Head) .....   | 3   |
|      | <b>a</b> 4146316 | Screw .....                   | 3   |

**FOOTNOTES:****a** Located bottom of door frame

## STEEL DOOR RH (FIGURE 1-11) FOR RAISED OVERHEAD GUARD



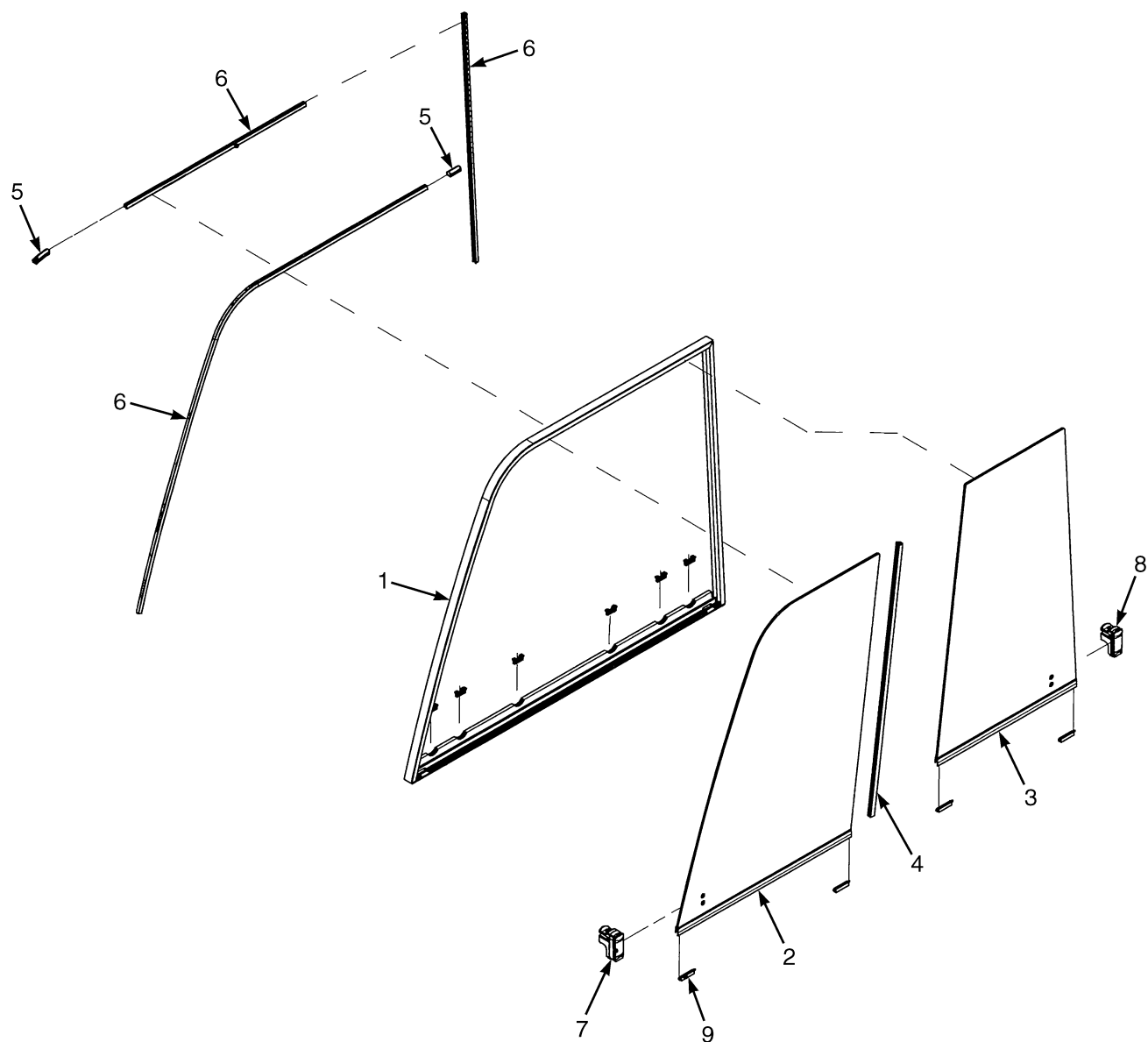
BP200305



**STEEL DOOR RH  
FOR RAISED OVERHEAD GUARD**

| ITEM | PART NO. | DESCRIPTION                   | QTY |
|------|----------|-------------------------------|-----|
|      | 4153875  | Door Assembly (RH) .....      | 1   |
| 1    | .....    | Frame (RH) .....              | 1   |
| 2    | 4153981  | Sliding Window (RH) .....     | 1   |
| 3    | 4153986  | Window (Door Bottom) .....    | 1   |
| 4    | 1515337  | Seal (Bulk) (4.911m) .....    | AR  |
| 5    | 1695059  | Grip , Door Handle .....      | 1   |
| 6    | 1558301  | Latch .....                   | 1   |
| 7    | 1695060  | Seal .....                    | 1   |
| 8    | 4146309  | Screw .....                   | 2   |
| 9    | 1468311  | Screw .....                   | 1   |
| 10   | 4146308  | Plate .....                   | 1   |
| 11   | 1708221  | Screw .....                   | 4   |
| 12   | 1558305  | Lock .....                    | 1   |
| 13   | 4146314  | Kit-Cover .....               | 1   |
| 14   | 4153877  | Cable .....                   | 1   |
| 15   | 4146310  | Nut .....                     | 1   |
| 16   | 1593629  | Key (For Cab Door Grip) ..... | 1   |
| 17   | 1506825  | Strap Clamp .....             | 1   |
| 18   | 4153987  | Plate .....                   | 1   |
| 19   | 1393539  | Seal .....                    | AR  |
| 20   | 296419   | Washer .....                  | 3   |
| 21   | 316835   | Nut .....                     | 3   |
| 22   | 1476584  | Cover (Capscrew Head) .....   | 3   |
| 23   | 4146316  | Screw .....                   | 3   |

## SLIDING WINDOW KIT (FIGURE 1-12)



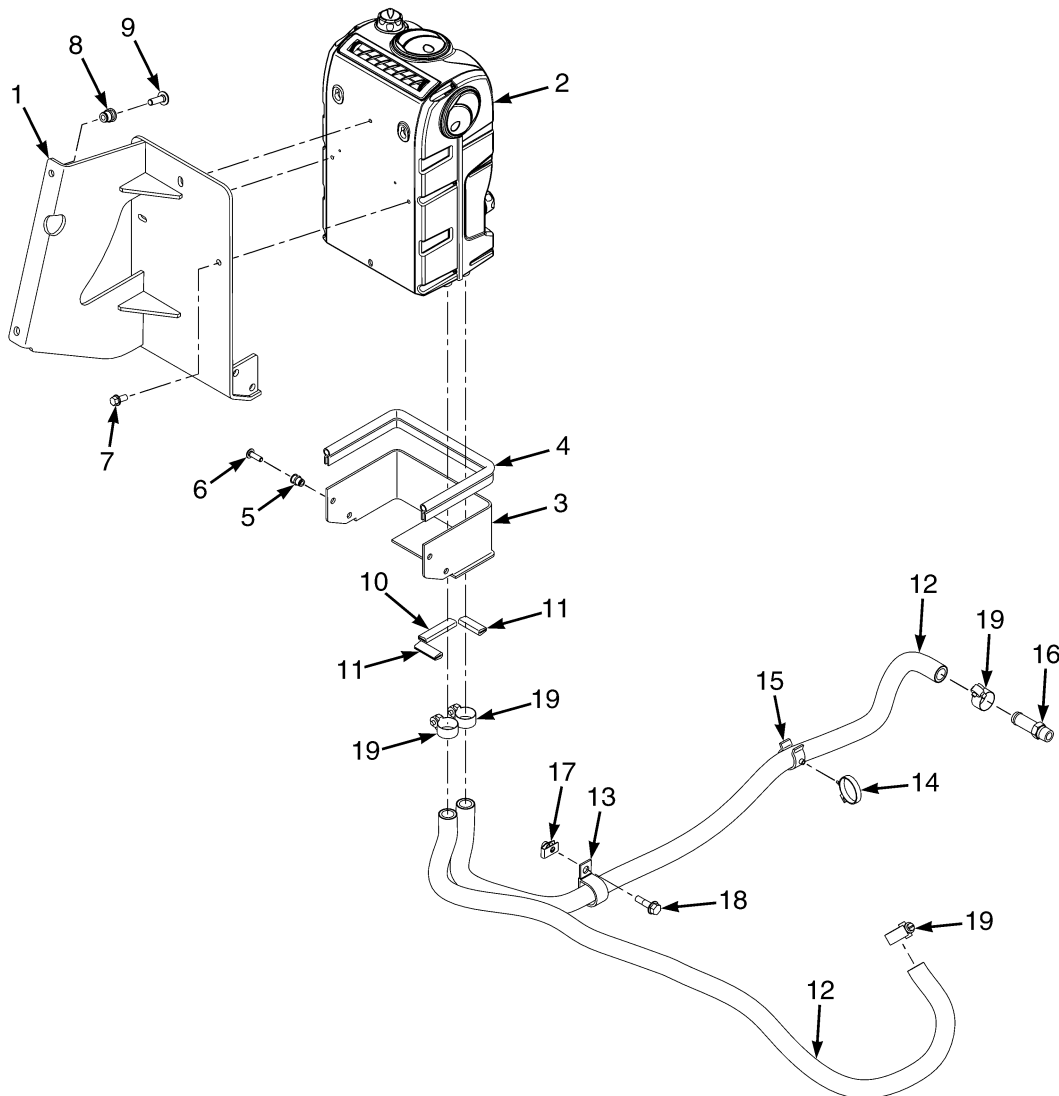
BP200305

**SLIDING WINDOW KIT**

| ITEM | PART NO.         | DESCRIPTION                              | QTY |
|------|------------------|------------------------------------------|-----|
|      | 4153880          | Sliding Window (LH) .....                | 1   |
|      | 4153981          | Sliding Window (RH) .....                | 1   |
| 1    | 4153988          | Window Frame (LH) .....                  | 1   |
| 1    | 4153982          | Window Frame (RH) .....                  | 1   |
| 2    | 4153990          | Sliding Window (LH) .....                | 1   |
| 2    | 4153983          | Sliding Window (RH) .....                | 1   |
| 2    | 4154024          | Screen (Front Sliding Rail) .....        | 1   |
| 2    | 4154025          | Screen (Sliding Window Rear) .....       | 1   |
| 3    | 4154164          | Screen (Rear Window) (LH) .....          | 1   |
| 3    | 4153984          | Sliding Window (Rear RH) .....           | 1   |
| 3    | 4153992          | Screen (Rear Sliding Window) .....       | 1   |
| 4    | 4154166          | Seal Bar .....                           | 1   |
| 4    | 4154167          | Seal (.778m) .....                       | 1   |
| 4    | 4154168          | Clamp .....                              | 1   |
| 5    | 1644804          | Seal (2.919m) .....                      | 1   |
| 6    | 1641640          | Strip Seal (.870m) .....                 | 1   |
| 7    | <b>a</b> 1653969 |                                          |     |
|      | 4013559          | Latch (Sliding Window with Screws) ..... | 1   |
| 8    | 4009780          | Latch .....                              | 1   |
| 9    | 1644804          |                                          |     |
|      | 4009782          | Guide .....                              | 4   |
| 10   | 4009779          | Clip .....                               | 6   |

**FOOTNOTES:****a** Mounted from the inside

## HEATER AND HOSES (FIGURE 1-13) PSI ENGINE

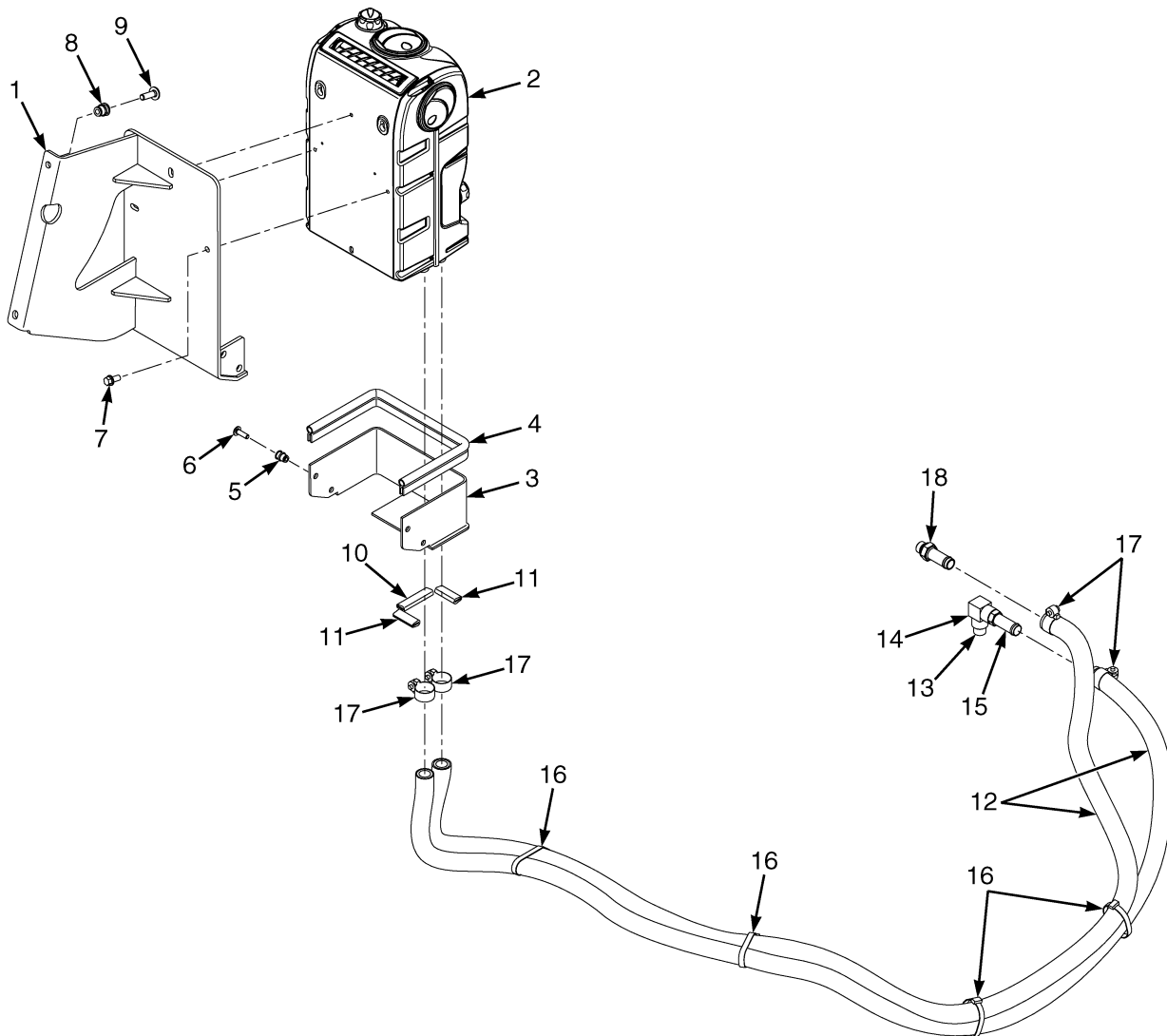


BP121537

**HEATER AND HOSES  
PSI ENGINE**

| ITEM | PART NO. | DESCRIPTION                 | QTY |
|------|----------|-----------------------------|-----|
| 1    | 4153927  | Bracket Wldmt .....         | 1   |
| 2    | 4151205  | Heater (☞ Figure 1-15)..... | 1   |
| 3    | 4153932  | Duct (Fresh Air) .....      | 1   |
| 4    | 1675895  | Trim Seal .....             | 1   |
| 5    | 1531001  | Insert .....                | 4   |
| 6    | 4613617  | Capscrew .....              | 4   |
| 7    | 1693371  | Capscrew .....              | 3   |
| 8    | 1530243  | Insert .....                | 2   |
| 9    | 2109744  | Capscrew .....              | 2   |
| 10   | 4055889  | Trim .....                  | 1   |
| 11   | 4025667  | Trim .....                  | 2   |
| 12   | 4651431  | Hose (Cab Heater) .....     | 2   |
| 13   | 178119   | Clamp .....                 | 1   |
| 14   | 1644398  | Clamp (Swivel) .....        | 1   |
| 15   | 1542436  | Clamp (Swivel) .....        | 1   |
| 16   | 102919   | Fitting .....               | 1   |
| 17   | 1480237  | Nut (Fold Over) .....       | 1   |
| 18   | 4109993  |                             |     |
|      | 1527879  | Capscrew .....              | 1   |
| 19   | 130845   | Clamp .....                 | 4   |

## HEATER HOSES (FIGURE 1-14) YANMAR

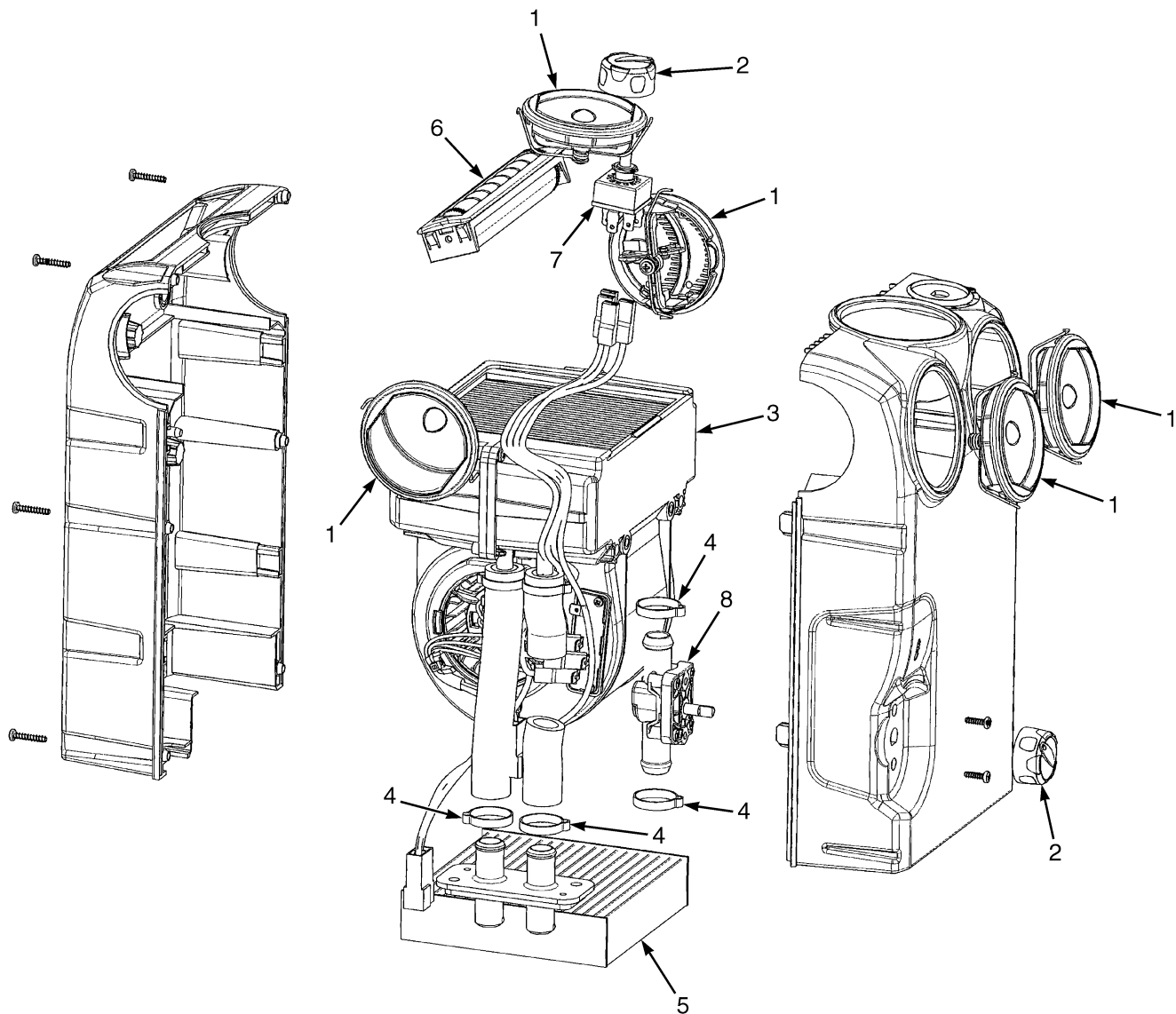


BP121538

**HEATER HOSES  
YANMAR**

| ITEM | PART NO. | DESCRIPTION                 | QTY |
|------|----------|-----------------------------|-----|
| 1    | 4153927  | Bracket Wldmt .....         | 1   |
| 2    | 4151205  | Heater (☞ Figure 1-15)..... | 1   |
| 3    | 4153932  | Duct (Fresh Air) .....      | 1   |
| 4    | 1675895  | Trim Seal .....             | 1   |
| 5    | 1531001  | Insert .....                | 4   |
| 6    | 4613617  | Capscrew .....              | 4   |
| 7    | 1693371  | Capscrew .....              | 3   |
| 8    | 1530243  | Insert .....                | 2   |
| 9    | 2109744  | Capscrew .....              | 2   |
| 10   | 4055889  | Trim .....                  | 1   |
| 11   | 4025667  | Trim .....                  | 2   |
| 12   | 4651428  | Hose (Cab Heater) .....     | 2   |
| 13   | 19987    | Fitting .....               | 1   |
| 14   | 12817    | Fitting .....               | 1   |
| 15   | 138710   | Fitting .....               | 1   |
| 16   | 129563   | Strap Clamp .....           | 4   |
| 17   | 130845   | Clamp .....                 | 4   |
| 18   | 4164225  | Fitting .....               | 1   |

## CAB HEATER (FIGURE 1-15)



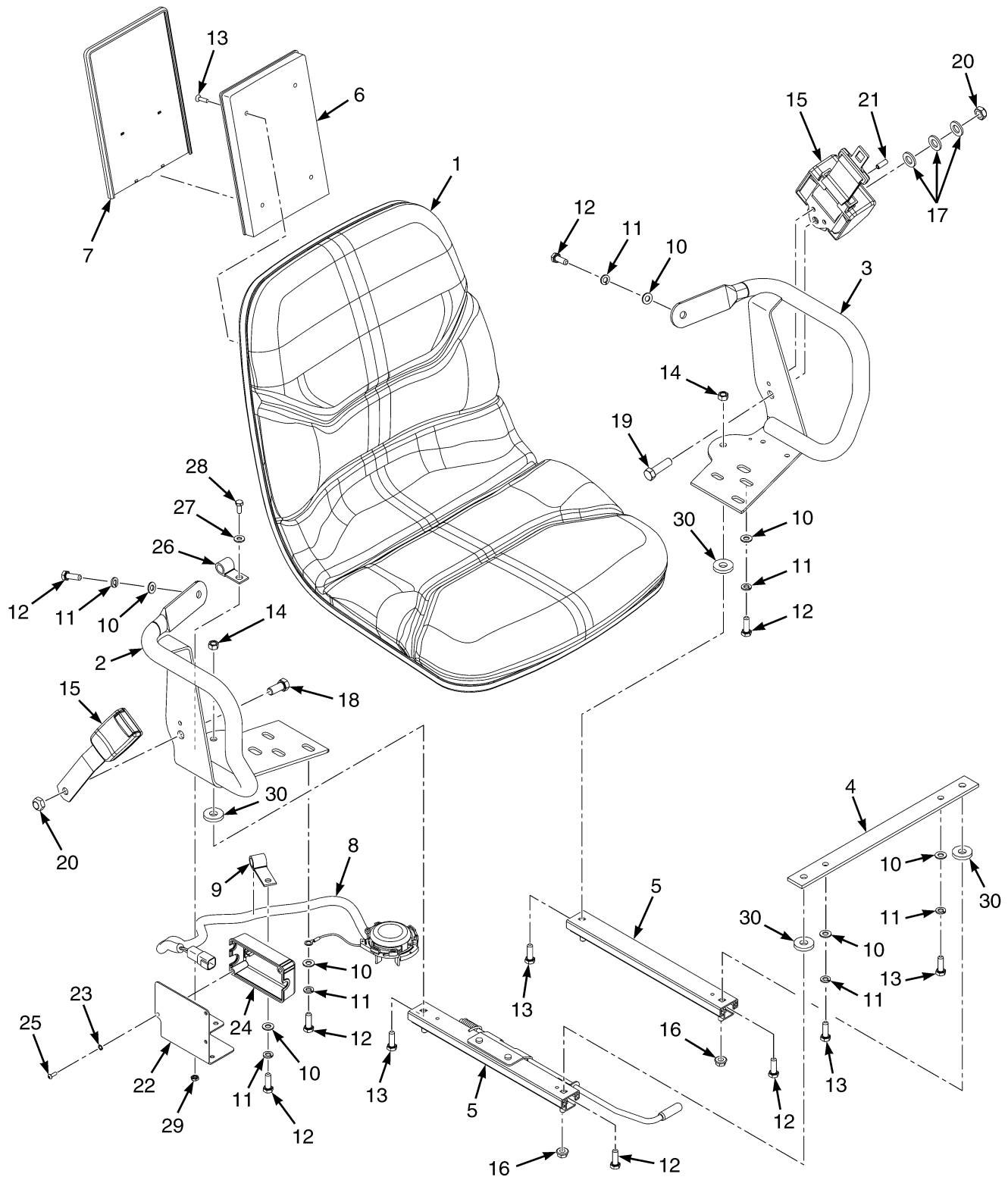
BP200311



**CAB HEATER**

| ITEM | PART NO. | DESCRIPTION               | QTY |
|------|----------|---------------------------|-----|
|      | 4151205  | Heater .....              | 1   |
| 1    | 4158216  | Louver .....              | 5   |
| 2    | 4158217  | Button .....              | 2   |
| 3    | 4158187  | Heater .....              | 1   |
| 3    | 4158188  | Fan .....                 | 1   |
| 3    | 4158189  | Coil .....                | 1   |
| 3    | 4158190  | Resistor .....            | 1   |
| 4    | 4158218  | Clamp .....               | 6   |
| 5    | 4158219  | Filter (Heater Air) ..... | 1   |
| 6    | 4158220  | Vent .....                | 1   |
| 7    | 4028131  | Switch .....              | 2   |
| 8    | 4158221  | Valve .....               | 1   |

## NON SUSPENSION SEAT (FIGURE 1-16)

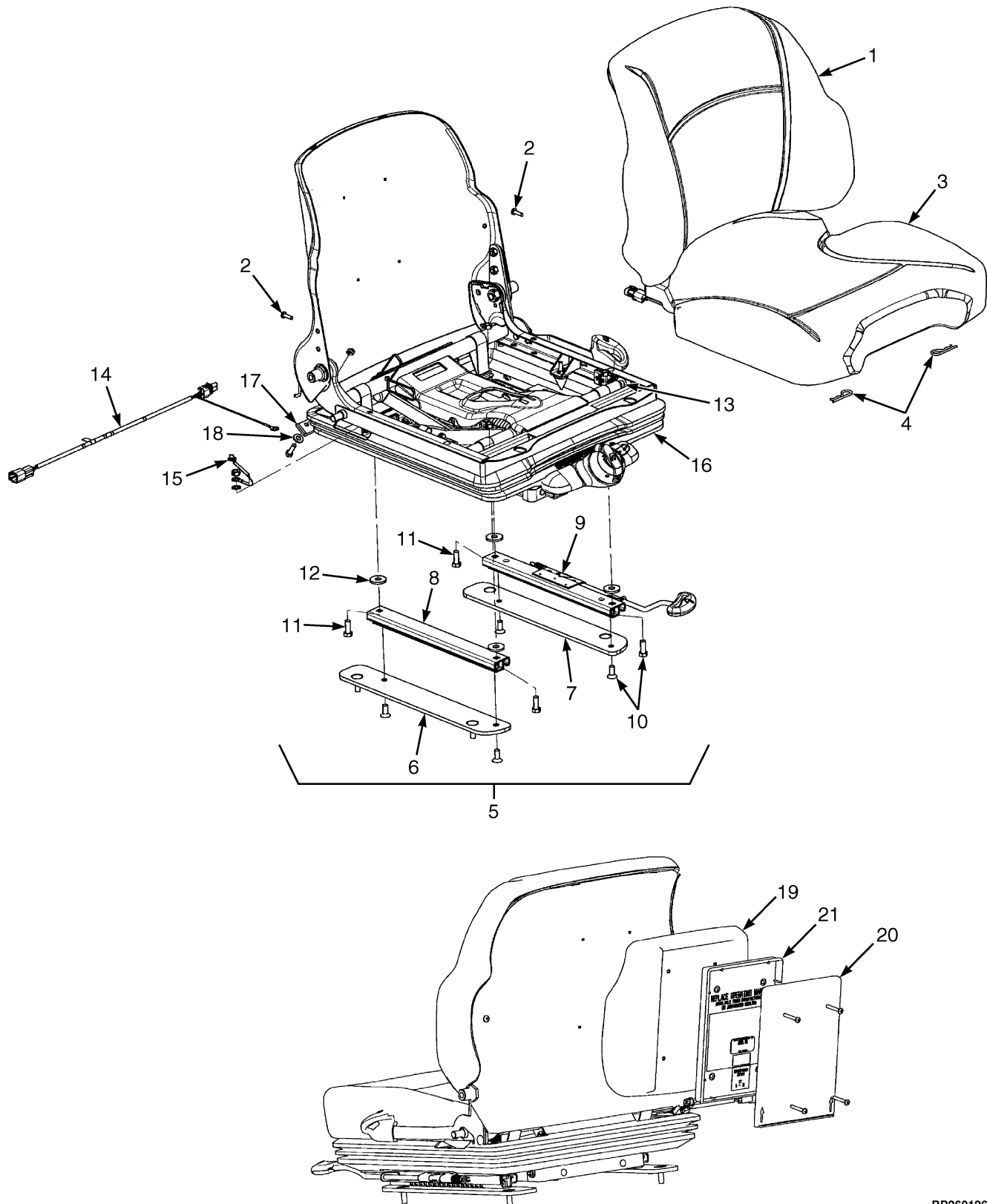


BP121487

**NON SUSPENSION SEAT**

| ITEM | PART NO.           | DESCRIPTION                                                      | QTY |
|------|--------------------|------------------------------------------------------------------|-----|
|      | 4638764            | Seat-Non Suspension Assembly .....                               | 1   |
| 1    | 4615813            | Seat-Non Suspension .....                                        | 1   |
| 2    | .....              | RH Hip Restraint .....                                           | 1   |
| 3    | .....              | LH Hip Restraint .....                                           | 1   |
| 4    | 4118204            | Plate .....                                                      | 1   |
| 5    | 4639540            | Seat Rail Assembly (Includes Locking and Slave Seat Rails) ..... | 1   |
| 6    | 4030278            | Box , Operator Manual .....                                      | 1   |
| 7    | 4030279            | Cover .....                                                      | 1   |
| 8    | 4639586            | Sensor Assembly, Operator Presence (Includes Housing) .....      | 1   |
| 8    | 4639542            | Sensor , Operator Presence .....                                 | 1   |
| 9    | 1479453            | Clamp .....                                                      | 1   |
| 10   | 320157             | Washer .....                                                     | 12  |
| 11   | 292681             | Lockwasher .....                                                 | 10  |
| 12   | 136749             | Screw .....                                                      | 14  |
| 13   | 296463             | Screw .....                                                      | 4   |
| 14   | 2022719            | Nut .....                                                        | 2   |
| 15   | 1603701            | Seat Belt (Standard) .....                                       | 1   |
| 15   | 1641250            | Seat Belt , High Visibility, Red .....                           | 1   |
| 15   | 4053079            | Seat Belt (High Visibility with Interlock) .....                 | 1   |
| 15   | 4221086            | Seat Belt (Red, High Visibility with Interlock) .....            | 1   |
| 16   | <del>1382472</del> |                                                                  |     |
|      | 1502543            | Nut .....                                                        | 4   |
| 17   | 1581852            | Washer .....                                                     | 3   |
| 18   | 221530             | Capscrew .....                                                   | 1   |
| 19   | 221536             | Capscrew .....                                                   | 1   |
| 20   | 221353             | Locknut .....                                                    | 2   |
| 21   | 19901              | Roll Pin .....                                                   | 1   |
| 22   | 4007891            | Cover Plate .....                                                | 1   |
| 23   | 296357             | Washer .....                                                     | 2   |
| 24   | 2107969            | Cover (Seat-Side Electrical) .....                               | 1   |
| 25   | 1694830            | Capscrew .....                                                   | 2   |
| 26   | 272133             | Clamp .....                                                      | 1   |
| 27   | 15127              | Washer .....                                                     | 1   |
| 28   | 292500             | Capscrew .....                                                   | 2   |
| 29   | 1593334            | Nut .....                                                        | 2   |
| 30   | .....              | Washer .....                                                     | 4   |
| 31   | .....              | Fastener .....                                                   | 2   |

## FULL-SUSPENSION SEAT (FIGURE 1-17) SHEET 1 OF 4



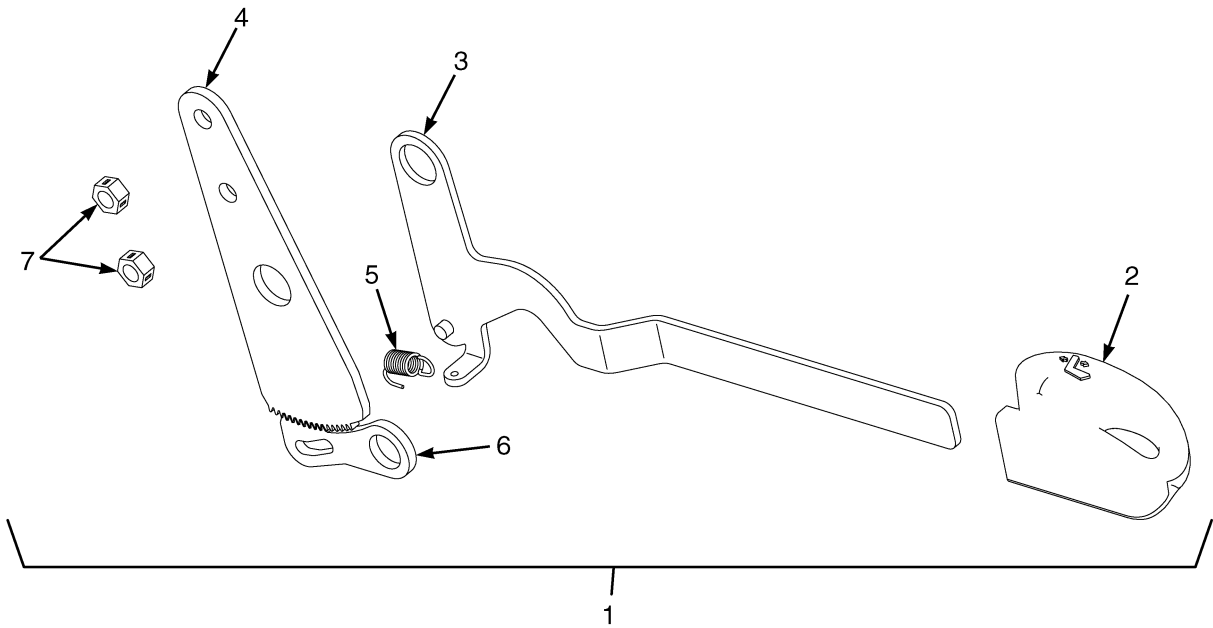
BP260126

**FULL-SUSPENSION SEAT**  
**SHEET 1 OF 4**

| ITEM | PART NO.         | DESCRIPTION                               | QTY |
|------|------------------|-------------------------------------------|-----|
|      | 4638762          | Seat-Full Suspension (Vinyl) .....        | 1   |
|      | 4638763          | Seat-Full Suspension (Cloth) .....        | 1   |
| 1    | 1703901          | Kit-Cushion (Back Cushion, Vinyl) .....   | 1   |
| 1    | 1703898          | Kit-Cushion (Back Cushion, Cloth) .....   | 1   |
| 2    | 1584643          | Screw .....                               | 2   |
| 3    | 4151990          | Kit-Seat Cushion (Vinyl) .....            | 1   |
| 3    | 4151991          | Kit-Seat Cushion (Cloth) .....            | 1   |
| 3    | 4151994          | Seat Cushion (Vinyl) .....                | 1   |
| 3    | 4151995          | Seat Cushion (Cloth) .....                | 1   |
| 4    | 1513089          | Cotter Pin (Hair) .....                   | 2   |
| 5    | 4151992          | Kit-Seat Rail .....                       | 1   |
| 6    | .....            | Plate (LH) .....                          | 1   |
| 7    | .....            | Plate (RH) .....                          | 1   |
| 8    | .....            | Seat Rail (Slave) .....                   | 1   |
| 9    | .....            | Seat Rail (Locking) .....                 | 1   |
| 10   | 296482           | Screw .....                               | 4   |
| 11   | 18496            | Capscrew .....                            | 4   |
| 12   | 1482995          | Washer .....                              | 4   |
| 13   | 1367150          | Nut .....                                 | 4   |
| 14   | 4151993          | Kit-Wire Harness .....                    | 1   |
| 15   | 893818           | Wire (Ground) .....                       | 1   |
| 16   | 4036586          | Kit -Seat Suspension without Swivel ..... | 1   |
| 17   | 4027341          | Bracket (Angle Control) .....             | 1   |
| 18   | 1482995          | Washer .....                              | 1   |
| 19   | 1482925          | Plate (Book Box) .....                    | 1   |
| 20   | 1482950          | Cover .....                               | 1   |
| 21   | 4058157          | Box (Book) .....                          | 1   |
|      | <b>a</b> 1615067 | Switch (Operator Presence System) .....   | 1   |

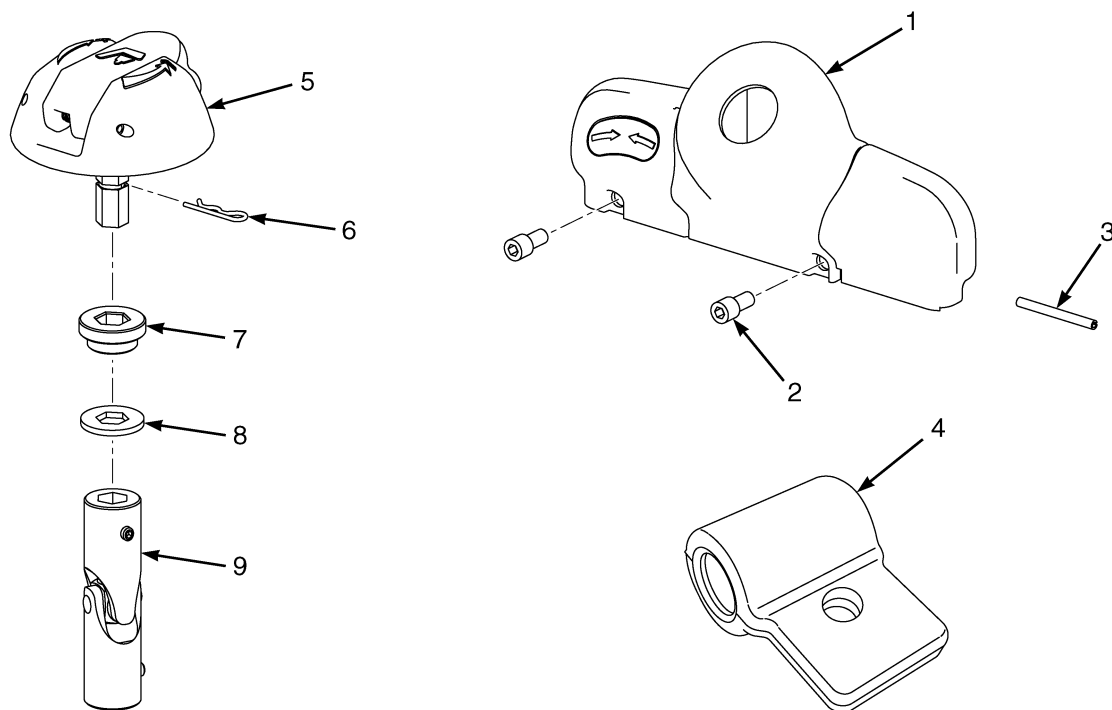
**FOOTNOTES:****a** Not Illustrated

**FULL SUSPENSION SEAT (FIGURE 1-18)**  
**RECLINER KIT — SHEET 2 OF 4**



BP260124

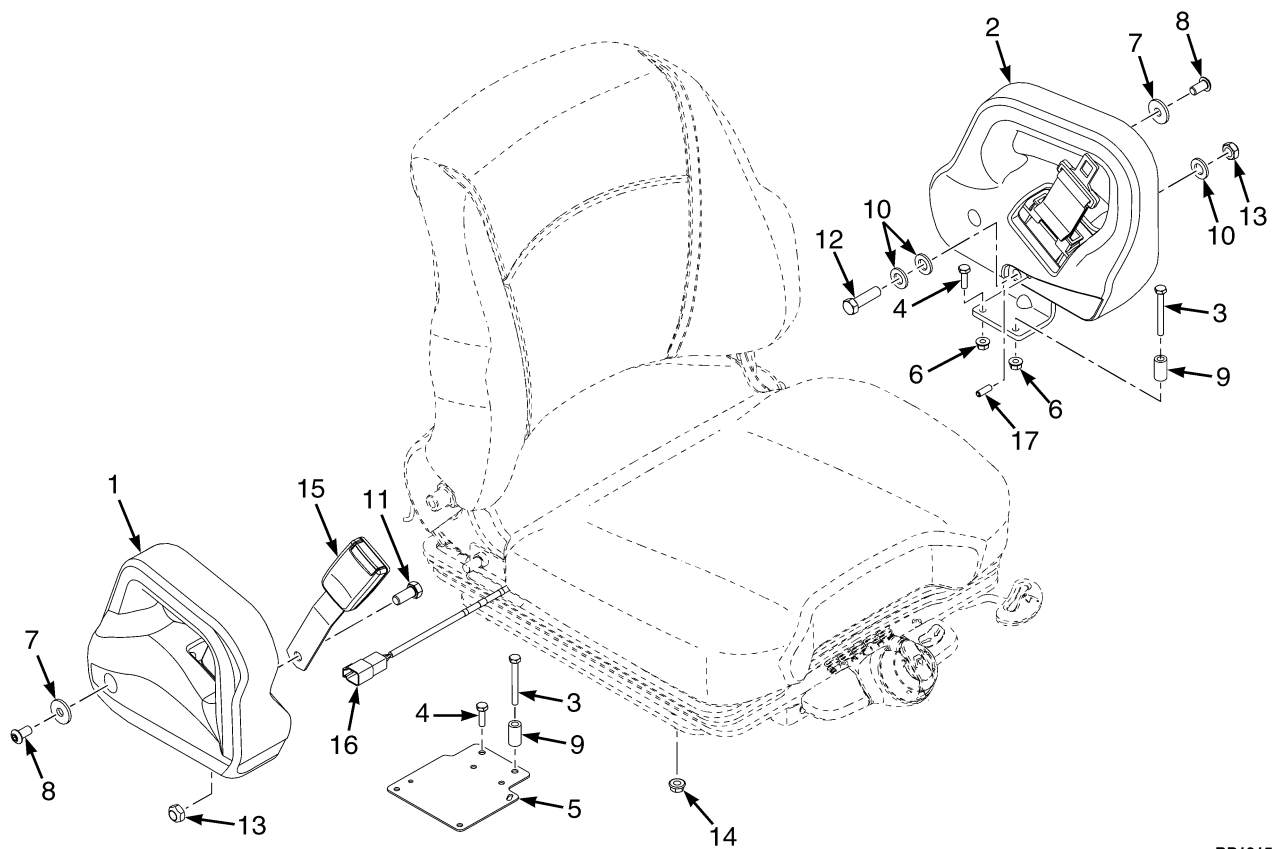
| ITEM | PART NO. | DESCRIPTION                               | QTY |
|------|----------|-------------------------------------------|-----|
| 1    | 1703891  | Kit-Recliner (Back Seat Adjustment) ..... | 1   |
| 2    | .....    | Knob .....                                | 1   |
| 3    | .....    | Lever .....                               | 1   |
| 4    | .....    | Plate .....                               | 1   |
| 5    | .....    | 1512694 .....                             | 1   |
| 6    | 1482906  | Latch .....                               | 1   |
| 7    | 1367150  | Nut .....                                 | 2   |

**FULL SUSPENSION SEAT (FIGURE 1-19)**  
**SERVICE KITS FOR NON-SWIVEL — SHEET 3 OF 4**

BP121233

| ITEM | PART NO. | DESCRIPTION                                  | QTY |
|------|----------|----------------------------------------------|-----|
|      | 4036586  | Kit -Seat Suspension without Swivel .....    | 1   |
| 1    | 1703893  | Kit-Service (Front Panel) (Non-Swivel) ..... | 1   |
| 1    | .....    | Front Panel .....                            | 1   |
| 2    | .....    | Capscrew .....                               | 2   |
| 3    | .....    | Roll Pin .....                               | 1   |
| 4    | 4046492  | Lever (Spring Pull) .....                    | 2   |
| 5    | 1703892  | Kit-Weight Adjuster .....                    | 1   |
| 5    | .....    | Knob .....                                   | 1   |
| 6    | .....    | Cotter Pin .....                             | 1   |
| 7    | .....    | Bushing .....                                | 1   |
| 8    | .....    | Washer .....                                 | 1   |
| 9    | .....    | U-Joint .....                                | 1   |

## FULL SUSPENSION SEAT (FIGURE 1-20) MANUAL HYDRAULIC NON-SWIVEL — SHEET 4 OF 4



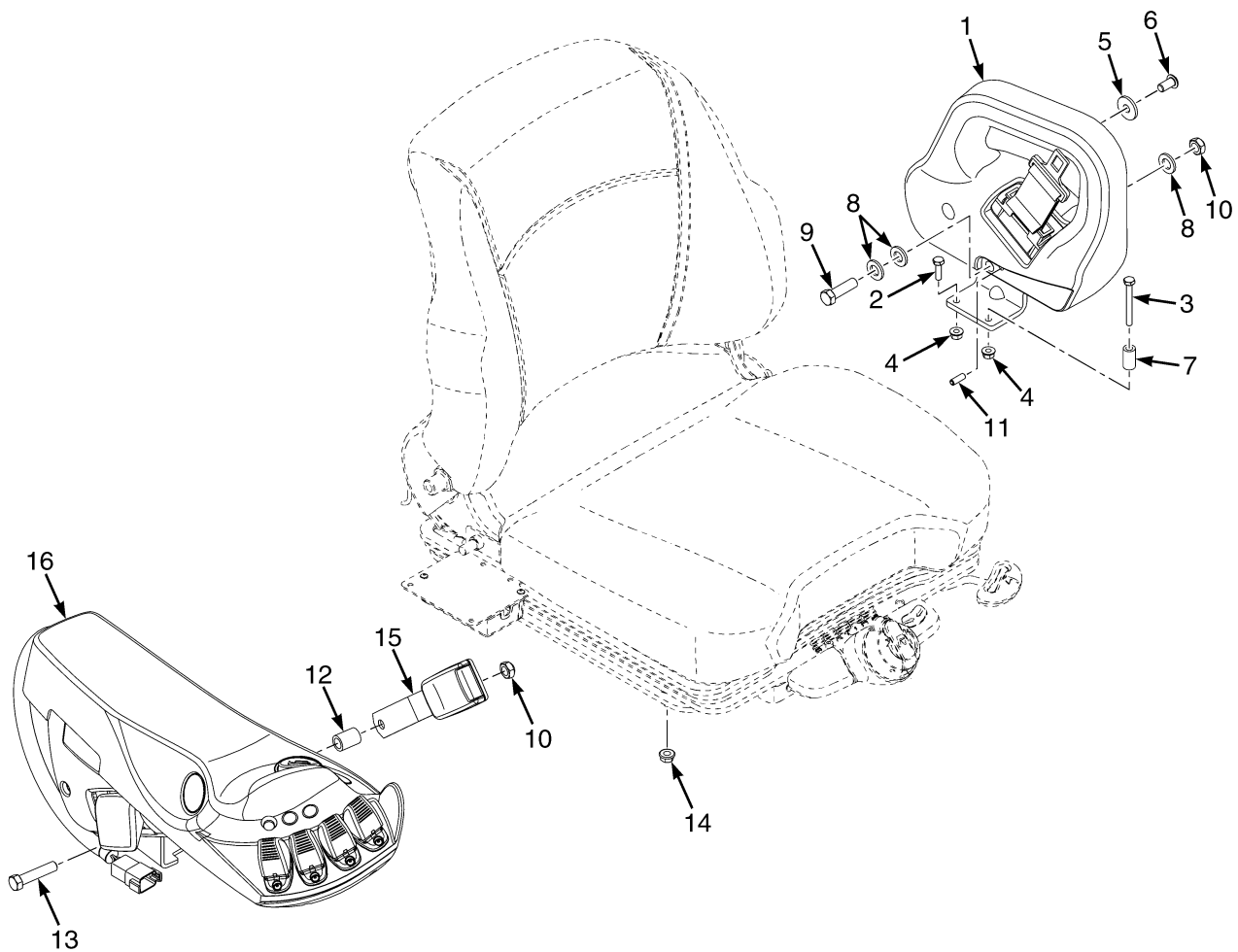
BP121549



**FULL SUSPENSION SEAT**  
**MANUAL HYDRAULIC NON-SWIVEL – SHEET 4 OF 4**

| ITEM | PART NO.                      | DESCRIPTION                                                  | QTY |
|------|-------------------------------|--------------------------------------------------------------|-----|
| 1    | 2099951                       | Armrest (Right-Hand Side) .....                              | 1   |
| 2    | 4612911                       | Armrest (Left-Hand Side) .....                               | 1   |
| 3    | 18473                         | Capscrew .....                                               | 2   |
| 4    | 18462                         | Capscrew .....                                               | 2   |
| 5    | 4004776                       | Cover Plate .....                                            | 1   |
| 6    | 169874                        | Nut .....                                                    | 4   |
| 7    | 1512536                       | Washer .....                                                 | 2   |
| 8    | 18735                         | Screw .....                                                  | 2   |
| 9    | 4007318                       | Spacer .....                                                 | 2   |
| 10   | 1581852                       | Washer .....                                                 | 3   |
| 11   | 221530                        | Capscrew .....                                               | 1   |
| 12   | 221536                        | Capscrew .....                                               | 1   |
| 13   | 221353                        | Locknut .....                                                | 2   |
| 14   | <del>1382472</del><br>1502543 | Nut .....                                                    | 4   |
| 15   | 4154326                       | Seat Belt (Standard) .....                                   | 1   |
| 15   | 1641250                       | Seat Belt , High Visibility, Red .....                       | 1   |
| 15   | 4156292                       | Seat Belt (High Visibility Interlock) (Alternate Part) ..... | 1   |
| 16   | 4653525                       | Wire Harness (Alternate Part) .....                          | 1   |
| 17   | 19901                         | Roll Pin .....                                               | 1   |

## FULL SUSPENSION SEAT (FIGURE 1-21) ELECTRO-HYDRAULIC NON-SWIVEL — SHEET 4 OF 4

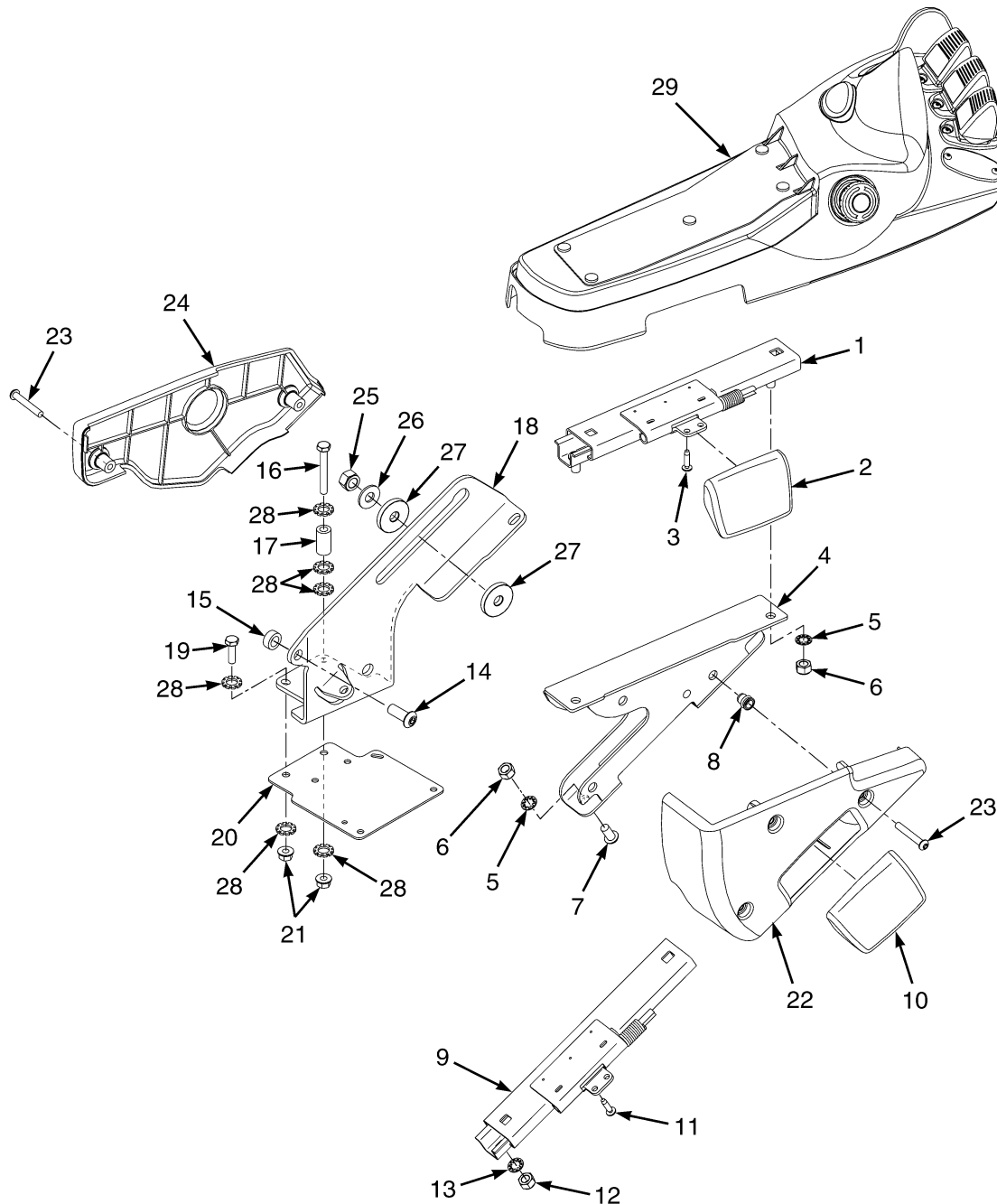


BP121548

**FULL SUSPENSION SEAT**  
**ELECTRO-HYDRAULIC NON-SWIVEL – SHEET 4 OF 4**

| ITEM | PART NO.           | DESCRIPTION                                            | QTY |
|------|--------------------|--------------------------------------------------------|-----|
| 1    | 4612911            | Armrest (Left-Hand Side) .....                         | 1   |
| 2    | 18462              | Capscrew .....                                         | 1   |
| 3    | 18473              | Capscrew .....                                         | 1   |
| 4    | 169874             | Nut .....                                              | 2   |
| 5    | 1512536            | Washer .....                                           | 1   |
| 6    | 18735              | Screw .....                                            | 1   |
| 7    | 4007318            | Spacer .....                                           | 1   |
| 8    | 1581852            | Washer .....                                           | 3   |
| 9    | 221536             | Capscrew .....                                         | 1   |
| 10   | 221353             | Locknut .....                                          | 2   |
| 11   | 19901              | Roll Pin .....                                         | 1   |
| 12   | 1694700            | Spacer .....                                           | 1   |
| 13   | 221542             | Capscrew .....                                         | 1   |
| 14   | <del>1382472</del> |                                                        |     |
|      | 1502543            | Nut .....                                              | 4   |
| 15   | 1603701            | Seat Belt (Standard) .....                             | 1   |
| 15   | 1641250            | Seat Belt , High Visibility, Red .....                 | 1   |
| 16   | .....              | Armrest (☞ Figure 1-22).....                           | 1   |
| 16   | 4005010            | Armrest (Slider for Mini Lever) (☞ Figure 1-22).....   | 1   |
| 16   | .....              | Mini-Lever Modules (☞ Figure 5-20, ☞ Figure 5-22)..... | 1   |

## ARMREST SLIDER ASSEMBLY (FIGURE 1-22)

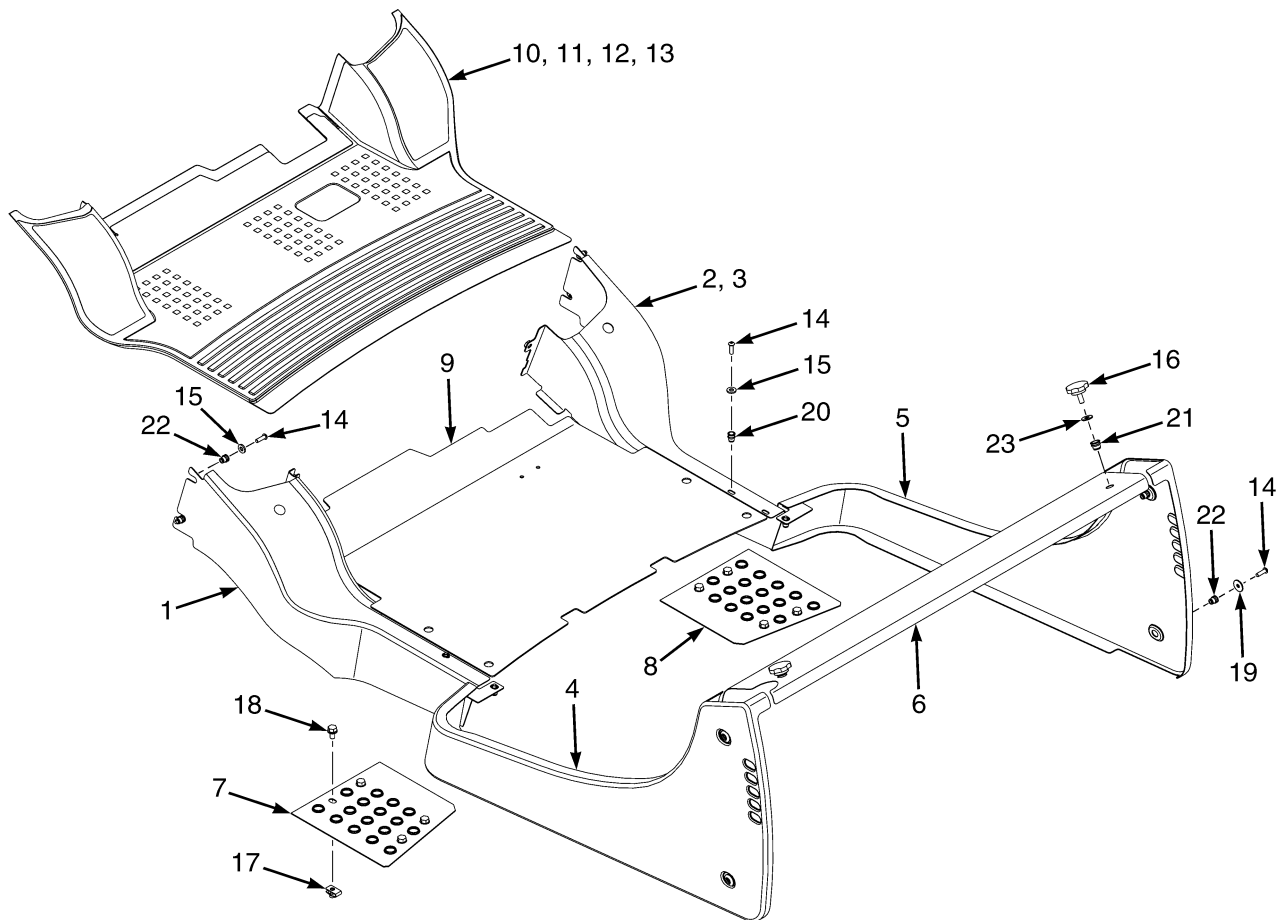


BP121412

**ARMREST SLIDER ASSEMBLY**

| ITEM | PART NO. | DESCRIPTION                                                                                                                                                                                                                     | QTY |
|------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|      | 4005010  | Armrest (Slider for Mini Lever) .....                                                                                                                                                                                           | 1   |
| 1    | .....    | Armrest (Handle Slide - Upper) .....                                                                                                                                                                                            | 1   |
| 1    | 1661511  | Armrest (Slider) .....                                                                                                                                                                                                          | 1   |
| 2    | 1655865  | Handle (Slider) .....                                                                                                                                                                                                           | 1   |
| 3    | 227157   | Screw .....                                                                                                                                                                                                                     | 2   |
| 4    | .....    | Bracket Weldment .....                                                                                                                                                                                                          | 1   |
| 5    | 296360   | Washer .....                                                                                                                                                                                                                    | 4   |
| 6    | 313828   | Nut .....                                                                                                                                                                                                                       | 4   |
| 7    | 296165   | Capscrew .....                                                                                                                                                                                                                  | 2   |
| 8    | 1531558  | Insert .....                                                                                                                                                                                                                    | 3   |
| 9    | .....    | Armrest (Handle Slide Assy) .....                                                                                                                                                                                               | 1   |
| 9    | 1661511  | Armrest (Slider) .....                                                                                                                                                                                                          | 1   |
| 10   | 1655865  | Handle (Slider) .....                                                                                                                                                                                                           | 1   |
| 11   | 227157   | Screw .....                                                                                                                                                                                                                     | 2   |
| 12   | 313828   | Nut .....                                                                                                                                                                                                                       | 2   |
| 13   | 296360   | Washer .....                                                                                                                                                                                                                    | 2   |
| 14   | 18738    | Capscrew .....                                                                                                                                                                                                                  | 1   |
| 15   | 4007319  | Spacer .....                                                                                                                                                                                                                    | 1   |
| 16   | 18473    | Capscrew .....                                                                                                                                                                                                                  | 1   |
| 17   | 4007318  | Spacer .....                                                                                                                                                                                                                    | 1   |
| 18   | 4004775  | Bracket .....                                                                                                                                                                                                                   | 1   |
| 19   | 18462    | Capscrew .....                                                                                                                                                                                                                  | 1   |
| 20   | 4004776  | Cover Plate .....                                                                                                                                                                                                               | 1   |
| 21   | 169874   | Nut .....                                                                                                                                                                                                                       | 2   |
| 22   | 4603492  | Cover .....                                                                                                                                                                                                                     | 1   |
| 23   | 2062875  | Capscrew .....                                                                                                                                                                                                                  | 5   |
| 24   | 4603493  | Cover .....                                                                                                                                                                                                                     | 1   |
| 25   | 316826   | Nut .....                                                                                                                                                                                                                       | 1   |
| 26   | 320160   | Washer .....                                                                                                                                                                                                                    | 1   |
| 27   | 1650640  | Washer .....                                                                                                                                                                                                                    | 2   |
| 28   | 296379   | Washer .....                                                                                                                                                                                                                    | 6   |
| 29   | .....    | Mini-Lever Control Arm (  Figure 5-20,  Figure 5-22)..... | 1   |

## FLOORPLATES AND COVERS (FIGURE 1-23) LPG

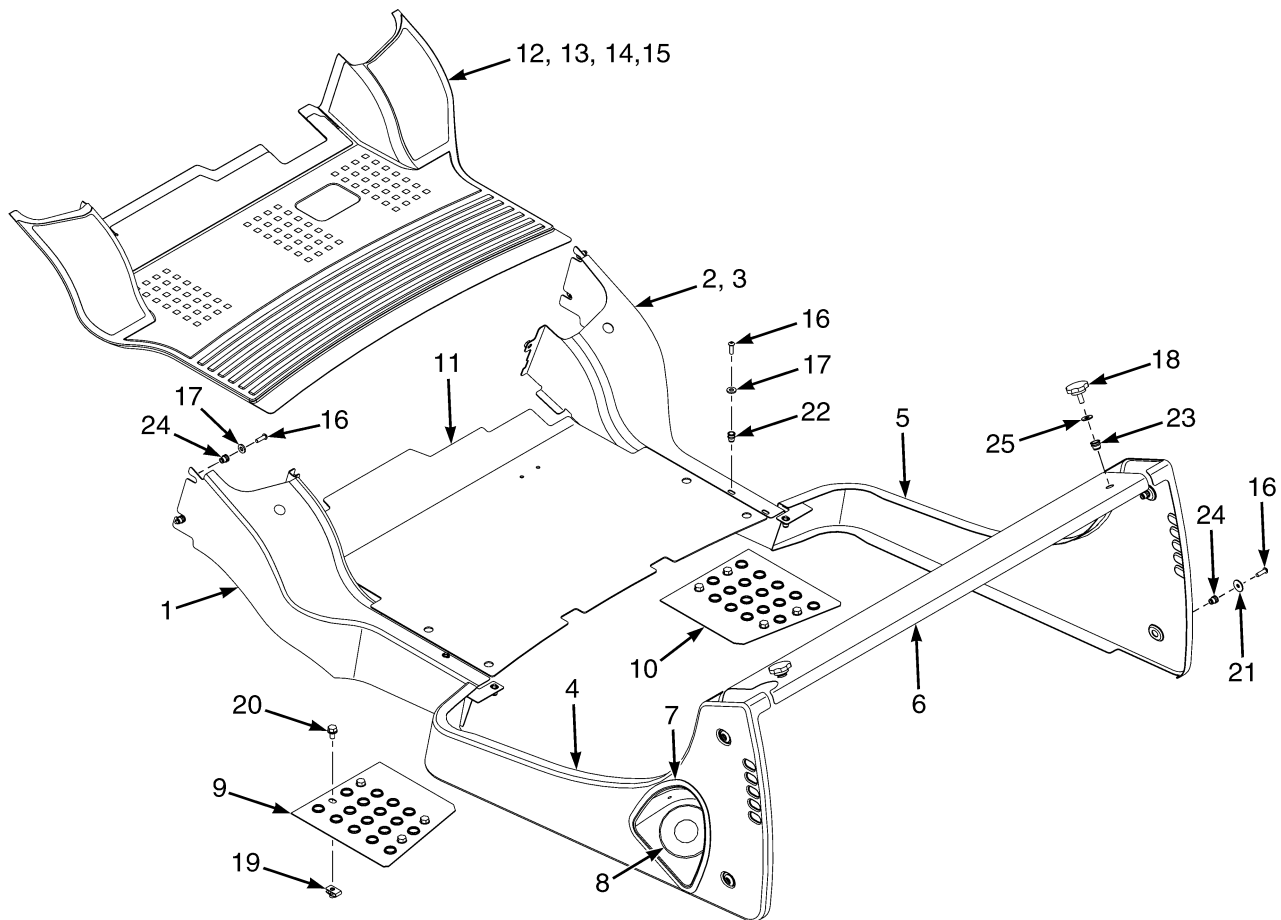


BP200312

**FLOORPLATES AND COVERS**  
**LPG****KEY:****A: Standard****B: Monotrol****C: Standard w/Heater****D: Monotrol w/Heater**

| ITEM | PART NO. | DESCRIPTION                        | QTY |    |    |    |
|------|----------|------------------------------------|-----|----|----|----|
|      |          |                                    | A   | B  | C  | D  |
| 1    | 4606026  | Panel (Front, LH) .....            | 1   | 1  | 1  | 1  |
| 2    | 4606027  | Panel (Front, RH) .....            | 1   | 1  | .. | .. |
| 3    | 4156094  | Panel (Painted, Front, RH) .....   | ..  | .. | 1  | 1  |
| 4    | 2081357  | Panel (Rear, LH) .....             | 1   | 1  | 1  | 1  |
| 5    | 2081358  | Panel (Rear, RH) .....             | 1   | 1  | 1  | 1  |
| 6    | 4109638  | Cover (Radiator) .....             | 1   | 1  | 1  | 1  |
| 7    | 4145524  | Step (LH) .....                    | 1   | 1  | 1  | 1  |
| 8    | 4145525  | Step (RH) .....                    | 1   | 1  | 1  | 1  |
| 9    | 4600091  | Steel Plate (Floor) .....          | 1   | 1  | 1  | 1  |
| 10   | 4604644  | Floormat (Standard) .....          | 1   | .. | .. | .. |
| 11   | 4156658  | Floormat (Standard w/Heater) ..... | ..  | .. | 1  | .. |
| 12   | 4604645  | Floormat (Monotrol) .....          | ..  | 1  | .. | .. |
| 13   | 4156659  | Floormat (Monotrol w/Heater) ..... | ..  | .. | .. | 1  |
| 14   | 4044966  | Capscrew .....                     | 12  | 12 | 12 | 12 |
| 15   | 4149893  | Washer .....                       | 8   | 8  | 8  | 8  |
| 16   | 2070024  | Bolt .....                         | 2   | 2  | 2  | 2  |
| 17   | 1480237  | Nut (Fold Over) .....              | 8   | 8  | 8  | 8  |
| 18   | 1613324  | Capscrew .....                     | 8   | 8  | 8  | 8  |
| 19   | 1709980  | Washer .....                       | 4   | 4  | 4  | 4  |
| 20   | 1531001  | Insert .....                       | 4   | 4  | 4  | 4  |
| 21   | 1530243  | Insert .....                       | 2   | 2  | 2  | 2  |
| 22   | 1531001  | Insert .....                       | 8   | 8  | 8  | 8  |
| 23   | 1581851  | Washer .....                       | 2   | 2  | 2  | 2  |

## FLOORPLATES AND COVERS (FIGURE 1-24) DIESEL AND BI-FUEL



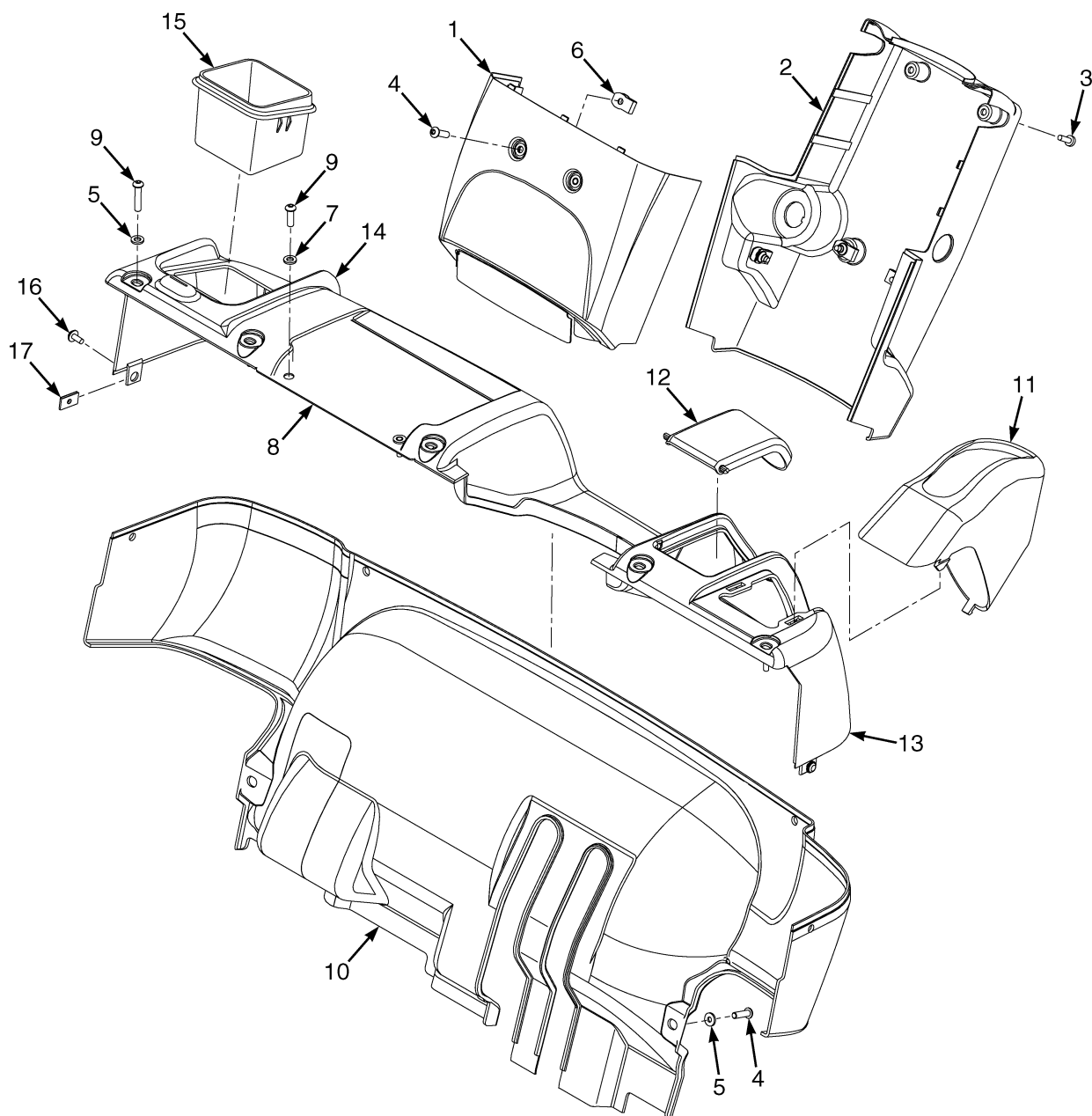
BP200313



**FLOORPLATES AND COVERS  
DIESEL AND BI-FUEL****KEY:****A: Standard****B: Monotrol****C: Standard w/Heater****D: Monotrol w/Heater**

| ITEM | PART NO. | DESCRIPTION                      | QTY |    |    |    |
|------|----------|----------------------------------|-----|----|----|----|
|      |          |                                  | A   | B  | C  | D  |
| 1    | 4606026  | Panel (Front, LH) .....          | 1   | 1  | 1  | 1  |
| 2    | 4606027  | Panel (Front, RH) .....          | 1   | 1  | .. | .. |
| 3    | 4156094  | Panel (Painted, Front, RH) ..... | ..  | .. | 1  | 1  |
| 4    | 2081356  | Panel (Rear, LH) .....           | 1   | 1  | 1  | 1  |
| 5    | 2081358  | Panel (Rear, RH) .....           | 1   | 1  | 1  | 1  |
| 6    | 4109638  | Cover (Radiator) .....           | 1   | 1  | 1  | 1  |
| 7    | 4650883  | Splash Guard (Fuel Filler) ..... | 1   | 1  | 1  | 1  |
| 8    | 2080066  | Packing (Fuel) .....             | 1   | 1  | 1  | 1  |
| 9    | 4145524  | Step (LH) .....                  | 1   | 1  | 1  | 1  |
| 10   | 4145525  | Step (RH) .....                  | 1   | 1  | 1  | 1  |
| 11   | 4600091  | Steel Plate (Floor) .....        | 1   | 1  | 1  | 1  |
| 12   | 4604644  | Floormat .....                   | 1   | .. | .. | .. |
| 13   | 4156658  | Floormat .....                   | ..  | .. | 1  | .. |
| 14   | 4604645  | Floormat .....                   | ..  | 1  | .. | .. |
| 15   | 4156659  | Floormat .....                   | ..  | .. | .. | 1  |
| 16   | 4044966  | Capscrew .....                   | 12  | 12 | 12 | 12 |
| 17   | 4149893  | Washer .....                     | 8   | 8  | 8  | 8  |
| 18   | 2070024  | Bolt .....                       | 2   | 2  | 2  | 2  |
| 19   | 1480237  | Nut (Fold Over) .....            | 8   | 8  | 8  | 8  |
| 20   | 1613324  | Capscrew .....                   | 8   | 8  | 8  | 8  |
| 21   | 1709980  | Washer .....                     | 4   | 4  | 4  | 4  |
| 22   | 1531001  | Insert .....                     | 4   | 4  | 4  | 4  |
| 23   | 1530243  | Insert .....                     | 2   | 2  | 2  | 2  |
| 24   | 1531001  | Insert .....                     | 8   | 8  | 8  | 8  |
| 25   | 1581851  | Washer .....                     | 2   | 2  | 2  | 2  |

## INTERIOR PANELS AND COVERS (FIGURE 1-25)



BP200314

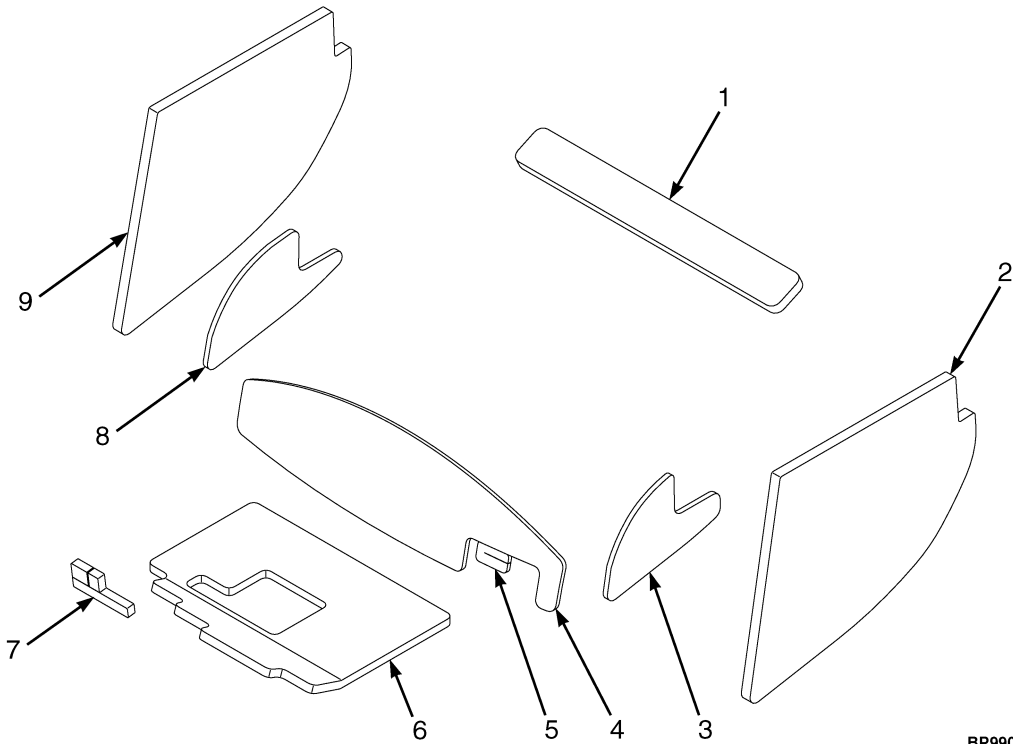
**INTERIOR PANELS AND COVERS**

| ITEM | PART NO.           | DESCRIPTION                                                   | QTY |
|------|--------------------|---------------------------------------------------------------|-----|
| 1    | 2080168            | Cover (Column Front) .....                                    | 1   |
| 1    | <b>d</b> 4659016   | Cover (Column Front) .....                                    | 1   |
| 2    | <b>b</b> 4639585   | Cover (Column Back) .....                                     | 1   |
| 2    | <b>e</b> 4179803   | Cover (Column Back) .....                                     | 1   |
| 3    | 2027655            | Screw .....                                                   | 2   |
| 4    | 4044966            | Capscrew .....                                                | 7   |
| 5    | 4211852            | Washer .....                                                  | 13  |
| 6    | 1566420            | Nut (Foldover) .....                                          | 5   |
| 7    | 4211852            | Washer .....                                                  | 2   |
| 8    | <del>4144764</del> |                                                               |     |
|      | 4178098            | Cover Plate .....                                             | 1   |
| 9    | 4044968            | Capscrew .....                                                | 5   |
| 10   | 2082104            | Panel (Kick, Standard) .....                                  | 1   |
| 10   | 2083480            | Panel (Kick, Monotrol) .....                                  | 1   |
| 11   | 4659260            | Cover (Parking Lever) .....                                   | 1   |
| 11   | <b>c</b> 2082105   | Cover (Parking Lever) .....                                   | 1   |
| 12   | 2082106            | Cover (Reserve Tank) .....                                    | 1   |
| 13   | 2082102            | Panel (LH Dash) .....                                         | 1   |
| 14   | 2082103            | Dash Panel (RH) .....                                         | 1   |
| 14   | <b>c</b> 4179801   | Dash Panel (RH) .....                                         | 1   |
| 15   | 2027356            | Cup Holder .....                                              | 1   |
| 16   | 2084606            | Screw .....                                                   | 4   |
| 17   | 2091344            | Nut .....                                                     | 4   |
|      | <b>a</b> 2092207   | Cover (Mounting Panel) .....                                  | 5   |
|      | <b>a</b> 4153136   | Ignition Switch (Located in Steering Column Back Cover) ..... | 1   |
|      | <b>a</b> 1687435   | Knob (Keyless Start) .....                                    | 1   |
|      | <b>a</b> 1337197   | Key Set .....                                                 | 1   |

**FOOTNOTES:**

- |                                         |                                           |
|-----------------------------------------|-------------------------------------------|
| <b>a</b> Not illustrated                | <b>d</b> With Telemetry Level 1 through 3 |
| <b>b</b> Standard and Telemetry Level 1 | <b>e</b> With Telemetry Level 2 and 3     |
| <b>c</b> With 12V Outlet                |                                           |

SOUND ABATEMENT (FIGURE 1-26)

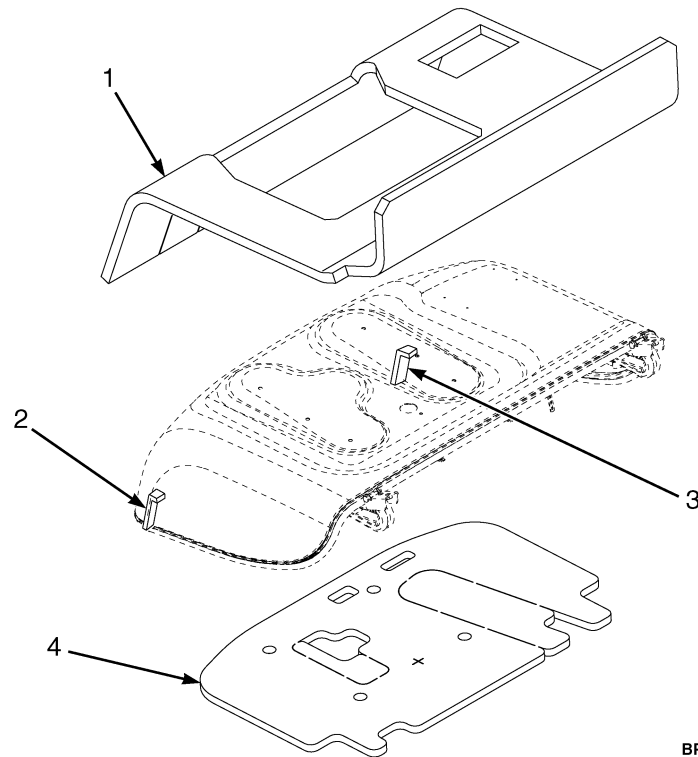


BP990099

| ITEM | PART NO.         | DESCRIPTION       | QTY |
|------|------------------|-------------------|-----|
| 1    | 4122924          | Sound Liner ..... | 1   |
| 2    | 4160766          | Door Panel .....  | 1   |
| 3    | 4122925          | Sound Liner ..... | 1   |
| 4    | 4123630          | Sound Liner ..... | 1   |
| 5    | <b>a</b> 4126586 | Sound Liner ..... | 1   |
| 6    | 4145957          | Sound Liner ..... | 1   |
| 7    | 4145933          | Sound Liner ..... | 1   |
| 8    | 4122926          | Sound Liner ..... | 1   |
| 9    | 4160765          | Door Panel .....  | 1   |

FOOTNOTES:

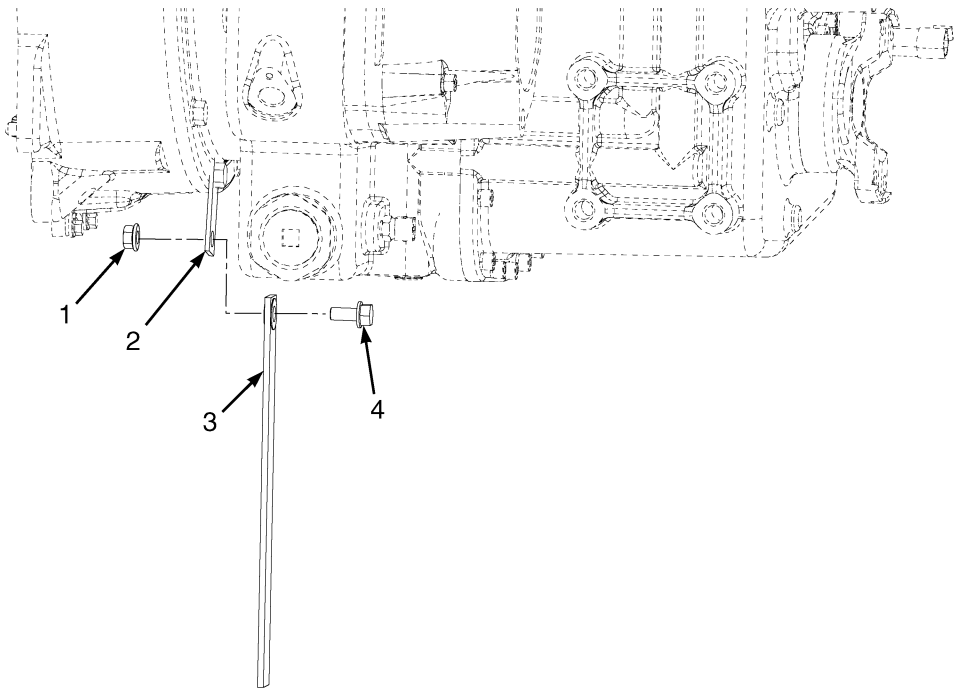
**a** → 5/2020

**SOUND ABATEMENT (FIGURE 1-27)  
HOOD LINERS**

BP990100

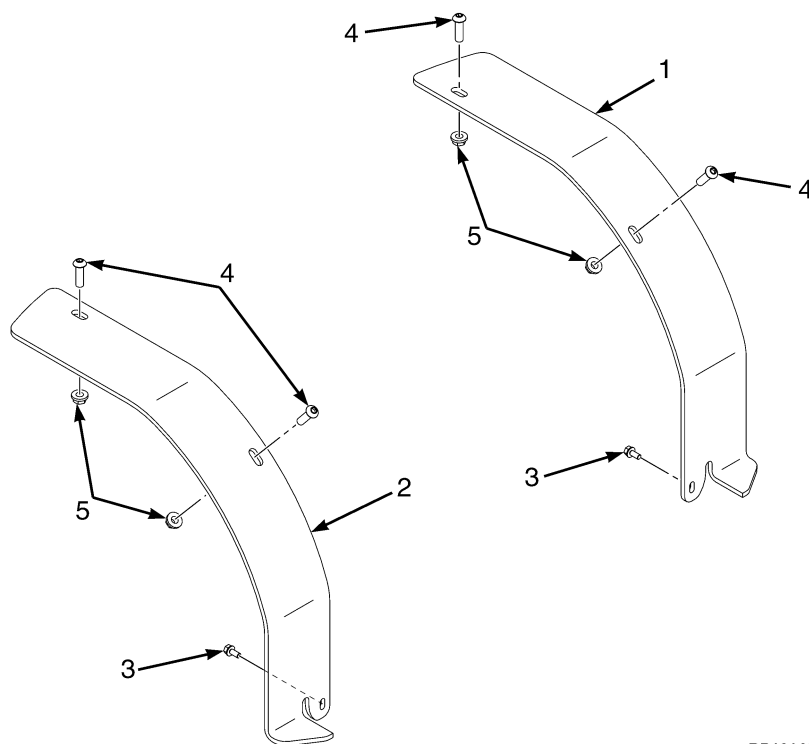
| ITEM | PART NO. | DESCRIPTION       | QTY |
|------|----------|-------------------|-----|
| 1    | 4160717  | Blanket .....     | 1   |
| 2    | 1596624  | Seal (RH) .....   | 1   |
| 3    | 1596625  | Seal (LH) .....   | 1   |
| 4    | 4123669  | Sound Liner ..... | 1   |

**STATIC STRAP INSTALLATION (FIGURE 1-28)**



BP120922

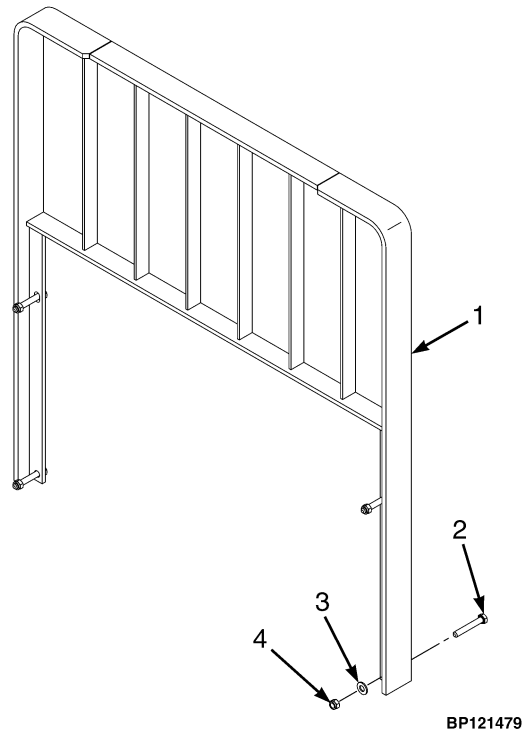
| ITEM | PART NO. | DESCRIPTION        | QTY |
|------|----------|--------------------|-----|
| 1    | 1460477  | Nut .....          | 1   |
| 2    | 1565832  | Bracket .....      | 1   |
| 3    | 2799498  | Static Strap ..... | 1   |
| 4    | 1586013  | Capscrew .....     | 1   |

**FENDER EXTENSIONS (FIGURE 1-29)**

BP121480

| ITEM | PART NO. | DESCRIPTION                | QTY |
|------|----------|----------------------------|-----|
| 1    | 4125465  | Fender (RH H40-50XT) ..... | 1   |
| 1    | 4125466  | Fender (RH H60XT) .....    | 1   |
| 2    | 4125157  | Fender (LH H40-50XT) ..... | 1   |
| 2    | 4125158  | Fender (LH H60XT) .....    | 1   |
| 3    | 1608654  | Capscrew .....             | 2   |
| 4    | 2076289  | Capscrew .....             | 4   |
| 5    | 1586432  | Nut .....                  | 4   |

## LOAD BACKREST EXTENSION (FIGURE 1-30)



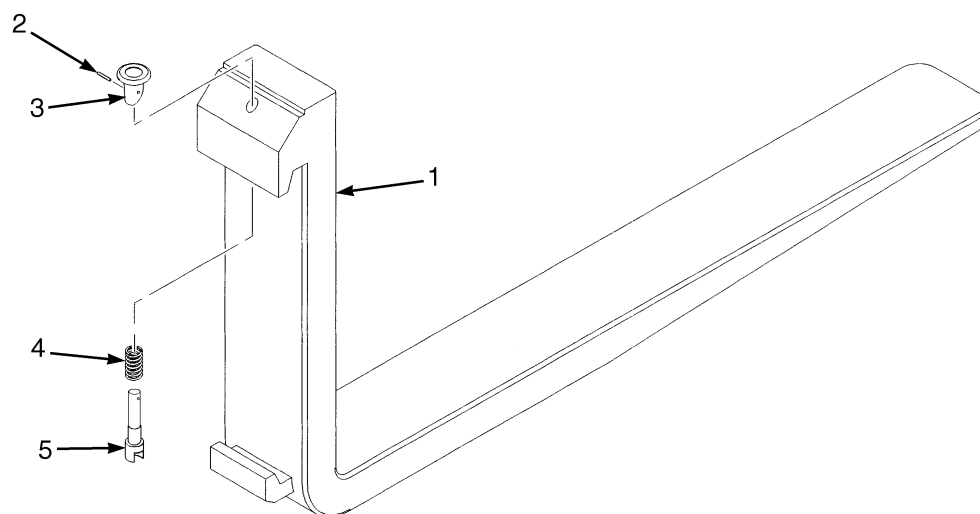
BP121479

| ITEM | PART NO.         | DESCRIPTION                              | QTY |
|------|------------------|------------------------------------------|-----|
| 1    | 4134518          | Load Backrest (42 in.) (Class II) .....  | 1   |
| 1    | 4134519          | Load Backrest (48 in.) (Class II) .....  | 1   |
| 1    | 4134522          | Load Backrest (42 in.) (Class III) ..... | 1   |
| 1    | 4134523          | Load Backrest (48 in.) (Class III) ..... | 1   |
| 2    | 1581838          | Capscrew .....                           | 4   |
| 2    | <b>a</b> 1581593 | Capscrew .....                           | 4   |
| 3    | 1581853          | Washer .....                             | 4   |
| 4    | 1581849          | Nut .....                                | 4   |

## FOOTNOTES:

**a** With Integral Side Shift



**FORKS (FIGURE 1-31)**

BP000187

**KEY:****A: Standard, Class II (3.9 in. x 1.6 in.)****B: Polished Full Bottom Taper, Class II (4.9 in. x 1.6 in.)****C: Standard, Class III (4.9 in. x 2 in.)****D: Polished Full Bottom Taper, Class III (7.1 in. x 1.8 in.)**

| ITEM | PART NO. | DESCRIPTION              | QTY |    |    |    |
|------|----------|--------------------------|-----|----|----|----|
|      |          |                          | A   | B  | C  | D  |
| 1    | 384211   | Fork (36 in.) .....      | 2   | .. | .. | .. |
| 1    | 1308093  | Fork (40 in.) .....      | 2   | .. | .. | .. |
| 1    | 384213   | Fork (42 in.) .....      | 2   | .. | .. | .. |
| 1    | 384214   | Fork (48 in.) .....      | 2   | .. | .. | .. |
| 1    | 384215   | Fork (54 in.) .....      | 2   | .. | .. | .. |
| 1    | 384216   | Fork (60 in.) .....      | 2   | .. | .. | .. |
| 1    | 1338087  | Fork (36 in.) .....      | ..  | 2  | .. | .. |
| 1    | 1338088  | Fork (42 in.) .....      | ..  | 2  | .. | .. |
| 1    | 1338089  | Fork (48 in.) .....      | ..  | 2  | .. | .. |
| 1    | 367419   | Fork (36 in.) .....      | ..  | .. | 2  | .. |
| 1    | 367420   | Fork (42 in.) .....      | ..  | .. | 2  | .. |
| 1    | 367421   | Fork (48 in.) .....      | ..  | .. | 2  | .. |
| 1    | 367422   | Fork (54 in.) .....      | ..  | .. | 2  | .. |
| 1    | 367423   | Fork (60 in.) .....      | ..  | .. | 2  | .. |
| 1    | 367424   | Fork (72 in.) .....      | ..  | .. | 2  | .. |
| 1    | 1338097  | Fork (42 in.) .....      | ..  | .. | .. | 2  |
| 1    | 1338098  | Fork (48 in.) .....      | ..  | .. | .. | 2  |
| 1    | 1332745  | Fork (54 in.) .....      | ..  | .. | .. | 2  |
| 2    | 1523734  | Pin , Pin Retainer ..... | 1   | 1  | 1  | 1  |
| 3    | 1523732  | Knob .....               | 1   | 1  | 1  | 1  |
| 4    | 1500782  | Spring .....             | 1   | 1  | .. | .. |
| 4    | 1500784  | Spring .....             | ..  | .. | 1  | 1  |

## KEY:

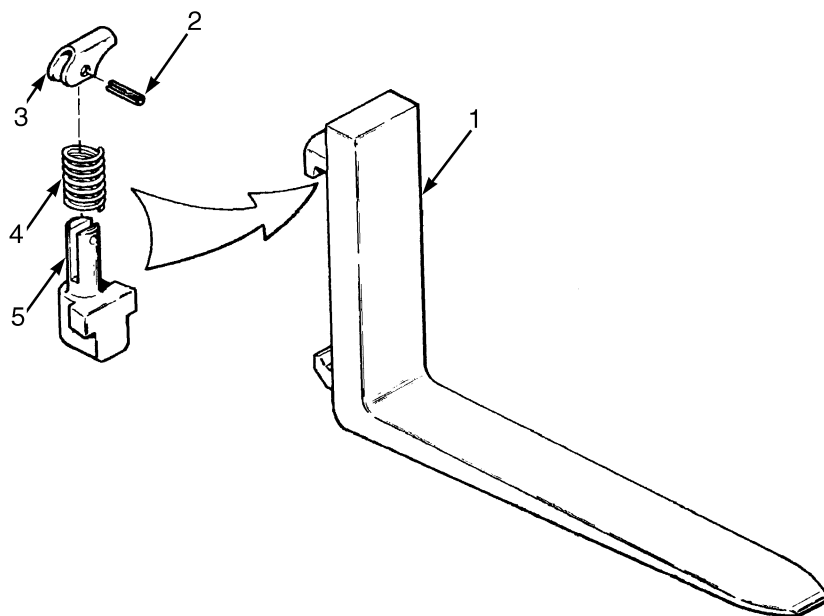
A: Standard, Class II (3.9 in. x 1.6 in.)

B: Polished Full Bottom Taper, Class II (4.9 in. x 1.6 in.)

C: Standard, Class III (4.9 in. x 2 in.)

D: Polished Full Bottom Taper, Class III (7.1 in. x 1.8 in.)

| ITEM | PART NO. | DESCRIPTION                             | QTY |    |    |    |
|------|----------|-----------------------------------------|-----|----|----|----|
|      |          |                                         | A   | B  | C  | D  |
| 5    | 1523733  | Pin .....                               | 1   | 1  | .. | .. |
| 5    | 1523737  | Pin .....                               | ..  | .. | 1  | 1  |
|      | 4033434  | Kit-Latch (Cascade) (Class II) .....    | 1   | 1  | .. | .. |
|      | 4033435  | Kit-Latch (Class III) (Class III) ..... | ..  | .. | 1  | 1  |

**FORKS (FIGURE 1-32)  
OPTIONAL**

HP120793

**KEY:****A: 100 x 40 mm (4 in. x 1.5 in.) Class II Standard Taper****B: 125 x 40 mm (5 in. x 1.5 in.) Class II Polished Full Bottom Taper****C: 125 x 50 mm (5 in. x 2 in.) Class III Standard Taper****D: 180 x 45 mm (7 in. x 1.75 in.) Class III Polished Full Bottom Taper**

| ITEM | PART NO. | DESCRIPTION         | QTY |    |    |    |
|------|----------|---------------------|-----|----|----|----|
|      |          |                     | A   | B  | C  | D  |
| 1    | 4083370  | Fork (36 in.) ..... | 2   | .. | .. | .. |
| 1    | 4083371  | Fork (40 in.) ..... | 2   | .. | .. | .. |
| 1    | 4083372  | Fork (42 in.) ..... | 2   | .. | .. | .. |
| 1    | 4083373  | Fork (48 in.) ..... | 2   | .. | .. | .. |
| 1    | 4083374  | Fork (54 in.) ..... | 2   | .. | .. | .. |
| 1    | 4083375  | Fork (60 in.) ..... | 2   | .. | .. | .. |
| 1    | 4083678  | Fork (36 in.) ..... | ..  | 2  | .. | .. |
| 1    | 4083679  | Fork (42 in.) ..... | ..  | 2  | .. | .. |
| 1    | 4083680  | Fork (48 in.) ..... | ..  | 2  | .. | .. |
| 1    | 4083870  | Fork (36 in.) ..... | ..  | .. | 2  | .. |
| 1    | 4083874  | Fork (42 in.) ..... | ..  | .. | 2  | .. |
| 1    | 4083876  | Fork (48 in.) ..... | ..  | .. | 2  | .. |
| 1    | 4083878  | Fork (54 in.) ..... | ..  | .. | 2  | .. |
| 1    | 4083881  | Fork (60 in.) ..... | ..  | .. | 2  | .. |
| 1    | 4083883  | Fork (72 in.) ..... | ..  | .. | 2  | .. |
| 1    | 4083686  | Fork (42 in.) ..... | ..  | .. | .. | 2  |
| 1    | 4083687  | Fork (48 in.) ..... | ..  | .. | .. | 2  |
| 1    | 4083688  | Fork (54 in.) ..... | ..  | .. | .. | 2  |
| 2    | .....    | Pin .....           | 1   | 1  | 1  | 1  |
| 3    | .....    | Lever .....         | 1   | 1  | 1  | 1  |
| 4    | .....    | Spring .....        | 1   | 1  | 1  | 1  |
| 5    | .....    | Pin .....           | 1   | 1  | 1  | 1  |

## KEY:

A: 100 x 40 mm (4 in. x 1.5 in.) Class II Standard Taper

B: 125 x 40 mm (5 in. x 1.5 in.) Class II Polished Full Bottom Taper

C: 125 x 50 mm (5 in. x 2 in.) Class III Standard Taper

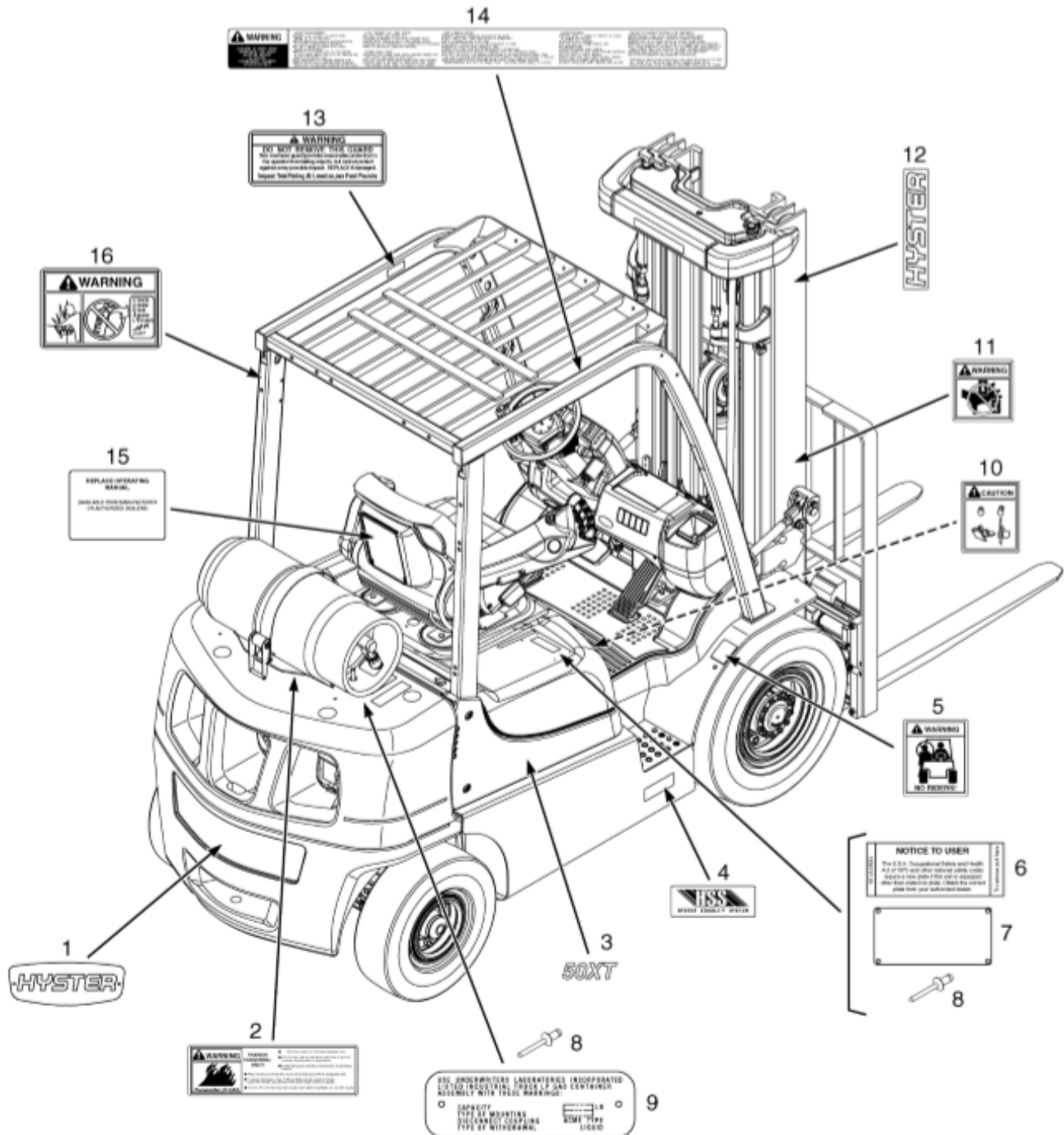
D: 180 x 45 mm (7 in. x 1.75 in.) Class III Polished Full Bottom Taper

| ITEM | PART NO. | DESCRIPTION                               | QTY |    |    |    |
|------|----------|-------------------------------------------|-----|----|----|----|
|      |          |                                           | A   | B  | C  | D  |
|      | 4083888  | Kit Fork Latch Mechanism (Class 2A) ..... | 2   | 2  | .. | .. |
|      | 4083889  | Kit Fork Latch Mechanism .....            | ..  | .. | 2  | 2  |

## NOTES

[illegible]

## NAMEPLATES AND LABELS (FIGURE 1-33) SHEET 1 OF 2



HP121691

**NAMEPLATES AND LABELS**  
**SHEET 1 OF 2**

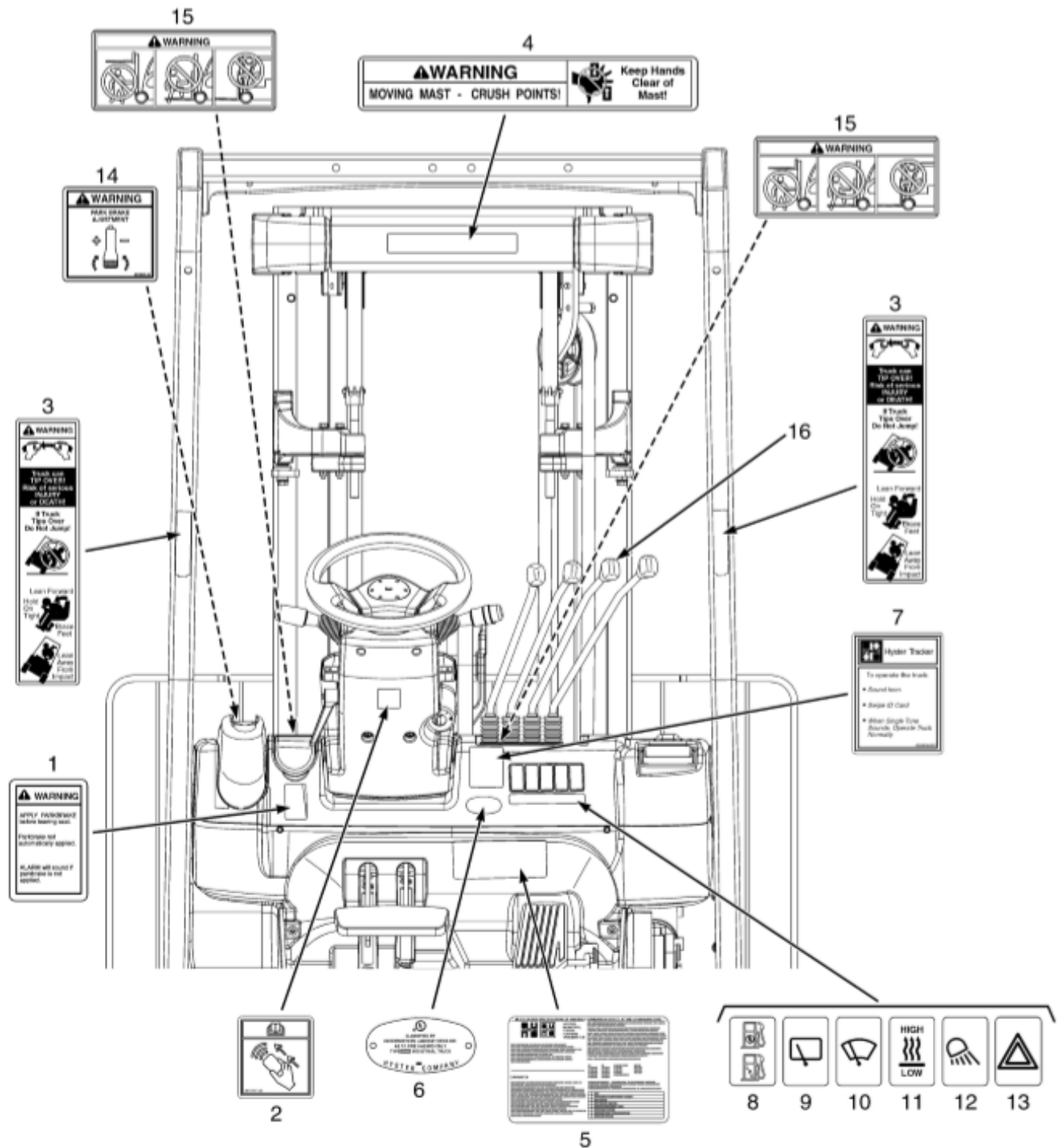
| ITEM | PART NO.           | DESCRIPTION                                           | QTY |
|------|--------------------|-------------------------------------------------------|-----|
| 1    | 4149529            | Label -HYSTER .....                                   | 1   |
| 2    | 1354171            | Label (Flammable LPG) .....                           | 1   |
| 3    | 4120660            | Label (H40XT) .....                                   | 2   |
| 3    | 4120661            | Label (H50XT) .....                                   | 2   |
| 3    | 4120662            | Label (H60XT) .....                                   | 2   |
| 4    | 4035750            | Label (Stability System) .....                        | 2   |
| 5    | 1330920            | Label (No Riders) .....                               | 2   |
| 5    | <b>b c</b> 4609850 | Label No-Entry .....                                  | 1   |
| 6    | 1335137            | Nameplate Label Tag .....                             | 1   |
| 6    | 1574147            | Nameplate (Incomplete Truck) .....                    | 1   |
| 7    | 389688             | Nameplate Cover .....                                 | 1   |
| 8    | 170658             | Rivet .....                                           | 6   |
| 9    | 1501258            | Nameplate (LP Tank) .....                             | 1   |
| 10   | 2075418            | Label (Locking Gas Spring) (Located under hood) ..... | 1   |
| 11   | 1335129            | Label (Pinch Point) .....                             | 2   |
| 12   | 1562353            | Label (Hyster) .....                                  | 2   |
| 13   | <b>a</b> . . . . . | Label-Overhead Guard Impact Rating .....              | 1   |
| 14   | 2073197            | Label (Operator Warning) .....                        | 1   |
| 15   | . . . . .          | Label (Replace Operator Manual) .....                 | 1   |
| 16   | 2034459            | Label (Ether Warning) .....                           | 1   |
|      | <b>b</b> 4016905   | Label (Protective) .....                              | 1   |
|      | <b>b</b> 2074255   | Label (Unleaded Gasoline Fuel Only) .....             | 1   |
|      | <b>b</b> 2074256   | Label (Diesel Fuel Only) .....                        | 1   |

**FOOTNOTES:**

**a** Contact Your Local Hyster Dealer  
**b** Not Illustrated

**c** With Cab and Heater

## NAMEPLATES AND LABELS (FIGURE 1-34) SHEET 2 OF 2



HP121693

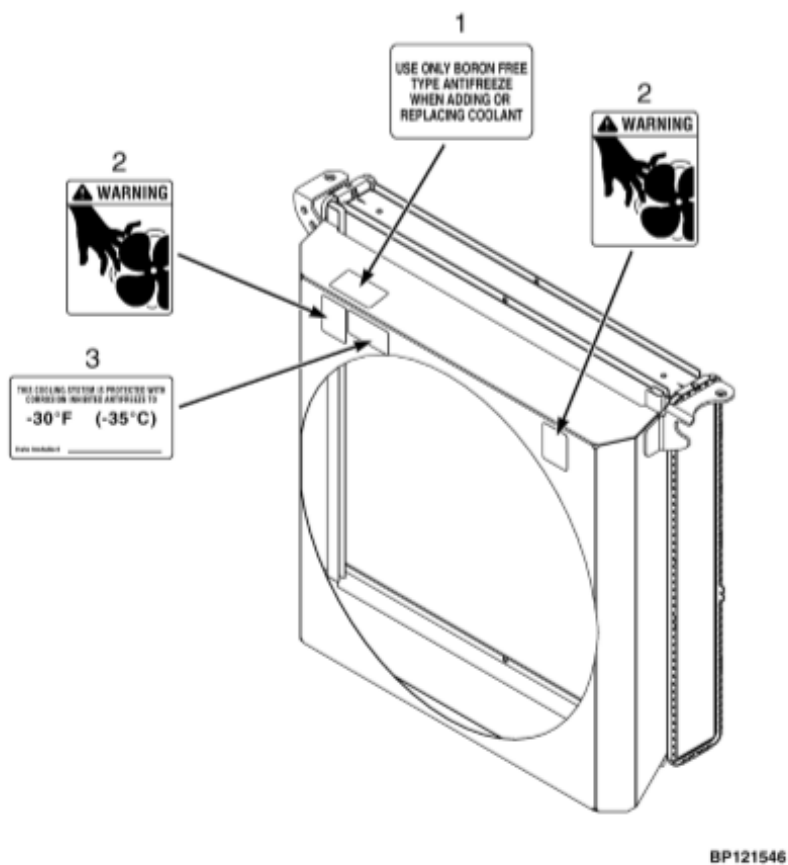


**NAMEPLATES AND LABELS**  
**SHEET 2 OF 2**

| ITEM | PART NO.           | DESCRIPTION                                   | QTY |
|------|--------------------|-----------------------------------------------|-----|
| 1    | 2074209            | Label (Parking Brake Warning) .....           | 1   |
| 2    | 4623436            | Label (ID Card Reader) .....                  | 1   |
| 3    | 4651225            | Label Operator Restraint .....                | 2   |
| 4    | 1330919            | Label (Mast Warning) .....                    | 1   |
| 5    | 4220933            | Label (Patents and Trademarks) .....          | 1   |
| 6    | <b>a</b> . . . . . | Label-UL Serialized (LPG) .....               | 1   |
| 6    | <b>a</b> . . . . . | Label-UL Serialized (Dual-Fuel) .....         | 1   |
| 7    | 4059405            | Label System Act Type C .....                 | 1   |
| 8    | 4641249            | Label (Dual-Fuel Switch) .....                | 1   |
| 9    | 2086973            | Label (Rear Wiper) .....                      | 1   |
| 10   | 2086971            | Label (Front Wiper) .....                     | 1   |
| 11   | 2086974            | Label Cab Heater Switch .....                 | 1   |
| 12   | 2093355            | Label (Rear Work Light) .....                 | 1   |
| 13   | 4150395            | Label (Hazard Lights) .....                   | 1   |
| 14   | 4640264            | Label (Park Brake Adjust) (Pinch Point) ..... | 1   |
| 15   | 2075658            | Label (Mast Warning) .....                    | 2   |
| 16   | 4657061            | Label Clamp .....                             | 1   |
| 16   | 4643468            | Label Rotator .....                           | 1   |
| 16   | 4657062            | Label Reach .....                             | 1   |
| 16   | 4657063            | Label Stabilizer .....                        | 1   |
| 16   | 2102678            | Label Positioner .....                        | 1   |
| 16   | 4657064            | Label Push/Pull .....                         | 1   |

**FOOTNOTES:****a** Contact your local Hyster Dealer

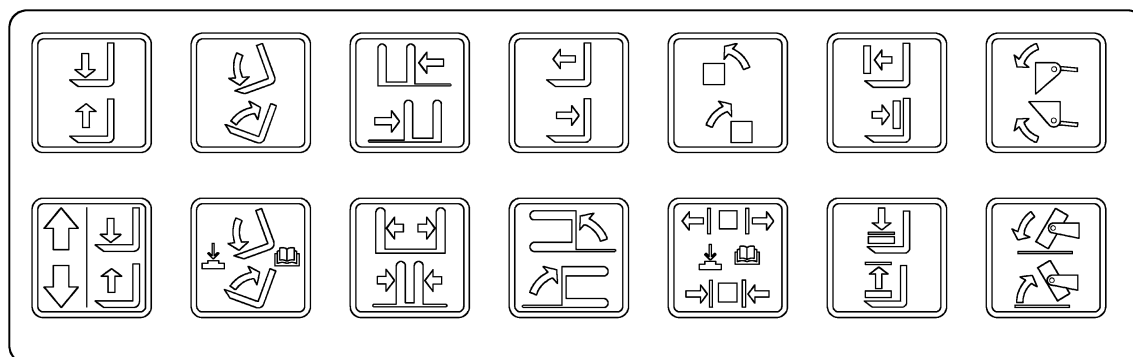
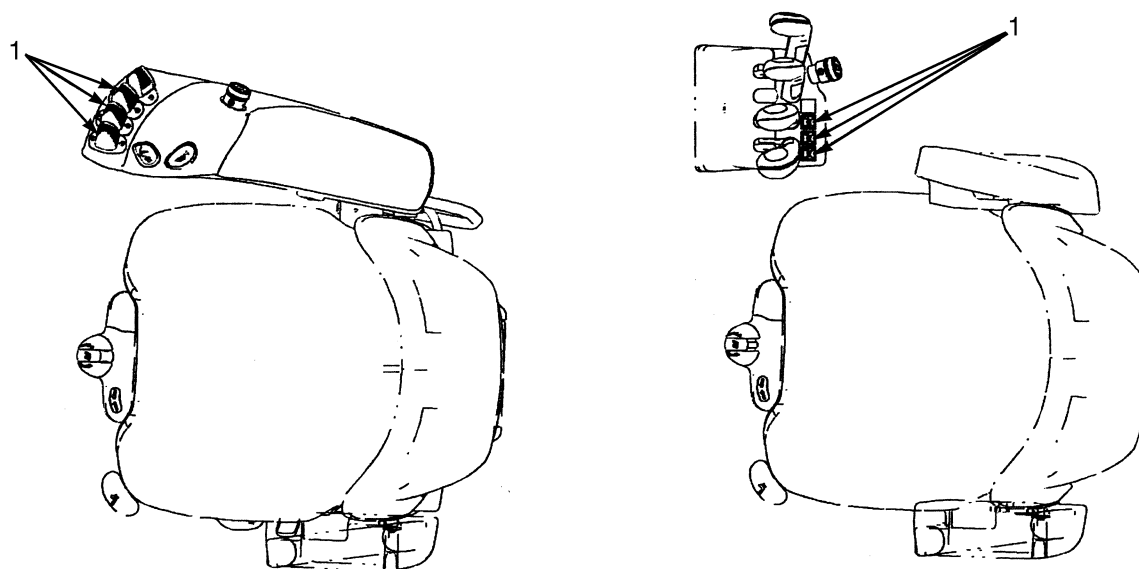
## LABELS (FIGURE 1-35) RADIATOR



**LABELS  
RADIATOR**

| ITEM | PART NO. | DESCRIPTION                         | QTY |
|------|----------|-------------------------------------|-----|
| 1    | 1375676  | Label (Boron-Free Antifreeze) ..... | 1   |
| 2    | 1345939  | Label (Fan Warning) .....           | 2   |
| 3    | 1354165  | Label (Antifreeze) .....            | 1   |

## LABELS (FIGURE 1-36) HYDRAULIC CONTROL FUNCTIONS — MINI LEVER MODULE



BP120427

| ITEM | PART NO. | DESCRIPTION                  | QTY |
|------|----------|------------------------------|-----|
| 1    | 2102640  | Label - Lever Function ..... | 1   |

[illegible]

**2**

**ENGINE ASSEMBLY - LPG**





**SECTION 2**  
**ENGINE ASSEMBLY - LPG**

| <b>DESCRIPTION</b>                                                | <b>PAGE</b> |
|-------------------------------------------------------------------|-------------|
| ALTERNATOR                                                        |             |
| PSI 2.4L .....                                                    | 2-39        |
| BALANCER                                                          |             |
| PSI 2.4L .....                                                    | 2-37        |
| CAB HEATER COOLANT                                                |             |
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| CAMSHAFT AND VALVES                                               |             |
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| COUNTERWEIGHT EXHAUST                                             |             |
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| CYLINDER BLOCK                                                    |             |
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| ENGINE AND ATTACHING PARTS                                        |             |
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| PSI 2.4L .....                                                    | 2-36        |
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| PSI 2.4L LPG AND 2.4L BI-FUEL .....                               | 2-42        |
| OIL PUMP AND ATTACHING PARTS                                      |             |
| PSI 2.4L .....                                                    | 2-46        |
| OVERHEAD EXHAUST                                                  |             |
| WITH CATALYTIC CONVERTER - PSI 2.4L LPG AND 2.4L BI-FUEL .....    | 2-8         |

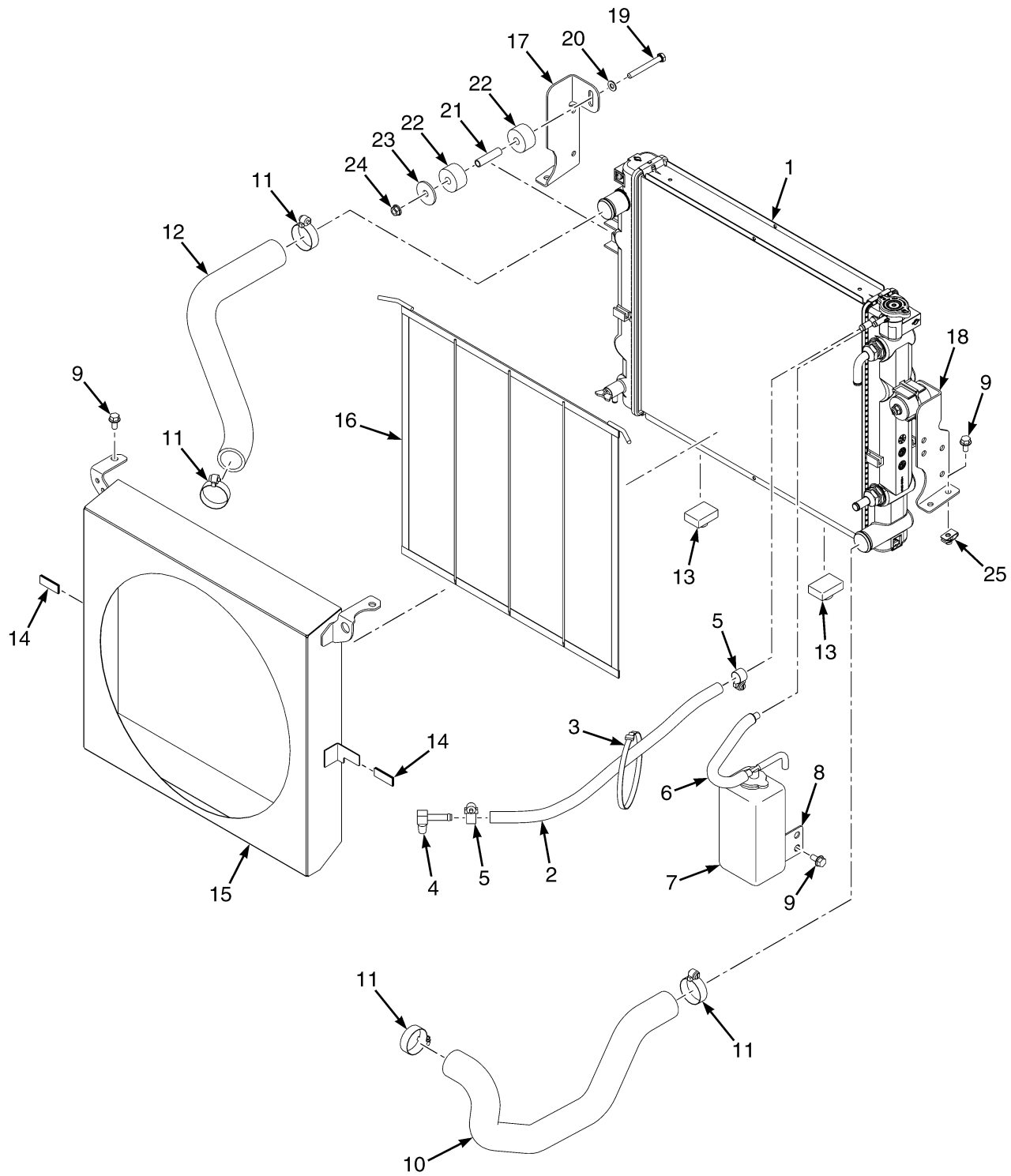
**SECTION 2**  
**ENGINE ASSEMBLY - LPG**

| <b>DESCRIPTION</b>                                                | <b>PAGE</b> |
|-------------------------------------------------------------------|-------------|
| WITHOUT CATALYTIC CONVERTER - PSI 2.4L LPG AND 2.4L BI-FUEL ..... | 2-10        |
| PISTON AND CRANKSHAFT                                             |             |
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| PSI 2.4L LPG AND 2.4L BI-FUEL .....                               | 2-48        |
| ROCKER COVER                                                      |             |
| PSI 2.4L .....                                                    | 2-32        |
| STARTER                                                           |             |
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| WATER OUTLET                                                      |             |
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| WATER PUMP                                                        |             |
| PSI 2.4L .....                                                    | 2-54        |

## NOTES

[illegible]

## COOLING SYSTEM (FIGURE 2-1) PSI STANDARD



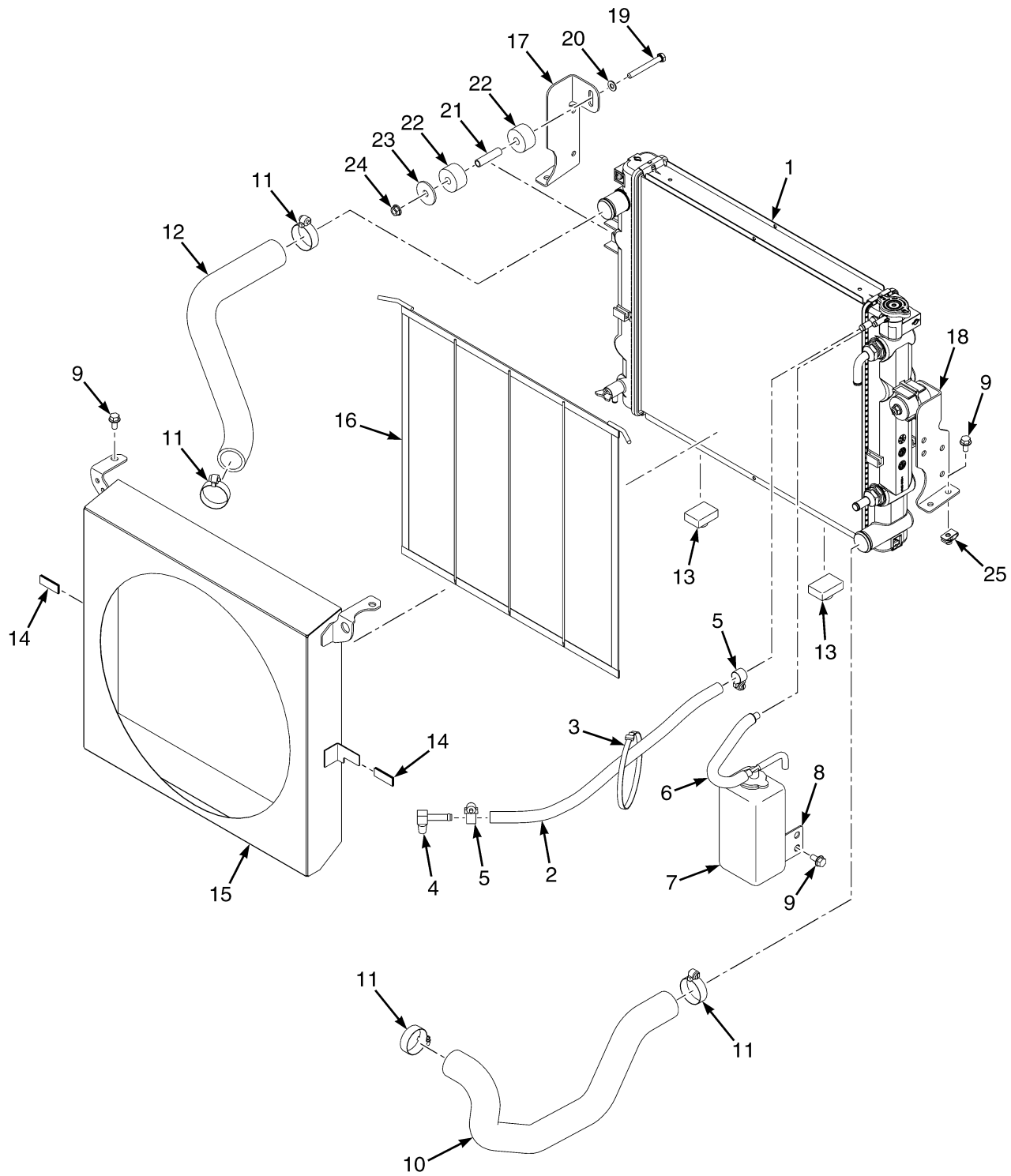
BP060155

**COOLING SYSTEM  
PSI STANDARD****KEY:****A: Standard without Lint Screen****B: Standard with Lint Screen**

| ITEM | PART NO.           | DESCRIPTION                     | QTY |    |
|------|--------------------|---------------------------------|-----|----|
|      |                    |                                 | A   | B  |
| 1    | 4643831            | Radiator .....                  | 1   | 1  |
| 1    | 4180891            | Plug (Drain) .....              | 1   | 1  |
| 1    | 4180892            | Radiator Cap .....              | 1   | 1  |
| 2    | 4644343            | Hose (Vent) .....               | 1   | 1  |
| 3    | 129563             | Strap Clamp .....               | 1   | 1  |
| 4    | 4155527            | Fitting .....                   | 1   | 1  |
| 5    | 166857             | Clamp .....                     | 2   | 2  |
| 6    | 2089649            | Protection Tube .....           | 1   | 1  |
| 7    | 2030673            | Reservoir .....                 | 1   | 1  |
| 7    | 2030675            | Conductor .....                 | 1   | 1  |
| 7    | 2030677            | Hose Assy .....                 | 2   | 2  |
| 7    | 2030679            | Pipe .....                      | 1   | 1  |
| 7    | 2030678            | Clamp .....                     | 1   | 1  |
| 8    | 2089654            | Bracket .....                   | 1   | 1  |
| 9    | 4109993            |                                 |     |    |
|      | 1527879            | Capscrew .....                  | 8   | 8  |
| 10   | <b>a</b> 4639609   | Radiator Hose (Lower) .....     | 1   | 1  |
| 10   | <b>b</b> 4653574   | Radiator Hose - lower .....     | 1   | 1  |
| 11   | 369804             | Clamp .....                     | 4   | 4  |
| 12   | 4644362            | Radiator Hose (Upper) .....     | 1   | 1  |
| 13   | 2085801            | Rubber Mount .....              | 2   | 2  |
| 14   | 2028265            | Plate .....                     | 2   | 2  |
| 15   | 4125746            | Shroud .....                    | 1   | .. |
| 15   | 4139907            | Shroud (With Lint Screen) ..... | ..  | 1  |
| 16   | 2107165            | Screen .....                    | ..  | 1  |
| 17   | 4110495            | Bracket (RH) .....              | 1   | 1  |
| 18   | 4108965            | Bracket (LH) .....              | 1   | 1  |
| 19   | 136703             | Capscrew .....                  | 2   | 2  |
| 20   | 320157             | Washer .....                    | 2   | 2  |
| 21   | 2029223            | Spacer .....                    | 2   | 2  |
| 22   | 2021512            | Rubber Cushion .....            | 4   | 4  |
| 23   | 4175769            | Washer .....                    | 2   | 2  |
| 24   | <del>1382472</del> |                                 |     |    |
|      | 1502543            | Nut .....                       | 2   | 2  |
| 25   | 1480237            | Nut (Fold Over) .....           | 4   | 4  |

**FOOTNOTES:****a** → 4/2016**b** 4/2016 →

## COOLING SYSTEM (FIGURE 2-2) PSI ANTI-CLOG



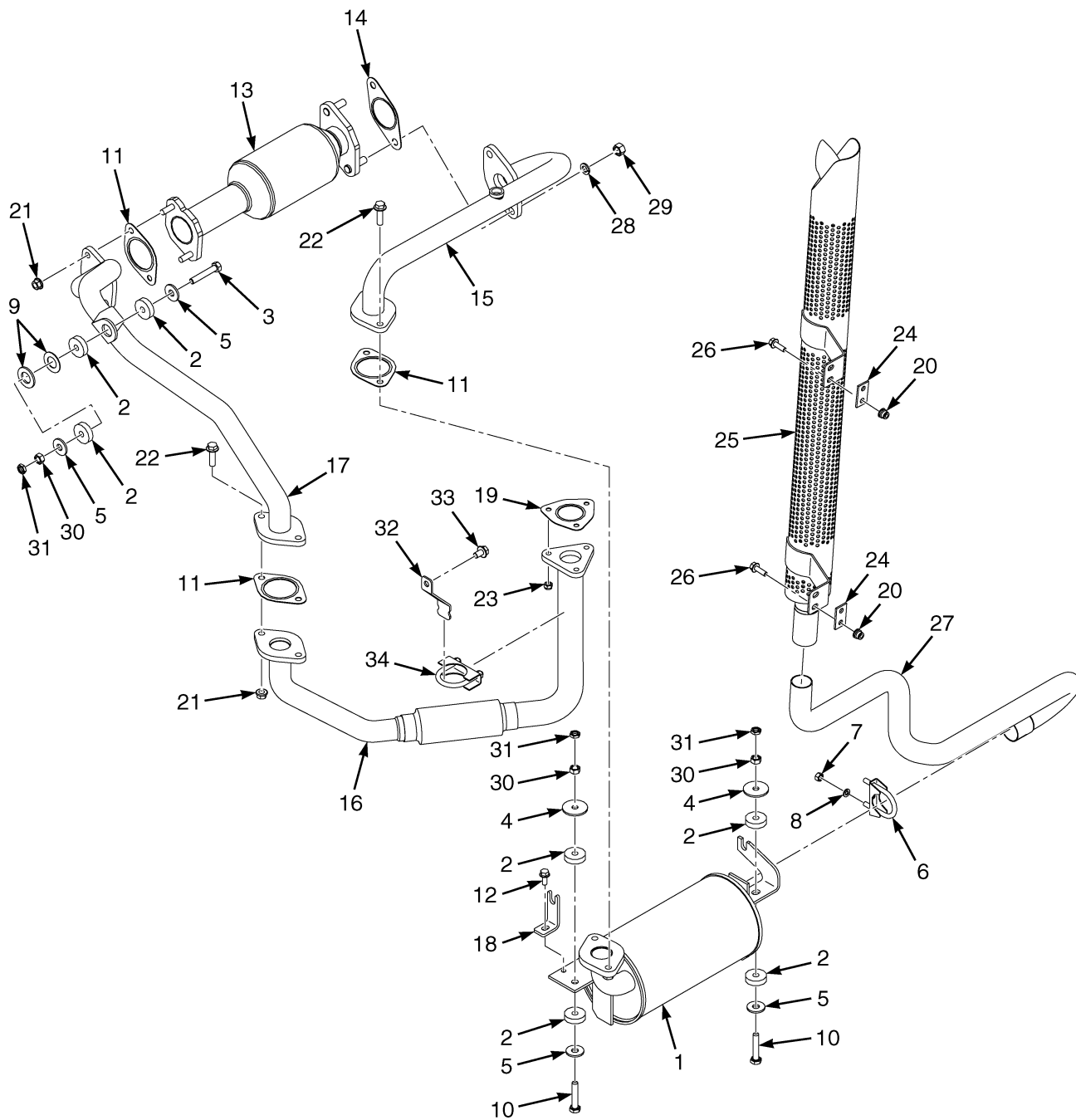
BP060155

**COOLING SYSTEM  
PSI ANTI-CLOG****KEY:****A: Without Lint Screen****B: With Lint Screen**

| ITEM | PART NO.           | DESCRIPTION                     | QTY |    |
|------|--------------------|---------------------------------|-----|----|
|      |                    |                                 | A   | B  |
| 1    | 4643832            | Radiator .....                  | 1   | 1  |
| 1    | 4180891            | Plug (Drain) .....              | 1   | 1  |
| 1    | 4180892            | Radiator Cap .....              | 1   | 1  |
| 2    | 4644343            | Hose (Vent) .....               | 1   | 1  |
| 3    | 129563             | Strap Clamp .....               | 1   | 1  |
| 4    | 4155527            | Fitting .....                   | 1   | 1  |
| 5    | 166857             | Clamp .....                     | 2   | 2  |
| 6    | 2089649            | Protection Tube .....           | 1   | 1  |
| 7    | 2030673            | Reservoir .....                 | 1   | 1  |
| 7    | 2030675            | Conductor .....                 | 1   | 1  |
| 7    | 2030677            | Hose Assy .....                 | 2   | 2  |
| 7    | 2030679            | Pipe .....                      | 1   | 1  |
| 7    | 2030678            | Clamp .....                     | 1   | 1  |
| 8    | 2089654            | Bracket .....                   | 1   | 1  |
| 9    | 4109993            |                                 |     |    |
|      | 1527879            | Capscrew .....                  | 8   | 8  |
| 10   | <b>a</b> 4639609   | Radiator Hose (Lower) .....     | 1   | 1  |
| 10   | <b>b</b> 4653574   | Radiator Hose - lower .....     | 1   | 1  |
| 11   | 369804             | Clamp .....                     | 4   | 4  |
| 12   | 4644362            | Radiator Hose (Upper) .....     | 1   | 1  |
| 13   | 2085801            | Rubber Mount .....              | 2   | 2  |
| 14   | 2028265            | Plate .....                     | 2   | 2  |
| 15   | 4125746            | Shroud .....                    | 1   | .. |
| 15   | 4139907            | Shroud (With Lint Screen) ..... | ..  | 1  |
| 16   | 2107165            | Screen .....                    | ..  | 1  |
| 17   | 4110495            | Bracket (RH) .....              | 1   | 1  |
| 18   | 4108965            | Bracket (LH) .....              | 1   | 1  |
| 19   | 136703             | Capscrew .....                  | 2   | 2  |
| 20   | 320157             | Washer .....                    | 2   | 2  |
| 21   | 2029223            | Spacer .....                    | 2   | 2  |
| 22   | 2021512            | Rubber Cushion .....            | 4   | 4  |
| 23   | 4175769            | Washer .....                    | 2   | 2  |
| 24   | <del>1382472</del> |                                 |     |    |
|      | 1502543            | Nut .....                       | 2   | 2  |
| 25   | 1480237            | Nut (Fold Over) .....           | 4   | 4  |

**FOOTNOTES:****a** → 4/2016**b** 4/2016 →

## OVERHEAD EXHAUST (FIGURE 2-3) WITH CATALYTIC CONVERTER — PSI 2.4L LPG AND 2.4L BI-FUEL



BP110193



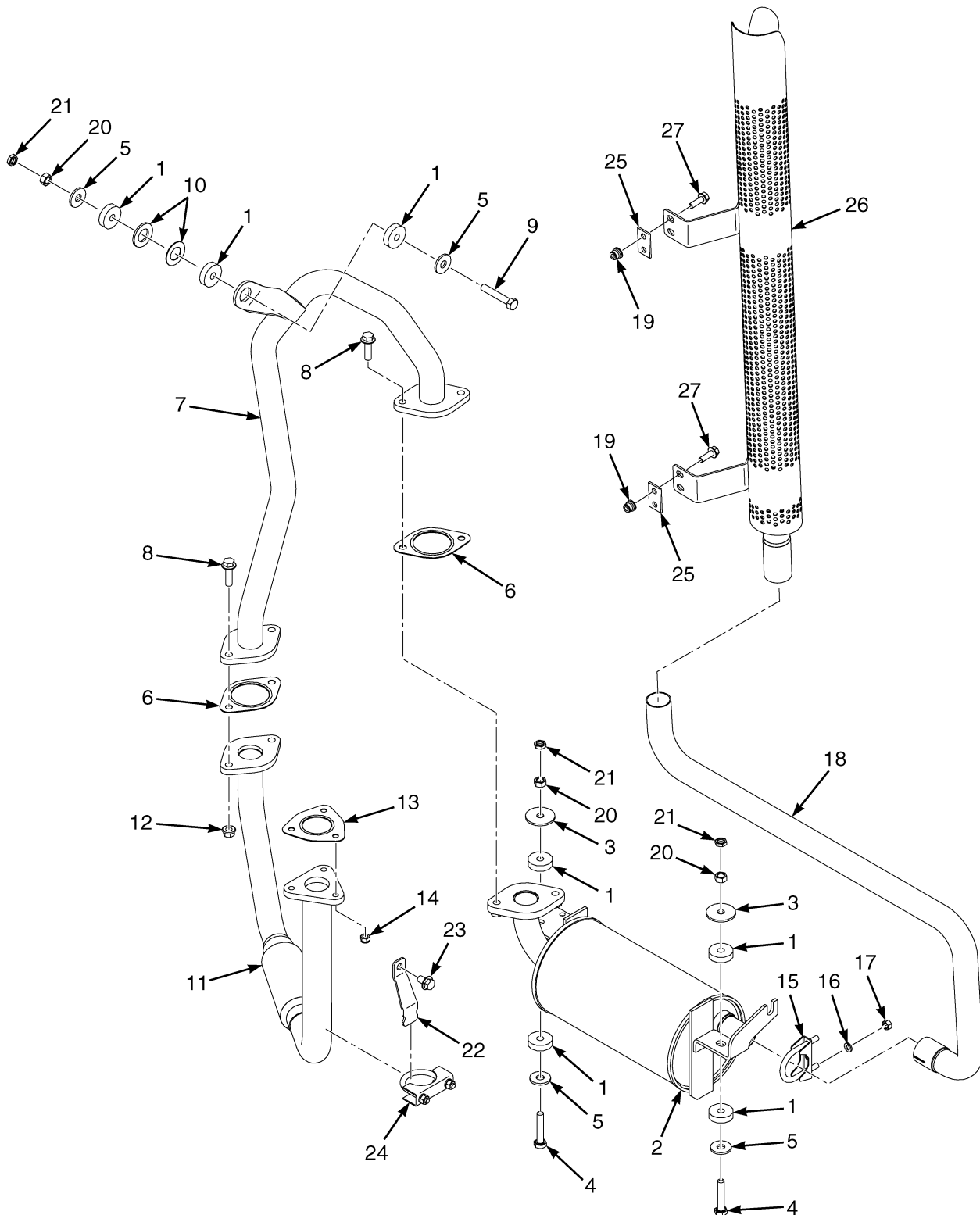
## OVERHEAD EXHAUST

### WITH CATALYTIC CONVERTER – PSI 2.4L LPG AND 2.4L BI-FUEL

| ITEM | PART NO.           | DESCRIPTION                    | QTY |
|------|--------------------|--------------------------------|-----|
| 1    | 4113478            | Muffler .....                  | 1   |
| 2    | <b>a</b> 1351177   | Rubber Cushion .....           | 7   |
| 2    | <b>b</b> 4205333   | Rubber Cushion .....           | 7   |
| 3    | 302294             | Capscrew .....                 | 1   |
| 4    | 1351176            | Washer .....                   | 2   |
| 5    | 2022973            | Washer .....                   | 4   |
| 6    | 63117              | Clamp .....                    | 1   |
| 7    | 15055              | Nut .....                      | 2   |
| 8    | 15155              | Lockwasher .....               | 2   |
| 9    | 2023006            | Shim (T=3.2) .....             | 1   |
| 9    | 2023007            | Shim (T=1.2) .....             | 1   |
| 10   | 292518             | Capscrew .....                 | 2   |
| 11   | 4086499            | Gasket .....                   | 3   |
| 12   | 1527880            | Capscrew .....                 | 1   |
| 13   | 4060812            | Catalytic Converter .....      | 1   |
| 14   | 4086500            | Gasket .....                   | 1   |
| 15   | 4115720            | Exhaust Pipe (Certified) ..... | 1   |
| 15   | 4115721            | Exhaust Pipe (Non-Cert) .....  | 1   |
| 16   | 4154618            | Exhaust Pipe (To Engine) ..... | 1   |
| 17   | 4103420            | Exhaust Pipe .....             | 1   |
| 18   | 4108118            | Bracket .....                  | 1   |
| 19   | 4110365            | Gasket .....                   | 1   |
| 20   | 1530243            | Insert .....                   | 4   |
| 21   | 1460477            | Nut .....                      | 4   |
| 22   | 1527885            | Capscrew .....                 | 4   |
| 23   | 1582222            | Locknut .....                  | 3   |
| 24   | 2089780            | Spacer .....                   | 2   |
| 25   | 4620896            | Tail Pipe .....                | 1   |
| 25   | 4164047            | Exhaust Pipe (Alt Part) .....  | 1   |
| 26   | 1510113            | Capscrew .....                 | 4   |
| 27   | 4112739            | Exhaust Pipe .....             | 1   |
| 28   | 292683             | Lockwasher .....               | 2   |
| 29   | 1469405            | Nut .....                      | 2   |
| 30   | <del>1586693</del> |                                |     |
|      | 136692             | Nut .....                      | 3   |
| 31   | 1593336            | Nut .....                      | 3   |
| 32   | 4154668            | Support .....                  | 1   |
| 33   | 1556623            | Bolt .....                     | 1   |
| 34   | 38738              | Clamp .....                    | 1   |

**FOOTNOTES:****a** → 10/2017**b** 10/2017 →

## OVERHEAD EXHAUST (FIGURE 2-4) WITHOUT CATALYTIC CONVERTER — PSI 2.4L LPG AND 2.4L BI-FUEL



BP110184

# OVERHEAD EXHAUST

## WITHOUT CATALYTIC CONVERTER – PSI 2.4L LPG AND 2.4L BI-FUEL

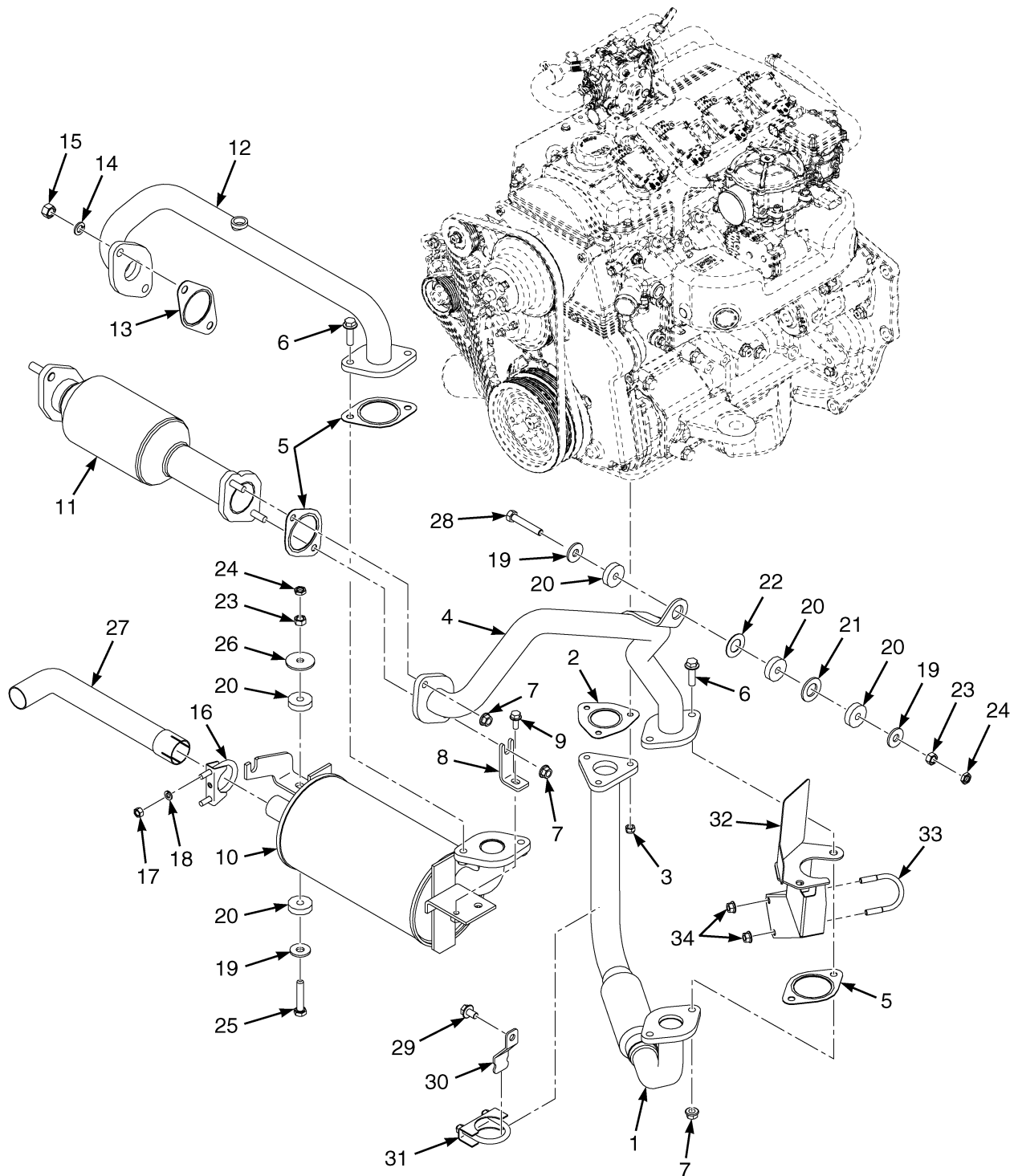
| ITEM | PART NO.           | DESCRIPTION          | QTY |
|------|--------------------|----------------------|-----|
| 1    | <b>b</b> 1351177   | Rubber Cushion ..... | 7   |
| 1    | <b>d</b> 4205333   | Rubber Cushion ..... | 7   |
| 2    | 4113478            | Muffler .....        | 1   |
| 3    | 1351176            | Washer .....         | 2   |
| 4    | 292518             | Capscrew .....       | 2   |
| 5    | 2022973            | Washer .....         | 4   |
| 6    | 4086499            | Gasket .....         | 2   |
| 7    | 4108552            | Exhaust Pipe .....   | 1   |
| 8    | 1527885            | Capscrew .....       | 4   |
| 9    | 302294             | Capscrew .....       | 1   |
| 10   | 2023006            | Shim (T=3.2) .....   | 1   |
| 10   | 2023007            | Shim (T=1.2) .....   | 1   |
| 11   | 4154618            | Exhaust Pipe .....   | 1   |
| 12   | 1460477            | Nut .....            | 2   |
| 13   | 4110365            | Gasket .....         | 1   |
| 14   | 1582222            | Locknut .....        | 3   |
| 15   | <b>b</b> 2081919   | Clamp .....          | 1   |
| 15   | <b>d</b> 63117     | Clamp .....          | 1   |
| 16   | <b>b</b> 292681    | Lockwasher .....     | 2   |
| 16   | <b>d</b> 15155     | Lockwasher .....     | 2   |
| 17   | <b>b</b> 2022719   | Nut .....            | 2   |
| 17   | <b>d</b> 15055     | Nut .....            | 2   |
| 18   | 4112882            | Exhaust Pipe .....   | 1   |
| 19   | 1530243            | Insert .....         | 4   |
| 20   | <del>1586693</del> |                      |     |
|      | 136692             | Nut .....            | 3   |
| 21   | 1593336            | Nut .....            | 3   |
| 22   | 4154668            | Support .....        | 1   |
| 23   | 1556623            | Bolt .....           | 1   |
| 24   | 38738              | Clamp .....          | 1   |
| 25   | 2089780            | Spacer .....         | 2   |
| 26   | <b>a</b> 4620896   | Tail Pipe .....      | 1   |
| 26   | <b>c</b> 4164047   | Exhaust Pipe .....   | 1   |
| 27   | 1510113            | Capscrew .....       | 4   |

**FOOTNOTES:**

**a** → 1/2017  
**b** → 10/2017

**c** 1/2017 →  
**d** 10/2017 →

## COUNTERWEIGHT EXHAUST (FIGURE 2-5) WITH CATALYTIC CONVERTER — PSI 2.4L LPG AND 2.4L BI-FUEL



BP110187

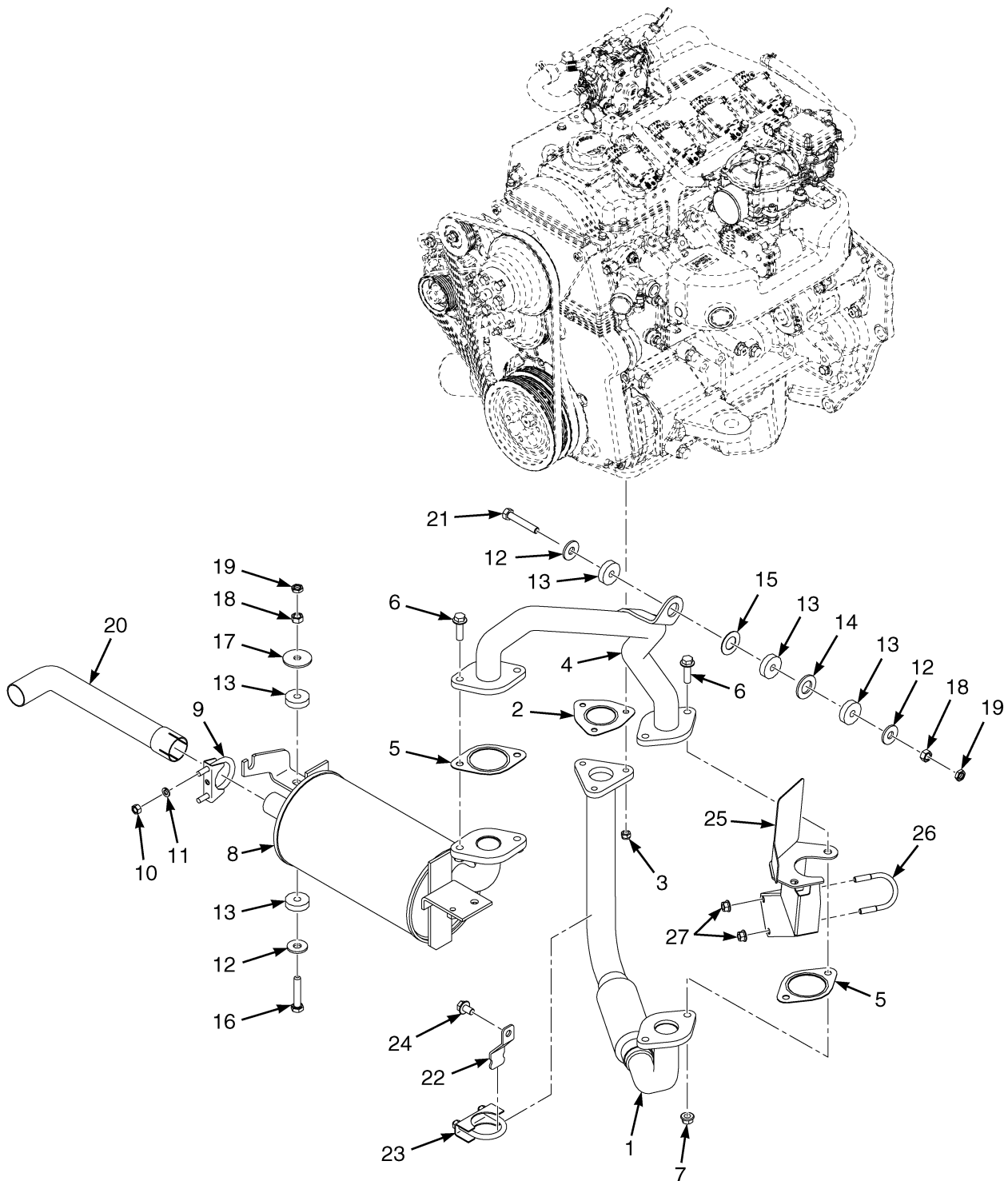
## COUNTERWEIGHT EXHAUST

### WITH CATALYTIC CONVERTER – PSI 2.4L LPG AND 2.4L BI-FUEL

| ITEM | PART NO.           | DESCRIPTION                   | QTY |
|------|--------------------|-------------------------------|-----|
| 1    | 4154618            | Exhaust Pipe .....            | 1   |
| 2    | 4110365            | Gasket .....                  | 1   |
| 3    | 1582222            | Locknut .....                 | 3   |
| 4    | 4103420            | Exhaust Pipe .....            | 1   |
| 5    | 4086499            | Gasket .....                  | 3   |
| 6    | 1527885            | Capscrew .....                | 4   |
| 7    | 1460477            | Nut .....                     | 4   |
| 8    | 4108118            | Bracket .....                 | 1   |
| 9    | 1527880            | Capscrew .....                | 1   |
| 10   | 4113478            | Muffler .....                 | 1   |
| 11   | 4060812            | Catalytic Converter .....     | 1   |
| 12   | 4115720            | Exhaust Pipe (Cert) .....     | 1   |
| 12   | 4115721            | Exhaust Pipe (Non-Cert) ..... | 1   |
| 13   | 4086500            | Gasket .....                  | 1   |
| 14   | 292683             | Lockwasher .....              | 2   |
| 15   | 1469405            | Nut .....                     | 2   |
| 16   | <b>a</b> 2081919   | Clamp .....                   | 1   |
| 16   | <b>b</b> 63117     | Clamp .....                   | 1   |
| 17   | <b>a</b> 2022719   | Nut .....                     | 2   |
| 17   | <b>b</b> 15055     | Nut .....                     | 2   |
| 18   | <b>a</b> 292681    | Lockwasher .....              | 2   |
| 18   | <b>b</b> 15155     | Lockwasher .....              | 2   |
| 19   | 2022973            | Washer .....                  | 4   |
| 20   | <b>a</b> 1351177   | Rubber Cushion .....          | 7   |
| 20   | <b>b</b> 4205333   | Rubber Cushion .....          | 1   |
| 21   | 2023006            | Shim (T=3.2) .....            | 1   |
| 22   | 2023007            | Shim (T=1.2) .....            | 1   |
| 23   | <del>1586693</del> |                               |     |
|      | 136692             | Nut .....                     | 3   |
| 24   | 1593336            | Nut .....                     | 3   |
| 25   | 292518             | Capscrew .....                | 2   |
| 26   | 1351176            | Washer .....                  | 2   |
| 27   | 4118726            | Exhaust Pipe .....            | 1   |
| 28   | 302294             | Capscrew .....                | 1   |
| 29   | 1556623            | Bolt .....                    | 1   |
| 30   | 4154668            | Support .....                 | 1   |
| 31   | 38738              | Clamp .....                   | 1   |
| 32   | 4158347            | Exhaust Shield .....          | 1   |
| 33   | 4158329            | Bolt , U-bolt .....           | 1   |
| 34   | 191941             | Nut .....                     | 2   |

**FOOTNOTES:****a** → 10/2017**b** 10/2017 →

## COUNTERWEIGHT EXHAUST (FIGURE 2-6) WITHOUT CATALYTIC CONVERTER — PSI 2.4L LPG AND 2.4L BI-FUEL



BP110186

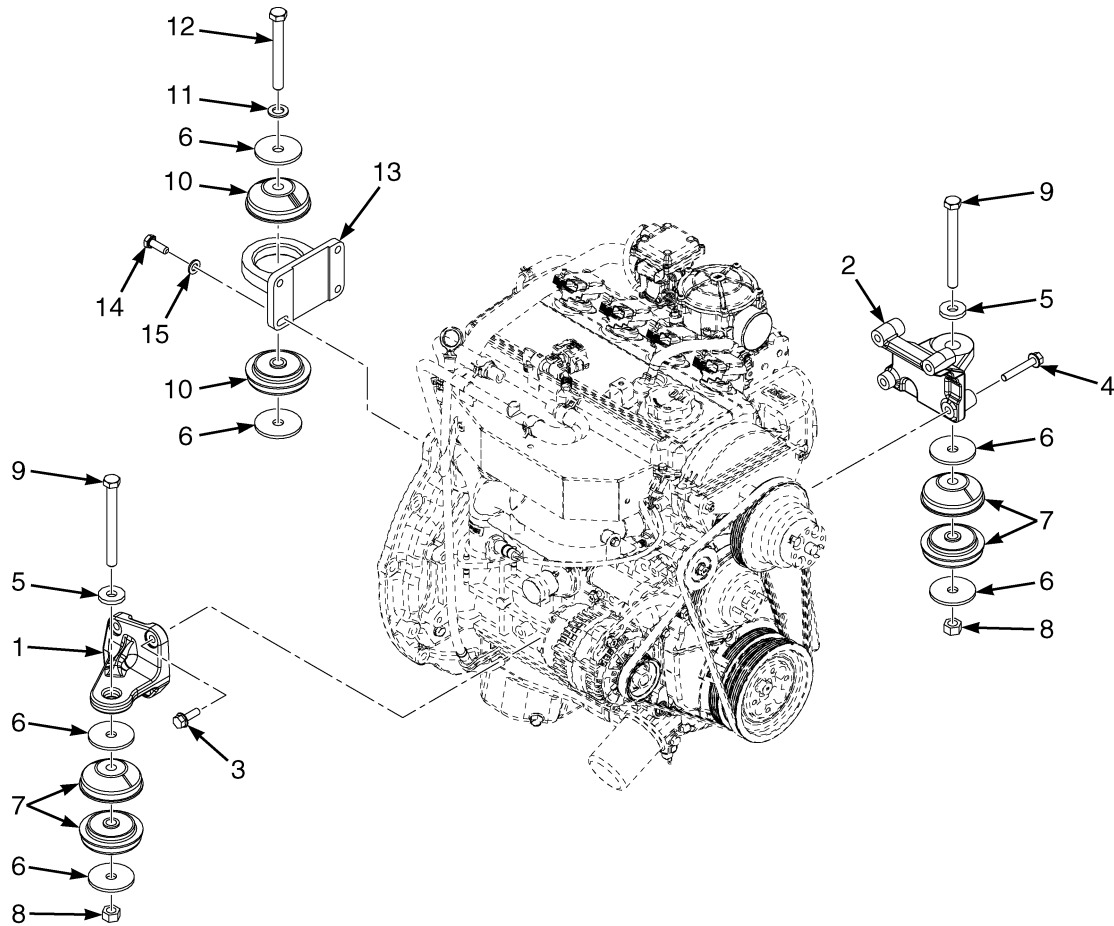
## COUNTERWEIGHT EXHAUST

### WITHOUT CATALYTIC CONVERTER – PSI 2.4L LPG AND 2.4L BI-FUEL

| ITEM | PART NO.           | DESCRIPTION          | QTY |
|------|--------------------|----------------------|-----|
| 1    | 4154618            | Exhaust Pipe .....   | 1   |
| 2    | 4110365            | Gasket .....         | 1   |
| 3    | 1582222            | Locknut .....        | 3   |
| 4    | 4108552            | Exhaust Pipe .....   | 1   |
| 5    | 4086499            | Gasket .....         | 2   |
| 6    | 1527885            | Capscrew .....       | 4   |
| 7    | 1460477            | Nut .....            | 2   |
| 8    | 4113478            | Muffler .....        | 1   |
| 9    | <b>a</b> 2081919   | Clamp .....          | 1   |
| 9    | <b>b</b> 63117     | Clamp .....          | 1   |
| 10   | <b>a</b> 2022719   | Nut .....            | 2   |
| 10   | <b>b</b> 15055     | Nut .....            | 2   |
| 11   | <b>a</b> 292681    | Lockwasher .....     | 2   |
| 11   | <b>b</b> 15155     | Lockwasher .....     | 2   |
| 12   | 2022973            | Washer .....         | 4   |
| 13   | <b>a</b> 1351177   | Rubber Cushion ..... | 7   |
| 13   | <b>b</b> 4205333   | Rubber Cushion ..... | 1   |
| 14   | 2023006            | Shim (T=3.2) .....   | 1   |
| 15   | 2023007            | Shim (T=1.2) .....   | 1   |
| 16   | 292518             | Capscrew .....       | 2   |
| 17   | 1351176            | Washer .....         | 2   |
| 18   | <del>1586693</del> |                      |     |
|      | 136692             | Nut .....            | 3   |
| 19   | 1593336            | Nut .....            | 3   |
| 20   | 4118726            | Exhaust Pipe .....   | 1   |
| 21   | 302294             | Capscrew .....       | 1   |
| 22   | 4154668            | Support .....        | 1   |
| 23   | 38738              | Clamp .....          | 1   |
| 24   | 1556623            | Bolt .....           | 1   |
| 25   | 4158347            | Exhaust Shield ..... | 1   |
| 26   | 4158329            | Bolt , U-bolt .....  | 1   |
| 27   | 191941             | Nut .....            | 2   |

**FOOTNOTES:****a** → 10/2017**b** 10/2017 →

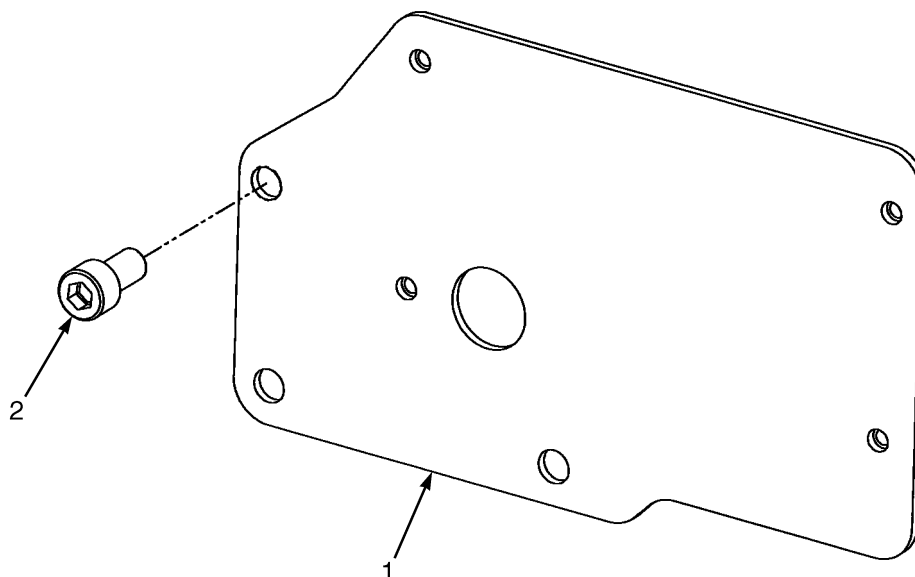
## ENGINE MOUNTING (FIGURE 2-7) PSI ENGINE



BP090976

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4108190  | Mount (LH) .....                                      | 1   |
| 2    | 4108191  | Mount (RH) .....                                      | 1   |
| 3    | 4109994  | Bolt , M10 x 1.50 x 30 .....                          | 4   |
| 4    | 4111647  | Bolt , M10 x 1.50 x 70 .....                          | 4   |
| 5    | 2081588  | Washer .....                                          | 2   |
| 6    | 2081587  | Washer .....                                          | 6   |
| 7    | 4132931  | Isolator .....                                        | 4   |
| 8    | 2081589  | Nut .....                                             | 2   |
| 9    | 293680   | Capscrew .....                                        | 2   |
| 10   | 4132930  | Isolator .....                                        | 2   |
| 11   | 296424   | Washer .....                                          | 1   |
| 12   | 293678   | Capscrew .....                                        | 1   |
| 13   | 2105228  | Bracket (Mounts to Transmission) .....                | 1   |
| 14   | 136985   | Capscrew .....                                        | 4   |
| 15   | 296420   | Washer .....                                          | 4   |



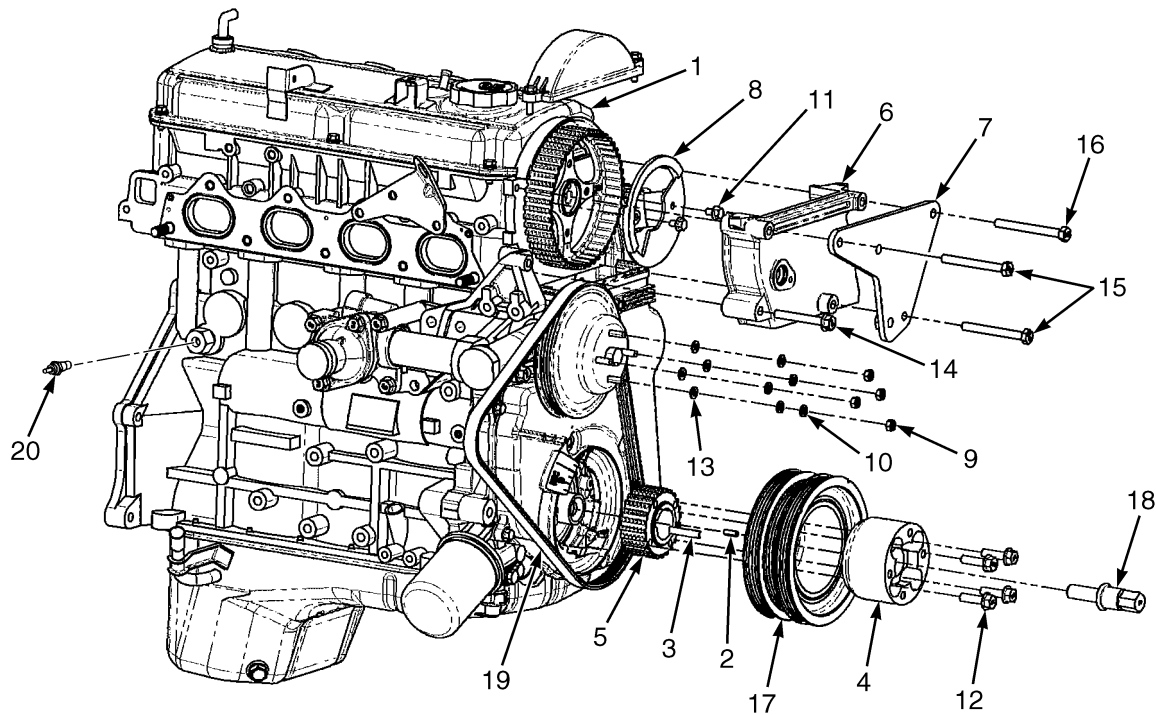
**ENGINE CONTROL MODULE MOUNTING (FIGURE 2-8)**  
**PSI 2.4L**

BP090982

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4140931  | Plate .....                                           | 1   |
| 2    | 4140934  | Bolt .....                                            | 1   |

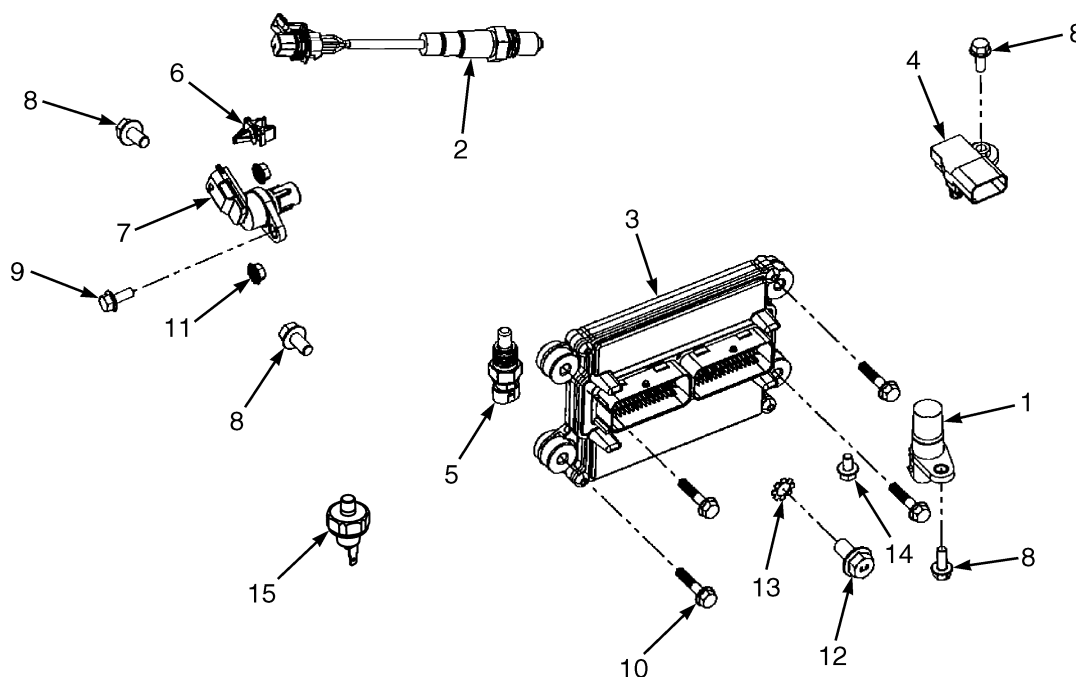
## ENGINE AND ATTACHING PARTS (FIGURE 2-9)

### PSI 2.4L LPG AND 2.4L BI-FUEL



BP091128

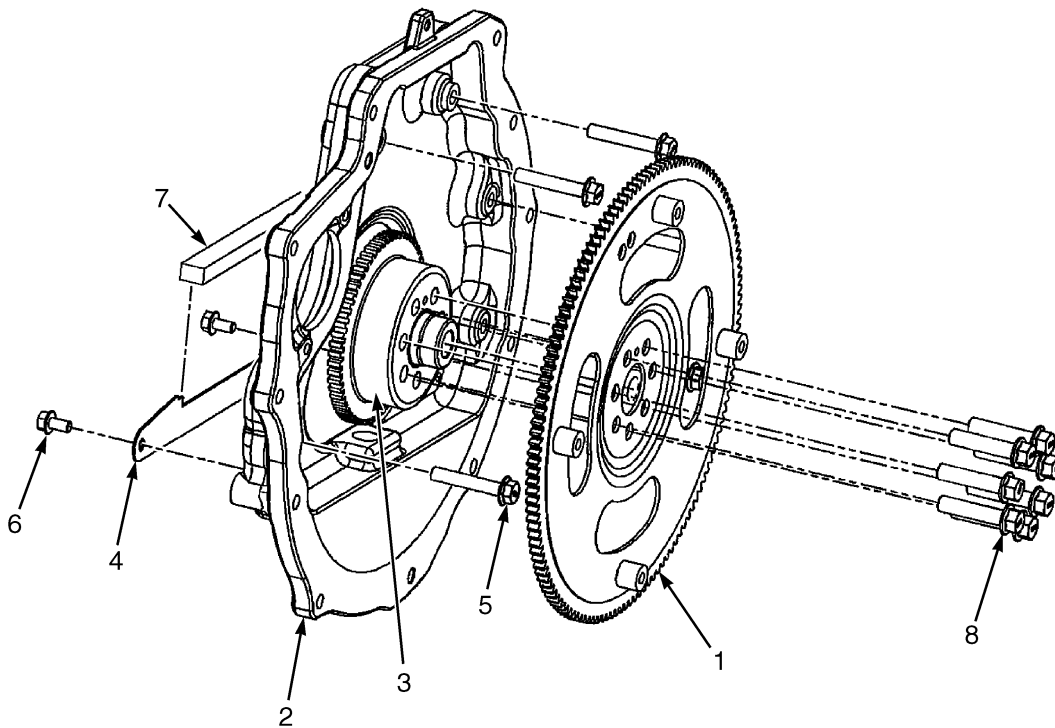
| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | .....    | Long Block .....                                      | 1   |
| 2    | 4137319  | Pin .....                                             | 1   |
| 3    | 4116728  | Shim .....                                            | 1   |
| 4    | 4123335  | Adapter (Crank to PTO) .....                          | 1   |
| 5    | 4135837  | Sprocket (Crankshaft) .....                           | 1   |
| 6    | 4137320  | Cover (Timing Gear) .....                             | 1   |
| 7    | 4135838  | Bracket (Hi-Fan) .....                                | 1   |
| 8    | 4110042  | Sensor (Cam Wheel) .....                              | 1   |
| 9    | 4137325  | Nut .....                                             | 4   |
| 10   | 4110066  | Washer .....                                          | 4   |
| 11   | 4019051  | Bolt .....                                            | 2   |
| 12   | 4104446  | Bolt .....                                            | 4   |
| 13   | 4137324  | Washer .....                                          | 4   |
| 14   | 4137323  | Capscrew .....                                        | 1   |
| 15   | 4137321  | Capscrew .....                                        | 2   |
| 16   | 4137322  | Capscrew .....                                        | 1   |
| 17   | 4111757  |                                                       |     |
|      | 4168673  | Damper (Crank Assy) .....                             | 1   |
| 18   | 4111759  | Bolt .....                                            | 1   |
| 19   | 4116722  | Belt (Alternator) .....                               | 1   |
| 20   | 2043160  | Thermal Sensor .....                                  | 1   |

**ELECTRICAL SENSORS (FIGURE 2-10)**  
**PSI 2.4L LPG AND 2.4L BI-FUEL**

BP091059

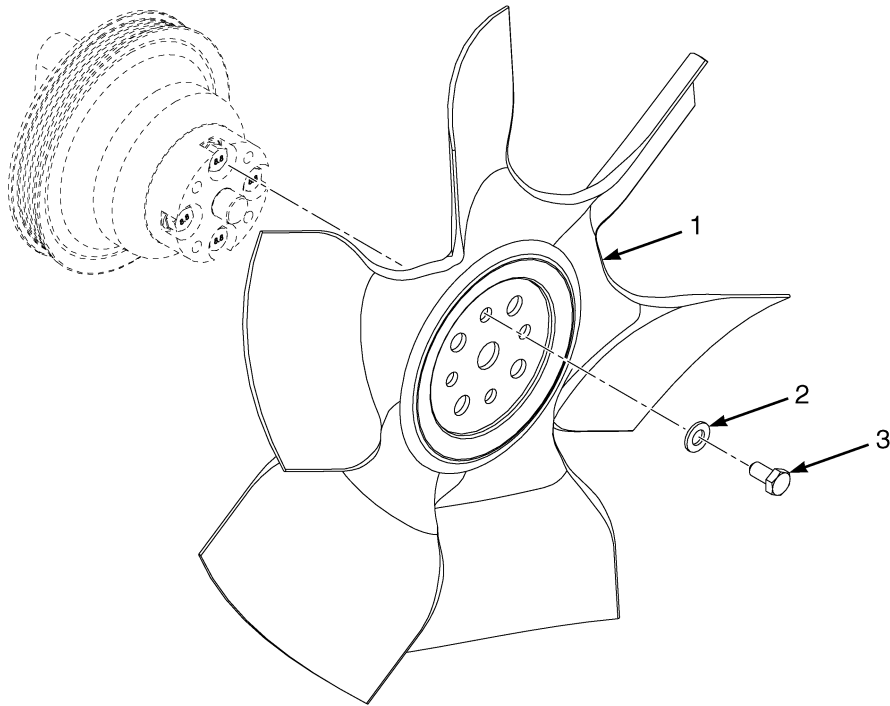
| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
| 1    | 4110038  | Sensor (Crank) (Speed Timing Wheel) .....             | 1   |
| 2    | 1646456  | Sensor (Oxygen) .....                                 | 1   |
| 3    | 4641322  | Engine Control Module (PSI 2.4L) .....                | 1   |
| 3    | 4641324  | Engine Control Module (Dual Fuel Certified) .....     | 1   |
| 3    | 4641325  | Engine Control Module (Dual Fuel Non Certified) ..... | 1   |
| 4    | 4049045  | Sensor (Temp Manifold Absolute Pressure) .....        | 1   |
| 4    | 1559567  | Seal .....                                            | 1   |
| 4    | 4042986  | Seal .....                                            | 1   |
| 5    | 4049046  | Temperature Sender (Coolant) .....                    | 1   |
| 6    | 1314381  | Clamp .....                                           | 1   |
| 7    | 4116714  | Sensor (Phases) .....                                 | 1   |
| 8    | 4110041  | Capscrew .....                                        | 2   |
| 8    | 4109993  | Capscrew .....                                        | 3   |
| 9    | 1527879  | Capscrew .....                                        | 4   |
| 9    | 4114055  | Bolt .....                                            | 2   |
| 9    | 1527876  | Nut .....                                             | 1   |
| 10   | 4111127  | Bolt .....                                            | 1   |
| 11   | 4307884  | Washer .....                                          | 1   |
| 11   | 1514429  | Screw .....                                           | 1   |
| 12   | 4110044  | Sensor , Oil Pressure .....                           | 1   |
| 13   | 4104445  | Wire Harness (Engine) (☞ Figure 5-28).....            | 1   |
| 14   | 4145797  | Wire Harness (Engine Dual Fuel) (☞ Figure 5-28).....  | 1   |
| 15   | 4118598  |                                                       |     |
|      | 4644871  |                                                       |     |
|      | 4644872  |                                                       |     |

## TRANSMISSION FLEX PLATE (FIGURE 2-11) PSI 2.4L



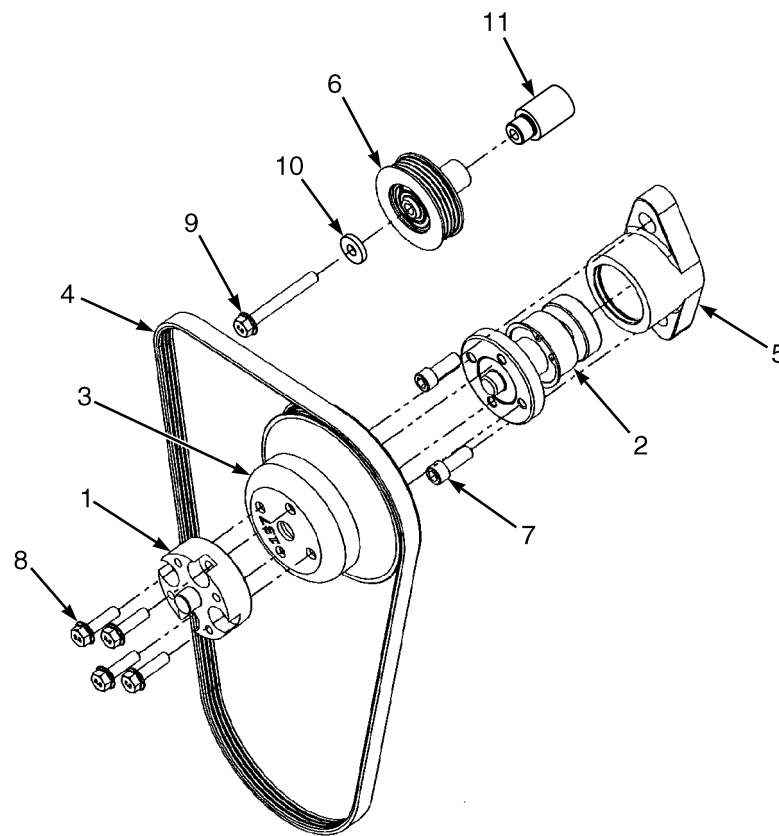
BP090981

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4153348  | Flywheel .....                                        | 1   |
| 2    | 4153349  | Adapter .....                                         | 1   |
| 3    | 4153350  | Adapter .....                                         | 1   |
| 4    | 4153351  | Cover .....                                           | 1   |
| 5    | 4111647  | Bolt , M10 x 1.50 x 70 .....                          | 5   |
| 6    | 4153352  | Screw .....                                           | 2   |
| 7    | 4153353  | Foam Rubber .....                                     | 1   |
| 8    | 4153354  | Screw .....                                           | 7   |

**FAN ASSEMBLY (FIGURE 2-12)**

BP060169

| ITEM | PART NO. | DESCRIPTION                       | QTY |
|------|----------|-----------------------------------|-----|
| 1    | 4620536  | Fan (Pusher, Plastic Blade) ..... | 1   |
| 2    | 296418   | Washer .....                      | 4   |
| 3    | 293612   | Capscrew .....                    | 4   |

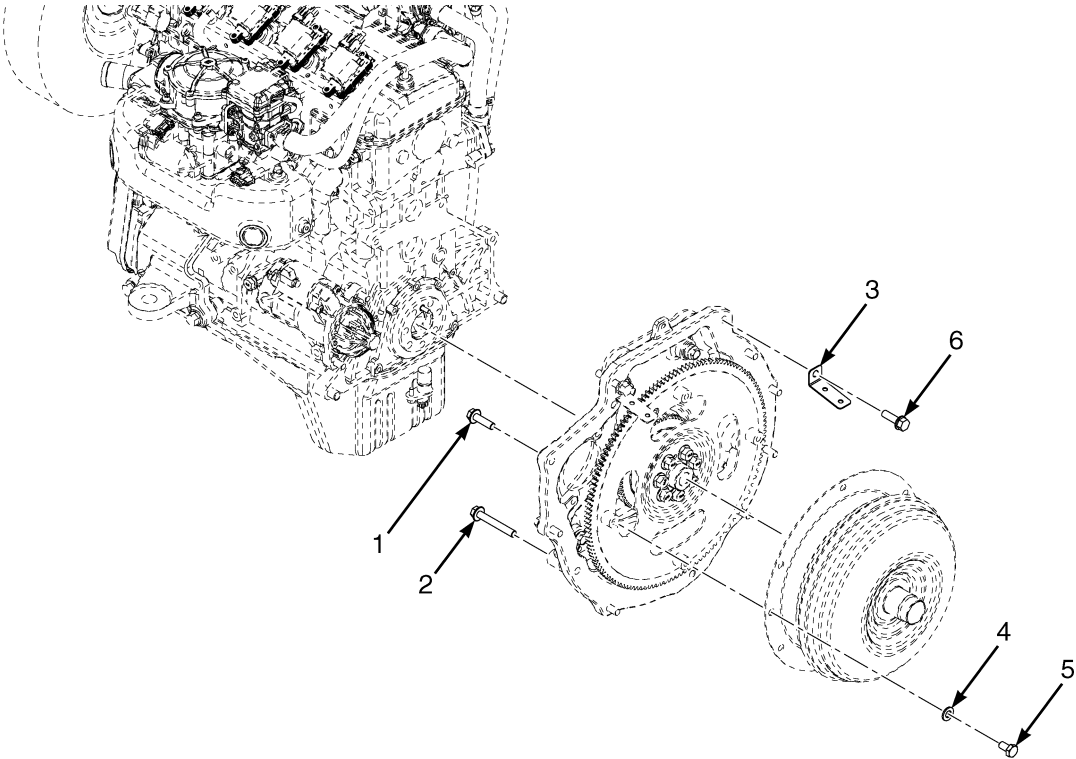
**HI-FAN ASSEMBLY (FIGURE 2-13)**  
**PSI 2.4L LPG AND 2.4L BI-FUEL**

BP090974

**HI-FAN ASSEMBLY**  
**PSI 2.4L LPG AND 2.4L BI-FUEL**

| ITEM | PART NO.           | DESCRIPTION                                           | QTY |
|------|--------------------|-------------------------------------------------------|-----|
|      | 4639191            | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134            | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137            | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4104456            | Spacer .....                                          | 1   |
| 2    | <del>4104450</del> |                                                       |     |
|      | 4137309            | Shaft (Fan Assembly) .....                            | 1   |
| 3    | 4135839            | Pulley (Fan) .....                                    | 1   |
| 4    | 4153347            | Belt (Hi-Fan) .....                                   | 1   |
| 5    | 4140926            | Hub (Hi-Fan) .....                                    | 1   |
| 6    | 4162011            | Idler Pulley .....                                    | 1   |
| 7    | 4137310            | Capscrew .....                                        | 2   |
| 8    | 4104446            | Bolt .....                                            | 4   |
| 9    | 4137311            | Capscrew .....                                        | 1   |
| 10   | 4162012            | Washer .....                                          | 1   |
| 11   | 4162013            | Shaft .....                                           | 1   |

**FLYWHEEL MOUNTING HARDWARE (FIGURE 2-14)**  
**PSI 2.4L LPG AND 2.4L BI-FUEL**



BP091023

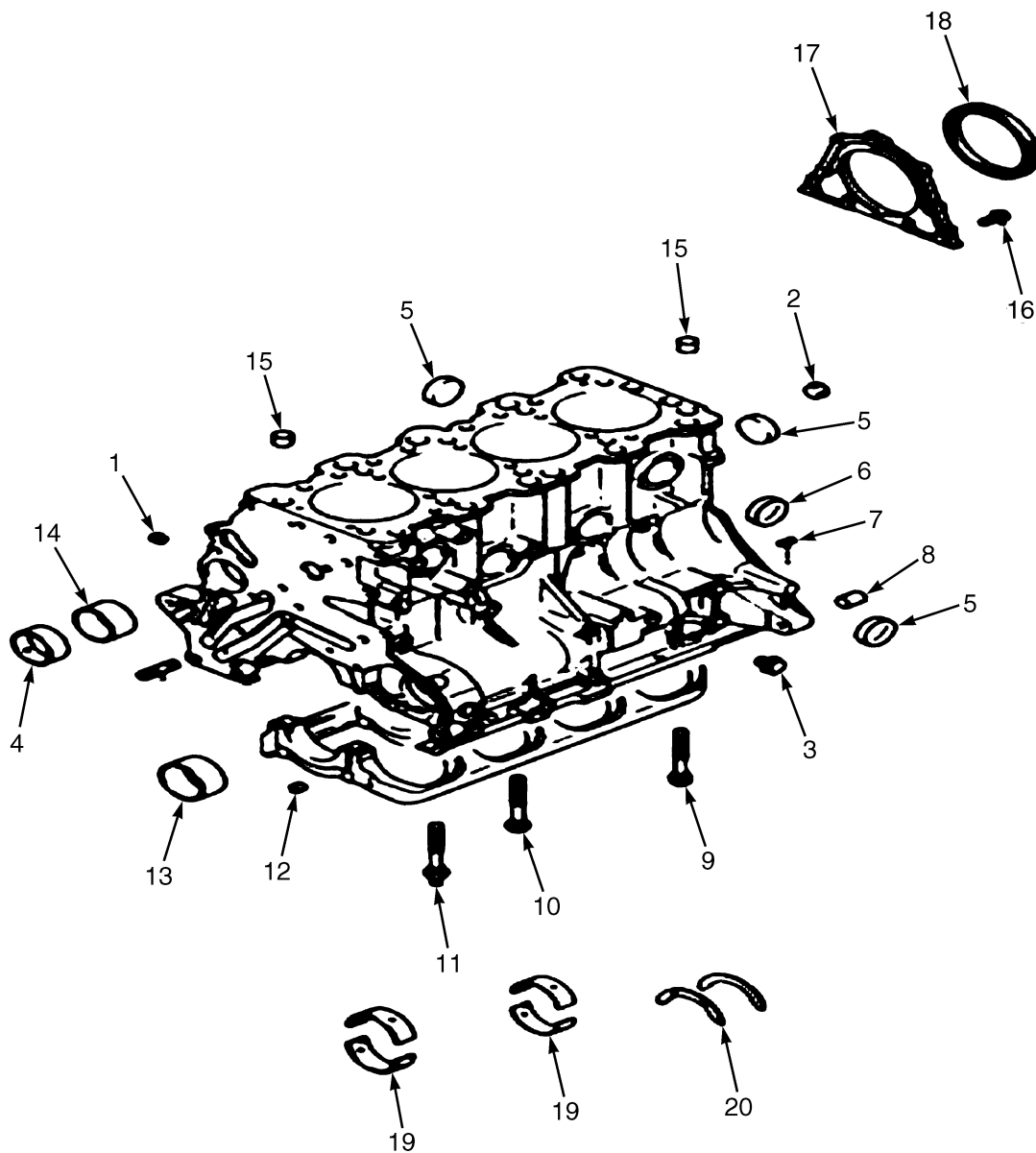
| ITEM | PART NO. | DESCRIPTION                | QTY |
|------|----------|----------------------------|-----|
| 1    | 1527885  | Capscrew .....             | 6   |
| 2    | 4115547  | Capscrew .....             | 2   |
| 3    | 2081402  | Bracket , Cable Clip ..... | 2   |
| 4    | 296420   | Washer .....               | 4   |
| 5    | 292514   | Capscrew .....             | 4   |
| 6    | 1586629  | Capscrew .....             | 2   |



## NOTES

[illegible]

## CYLINDER BLOCK (FIGURE 2-15) PSI 2.4L

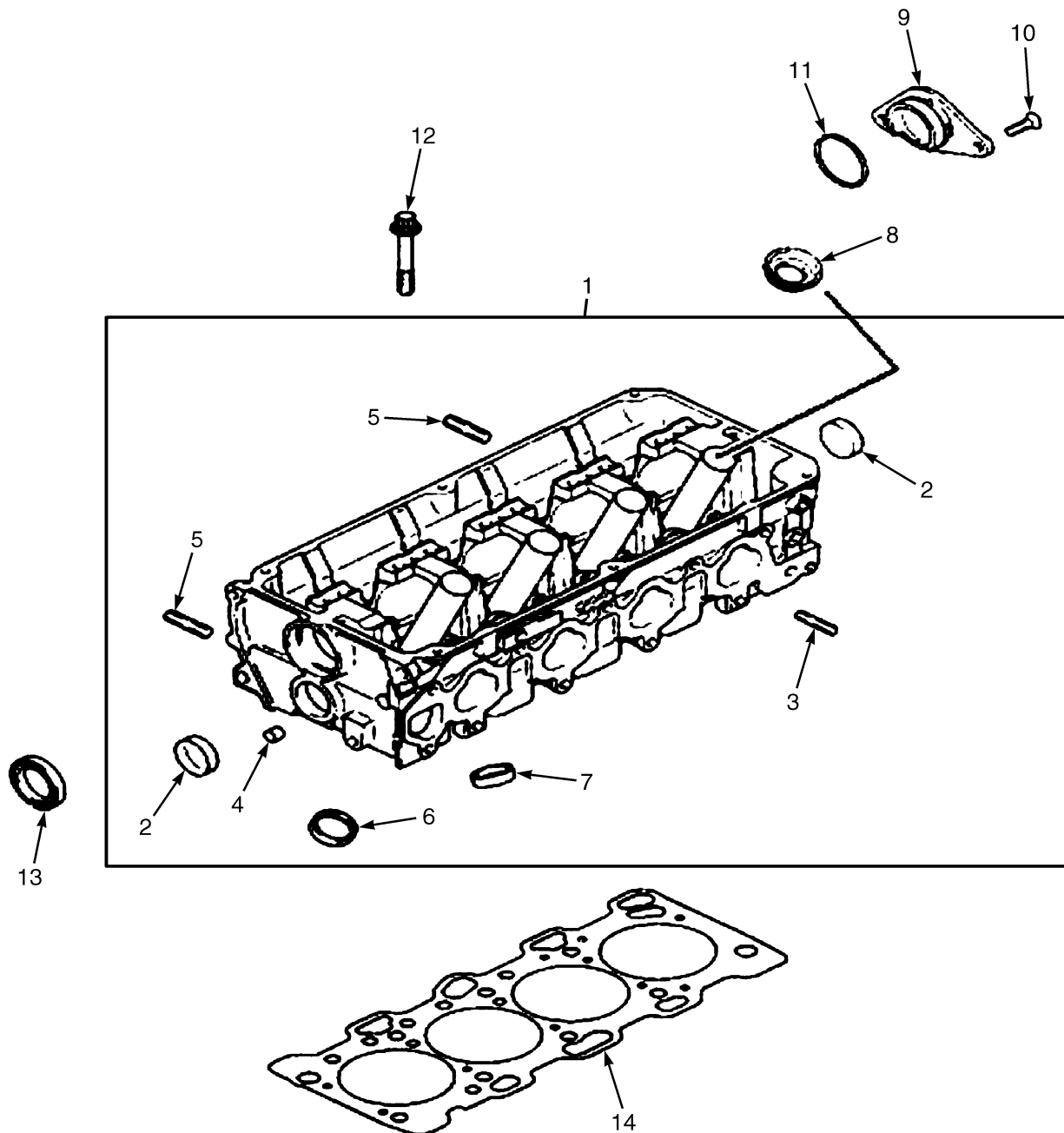


BP090979

**CYLINDER BLOCK**  
**PSI 2.4L**

| ITEM | PART NO. | DESCRIPTION                                                              | QTY |
|------|----------|--------------------------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                                        | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....                        | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) .....                    | 1   |
| 1    | 4111691  | Plug .....                                                               | 2   |
| 2    | 4111692  | Plug .....                                                               | 1   |
| 3    | 4111693  | Plug .....                                                               | 1   |
| 4    | 4111734  | Bearing (Balancer) (Standard) .....                                      | 1   |
| 4    | 4111735  | Bearing (Balancer) (Oversized) (Oversize) .....                          | 1   |
| 5    | 4111695  | Cap .....                                                                | 7   |
| 6    | 4111696  | Cap .....                                                                | 2   |
| 7    | 4111697  | Dowel .....                                                              | 2   |
| 8    | 4111698  | Bushing .....                                                            | 2   |
| 9    | 4111699  | Bolt .....                                                               | 2   |
| 10   | 4111700  | Bolt .....                                                               | 7   |
| 11   | 4111701  | Bolt .....                                                               | 1   |
| 12   | 4111681  | Bushing .....                                                            | 2   |
| 13   | 4111702  | Bearing (Standard) .....                                                 | 1   |
| 13   | 4111703  | Bearing (Oversized) (Oversize 1.0 mm) .....                              | 1   |
| 14   | 4111704  | Bearing (Standard) .....                                                 | 1   |
| 14   | 4111705  | Bearing (Oversized) (Oversize 1.0 mm) .....                              | 1   |
| 15   | 4111706  | Bushing .....                                                            | 2   |
| 16   | 4111713  | Bolt .....                                                               | 5   |
| 17   | 4111714  | Cover .....                                                              | 1   |
| 18   | 4111715  | Oil Seal .....                                                           | 1   |
| 19   | 4111716  | Crankshaft Bearing (Standard, Green - 1, 2, 4, 5) (1,2,4,5 (Green) ..... | 4   |
| 19   | 4111717  | Crankshaft Bearing (1,2,4,5 (Yellow) .....                               | 4   |
| 19   | 4111718  | Crankshaft Bearing (1,2,4,5 (Standard) .....                             | 4   |
| 19   | 4111719  | Crankshaft Bearing (1,2,4,5 (Lan Standard) .....                         | 4   |
| 19   | 4111727  | Crankshaft Bearing (1,2,4,5 (Red) .....                                  | 4   |
| 20   | 4111733  | Thrust Bearing .....                                                     | 1   |
|      | 4111694  | Plug .....                                                               | 1   |

## CYLINDER HEAD (FIGURE 2-16) PSI 2.4L

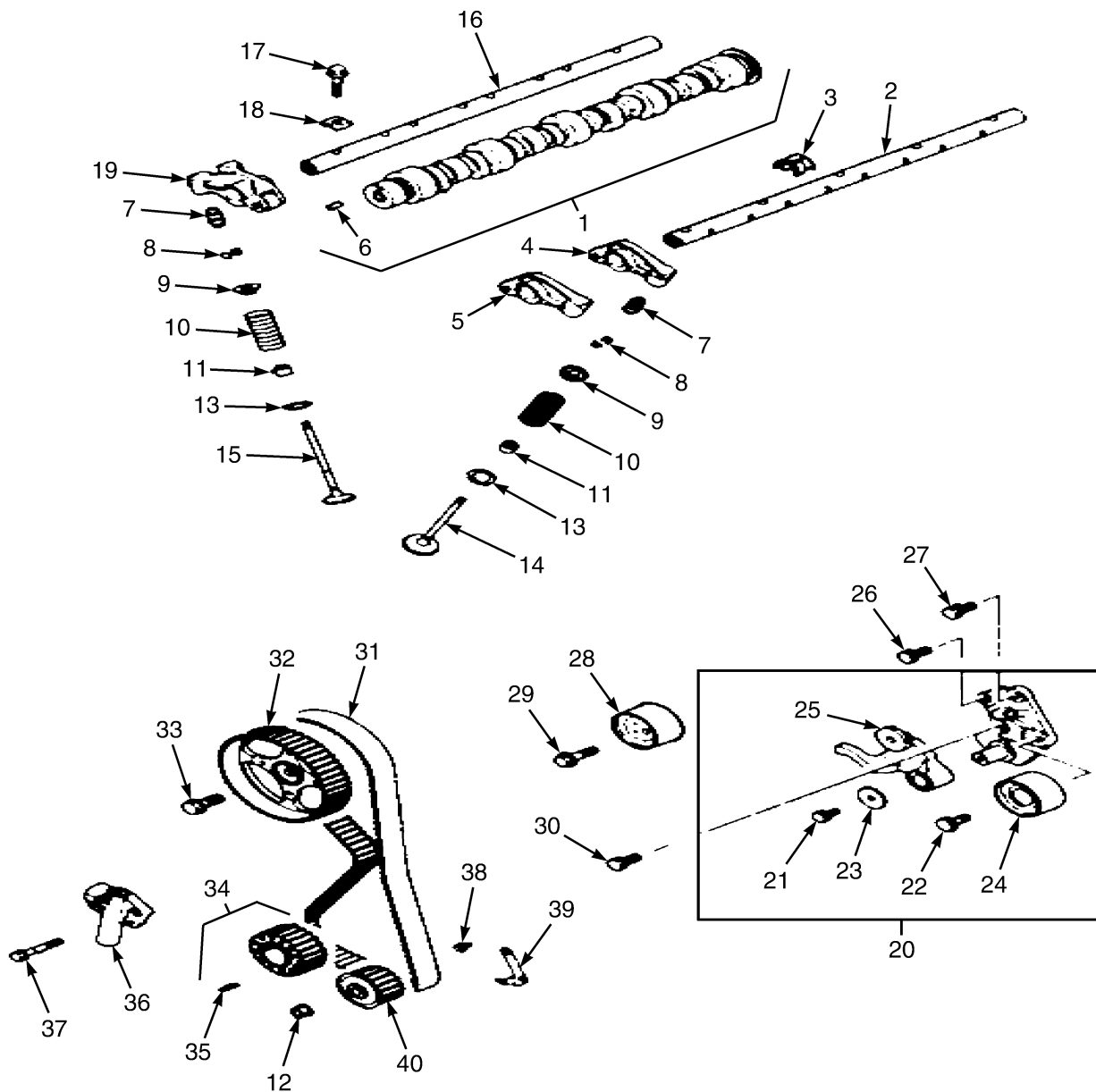


BP090975

**CYLINDER HEAD  
PSI 2.4L**

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4111675  | Cylinder Head .....                                   | 1   |
| 2    | 4111678  | Cap .....                                             | 2   |
| 3    | 4111679  | Stud .....                                            | 3   |
| 4    | 4111681  | Bushing .....                                         | 2   |
| 5    | 4111682  | Stud .....                                            | 3   |
| 6    | .....    | Exhaust Seat .....                                    | 1   |
| 7    | .....    | Intake Seat .....                                     | 2   |
| 8    | 4111683  | Oil Seal .....                                        | 4   |
| 9    | 4111684  | Thrust Plate .....                                    | 1   |
| 10   | 4111685  | Screw .....                                           | 2   |
| 11   | 4111686  | O-Ring .....                                          | 1   |
| 12   | 4111687  | Bolt .....                                            | 10  |
| 13   | 4111680  | Oil Seal .....                                        | 1   |
| 14   | 4111676  | Gasket - Cylinder Head .....                          | 1   |

## CAMSHAFT AND VALVES (FIGURE 2-17) PSI 2.4L



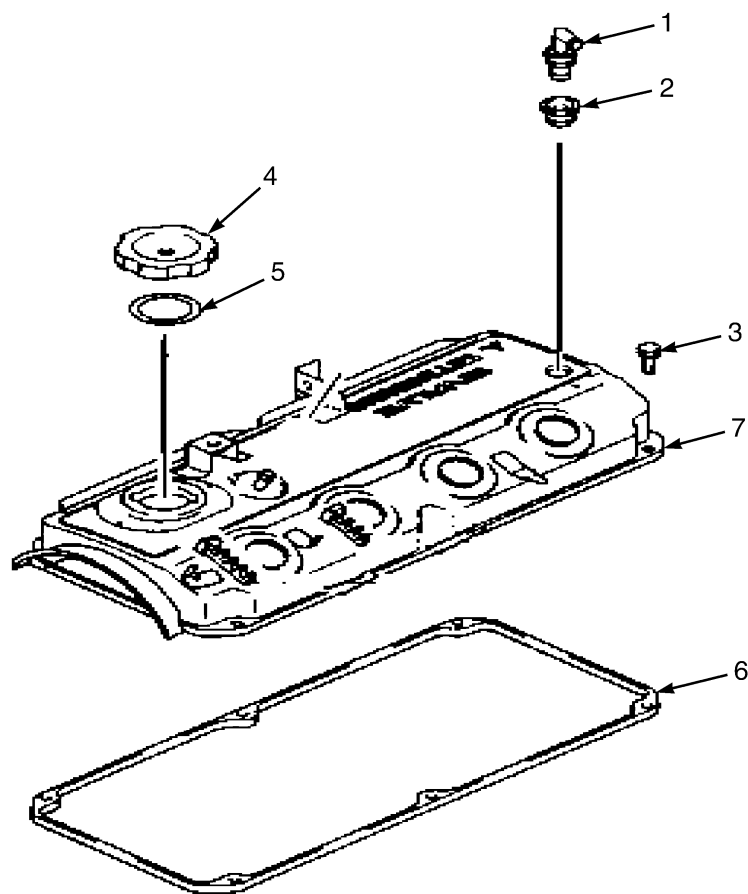
BP090737

**CAMSHAFT AND VALVES****PSI 2.4L**

| ITEM | PART NO.  | DESCRIPTION                                           | QTY |
|------|-----------|-------------------------------------------------------|-----|
|      | 4639191   | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134   | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137   | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4111774   |                                                       |     |
|      | 4116724   | Camshaft .....                                        | 1   |
| 2    | a 4111775 | Rocker Shaft .....                                    | 1   |
| 3    | a 4111776 | Spring (Rocker Shaft) .....                           | 4   |
| 4    | a 4112104 | Rocker Arm ("B") .....                                | 4   |
| 5    | a 4112105 | Rocker Arm ("A") .....                                | 4   |
| 6    | 4112106   | Pin .....                                             | 1   |
| 7    | 4112107   | Adjuster .....                                        | 16  |
| 8    | a 4112108 | Lock (Valve Spring) .....                             | 32  |
| 9    | a 4112109 | Retainer (Valve Spring) .....                         | 16  |
| 10   | a 4112110 | Spring (Valve) .....                                  | 16  |
| 11   | a 4112111 | Seal .....                                            | 16  |
| 12   | 4112324   | Nut .....                                             | 1   |
| 13   | a 4112112 | Valve Seat .....                                      | 16  |
| 14   | a 4112113 | Valve (Inlet) .....                                   | 8   |
| 15   | a 4112114 | Valve (Exhaust) .....                                 | 8   |
| 16   | a 4112115 | Rocker Shaft .....                                    | 1   |
| 17   | a 4112116 | Bolt .....                                            | 13  |
| 18   | a 4112117 | Cap .....                                             | 13  |
| 19   | a 4112118 | Rocker Arm .....                                      | 4   |
| 20   | 4112119   | Bracket Assembly (Tensioner Pulley) .....             | 1   |
| 21   | 4112120   | Bolt .....                                            | 1   |
| 22   | 4112121   | Bolt .....                                            | 1   |
| 23   | 4112122   | Washer .....                                          | 1   |
| 24   | 4112123   | Idler Pulley .....                                    | 1   |
| 25   | .....     | Tensioner Arm Assembly .....                          | 1   |
| 26   | 4112124   | Bolt .....                                            | 1   |
| 27   | 4112125   | Bolt .....                                            | 1   |
| 28   | 4112126   | Pulley (Tensioner) .....                              | 1   |
| 29   | 4112127   | Bolt .....                                            | 1   |
| 30   | 4112121   | Bolt .....                                            | 1   |
| 31   | 4112128   | Timing Belt -Cam .....                                | 1   |
| 32   | 4112130   | Sprocket .....                                        | 1   |
| 33   | 4112131   | Bolt .....                                            | 1   |
| 34   | 4135837   | Sprocket (Crankshaft) .....                           | 1   |
| 35   | 4137319   | Pin .....                                             | 1   |
| 36   | 4112320   | Tensioner (Crank Shaft) .....                         | 1   |
| 37   | 4112321   | Bolt .....                                            | 2   |
| 38   | 4111276   | Bolt .....                                            | 2   |
| 39   | 4112322   | Bracket (Indicator) .....                             | 1   |
| 40   | 4112323   | Sprocket (Oil Pump) .....                             | 1   |
|      | 4116503   | Kit-Service 6000 Hour Belt .....                      | 1   |

**FOOTNOTES:**

**a** Included with Cylinder Head 4111675

**ROCKER COVER (FIGURE 2-18)**  
PSI 2.4L

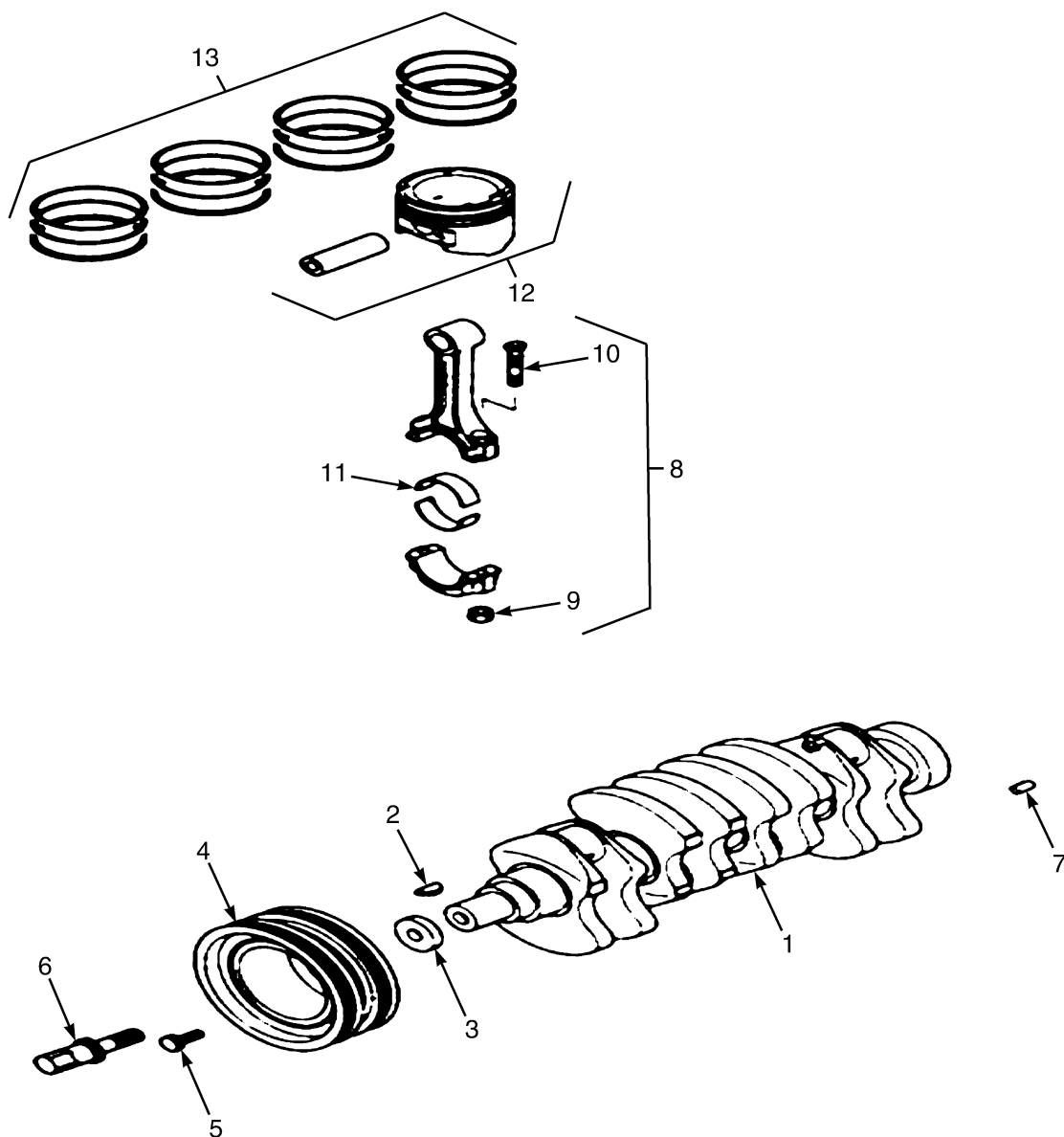
BP090732



**ROCKER COVER**  
**PSI 2.4L**

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4111670  | Pcv Valve .....                                       | 1   |
| 2    | 4111257  | Grommet .....                                         | 1   |
| 3    | 4111671  | Bolt .....                                            | 6   |
| 4    | 4111672  | Cap (Oil Fill) .....                                  | 1   |
| 5    | .....    | Gasket .....                                          | 1   |
| 6    | 4111673  | Gasket (Rocker Cover) .....                           | 1   |
| 7    | 4111674  | Engine Cover (Valve) .....                            | 1   |

## PISTON AND CRANKSHAFT (FIGURE 2-19) PSI 2.4L

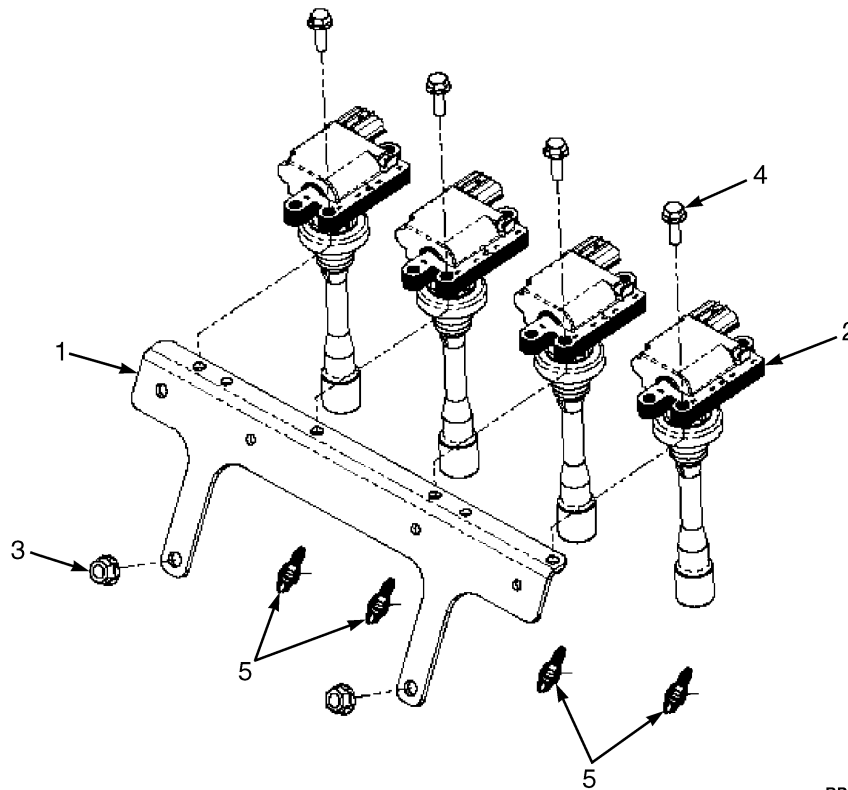


BP090736

**PISTON AND CRANKSHAFT**  
**PSI 2.4L**

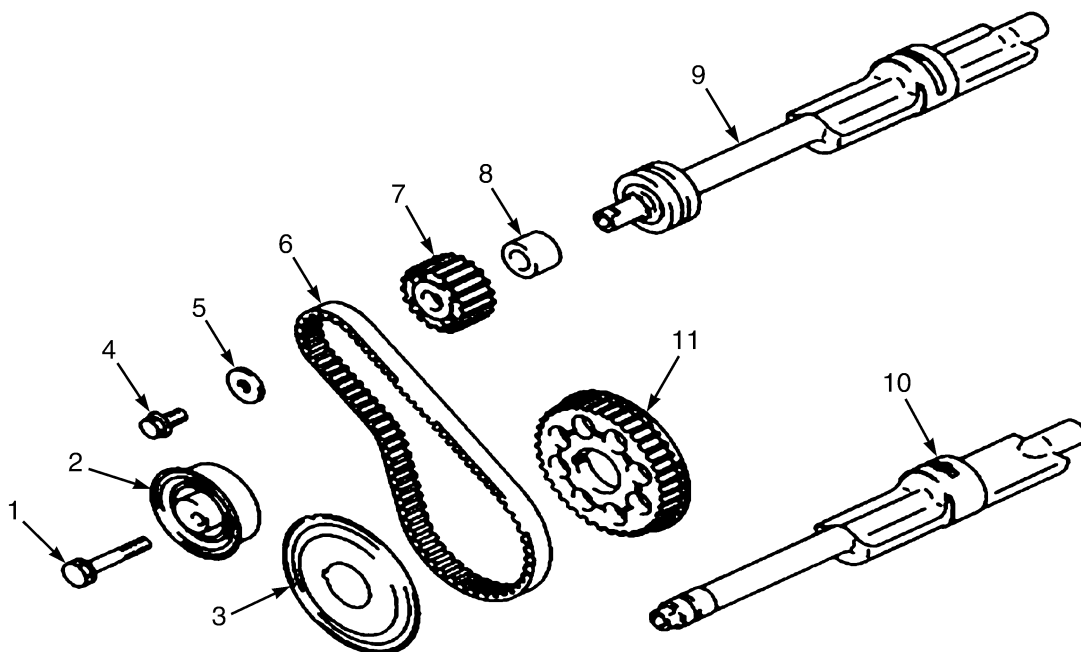
| ITEM | PART NO.           | DESCRIPTION                                           | QTY |
|------|--------------------|-------------------------------------------------------|-----|
|      | 4639191            | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134            | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137            | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4111753            | Crankshaft .....                                      | 1   |
| 2    | 4111755            | Key .....                                             | 1   |
| 3    | 4111756            | Washer .....                                          | 1   |
| 4    | <del>4111757</del> |                                                       |     |
|      | 4168673            | Damper (Crank Assy) .....                             | 1   |
| 5    | 4111758            | Bolt .....                                            | 4   |
| 6    | 4111759            | Bolt .....                                            | 1   |
| 7    | 4111760            | Pin .....                                             | 1   |
| 8    | 4111761            | Piston Rod .....                                      | 4   |
| 9    | 4111762            | Nut .....                                             | 8   |
| 10   | 4111766            | Bolt .....                                            | 8   |
| 11   | 4111763            | Piston Rod Bearing (Yellow) .....                     | 4   |
| 11   | 4111764            | Piston Rod Bearing (Standard) .....                   | 4   |
| 11   | 4111765            | Piston Rod Bearing (Blue Standard) .....              | 4   |
| 12   | 4111767            | Piston - with pin standard ("A") .....                | 4   |
| 12   | 4111768            | Piston - with pin standard ("B") .....                | 4   |
| 12   | 4111769            | Piston - with pin standard ("C") .....                | 4   |
| 13   | 4111773            | Kit-Piston Ring .....                                 | 1   |

## IGNITION COIL (FIGURE 2-20) PSI 2.4L



BP091087

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4110027  | Bracket .....                                         | 1   |
| 2    | 4110028  | Ignition Coil .....                                   | 4   |
| 2    | 4110031  | Boot .....                                            | 1   |
| 3    | 4111260  | Nut .....                                             | 2   |
| 4    | 4110029  | Bolt .....                                            | 4   |
| 5    | 4110030  | Spark Plug .....                                      | 4   |

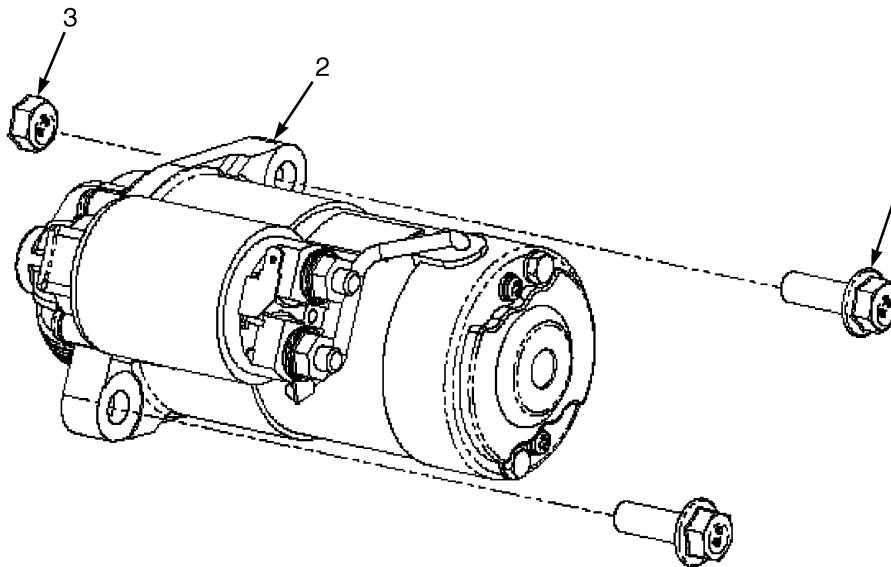
**BALANCER (FIGURE 2-21)**  
**PSI 2.4L**

BP090738

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4112325  | Bolt .....                                            | 1   |
| 2    | 4112327  | Tensioner (Timing Belt) .....                         | 1   |
| 3    | 4112328  | Flange .....                                          | 1   |
| 4    | 4112329  | Bolt .....                                            | 1   |
| 5    | 4112330  | Washer .....                                          | 1   |
| 6    | 4112331  | Timing Belt -Balancer .....                           | 1   |
| 7    | 4112332  | Sprocket (Balancer Shaft) .....                       | 1   |
| 8    | 4112333  | Spacer .....                                          | 1   |
| 9    | 4112334  | Shaft (Balancer Right) .....                          | 1   |
| 10   | 4112336  | Shaft (Balancer Left) .....                           | 1   |
| 11   | 4112338  | Sprocket (Crank Shaft) .....                          | 1   |
|      | 4116503  | Kit-Service 6000 Hour Belt .....                      | 1   |

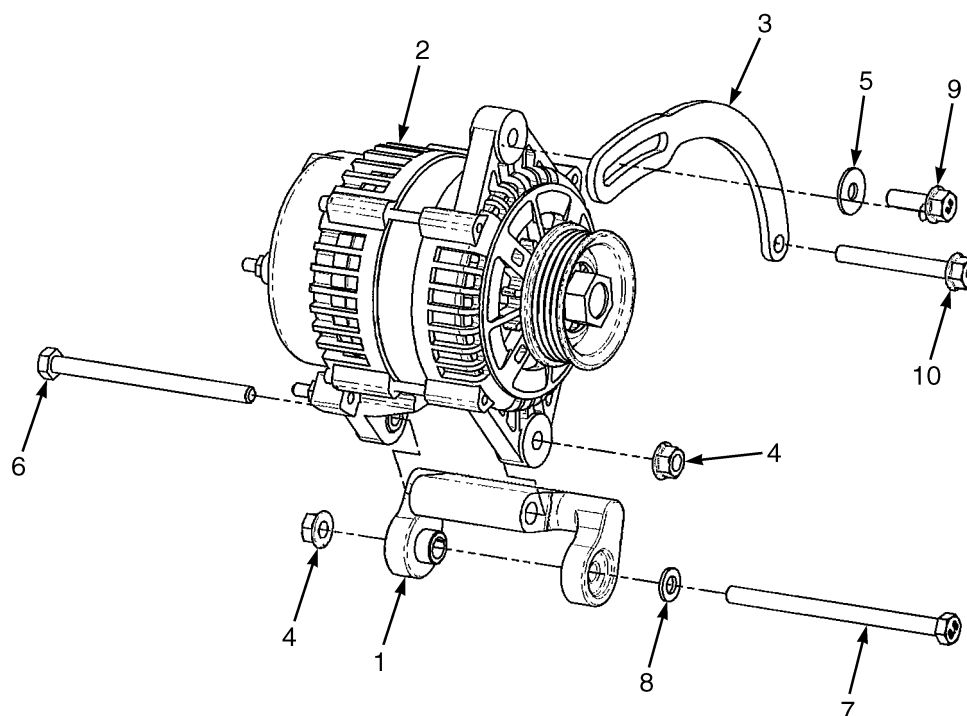
## STARTER (FIGURE 2-22)

### PSI 2.4L



BP090708

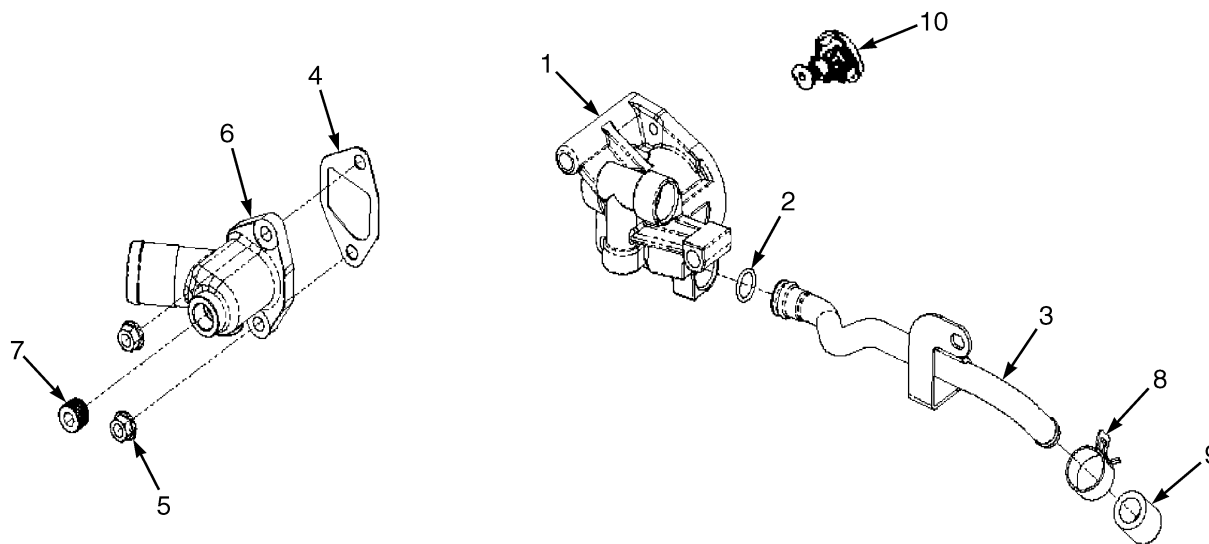
| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4110034  |                                                       |     |
|      | 4137303  | Capscrew .....                                        | 2   |
| 2    | 4110035  | Starter .....                                         | 1   |
| 3    | 1382472  |                                                       |     |
|      | 1502543  | Nut .....                                             | 2   |

**ALTERNATOR (FIGURE 2-23)**  
**PSI 2.4L**

BP090988

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4153412  | Bracket (Alternator) .....                            | 1   |
| 2    | 4145981  | Alternator (50 Amp) .....                             | 1   |
| 3    | 4153413  | Strap .....                                           | 1   |
| 4    | 1382472  | Nut .....                                             | 2   |
|      | 1502543  | Nut .....                                             | 2   |
| 5    | 18515    | Washer .....                                          | 1   |
| 6    | 4111042  | Bolt .....                                            | 1   |
| 7    | 4137318  | Capscrew .....                                        | 1   |
| 8    | 320157   | Washer .....                                          | 1   |
| 9    | 4111235  | Bolt .....                                            | 1   |
| 10   | 4137311  | Capscrew .....                                        | 1   |

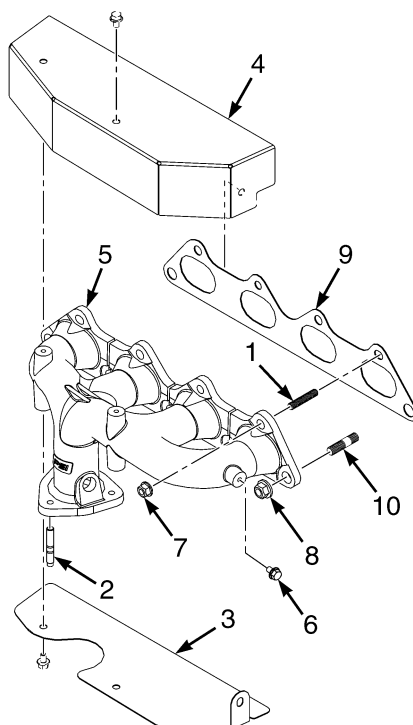
## CAB HEATER COOLANT (FIGURE 2-24) PSI 2.4L



BP090724

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4111253  | Thermostat Housing .....                              | 1   |
| 2    | 4111252  | O-Ring .....                                          | 1   |
|      | 4168639  | Tube .....                                            | 1   |
| 3    | 4111255  | Gasket .....                                          | 1   |
| 4    | 4111232  | Nut .....                                             | 2   |
| 5    | 1382472  | Water Outlet .....                                    | 1   |
|      | 1502543  | Plug .....                                            | 1   |
| 6    | 4111256  | Clamp .....                                           | 1   |
| 7    | 4111211  | Cap .....                                             | 1   |
| 8    | 4019092  | Thermostat .....                                      | 1   |
| 9    | 4050572  |                                                       |     |
|      | 4173763  |                                                       |     |
| 10   | 4111238  |                                                       |     |

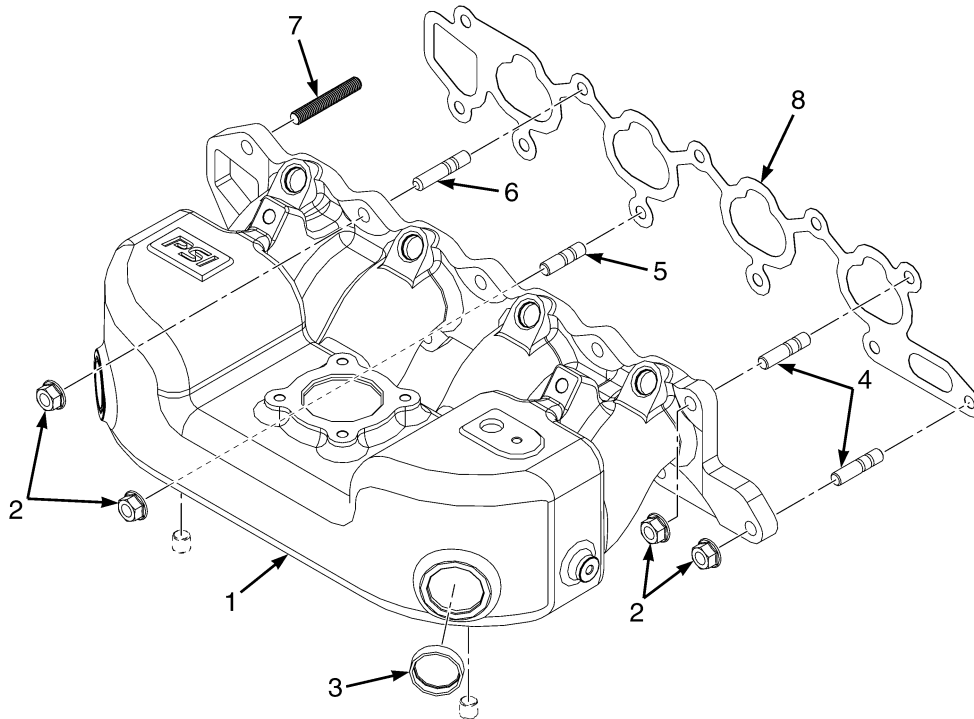


**EXHAUST MANIFOLD (FIGURE 2-25)**  
**PSI 2.4L**

BP091032

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4137304  |                                                       |     |
|      | 4111269  | Stud .....                                            | 7   |
| 2    | 4111228  | Stud .....                                            | 3   |
| 3    | 4111270  | Heat Shield .....                                     | 1   |
| 4    | 4111271  | Heat Shield .....                                     | 1   |
| 5    | 4111272  | Exhaust Manifold .....                                | 1   |
| 6    | 4019051  | Bolt .....                                            | 5   |
| 7    | 4111273  | Nut .....                                             | 7   |
| 8    | 4111274  | Nut .....                                             | 2   |
| 9    | 4111275  | Gasket .....                                          | 1   |
| 10   | 4111679  | Stud .....                                            | 2   |

## INTAKE MANIFOLD (FIGURE 2-26) PSI 2.4L LPG AND 2.4L BI-FUEL



BP090980

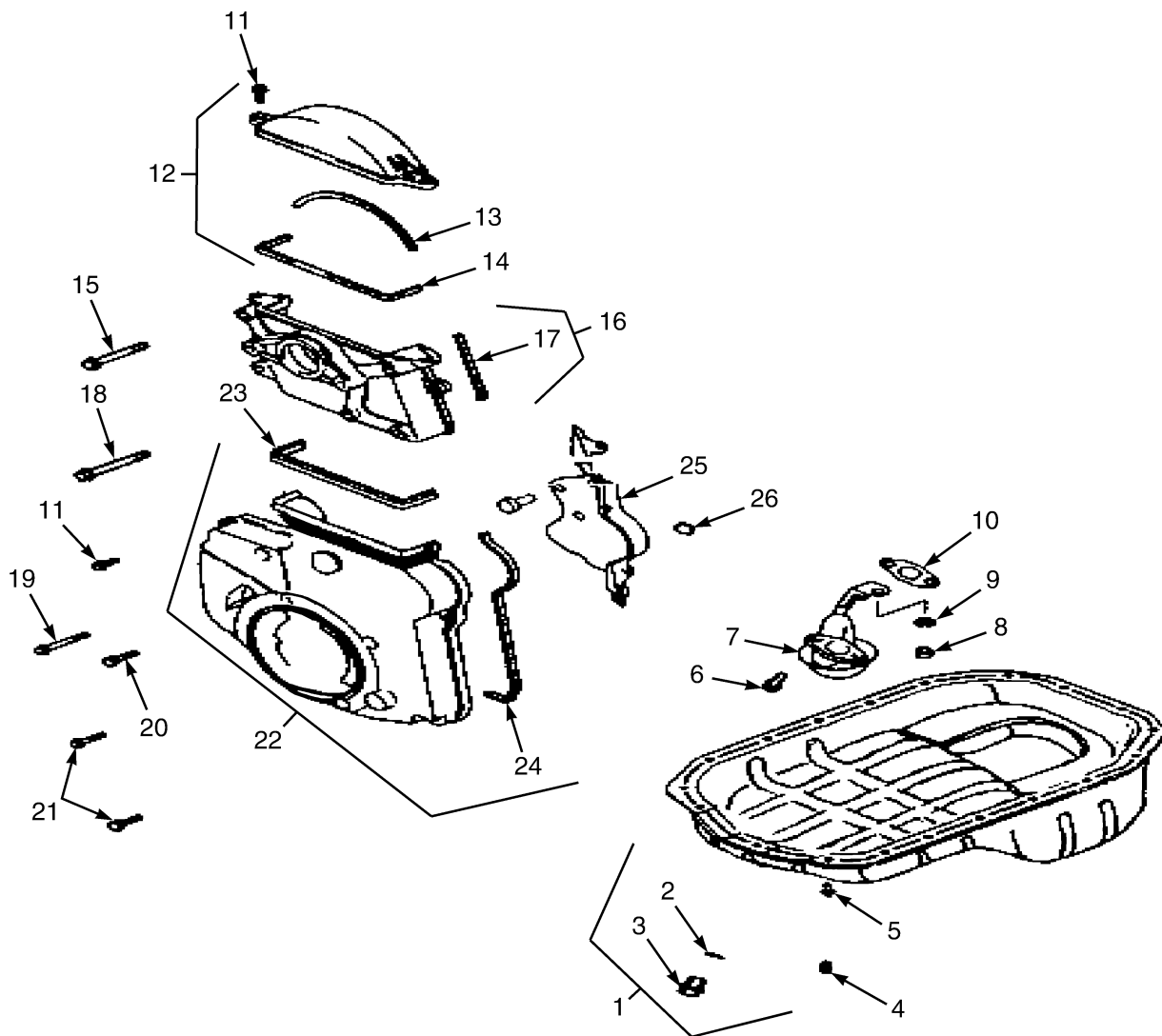
| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4153437  | Intake Manifold .....                                 | 1   |
| 1    | 4137349  | Intake Manifold (Dual-Fuel) .....                     | 1   |
| 2    | 1382472  | Nut .....                                             | 10  |
| 3    | 4019120  | Plug .....                                            | 2   |
| 4    | 4111262  | Stud .....                                            | 2   |
| 4    | 4153434  | Stud (Replacement Part) .....                         | 2   |
| 5    | 4111264  | Stud .....                                            | 4   |
| 5    | 4153434  | Stud (Replacement Part) .....                         | 4   |
| 6    | 4111265  | Stud .....                                            | 2   |
| 7    | 4111261  | Stud .....                                            | 2   |
| 8    | 4111266  | Gasket (Intake Manifold) .....                        | 1   |

## NOTES

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## FRONT COVER AND OIL PAN (FIGURE 2-27)

### PSI 2.4L

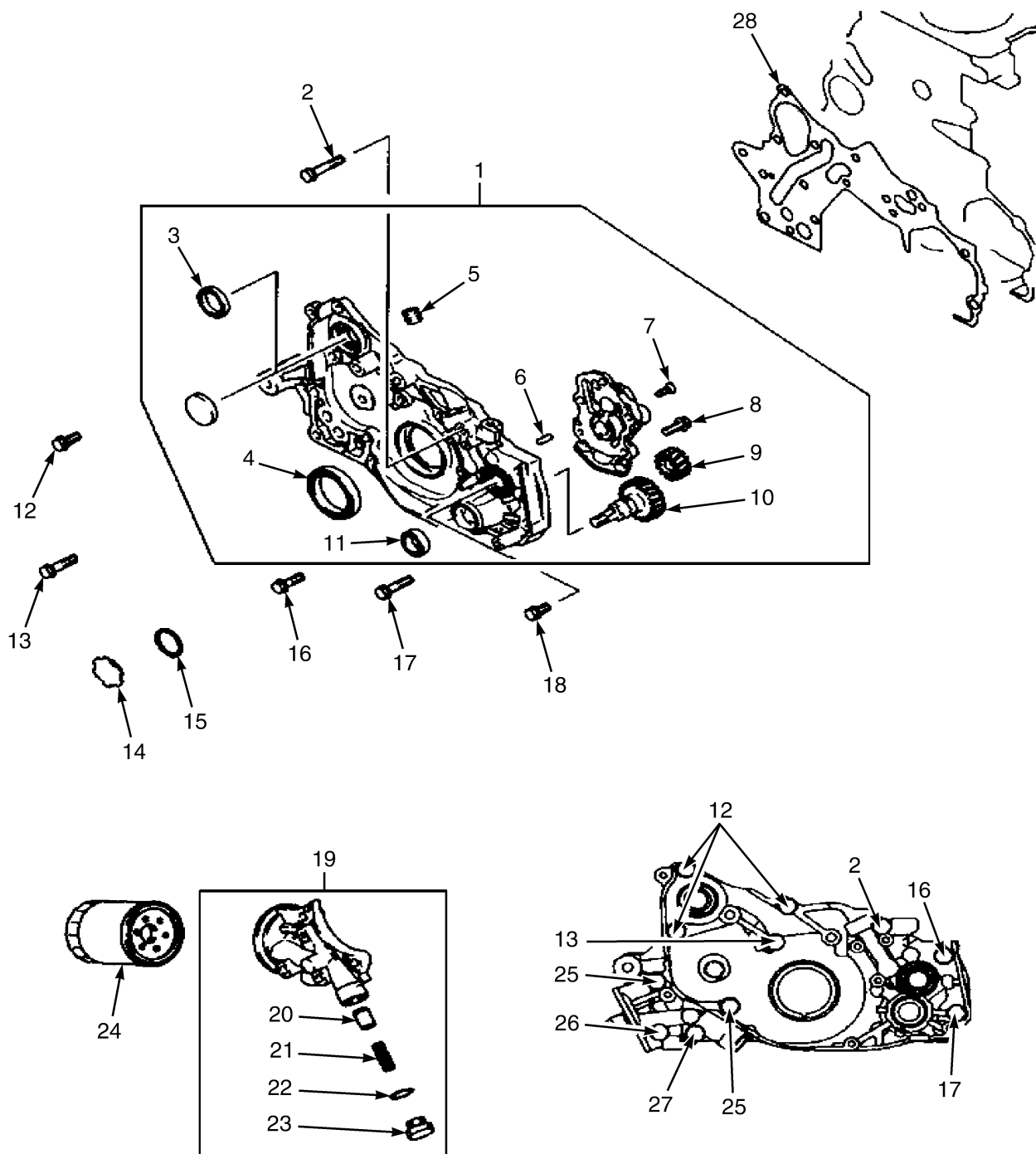


BP090735

**FRONT COVER AND OIL PAN**  
**PSI 2.4L**

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4111494  |                                                       |     |
|      | 4141178  | Oil Pan .....                                         | 1   |
| 2    | 4111208  | Gasket (Oil Drain) .....                              | 1   |
| 3    | 4111209  | Drain Plug .....                                      | 1   |
| 4    | 4111210  | Bolt .....                                            | 17  |
| 5    | 4111276  | Bolt .....                                            | 2   |
| 6    | 4111632  | Bolt .....                                            | 2   |
| 7    | 4111645  | Screen .....                                          | 1   |
| 8    | 4111736  | Nut .....                                             | 1   |
| 9    | 4111737  | Washer .....                                          | 1   |
| 10   | 4111738  | Gasket .....                                          | 1   |
| 11   | 4111739  | Bolt .....                                            | 8   |
| 12   | 4111740  | Cover (Front Upper) .....                             | 1   |
| 13   | .....    | Gasket (Timing Belt Cover) .....                      | 1   |
| 14   | .....    | Gasket (Timing Belt Cover) .....                      | 1   |
| 15   | 4111742  | Bolt .....                                            | 3   |
| 16   | 4111741  | Cover (Middle Timing Cover) .....                     | 1   |
| 17   | .....    | Gasket .....                                          | 1   |
| 18   | 4111743  | Bolt .....                                            | 1   |
| 19   | 4111744  | Bolt .....                                            | 1   |
| 20   | 4111745  | Bolt .....                                            | 2   |
| 21   | 4111746  | Bolt .....                                            | 2   |
| 22   | 4111747  | Cover (T-Belt) .....                                  | 1   |
| 23   | .....    | Gasket (Lower Cover) .....                            | 1   |
| 24   | .....    | Gasket (Lower Cover) .....                            | 1   |
| 25   | 4111749  | Cover (Rear) .....                                    | 1   |
| 26   | 4111751  | Plug .....                                            | 1   |

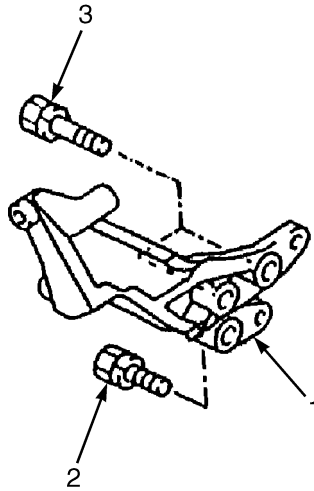
## OIL PUMP AND ATTACHING PARTS (FIGURE 2-28) PSI 2.4L



BP090978

**OIL PUMP AND ATTACHING PARTS**  
**PSI 2.4L**

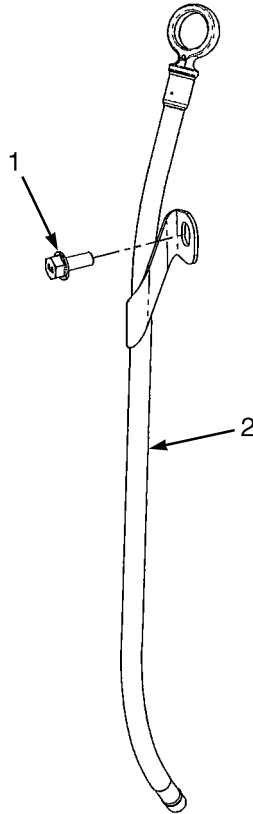
| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4112340  | Oil Pump .....                                        | 1   |
| 2    | 4112341  | Bolt .....                                            | 1   |
| 3    | 4112342  | Oil Seal .....                                        | 1   |
| 4    | 4112343  | Oil Seal .....                                        | 1   |
| 5    | 4112344  | Plug .....                                            | 1   |
| 6    | 4111697  | Dowel .....                                           | 2   |
| 7    | 4112345  | Screw .....                                           | 1   |
| 8    | 4112346  | Bolt .....                                            | 4   |
| 9    | .....    | Oil Pump Gear .....                                   | 1   |
| 10   | .....    | Oil Pump Drive Gear .....                             | 1   |
| 11   | 4112361  | Oil Seal .....                                        | 1   |
| 12   | 4111239  | Bolt .....                                            | 3   |
| 13   | 4112348  | Bolt .....                                            | 1   |
| 14   | 4112349  | Cap .....                                             | 1   |
| 15   | 4112350  | O-Ring .....                                          | 1   |
| 16   | 4112351  | Bolt .....                                            | 1   |
| 17   | 4112352  | Bolt .....                                            | 1   |
| 18   | 4112329  | Bolt .....                                            | 1   |
| 19   | 4112353  | Bracket .....                                         | 1   |
| 20   | .....    | Plunger .....                                         | 1   |
| 21   | 4112355  | Spring .....                                          | 1   |
| 22   | 4112356  | Gasket .....                                          | 1   |
| 23   | 4112357  | Plug .....                                            | 1   |
| 24   | 4122335  | Oil Filter .....                                      | 1   |
| 25   | 4112358  | Bolt .....                                            | 2   |
| 26   | 4112359  | Bolt .....                                            | 1   |
| 27   | 4112360  | Bolt .....                                            | 1   |
| 28   | 4112347  | Gasket .....                                          | 1   |

**PUMP MOUNT BRACKET (FIGURE 2-29)**  
**PSI 2.4L LPG AND 2.4L BI-FUEL**

BP090983

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4145806  | Bracket .....                                         | 1   |
| 2    | 4145807  | Bolt and Washer Set .....                             | 1   |
| 3    | 4145808  | Bolt and Washer Set .....                             | 2   |

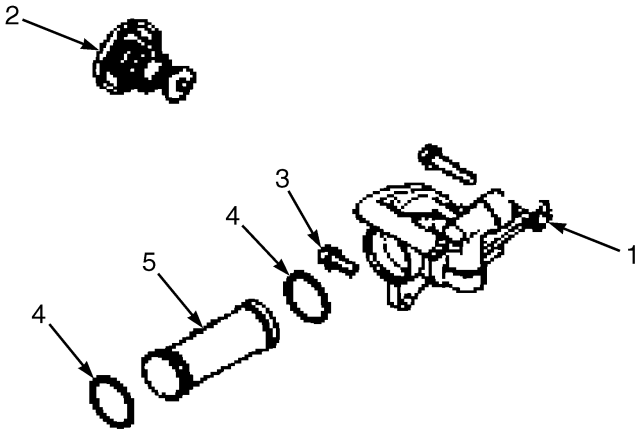


**DIPSTICK AND TUBE (FIGURE 2-30)**  
**PSI 2.4L LPG**

BP090985

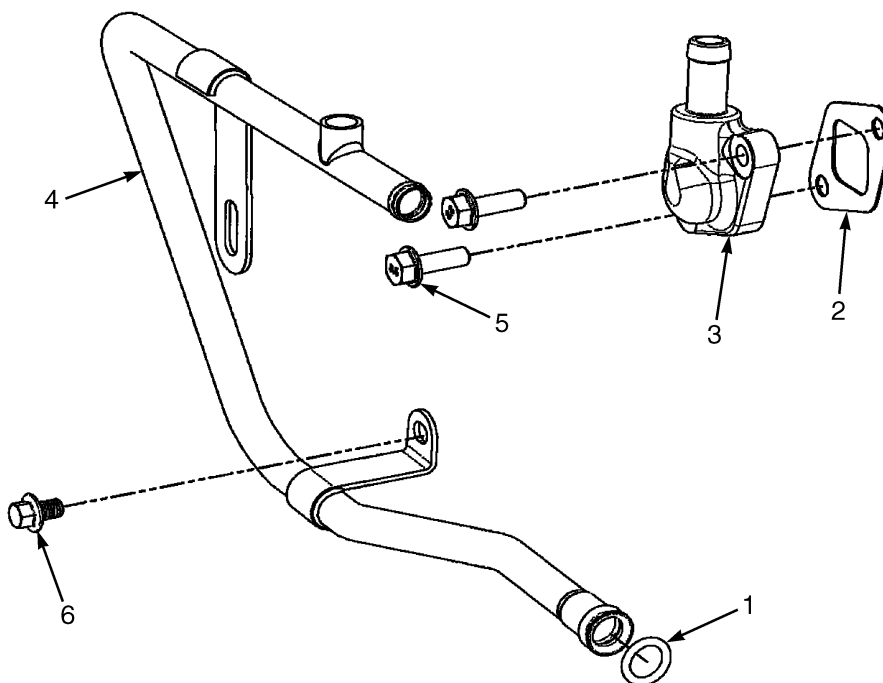
| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4153415  | Bolt .....                                            | 1   |
| 2    | 4146209  | Dipstick and Tube Assembly .....                      | 1   |

**THERMOSTAT AND HOUSING (FIGURE 2-31)**  
**PSI 2.4L LPG AND 2.4L BI-FUEL**



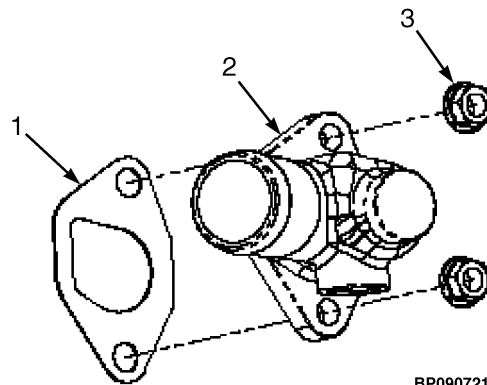
BP090723

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4111236  | Thermostat Housing .....                              | 1   |
| 2    | 4111238  | Thermostat .....                                      | 1   |
| 3    | 4111239  | Bolt .....                                            | 1   |
| 4    | 4111240  | O-Ring .....                                          | 2   |
| 5    | 4111241  | Pipe .....                                            | 1   |

**DRS CIRCUIT (FIGURE 2-32)**  
**PSI 2.4L LPG AND 2.4L BI-FUEL**

BP090984

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4111252  |                                                       |     |
|      | 4168639  | O-Ring .....                                          | 1   |
| 2    | 4111250  | Gasket .....                                          | 1   |
| 3    | 4111249  |                                                       |     |
|      | 4153346  | Outlet (Water Bypass) .....                           | 1   |
| 4    | 4140927  | Tube (Coolant) .....                                  | 1   |
| 5    | 4111235  | Bolt .....                                            | 2   |
| 6    | 4136115  |                                                       |     |
|      | 4137335  | Capscrew .....                                        | 1   |

**WATER OUTLET (FIGURE 2-33)**  
**WITHOUT CAB HEATER — PSI 2.4L LPG AND 2.4L BI-FUEL**

| ITEM | PART NO.  | DESCRIPTION                                           | QTY |
|------|-----------|-------------------------------------------------------|-----|
|      | 4639191   | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134   | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137   | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4111232   | Gasket .....                                          | 1   |
| 2    | 4111229   | Water Outlet .....                                    | 1   |
| 3    | 1382472   |                                                       |     |
|      | 1502543   | Nut .....                                             | 2   |
|      | a 4111238 | Thermostat .....                                      | 1   |

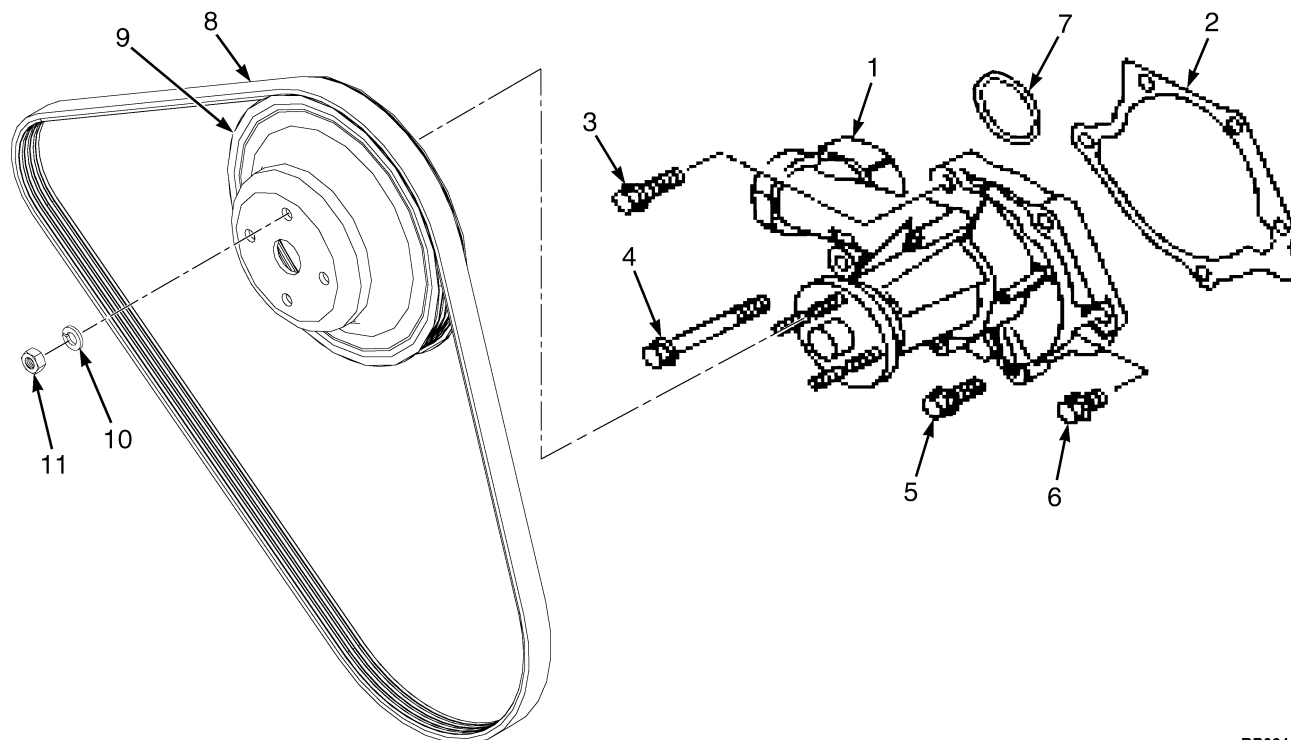
**FOOTNOTES:**

**a** Not Illustrated

## NOTES

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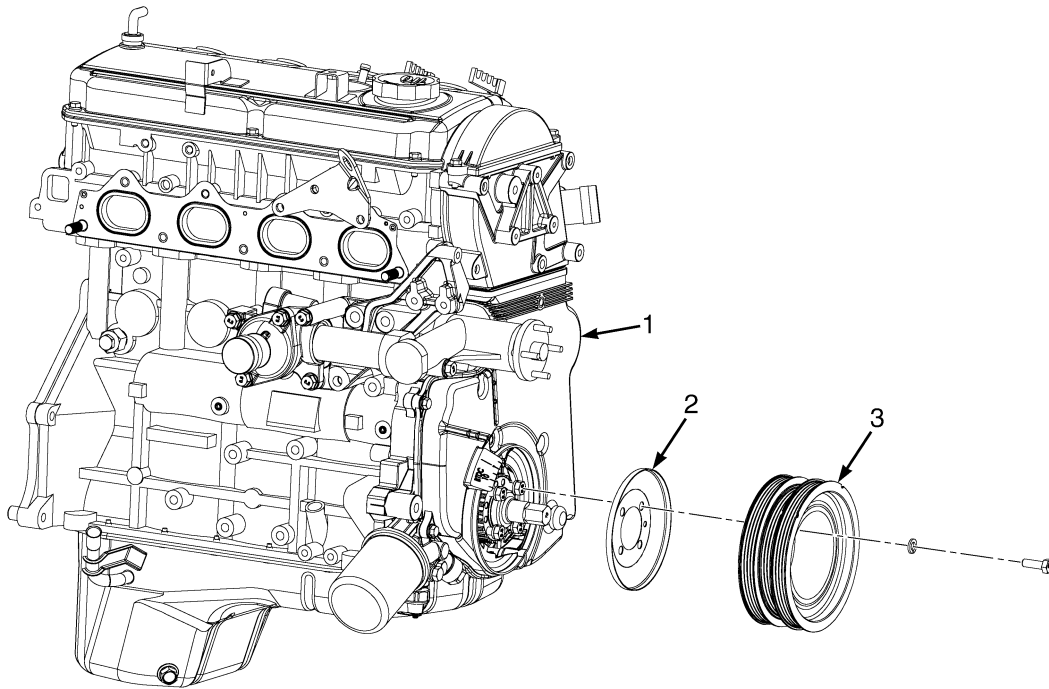
## WATER PUMP (FIGURE 2-34) PSI 2.4L



BP091055

**WATER PUMP  
PSI 2.4L**

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4112416  | Water Pump .....                                      | 1   |
| 2    | 4112417  | Gasket .....                                          | 1   |
| 3    | 4112418  | Bolt .....                                            | 1   |
| 4    | 4111742  | Bolt .....                                            | 1   |
| 5    | 4112419  | Bolt .....                                            | 2   |
| 6    | 4112420  | Bolt .....                                            | 1   |
| 7    | 4111240  | O-Ring .....                                          | 1   |
| 8    | 4116722  | Belt (Alternator) .....                               | 1   |
| 9    | 4116721  | Pulley .....                                          | 1   |
| 10   | 4225549  | Spring Washer .....                                   | 4   |
| 11   | 4225548  | Nut .....                                             | 4   |
|      | 4116503  | Kit-Service 6000 Hour Belt .....                      | 1   |

**EXCLUDER SHIELD (FIGURE 2-35)**  
**PSI 2.4L**

BP090987

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | .....    | Block (2.4L) .....                                    | 1   |
| 2    | 4168672  | Cover .....                                           | 1   |
| 3    | 4111757  |                                                       |     |
|      | 4168673  | Damper (Crank Assy) .....                             | 1   |



**3**

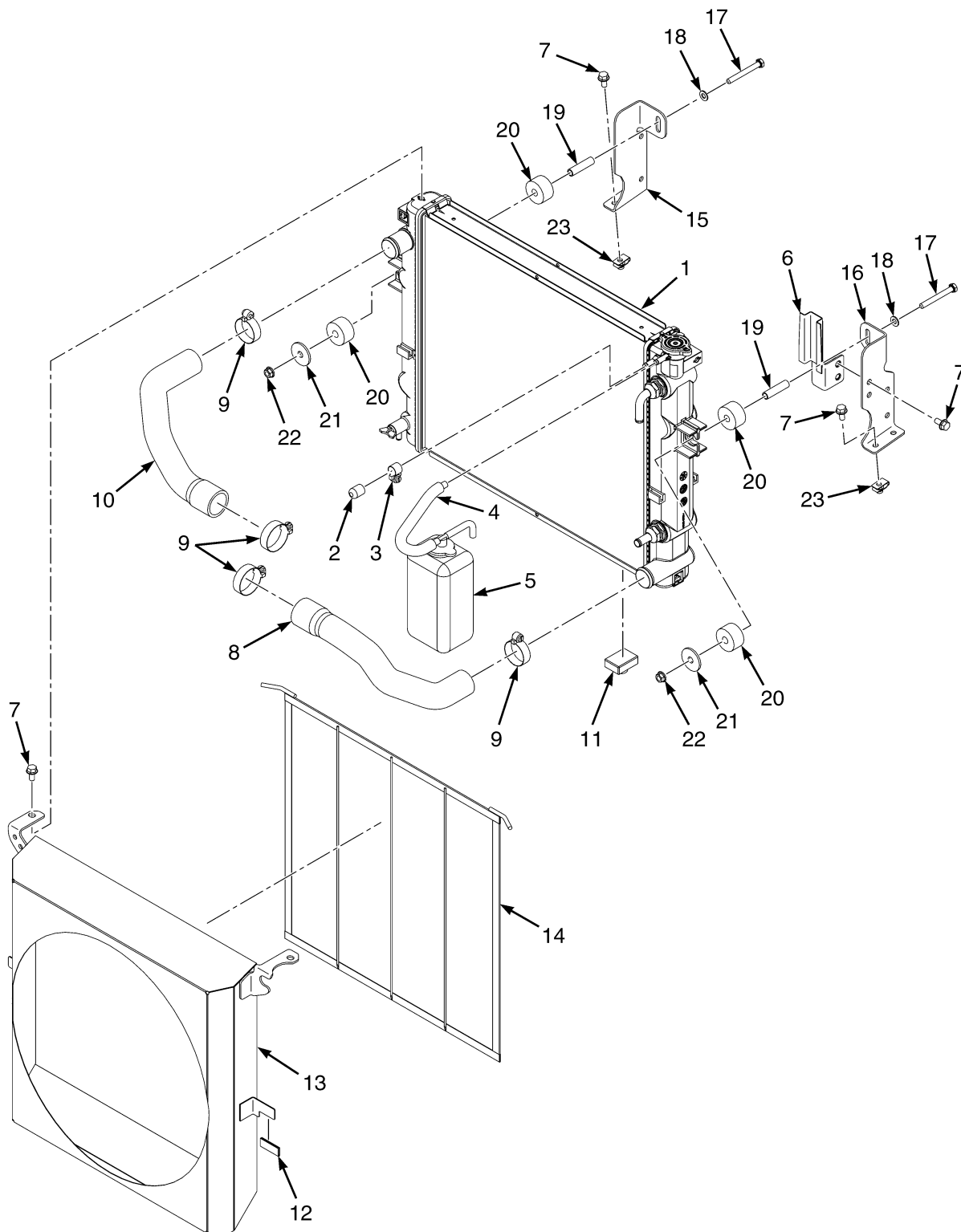
**ENGINE ASSEMBLY - YANMAR**



### SECTION 3 ENGINE ASSEMBLY - YANMAR

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## COOLING SYSTEM (FIGURE 3-1) YANMAR STANDARD AND ANTI-CLOG — WITHOUT SILENCER



BP060157

## COOLING SYSTEM

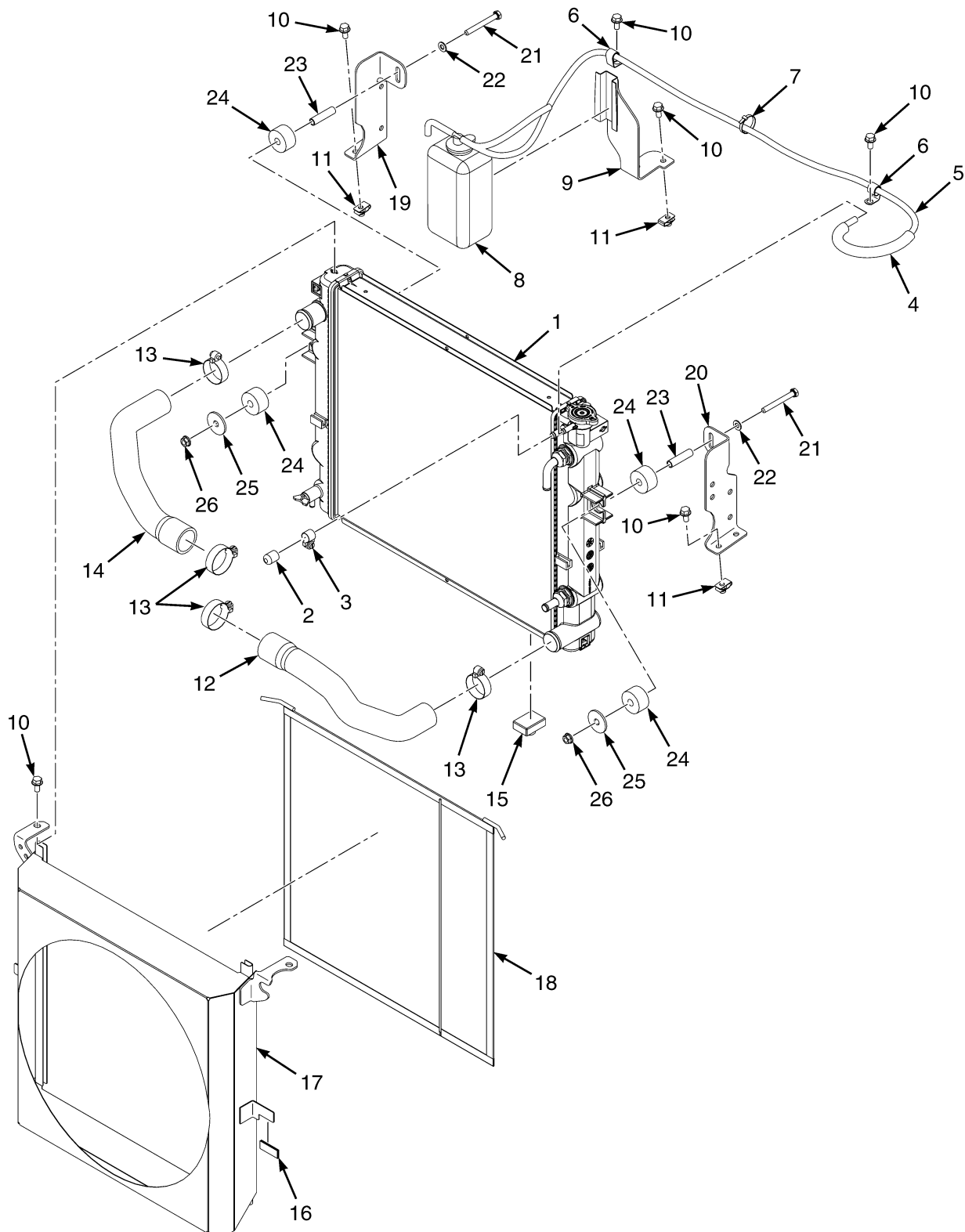
### YANMAR STANDARD AND ANTI-CLOG – WITHOUT SILENCER

**KEY:****A:** Without Lint Screen**B:** With Lint Screen

| ITEM | PART NO.         | DESCRIPTION                     | QTY |    |
|------|------------------|---------------------------------|-----|----|
|      |                  |                                 | A   | B  |
| 1    | 4643831          | Radiator (Standard) .....       | 1   | 1  |
| 1    | 4643832          | Radiator (Anti-Clog) .....      | 1   | 1  |
| 1    | 4180891          | Plug (Drain) .....              | 1   | 1  |
| 1    | 4180892          | Radiator Cap .....              | 1   | 1  |
| 2    | 4133320          | Cap .....                       | 1   | 1  |
| 3    | 166857           | Clamp .....                     | 1   | 1  |
| 4    | 2089649          | Protection Tube .....           | 1   | 1  |
| 5    | 2030673          | Reservoir .....                 | 1   | 1  |
| 5    | 2030675          | Conductor .....                 | 1   | 1  |
| 5    | 2030677          | Hose Assy .....                 | 2   | 2  |
| 5    | 2030679          | Pipe .....                      | 1   | 1  |
| 5    | 2030678          | Clamp .....                     | 1   | 1  |
| 6    | 2089654          | Bracket .....                   | 1   | 1  |
| 7    | 4109993          |                                 |     |    |
|      | 1527879          | Capscrew .....                  | 8   | 8  |
| 8    | 4155041          | Hose (Radiator, Lower) .....    | 1   | 1  |
| 9    | 369804           | Clamp .....                     | 4   | 4  |
| 10   | 4155842          | Hose (Radiator, Upper) .....    | 1   | 1  |
| 11   | 2085801          | Rubber Mount .....              | 2   | 2  |
| 12   | 2028265          | Plate .....                     | 2   | 2  |
| 13   | 4125744          | Shroud .....                    | 1   | .. |
| 13   | 4139909          | Shroud (With Lint Screen) ..... | ..  | 1  |
| 14   | 2107165          | Screen .....                    | ..  | 1  |
| 15   | 4110495          | Bracket .....                   | 1   | 1  |
| 16   | 4108965          | Bracket .....                   | 1   | 1  |
| 17   | 136703           | Capscrew .....                  | 2   | 2  |
| 18   | 320157           | Washer .....                    | 2   | 2  |
| 19   | 2029223          | Spacer .....                    | 2   | 2  |
| 20   | 2021512          | Rubber Cushion .....            | 4   | 4  |
| 21   | 4175769          | Washer .....                    | 2   | 2  |
| 22   | 1382472          |                                 |     |    |
|      | 1502543          | Nut .....                       | 2   | 2  |
| 23   | 1480237          | Nut (Fold Over) .....           | 4   | 4  |
|      | <b>a</b> 4158903 | Shield (Radiator Hose) .....    | 1   | 1  |

**FOOTNOTES:****a** Not Illustrated

## COOLING SYSTEM (FIGURE 3-2) YANMAR STANDARD AND ANTI-CLOG — WITH SILENCER



BP060156

## COOLING SYSTEM

### YANMAR STANDARD AND ANTI-CLOG – WITH SILENCER

**KEY:****A:** Without Lint Screen**B:** With Lint Screen

| ITEM | PART NO.         | DESCRIPTION                     | QTY |    |
|------|------------------|---------------------------------|-----|----|
|      |                  |                                 | A   | B  |
| 1    | 4643831          | Radiator (Standard) .....       | 1   | 1  |
| 1    | 4643832          | Radiator (Anti-Clog) .....      | 1   | 1  |
| 1    | 4180891          | Plug (Drain) .....              | 1   | 1  |
| 1    | 4180892          | Radiator Cap .....              | 1   | 1  |
| 2    | 4133320          | Cap .....                       | 1   | 1  |
| 3    | 166857           | Clamp .....                     | 1   | 1  |
| 4    | 2089649          | Protection Tube .....           | 1   | 1  |
| 5    | 1302954          | Hose (Plastic Tube) .....       | ..  | 1  |
| 6    | 2022013          | Clamp .....                     | 2   | 2  |
| 7    | 1352606          | Strap Clamp .....               | 1   | 1  |
| 8    | 2030673          | Reservoir .....                 | 1   | 1  |
| 8    | 2030675          | Conductor .....                 | 1   | 1  |
| 8    | 2030677          | Hose Assy .....                 | 2   | 2  |
| 8    | 2030679          | Pipe .....                      | 1   | 1  |
| 8    | 2030678          | Clamp .....                     | 1   | 1  |
| 9    | 4124290          | Bracket .....                   | 1   | 1  |
| 10   | 4109993          |                                 |     |    |
|      | 1527879          | Capscrew .....                  | 8   | 8  |
| 11   | 1480237          | Nut (Fold Over) .....           | 6   | 6  |
| 12   | 4155041          | Hose (Radiator, Lower) .....    | 1   | 1  |
| 13   | 369804           | Clamp .....                     | 4   | 4  |
| 14   | 4155842          | Hose (Radiator, Upper) .....    | 1   | 1  |
| 15   | 2085801          | Rubber Mount .....              | 2   | 2  |
| 16   | 2028265          | Plate .....                     | 2   | 2  |
| 17   | 4125744          | Shroud .....                    | 1   | .. |
| 17   | 4139909          | Shroud (With Lint Screen) ..... | ..  | 1  |
| 18   | 2107165          | Screen .....                    | ..  | 1  |
| 19   | 4110495          | Bracket .....                   | 1   | 1  |
| 20   | 4108965          | Bracket .....                   | 1   | 1  |
| 21   | 136703           | Capscrew .....                  | 2   | 2  |
| 22   | 320157           | Washer .....                    | 2   | 2  |
| 23   | 2029223          | Spacer .....                    | 2   | 2  |
| 24   | 2021512          | Rubber Cushion .....            | 4   | 4  |
| 25   | 4175769          | Washer .....                    | 2   | 2  |
| 26   | 1382472          |                                 |     |    |
|      | 1502543          | Nut .....                       | 2   | 2  |
|      | <b>a</b> 4158903 | Shield (Radiator Hose) .....    | 1   | 1  |

**FOOTNOTES:****a** Not Illustrated

This exploded perspective view illustrates the assembly of a medical device, likely a catheter or probe. The components are numbered as follows:

- 1:** Multiple O-rings or seals used for fluid-tight connections.
- 2:** The main cylindrical body or housing of the device.
- 3:** Small spacers or washers used in the assembly.
- 4:** A larger circular flange or end cap.
- 5:** A small pin or screw used for mounting or adjustment.
- 6:** A small cylindrical component, possibly a connector or plug.
- 7:** A curved tube or hose that connects to the main body.
- 8:** A small pin or screw used for assembly.
- 9:** A small cylindrical component, possibly a connector or plug.
- 10:** A series of O-rings or seals along a tube.
- 11:** A small pin or screw used for assembly.
- 12:** A long, curved tube or hose that connects to the main body.
- 13:** A small component, possibly a connector or plug.
- 14:** A small pin or screw used for assembly.
- 15:** A small component, possibly a connector or plug.
- 16:** A small pin or screw used for assembly.
- 17:** A vertical tube or probe that connects to the main body.
- 18:** A small pin or screw used for assembly.
- 19:** A small pin or screw used for assembly.
- 20:** A small pin or screw used for assembly.
- 21:** A small pin or screw used for assembly.
- 22:** A small component, possibly a connector or plug.
- 23:** A small pin or screw used for assembly.

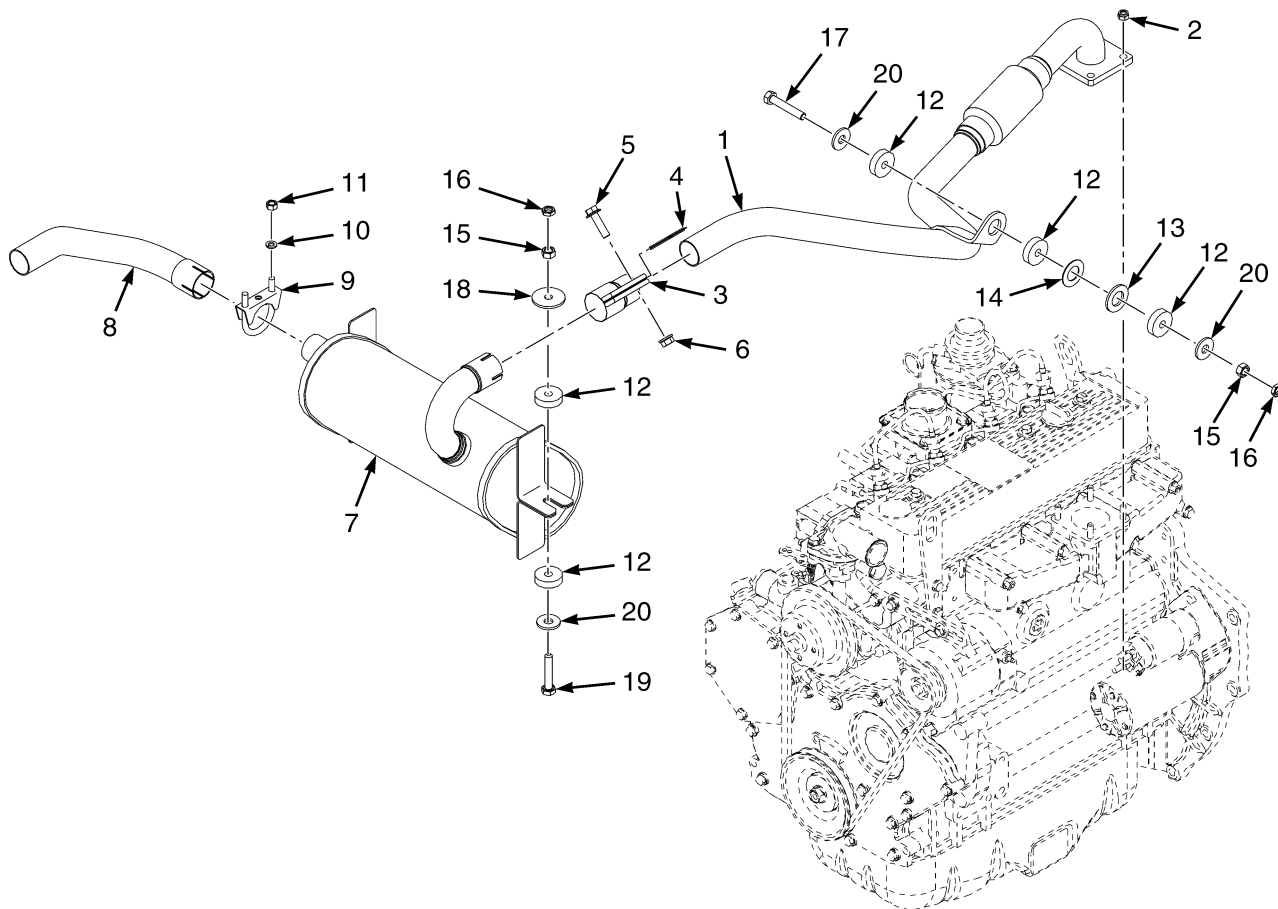
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**OVERHEAD EXHAUST  
YANMAR 2.6L AND 3.3L**

| ITEM | PART NO.           | DESCRIPTION                   | QTY |
|------|--------------------|-------------------------------|-----|
| 1    | 1351177            | Rubber Cushion .....          | 7   |
| 2    | 2081918            | Muffler .....                 | 1   |
| 3    | 2022973            | Washer .....                  | 4   |
| 4    | 1351176            | Washer .....                  | 2   |
| 5    | 1582222            | Locknut .....                 | 4   |
| 6    | 2101107            | Clamp .....                   | 1   |
| 7    | 2102323            | Gasket .....                  | 1   |
| 8    | 1527885            | Capscrew .....                | 2   |
| 9    | 1460477            | Nut .....                     | 2   |
| 10   | 2023006            | Shim (T=3.2) .....            | 1   |
| 10   | 2023007            | Shim (T=1.2) .....            | 1   |
| 11   | 302294             | Capscrew .....                | 1   |
| 12   | 2083718            | Exhaust Pipe .....            | 1   |
| 13   | 2081919            | Clamp .....                   | 1   |
| 14   | 2022719            | Nut .....                     | 2   |
| 15   | 292681             | Lockwasher .....              | 2   |
| 16   | 2089780            | Spacer .....                  | 2   |
| 17   | 4620896            | Tail Pipe .....               | 1   |
| 17   | 4164047            | Exhaust Pipe (Alt Part) ..... | 1   |
| 18   | 1510113            | Capscrew .....                | 4   |
| 19   | 1530243            | Insert .....                  | 4   |
| 20   | <del>1586693</del> |                               |     |
|      | 136692             | Nut .....                     | 3   |
| 21   | 1593336            | Nut .....                     | 3   |
| 22   | 4154360            | Exhaust Pipe .....            | 1   |
| 23   | 292518             | Capscrew .....                | 2   |

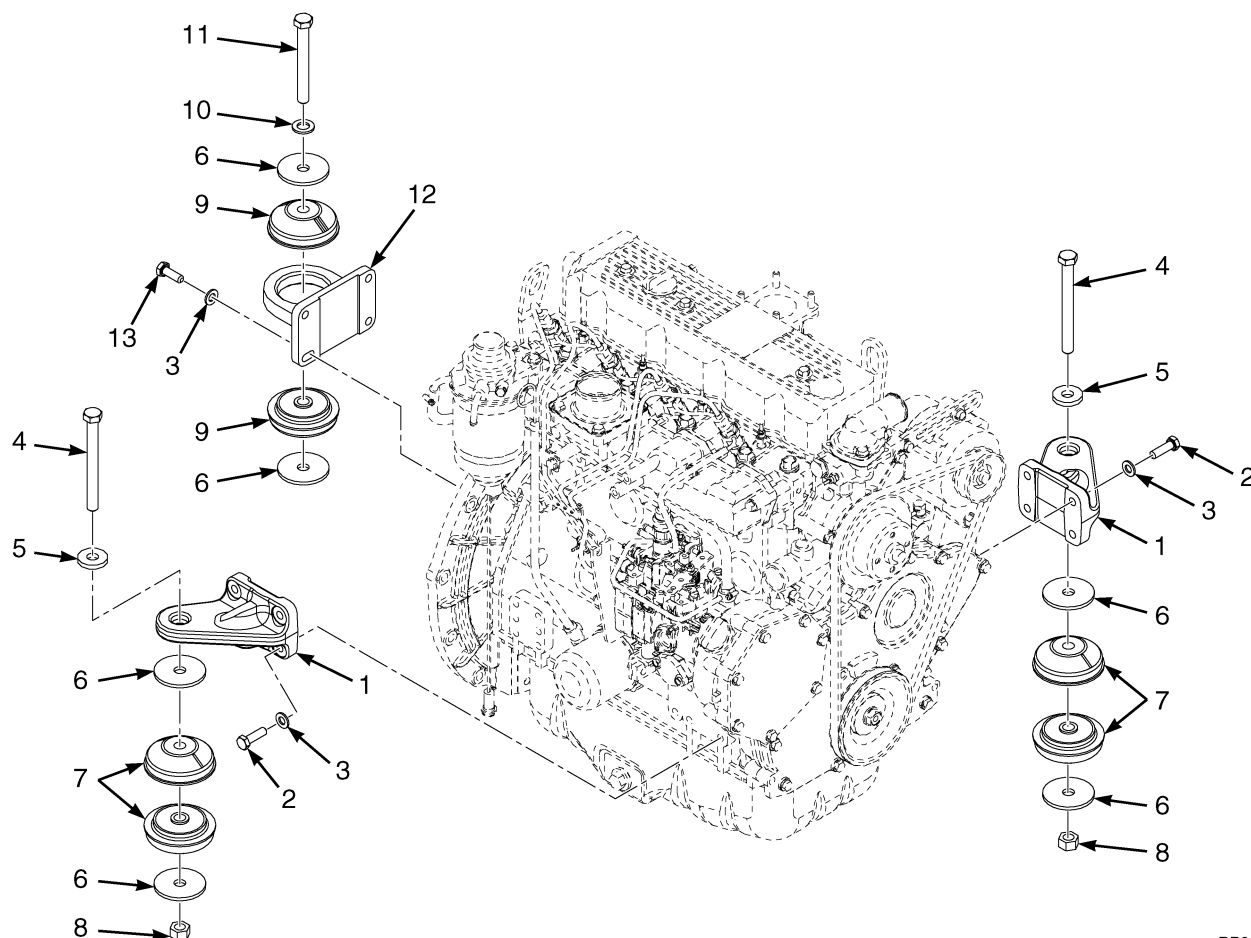
## COUNTERWEIGHT EXHAUST (FIGURE 3-4) YANMAR 2.6L AND 3.3L DIESEL



BP110188

**COUNTERWEIGHT EXHAUST  
YANMAR 2.6L AND 3.3L DIESEL**

| ITEM | PART NO.                     | DESCRIPTION          | QTY |
|------|------------------------------|----------------------|-----|
| 1    | 4154360                      | Exhaust Pipe .....   | 1   |
| 2    | 1582222                      | Locknut .....        | 4   |
| 3    | 2101107                      | Clamp .....          | 1   |
| 4    | 2102323                      | Gasket .....         | 1   |
| 5    | 1527885                      | Capscrew .....       | 2   |
| 6    | 1460477                      | Nut .....            | 2   |
| 7    | 2081918                      | Muffler .....        | 1   |
| 8    | 4136915                      | Exhaust Pipe .....   | 1   |
| 9    | 2081919                      | Clamp .....          | 1   |
| 10   | 292681                       | Lockwasher .....     | 2   |
| 11   | 2022719                      | Nut .....            | 2   |
| 12   | 1351177                      | Rubber Cushion ..... | 7   |
| 13   | 2023006                      | Shim (T=3.2) .....   | 1   |
| 14   | 2023007                      | Shim (T=1.2) .....   | 1   |
| 15   | <del>1586693</del><br>136692 | Nut .....            | 3   |
| 16   | 1593336                      | Nut .....            | 3   |
| 17   | 292518                       | Capscrew .....       | 2   |
| 18   | 1351176                      | Washer .....         | 2   |
| 19   | 302294                       | Capscrew .....       | 1   |
| 20   | 2022973                      | Washer .....         | 4   |

**ENGINE MOUNTING (FIGURE 3-5)**  
**YANMAR ENGINE**

BP090950

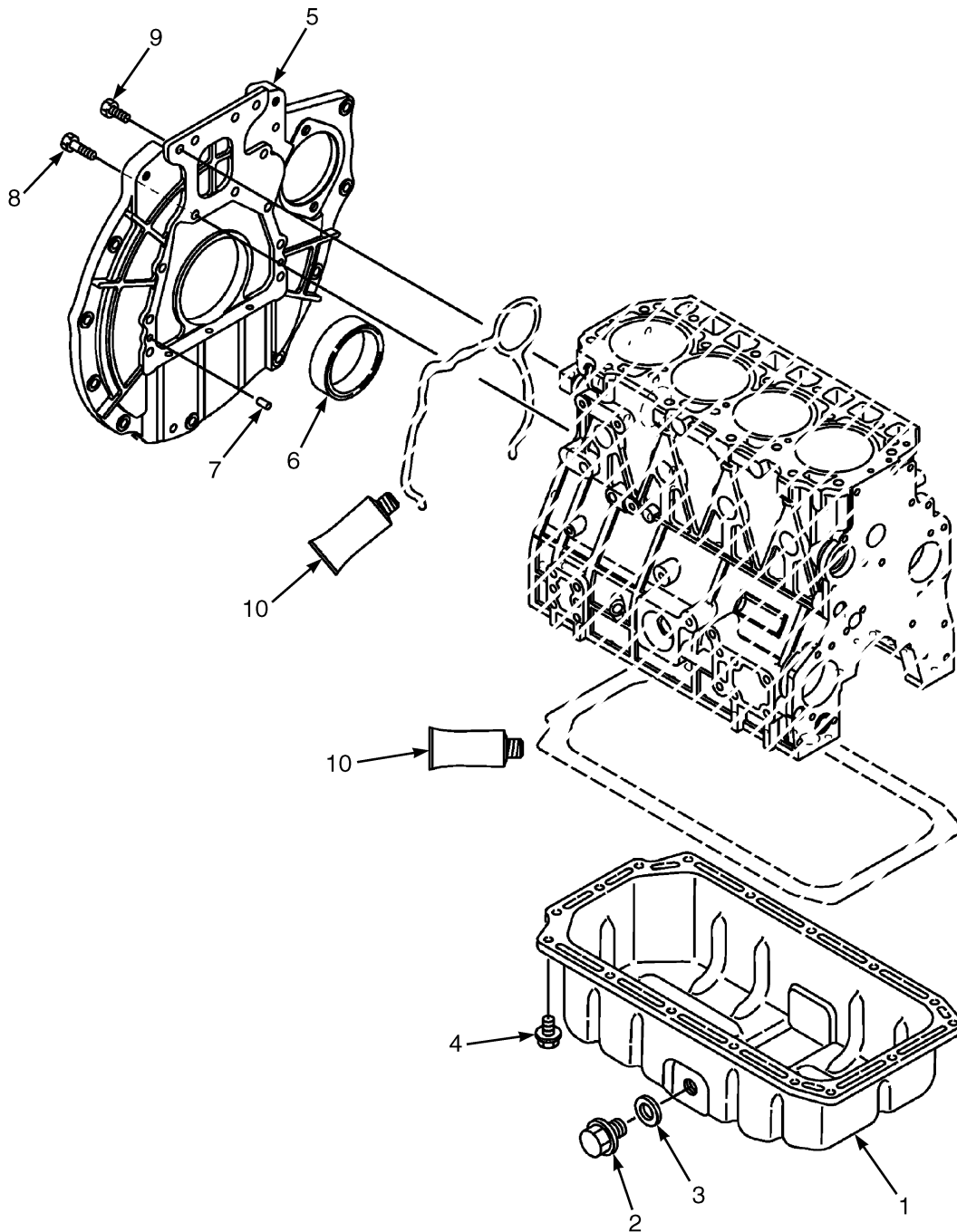
| ITEM | PART NO. | DESCRIPTION                            | QTY |
|------|----------|----------------------------------------|-----|
| 1    | 2067900  | Plate .....                            | 2   |
| 2    | 293630   | Capscrew .....                         | 8   |
| 3    | 296420   | Washer .....                           | 12  |
| 4    | 293680   | Capscrew .....                         | 2   |
| 5    | 2081588  | Washer .....                           | 2   |
| 6    | 2081587  | Washer .....                           | 6   |
| 7    | 4132931  | Isolator .....                         | 4   |
| 8    | 2081589  | Nut .....                              | 2   |
| 9    | 4132930  | Isolator .....                         | 2   |
| 10   | 296424   | Washer .....                           | 1   |
| 11   | 293678   | Capscrew .....                         | 1   |
| 12   | 2105228  | Bracket (Mounts to Transmission) ..... | 1   |
| 13   | 136985   | Capscrew .....                         | 4   |
|      | a 280472 | Sealant .....                          | AR  |

**FOOTNOTES:****a** Not Illustrated

## NOTES

[illegible]

## OIL PAN AND FLYWHEEL HOUSING (FIGURE 3-6) YANMAR 2.6L AND 3.3L

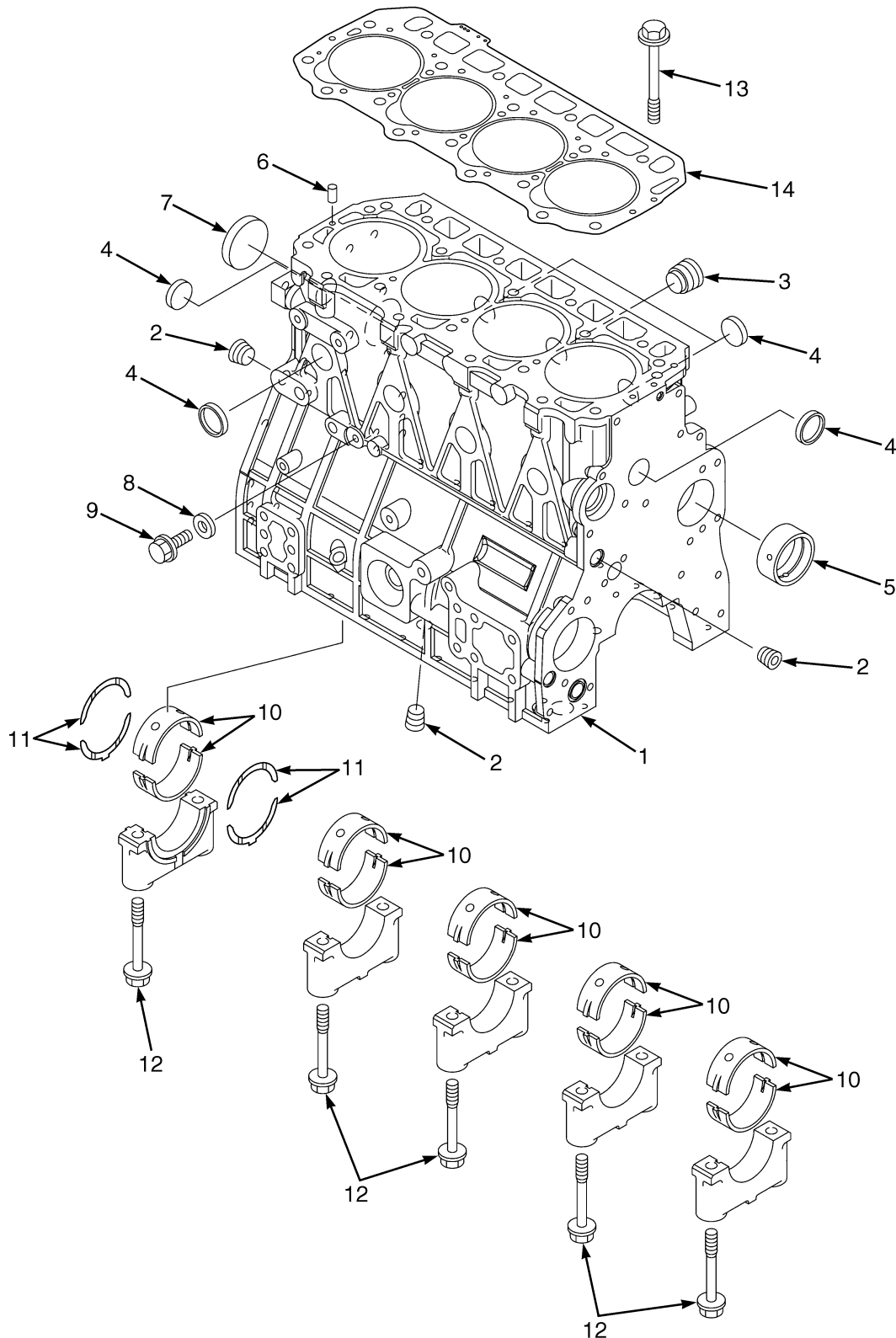


BP090965

**OIL PAN AND FLYWHEEL HOUSING  
YANMAR 2.6L AND 3.3L**

| ITEM | PART NO.           | DESCRIPTION                                                | QTY |
|------|--------------------|------------------------------------------------------------|-----|
|      | 2108726            | Engine Service Assy (2.6L) .....                           | 1   |
|      | 2100625            | Engine Service Assy (3.3L) .....                           | 1   |
| 1    | 1599479            | Oil Pan .....                                              | 1   |
| 2    | 1599480            | Drain Plug .....                                           | 1   |
| 3    | 1599481            | Oil Seal .....                                             | 1   |
| 4    | 1599448            | Bolt .....                                                 | 16  |
| 5    | 2079757            | Flywheel Housing .....                                     | 1   |
| 6    | <del>1599484</del> |                                                            |     |
|      | 1707826            | Seal .....                                                 | 1   |
| 7    | 1599458            | Pin .....                                                  | 2   |
| 8    | 2084314            | Bolt .....                                                 | 9   |
| 9    | 2084313            | Bolt .....                                                 | 4   |
| 10   | 2084312            | Gasket , silicone sealant (Silicone Not Illustrated) ..... | AR  |

## CYLINDER BLOCK (FIGURE 3-7) YANMAR 2.6 AND 3.3L — DIESEL



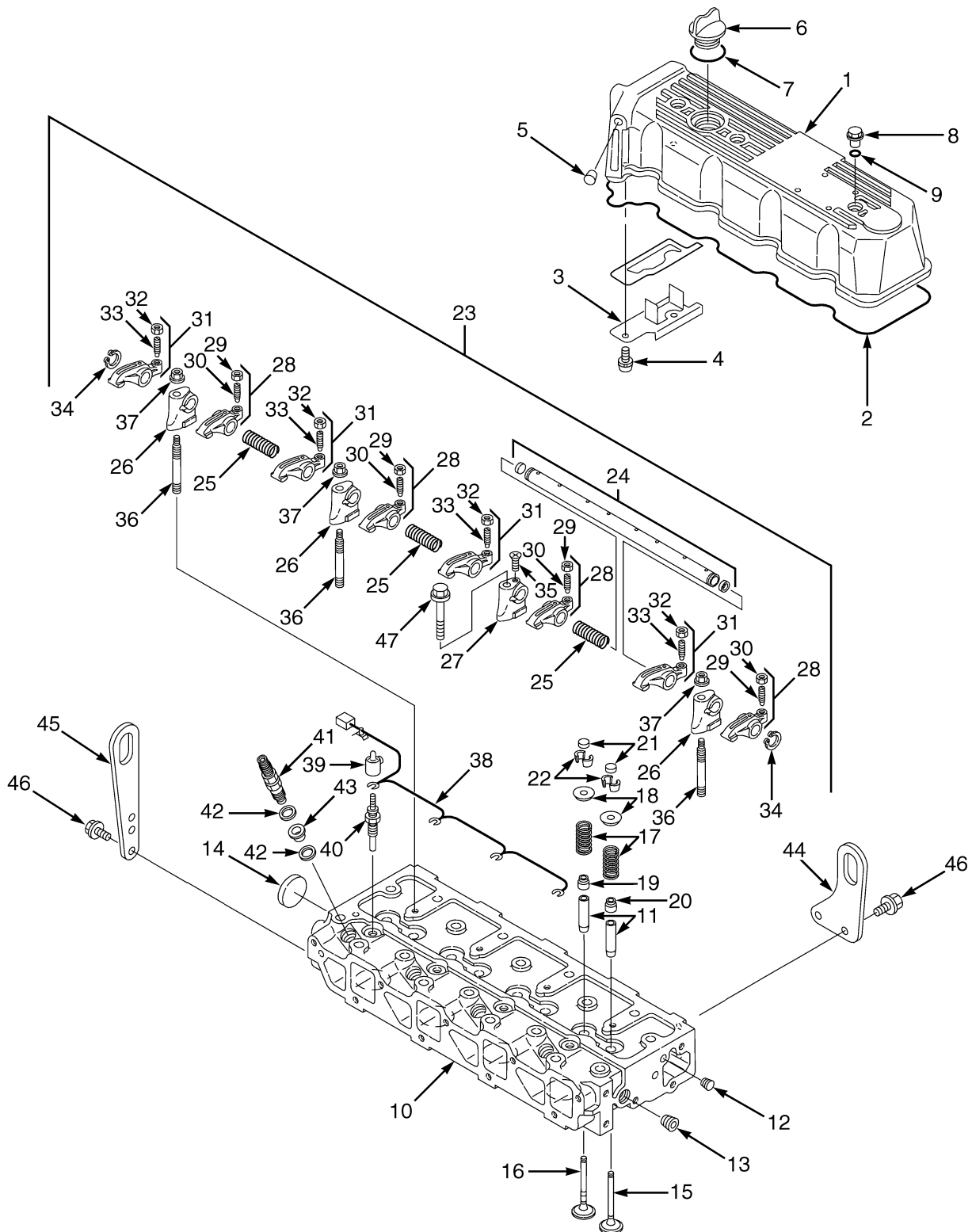
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**CYLINDER BLOCK**  
**YANMAR 2.6 AND 3.3L – DIESEL**

| ITEM | PART NO. | DESCRIPTION                               | QTY |
|------|----------|-------------------------------------------|-----|
|      | 2108726  | Engine Service Assy (2.6L) .....          | 1   |
|      | 2100625  | Engine Service Assy (3.3L) .....          | 1   |
| 1    | 2091237  | Short Block (Non-Emissions) (2.6L) .....  | 1   |
| 1    | 2091238  | Short Block (3.3L) .....                  | 1   |
| 1    | 1599440  | Cylinder Block (2.6L) .....               | 1   |
| 1    | 1599904  | Cylinder Block (3.3L) .....               | 1   |
| 2    | 1599441  | Plug .....                                | 3   |
| 3    | 1599442  | Plug .....                                | 1   |
| 4    | 1599451  | Plug .....                                | 8   |
| 5    | 1599444  | Bushing .....                             | 1   |
| 6    | 1599446  | Cotter Pin .....                          | 2   |
| 7    | 1599449  | Plug .....                                | 1   |
| 8    | 1599445  | Washer .....                              | 1   |
| 9    | 1599448  | Bolt .....                                | 1   |
| 10   | 2092548  | Kit-Crankshaft Bearing (Standard) .....   | 5   |
| 10   | 2092549  | Kit-Bearing , Crankshaft (U/S 0.25) ..... | 5   |
| 11   | 2092552  | Kit-Thrust Bearing (Standard) .....       | 2   |
| 11   | 2092553  | Kit-Thrust Bearing (U/S 0.25) .....       | 2   |
| 12   | 1599443  | Bolt .....                                | 10  |
| 13   | 1599454  | Bolt .....                                | 18  |
| 14   | 1599455  | Cylinder Head Gasket (2.6L) .....         | 1   |
| 14   | 1599905  | Cylinder Head Gasket (3.3L) .....         | 1   |
|      | .....    | Gasket Kit (☞Figure 3-21).....            | 1   |

## CYLINDER HEAD (FIGURE 3-8) YANMAR 2.6L AND 3.3L — DIESEL



BP090184

**CYLINDER HEAD**  
**YANMAR 2.6L AND 3.3L – DIESEL**

| ITEM | PART NO. | DESCRIPTION                         | QTY |
|------|----------|-------------------------------------|-----|
|      | 2108726  | Engine Service Assy (2.6L) .....    | 1   |
|      | 2100625  | Engine Service Assy (3.3L) .....    | 1   |
| 1    | 1599545  | Engine Cover .....                  | 1   |
| 2    | 1599546  | Gasket .....                        | 1   |
| 3    | 1599547  | Plate .....                         | 1   |
| 4    | 1599548  | Screw .....                         | 2   |
| 5    | 1599549  | Plug .....                          | 1   |
| 6    | 1599463  | Cap (Oil Fill) .....                | 1   |
| 7    | 1599464  | O-Ring .....                        | 1   |
| 8    | 1599544  | Plug .....                          | 3   |
| 9    | 1599550  | O-Ring .....                        | 3   |
| 10   | 1599488  | Cylinder Head Assembly (2.6L) ..... | 1   |
| 10   | 1600273  | Cylinder Head (3.3L) .....          | 1   |
| 11   | 1599525  | Guide .....                         | 8   |
| 12   | 1599526  | Plug .....                          | 1   |
| 13   | 1599441  | Plug .....                          | 1   |
| 14   | 1599528  | Plug .....                          | 1   |
| 15   | 1599489  | Inlet Valve .....                   | 4   |
| 16   | 1599516  | Exhaust Valve .....                 | 4   |
| 17   | 1599517  | Spring .....                        | 8   |
| 18   | 1599518  | Retainer .....                      | 8   |
| 19   | 1599519  | Seal (Exhaust Valve) .....          | 4   |
| 20   | 1599520  | Seal (Intake Valve) .....           | 4   |
| 21   | 1599521  | Cap .....                           | 8   |
| 22   | 1599529  | Retainer .....                      | 8   |
| 23   | 1599530  | Support Assembly (Rocker Arm) ..... | 1   |
| 24   | 1599531  | Shaft .....                         | 1   |
| 25   | 1599532  | Spring .....                        | 3   |
| 26   | 1599533  | Support .....                       | 3   |
| 27   | 1599534  | Support .....                       | 1   |
| 28   | 1599535  | Kit-Rocker Arm .....                | 4   |
| 29   | 1599536  | Screw .....                         | 1   |
| 30   | 1599537  | Nut .....                           | 1   |
| 31   | 1599538  | Kit-Rocker Arm .....                | 4   |
| 32   | 1599536  | Screw .....                         | 1   |
| 33   | 1599537  | Nut .....                           | 1   |
| 34   | 1599539  | Retaining Ring .....                | 2   |
| 35   | 1599540  | Screw .....                         | 1   |
| 36   | 1599541  | Stud .....                          | 3   |
| 37   | 1599542  | Nut .....                           | 3   |
| 38   | 2084316  | Connector (Glow Plug) .....         | 1   |
| 39   | 1599557  | Cover .....                         | 4   |
| 40   | 4068196  | Plug (Glow Plug) .....              | 4   |
| 41   | 1599819  | Nozzle .....                        | 1   |
| 42   | 1599523  | Gasket .....                        | 8   |
| 43   | 1599522  | Protector .....                     | 4   |
| 44   | 1599486  | Lifting Eye .....                   | 1   |
| 45   | 2084315  | Hook , Engine Lift .....            | 1   |
| 46   | 1599470  | Bolt .....                          | 4   |
| 47   | 1599555  | Bolt .....                          | 1   |

This diagram illustrates the exploded view of a mechanical assembly, likely a pump or motor component. The parts are numbered 1 through 18. The assembly consists of a main housing (1) with a central shaft (9). The shaft is supported by bearings (11, 12) and a gear (10). A piston (4) is connected to a crankshaft (5) via a connecting rod (6). The crankshaft is driven by a motor (13) which is mounted on a base (14). The motor is connected to a power source (15) via a cable (16). The entire assembly is mounted on a base (17) which is secured with a bolt (18).

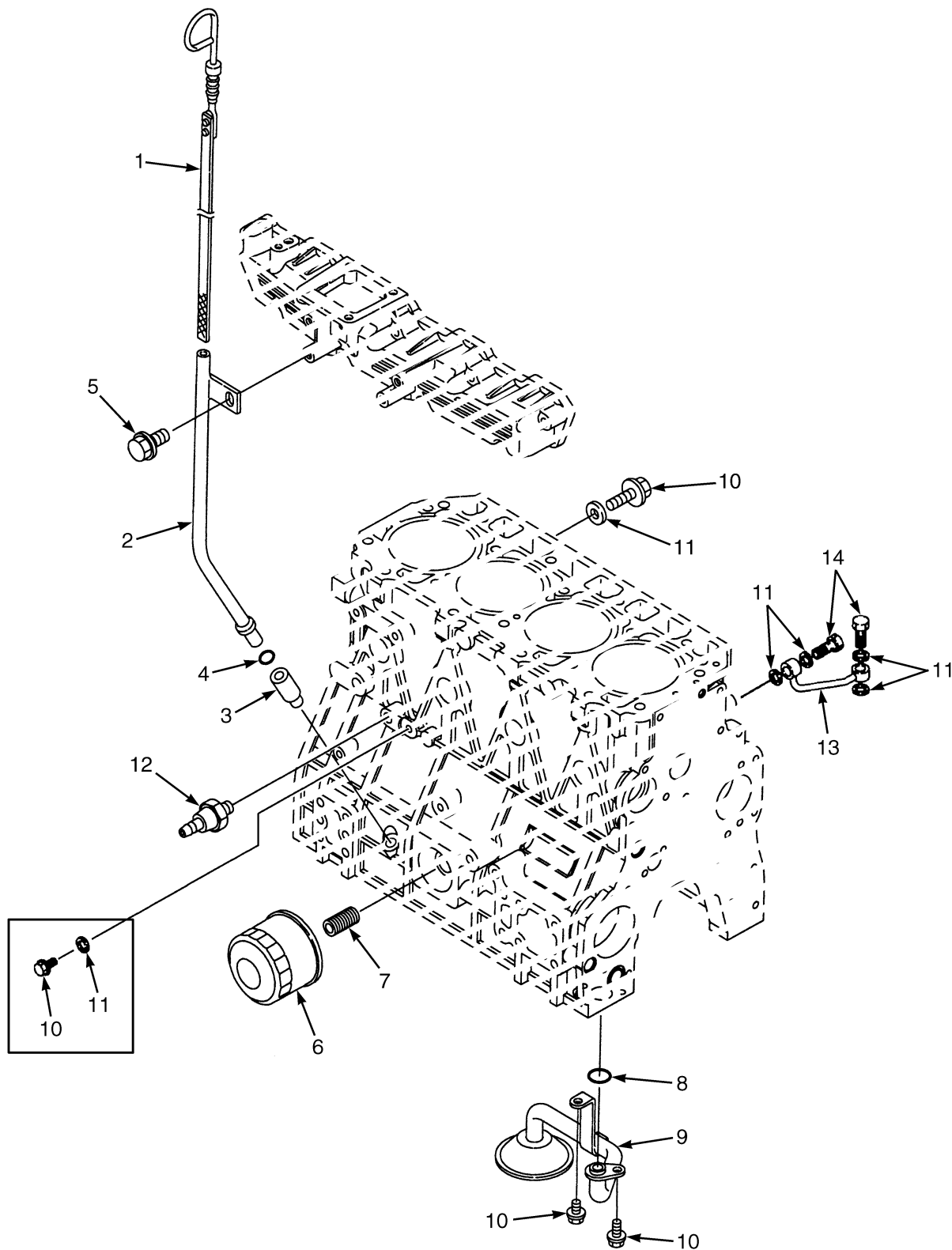
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**CRANKSHAFT AND PISTONS**  
**YANMAR 2.6L AND 3.3L – DIESEL**

| ITEM | PART NO.         | DESCRIPTION                                          | QTY |
|------|------------------|------------------------------------------------------|-----|
|      | 2108726          | Engine Service Assy (2.6L) .....                     | 1   |
|      | 2100625          | Engine Service Assy (3.3L) .....                     | 1   |
| 1    | 1599592          | Piston (With Standard Rings) (2.6L) .....            | 4   |
| 1    | 1600276          | Piston (With Standard Rings) (3.3L) .....            | 4   |
| 1    | 1599600          | Kit-Piston (O/S 0.25 with Rings) (2.6L) .....        | 4   |
| 1    | 1600278          | Piston (O/S 0.25 with Rings) (3.3L) .....            | 4   |
| 2    | 1599593          | Kit-Piston Ring (Standard) (2.6L) .....              | 1   |
| 2    | 1600277          | Kit-Piston Ring (Standard) (3.3L) .....              | 1   |
| 2    | 1599601          | Kit-Piston Ring (O/S 0.25) (2.6L) .....              | 1   |
| 2    | 1600279          | Kit-Piston Ring (O/S 0.25) (3.3L) .....              | 1   |
| 3    | 1599595          | Snap Ring .....                                      | 8   |
| 4    | 1599594          | Pin .....                                            | 4   |
| 5    | 1599596          | Piston Rod .....                                     | 4   |
| 6    | 1599597          | Bushing .....                                        | 1   |
| 7    | 2092550          | Piston Rod Bearing (Standard) .....                  | 1   |
| 7    | 2092551          | Bearing (U/S 0.25) .....                             | 4   |
| 8    | 1599598          | Bolt .....                                           | 2   |
| 9    | 2084471          | Crankshaft (3.3L) .....                              | 1   |
| 9    | 2084321          | Crankshaft (2.6L Non Emission) .....                 | 1   |
| 10   | 2084322          | Gear .....                                           | 1   |
| 11   | 1599574          | Key .....                                            | 1   |
| 12   | 1599585          | Pin .....                                            | 1   |
| 13   | 1599586          | Pin .....                                            | 1   |
| 14   | 1720462          | Bolt .....                                           | 1   |
| 15   | 1599589          | Washer .....                                         | 1   |
| 16   | 1599591          | Bolt .....                                           | 6   |
| 17   | 2079758          | Flywheel .....                                       | 1   |
| 17   | 2084323          | Ring Gear .....                                      | 1   |
| 18   | 1599588          | Pulley (Standard 2.6L and 3.3L) .....                | 1   |
| 18   | 4607618          | Pulley (3.3L Hi-speed fan) .....                     | 1   |
|      | <b>a</b> 2107750 | V-Belt (Std 2.6L and 3.3L) (2.6L Hi-speed fan) ..... | 1   |
|      | <b>a</b> 1368841 | V-Belt (3.3L Hi-speed fan) .....                     | 1   |

**FOOTNOTES:****a** not illustrated

## LUBRICATION SYSTEM (FIGURE 3-10) YANMAR 2.6 AND 3.3L

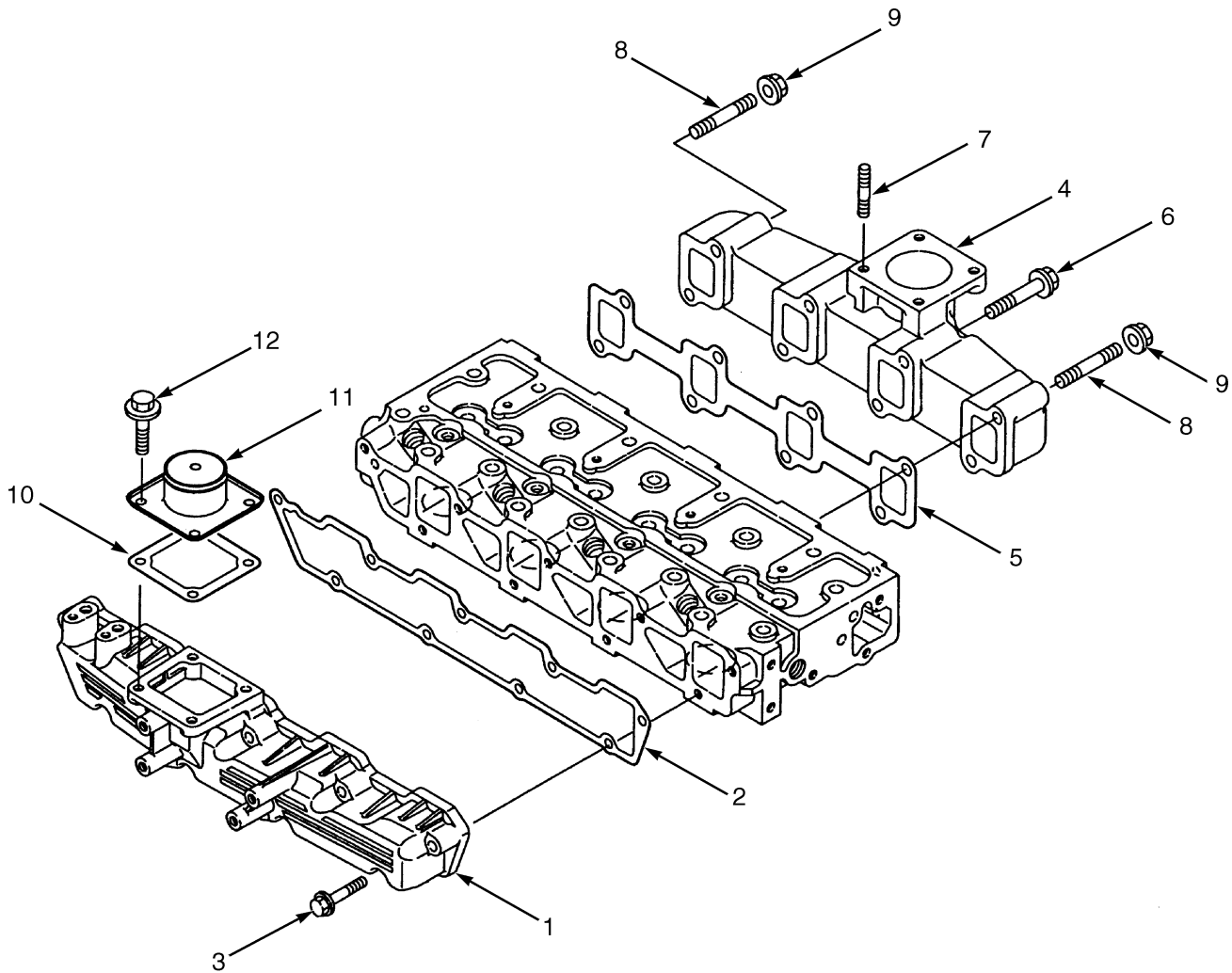


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**LUBRICATION SYSTEM**  
**YANMAR 2.6 AND 3.3L**

| ITEM | PART NO. | DESCRIPTION                          | QTY |
|------|----------|--------------------------------------|-----|
|      | 2108726  | Engine Service Assy (2.6L) .....     | 1   |
|      | 2100625  | Engine Service Assy (3.3L) .....     | 1   |
| 1    | 1599604  | Dipstick .....                       | 1   |
| 2    | 1599605  | Guide .....                          | 1   |
| 3    | 1599606  | Dipstick Tube .....                  | 1   |
| 4    | 1599607  | O-Ring .....                         | 1   |
| 5    | 1599470  | Bolt .....                           | 1   |
| 6    | 2077983  | Oil Filter .....                     | 1   |
| 7    | 1599610  | Stud .....                           | 1   |
| 8    | 1599468  | O-Ring .....                         | 1   |
| 9    | 1599611  | Pipe .....                           | 1   |
| 10   | 1599448  | Bolt .....                           | 2   |
| 11   | 1599445  | Washer .....                         | 4   |
| 12   | 1599613  | Pressure Switch (Oil Pressure) ..... | 1   |
| 13   | 2084325  | Pipe .....                           | 1   |
| 14   | 2084326  | Bolt .....                           | 2   |

## INTAKE AND EXHAUST MANIFOLD (FIGURE 3-11) YANMAR 2.6L AND 3.3L



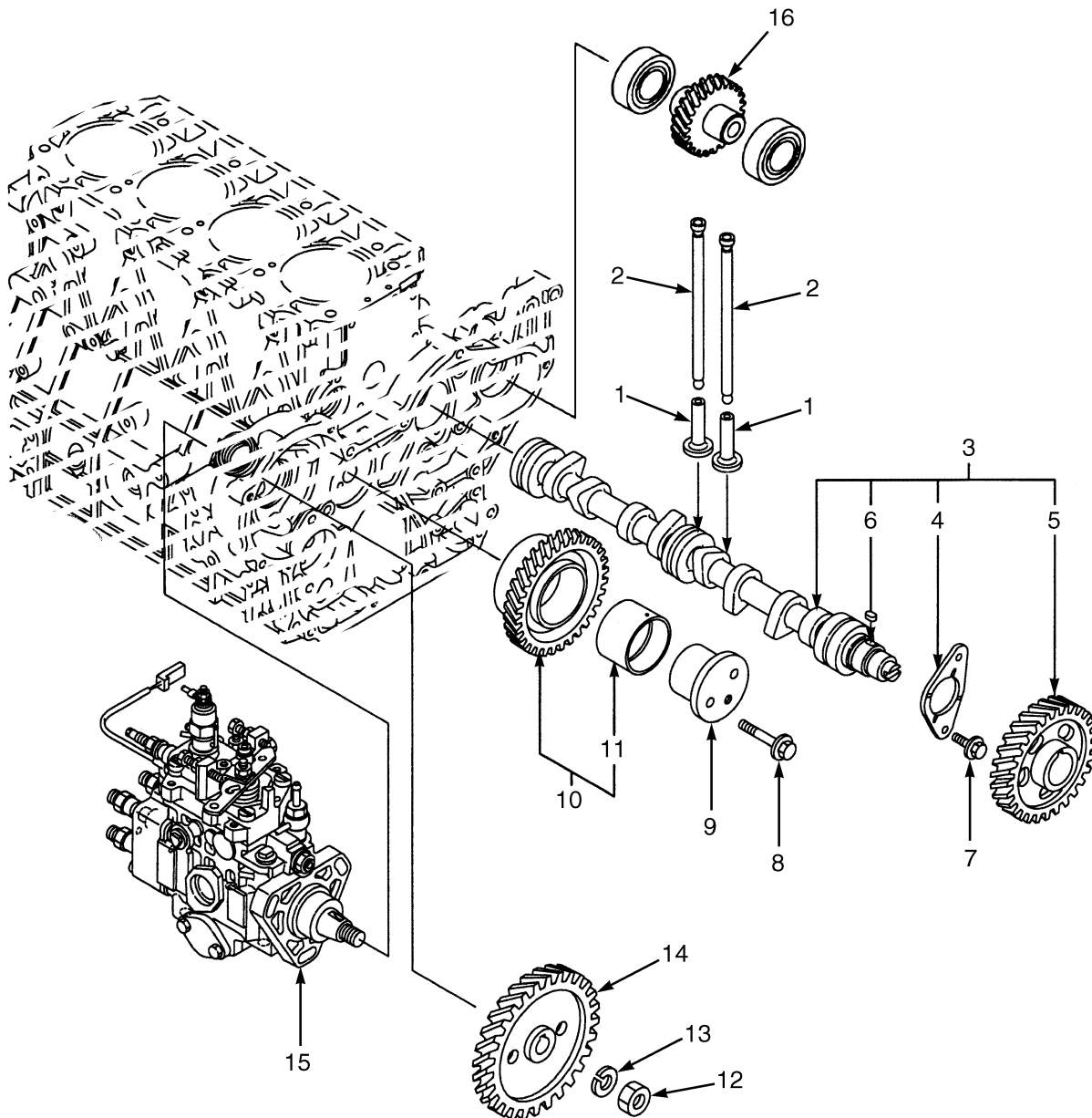
BP090185



**INTAKE AND EXHAUST MANIFOLD  
YANMAR 2.6L AND 3.3L**

| ITEM | PART NO. | DESCRIPTION                      | QTY |
|------|----------|----------------------------------|-----|
|      | 2108726  | Engine Service Assy (2.6L) ..... | 1   |
|      | 2100625  | Engine Service Assy (3.3L) ..... | 1   |
| 1    | 1599556  | Intake Manifold .....            | 1   |
| 2    | 1599543  | Gasket .....                     | 1   |
| 3    | 1599475  | Bolt .....                       | 9   |
| 4    | 1599559  | Exhaust Manifold .....           | 1   |
| 5    | 1599560  | Gasket .....                     | 1   |
| 6    | 1599561  | Bolt .....                       | 9   |
| 7    | 1599562  | Stud .....                       | 4   |
| 8    | 1599563  | Stud .....                       | 2   |
| 9    | 2068378  | Nut .....                        | 2   |
| 10   | 1599565  | Gasket .....                     | 1   |
| 11   | 1599567  | Adapter .....                    | 1   |
| 12   | 1599568  | Bolt .....                       | 4   |
|      | 2068377  | Gasket (Exhaust) .....           | 1   |

## CAMSHAFT AND DRIVE GEAR (FIGURE 3-12) YANMAR 2.6L AND 3.3L



BP090967

**CAMSHAFT AND DRIVE GEAR  
YANMAR 2.6L AND 3.3L**

| ITEM | PART NO. | DESCRIPTION                      | QTY |
|------|----------|----------------------------------|-----|
|      | 2108726  | Engine Service Assy (2.6L) ..... | 1   |
|      | 2100625  | Engine Service Assy (3.3L) ..... | 1   |
| 1    | 1599569  | Tappet .....                     | 8   |
| 2    | 1599570  | Push Rod .....                   | 8   |
| 3    | 2084317  | Camshaft .....                   | 1   |
| 4    | 1599572  | Retainer .....                   | 1   |
| 5    | 2084318  | Gear .....                       | 1   |
| 6    | 1599574  | Key .....                        | 1   |
| 7    | 1599568  | Bolt .....                       | 2   |
| 8    | 1599579  | Bolt .....                       | 2   |
| 9    | 1599576  | Shaft .....                      | 1   |
| 10   | 2084319  | Gear .....                       | 1   |
| 11   | 1599578  | Bushing .....                    | 1   |
| 12   | 1599582  | Locknut .....                    | 1   |
| 13   | 1599581  | Spring Washer .....              | 1   |
| 14   | 1599580  | Gear .....                       | 1   |
| 15   | 2080675  | Injection Pump .....             | 1   |
| 16   | 2084320  | Gear (Hydraulic Pump) .....      | 1   |

This diagram illustrates the assembly of a hydraulic system. The main components are shown in an exploded view:

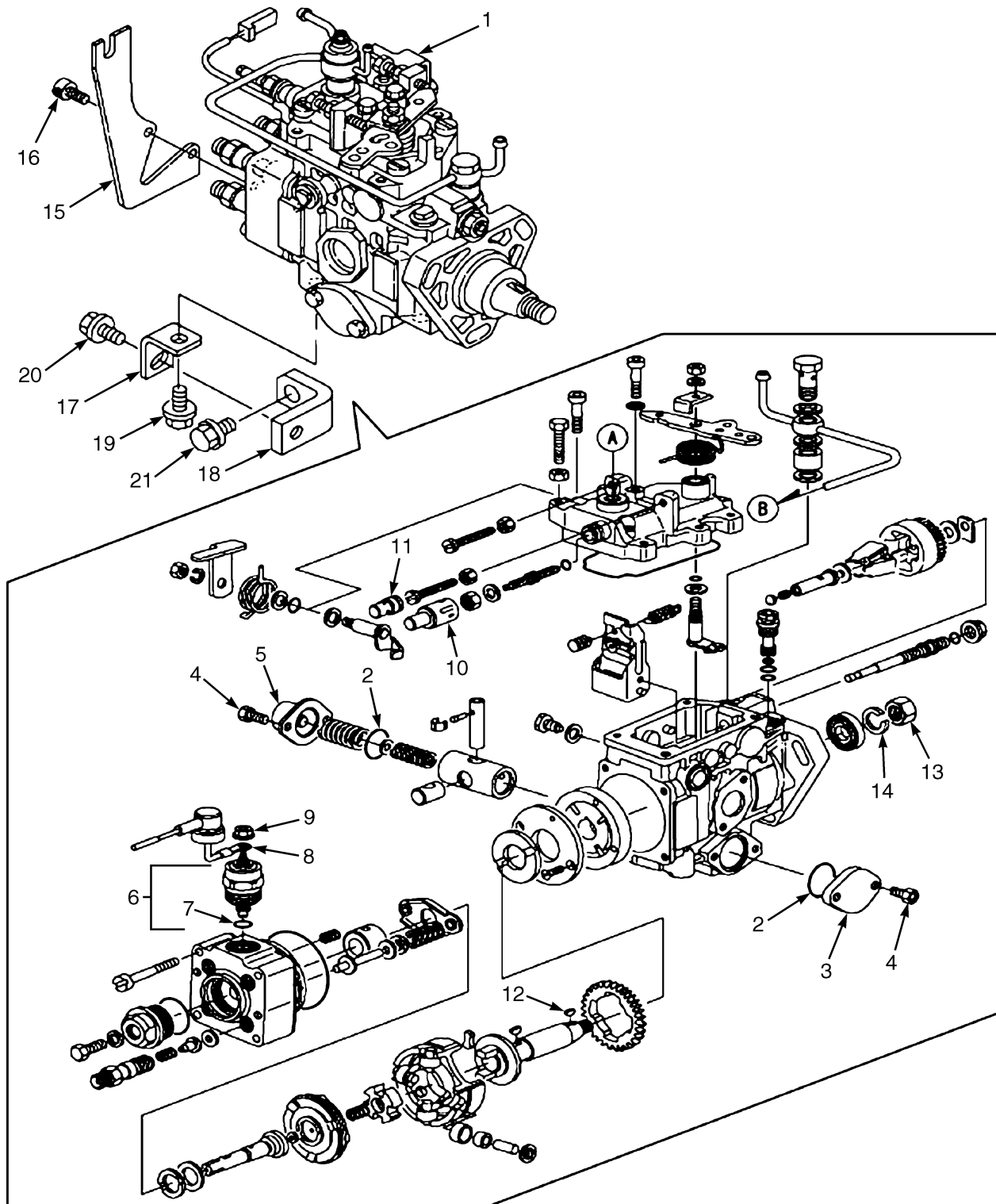
- 1**: Hydraulic pump/motor unit.
- 2**: Top mounting bracket for the pump.
- 3**: Solenoid valve assembly.
- 4**: Solenoid coil.
- 5**: Solenoid valve body.
- 6**: Hydraulic cylinder.
- 7**: Hose end fittings (two shown).
- 8**: Mounting bolt for the pump.
- 9**: Hydraulic hose.
- 10**: Hose end fitting (one shown).
- 11**: Hose end fitting (one shown).
- 14**: Hose end fitting (one shown).

The diagram shows the pump (1) connected to a hose (9) which is then connected to a solenoid valve (3) and a hydraulic cylinder (6). The solenoid valve is also connected to the hose. The hose is secured with fittings (7, 10, 11, 14). The pump is mounted with a bracket (2) and a bolt (8). The cylinder is shown in an exploded view, indicating its connection to the hose.

**FUEL FILTER AND WATER SEPARATOR  
YANMAR 2.6 AND 3.3L DIESEL**

| ITEM | PART NO. | DESCRIPTION                      | QTY |
|------|----------|----------------------------------|-----|
|      | 2108726  | Engine Service Assy (2.6L) ..... | 1   |
|      | 2100625  | Engine Service Assy (3.3L) ..... | 1   |
| 1    | 2084448  | Fuel Filter .....                | 1   |
| 2    | 2084449  | Filter Head .....                | 1   |
| 3    | 2084450  | Sensor .....                     | 1   |
| 4    | 2084451  | Plug .....                       | 1   |
| 5    | 2084452  | O-Ring .....                     | 1   |
| 6    | 2084453  | Element Assy (Fuel Filter) ..... | 1   |
| 7    | 1599842  | Clamp .....                      | 2   |
| 8    | 1599801  | Bolt .....                       | 2   |
| 9    | 1599841  | Tube Assy .....                  | 1   |
| 10   | 2084454  | Fitting .....                    | 1   |
| 11   | 1600086  | Seal .....                       | 2   |
| 12   | 1586457  | Fuel Filter .....                | 1   |
| 13   | 2081974  | Clamp .....                      | 1   |
| 14   | 1599843  | Clamp .....                      | 2   |

## INJECTION PUMP (FIGURE 3-14) YANMAR 2.6L AND 3.3L DIESEL



BP090969

**INJECTION PUMP  
YANMAR 2.6L AND 3.3L DIESEL**

| ITEM | PART NO. | DESCRIPTION                      | QTY |
|------|----------|----------------------------------|-----|
|      | 2108726  | Engine Service Assy (2.6L) ..... | 1   |
|      | 2100625  | Engine Service Assy (3.3L) ..... | 1   |
| 1    | 2080675  | Injection Pump (2.6L) .....      | 1   |
| 1    | 2080676  | Injection Pump (3.3L) .....      | 1   |
| 2    | 2084349  | O-Ring .....                     | 2   |
| 3    | 2084356  | Cover .....                      | 1   |
| 4    | 2084355  | Bolt .....                       | 4   |
| 5    | 2084354  | Cover .....                      | 1   |
| 6    | 1608616  | Solenoid (Fuel Shut-Off) .....   | 1   |
| 7    | 1608617  | O-Ring .....                     | 1   |
| 8    | 2084430  | Wire .....                       | 1   |
| 9    | 2084431  | Nut .....                        | 2   |
| 10   | 2084436  | Cap .....                        | 1   |
| 11   | 4639365  | Cap .....                        | 1   |
| 12   | 2084442  | Woodruff Key .....               | 1   |
| 13   | 2084443  | Nut .....                        | 1   |
| 14   | 2084444  | Spring Washer .....              | 1   |
| 15   | 1599907  | Bracket .....                    | 1   |
| 16   | 1599908  | Bolt .....                       | 2   |
| 17   | 1599909  | Retainer .....                   | 1   |
| 18   | 1599910  | Bracket .....                    | 1   |
| 19   | 1599911  | Bolt .....                       | 1   |
| 20   | 1599912  | Bolt .....                       | 1   |
| 21   | 1599913  | Bolt .....                       | 1   |

This technical diagram illustrates the assembly of a fuel system. The components are numbered as follows:

- 1**: Fuel rail assembly
- 2**: Fuel rail pin
- 3**: Fuel rail O-ring
- 4**: Fuel rail nut
- 5**: Fuel rail seal
- 6**: Fuel line
- 7**: Fuel line fitting
- 8**: Fuel line
- 9**: Fuel line fitting
- 10**: Fuel line fitting
- 11**: Fuel line fitting
- 12**: Fuel line fitting
- 13**: Fuel line fitting
- 14**: Fuel line fitting
- 15**: Fuel line fitting

The diagram shows the fuel rail (1) being installed onto the fuel manifold. The fuel line (6) is connected to the fuel rail (1) via a fuel line fitting (7). The fuel line (8) is connected to the fuel manifold via a fuel line fitting (9). The fuel line (10) is connected to the fuel manifold via a fuel line fitting (11). The fuel line (12) is connected to the fuel manifold via a fuel line fitting (13). The fuel line (14) is connected to the fuel manifold via a fuel line fitting (15). The fuel line (15) is connected to the fuel manifold via a fuel line fitting (13).

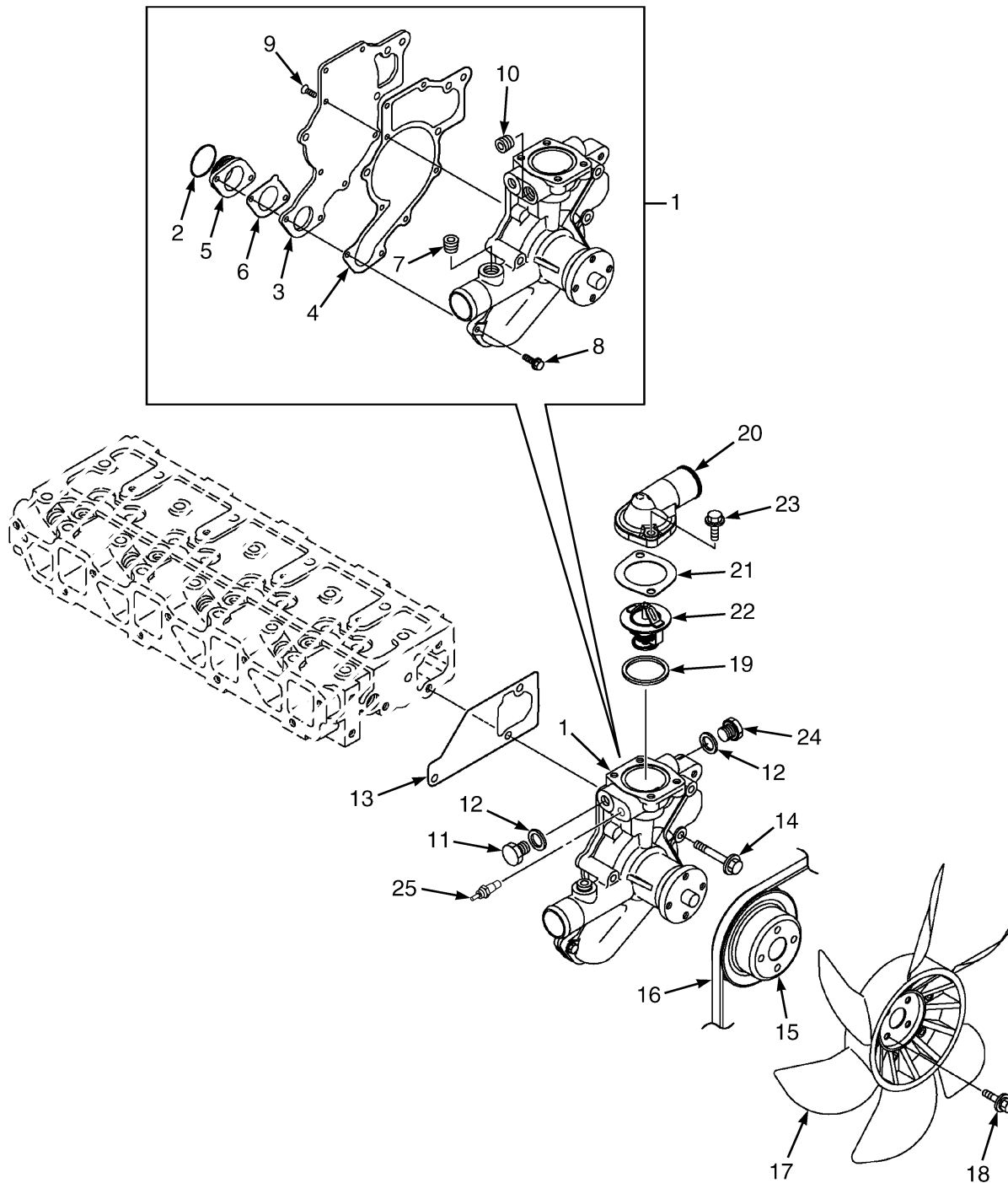
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**FUEL INJECTION SYSTEM  
YANMAR 2.6 AND 3.3L DIESEL**

| ITEM | PART NO. | DESCRIPTION                      | QTY |
|------|----------|----------------------------------|-----|
|      | 2108726  | Engine Service Assy (2.6L) ..... | 1   |
|      | 2100625  | Engine Service Assy (3.3L) ..... | 1   |
| 1    | 1599818  | Injector .....                   | 4   |
| 2    | 1599819  | Nozzle .....                     | 4   |
| 3    | 1689746  | Shim .....                       | 4   |
| 4    | 1599831  | Gasket .....                     | 4   |
| 5    | 1599832  | Nut .....                        | 4   |
| 6    | 1599830  | Tube Assy (Fuel Return) .....    | 1   |
| 7    | 1599829  | Clamp .....                      | 2   |
| 8    | 1599828  | Tube Assy (Return) .....         | 1   |
| 9    | 1599827  | Tube Assy (#4) .....             | 1   |
| 10   | 1599826  | Tube Assy (#3) .....             | 1   |
| 11   | 1599825  | Tube Assy (#2) .....             | 1   |
| 12   | 1599824  | Tube Assy (#1) .....             | 1   |
| 13   | 1599822  | Bolt .....                       | 4   |
| 14   | 1599823  | Retainer .....                   | 1   |
| 15   | 1599821  | Retainer .....                   | 2   |

## WATER COOLING SYSTEM (FIGURE 3-16) YANMAR 2.6L AND 3.3L DIESEL



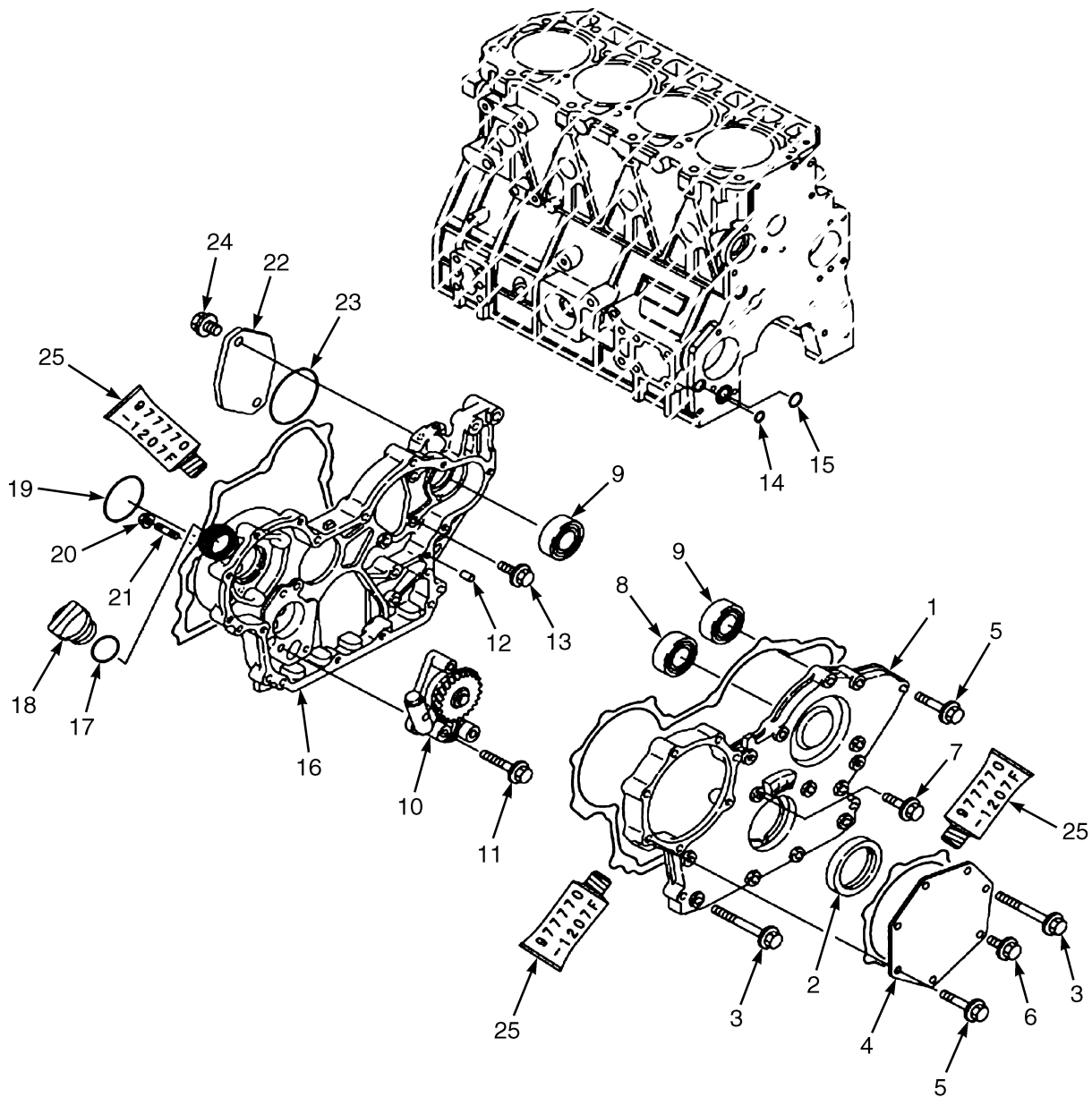
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**WATER COOLING SYSTEM  
YANMAR 2.6L AND 3.3L DIESEL**

| ITEM | PART NO.         | DESCRIPTION                                          | QTY |
|------|------------------|------------------------------------------------------|-----|
|      | 2108726          | Engine Service Assy (2.6L) .....                     | 1   |
|      | 2100625          | Engine Service Assy (3.3L) .....                     | 1   |
| 1    | 2080681          | Water Pump .....                                     | 1   |
| 2    | 1599807          | O-Ring .....                                         | 1   |
| 3    | 1599808          | Cover .....                                          | 1   |
| 4    | 1599809          | Gasket .....                                         | 1   |
| 5    | 1599810          | Flange .....                                         | 1   |
| 6    | 1599811          | Seal .....                                           | 1   |
| 7    | 2084330          | Drain Plug .....                                     | 1   |
| 8    | 1599816          | Bolt .....                                           | 2   |
| 9    | 1719970          | Screw .....                                          | 6   |
| 10   | <b>b</b> 2084331 | Plug .....                                           | 1   |
| 11   | 1599812          | Plug .....                                           | 1   |
| 12   | 1599814          | Gasket .....                                         | 2   |
| 13   | 1599803          | Gasket .....                                         | 1   |
| 14   | 1599579          | Bolt .....                                           | 3   |
| 15   | 2084327          | Fan Pulley (2.6L and 3.3L) .....                     | 1   |
| 16   | 2107750          | V-Belt (Std 2.6L and 3.3L) (2.6L Hi-speed fan) ..... | 1   |
| 16   | 1368841          | V-Belt (3.3L High Speed Fan) .....                   | 1   |
| 17   | 2080678          | Fan .....                                            | 1   |
| 18   | 4648640          | Bolt .....                                           | 4   |
| 19   | 1597709          | Gasket .....                                         | 1   |
| 20   | 1599798          | Cover .....                                          | 1   |
| 21   | 1597710          | Gasket .....                                         | 1   |
| 22   | 4068202          | Thermostat .....                                     | 1   |
| 23   | 1599801          | Bolt .....                                           | 2   |
| 24   | 1599802          | Drain Plug .....                                     | 1   |
| 25   | 2043160          | Thermal Sensor .....                                 | 1   |
|      | <b>a</b> 2081274 | Bracket (Harness Clamp) .....                        | 1   |
|      | <b>a</b> 1529366 | Capscrew (Harness Clamp Bracket) .....               | 1   |

**FOOTNOTES:****a** Not Illustrated**b** Only used if Thermal Sensor not installed.

## GEAR HOUSING (FIGURE 3-17) YANMAR 2.6 AND 3.3L DIESEL

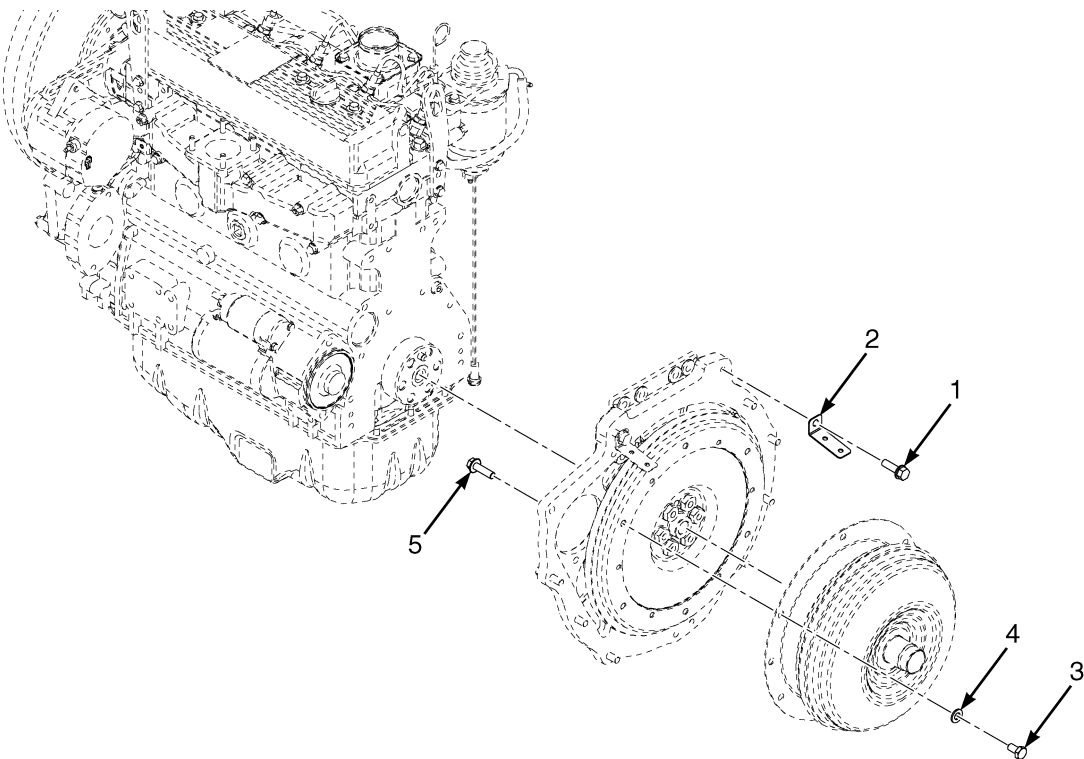


BP090971

**GEAR HOUSING**  
**YANMAR 2.6 AND 3.3L DIESEL**

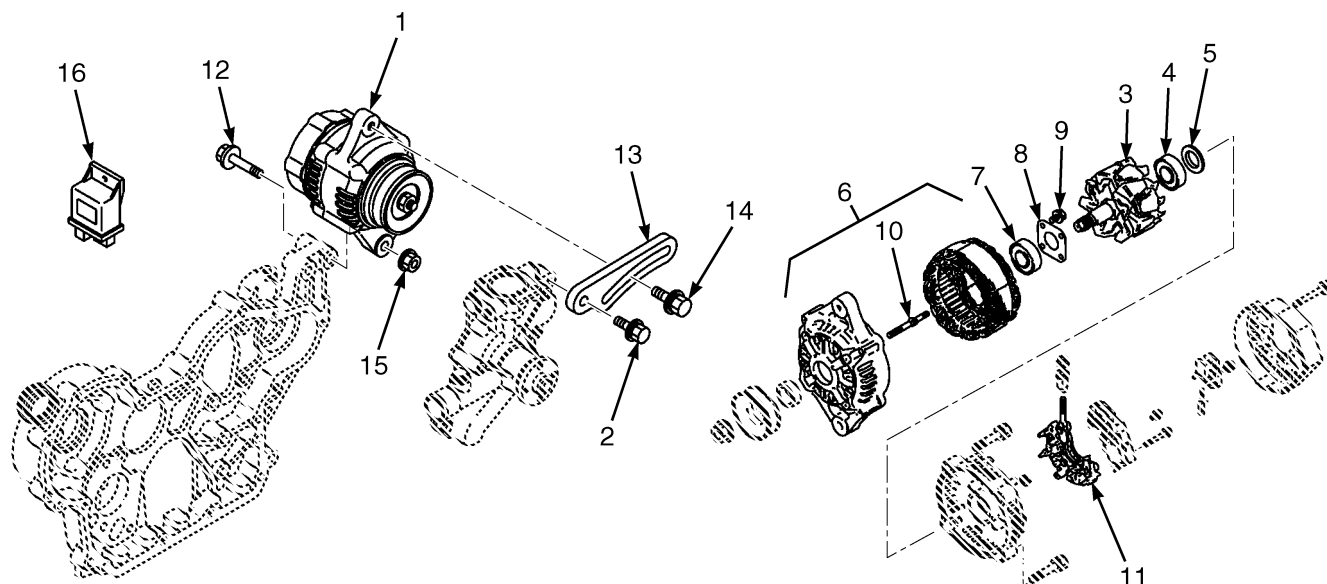
| ITEM | PART NO. | DESCRIPTION                              | QTY |
|------|----------|------------------------------------------|-----|
|      | 2108726  | Engine Service Assy (2.6L) .....         | 1   |
|      | 2100625  | Engine Service Assy (3.3L) .....         | 1   |
| 1    | 2101708  | Gear Cover Assembly .....                | 1   |
| 2    | 2100927  | Oil Seal .....                           | 1   |
| 3    | 1599476  | Bolt .....                               | 7   |
| 4    | 1599461  | Cover .....                              | 1   |
| 5    | 1599473  | Bolt .....                               | 10  |
| 6    | 1599470  | Bolt .....                               | 1   |
| 7    | 1599472  | Bolt .....                               | 1   |
| 8    | 2084309  | Ball Bearing .....                       | 1   |
| 9    | 2084305  | Ball Bearing .....                       | 2   |
| 10   | 1599466  | Engine Oil Pump .....                    | 1   |
| 11   | 1599475  | Bolt .....                               | 3   |
| 12   | 1599458  | Pin .....                                | 4   |
| 13   | 1599471  | Bolt .....                               | 3   |
| 14   | 1599469  | O-Ring .....                             | 1   |
| 15   | 1599468  | O-Ring .....                             | 1   |
| 16   | 2084304  | Timing Gear Cover .....                  | 1   |
| 17   | 1599464  | O-Ring .....                             | 1   |
| 18   | 1599463  | Cap (Oil Fill) .....                     | 1   |
| 19   | 1599462  | O-Ring .....                             | 1   |
| 20   | 2068378  | Nut .....                                | 3   |
| 21   | 2084306  | Stud .....                               | 3   |
| 22   | 2084307  | Cover .....                              | 1   |
| 23   | 2084308  | O-Ring .....                             | 1   |
| 24   | 2084311  | Bolt .....                               | 2   |
| 25   | 2084312  | Gasket , silicone sealant (Liquid) ..... | 1   |

**FLYWHEEL MOUNTING HARDWARE (FIGURE 3-18)**  
**YANMAR 2.6 AND 3.3L DIESEL**



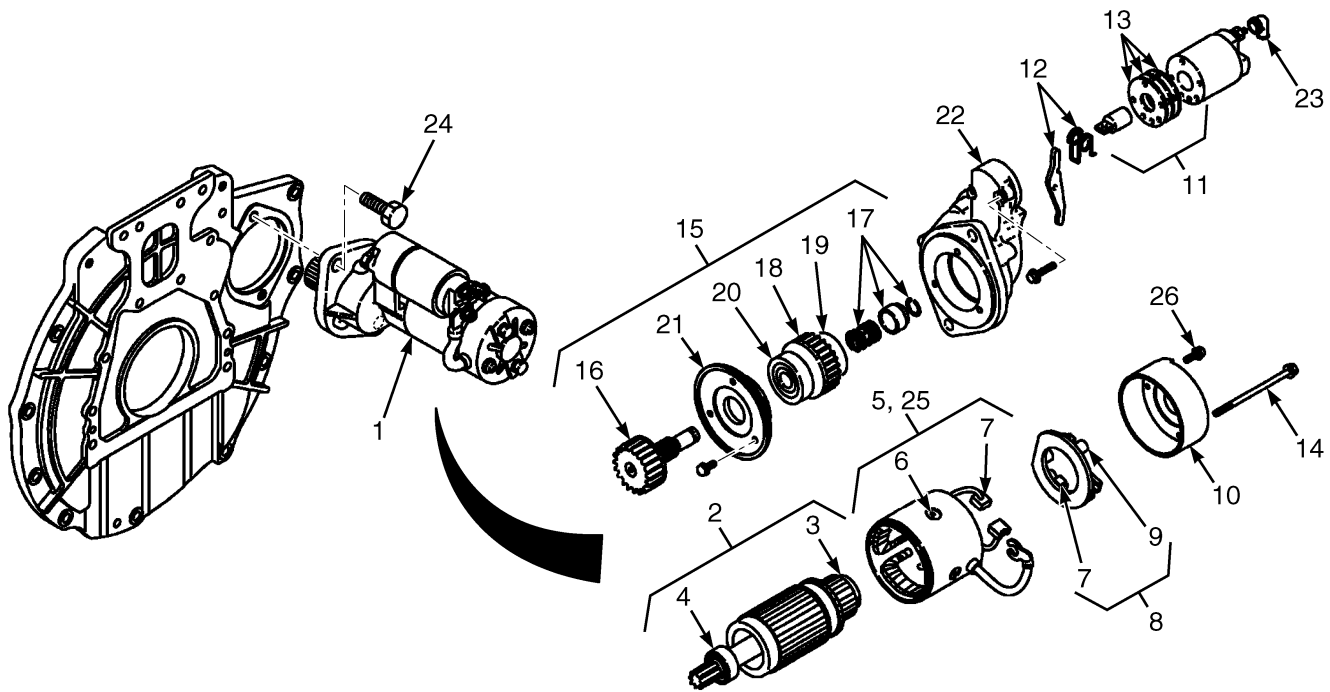
BP091024

| ITEM | PART NO. | DESCRIPTION                | QTY |
|------|----------|----------------------------|-----|
| 1    | 1586629  | Capscrew .....             | 2   |
| 2    | 2081402  | Bracket , Cable Clip ..... | 2   |
| 3    | 292514   | Capscrew .....             | 6   |
| 4    | 296420   | Washer .....               | 6   |
| 5    | 1527885  | Capscrew .....             | 8   |

**ALTERNATOR (FIGURE 3-19)**  
**YANMAR 2.6 AND 3.3L DIESEL**

BP091026

| ITEM | PART NO. | DESCRIPTION                                  | QTY |
|------|----------|----------------------------------------------|-----|
|      | 2108726  | Engine Service Assy Yanmar 2.6L Diesel ..... | 1   |
|      | 2100625  | Engine Service Assy Yanmar 3.3L Diesel ..... | 1   |
| 1    | 2100632  | Alternator .....                             | 1   |
| 2    | 1599887  | Bolt .....                                   | 1   |
| 3    | 1599877  | Rotator Assembly .....                       | 1   |
| 4    | 1599878  | Ball Bearing .....                           | 1   |
| 5    | 1599879  | Cover .....                                  | 1   |
| 6    | 2084466  | Housing .....                                | 1   |
| 7    | 1599873  | Ball Bearing .....                           | 1   |
| 8    | 1599874  | Plate .....                                  | 1   |
| 9    | 1599875  | Screw .....                                  | 4   |
| 10   | 1599876  | Stud .....                                   | 2   |
| 11   | 2084467  | Holder .....                                 | 1   |
| 12   | 1599893  | Bolt .....                                   | 1   |
| 13   | 1599895  | Bracket .....                                | 1   |
| 14   | 1599896  | Bolt .....                                   | 1   |
| 15   | 1599894  | Nut .....                                    | 1   |
| 16   | 2081947  | Controller (QGS) .....                       | 1   |

**STARTER (FIGURE 3-20)**  
**YANMAR 2.6 AND 3.3L DIESEL**

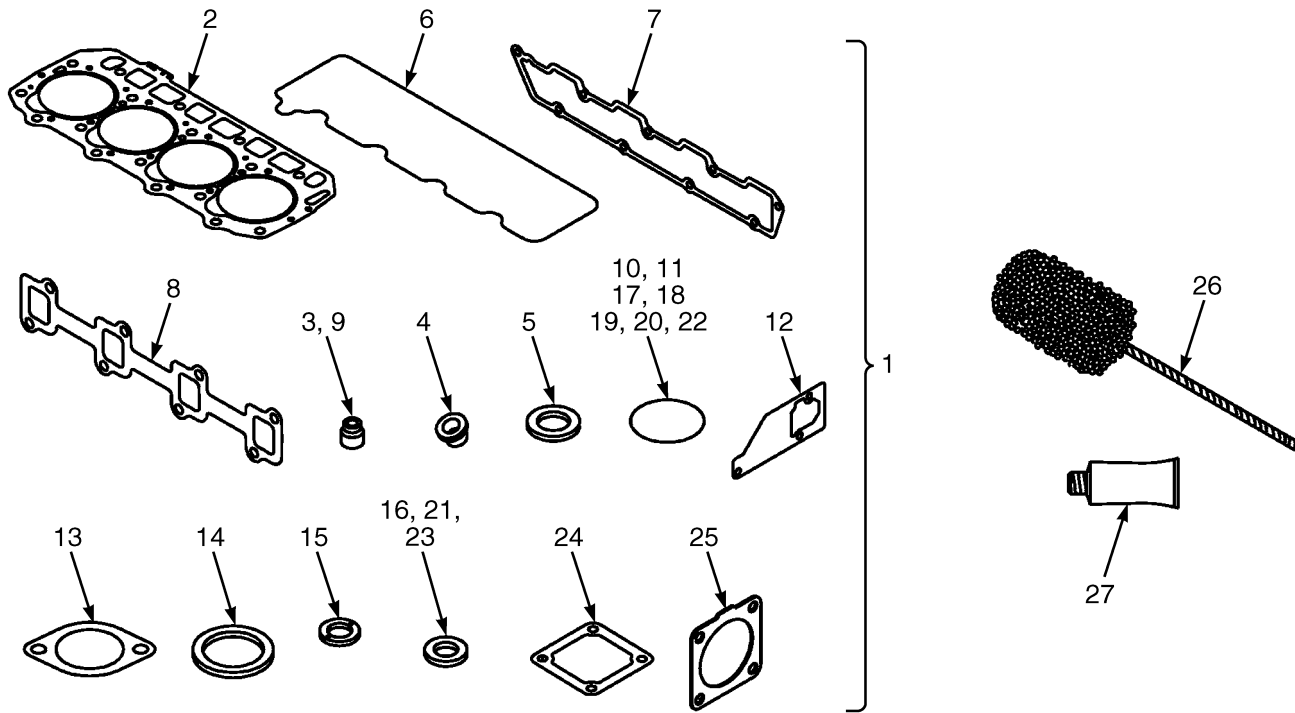
BP091025

| ITEM | PART NO. | DESCRIPTION                                  | QTY |
|------|----------|----------------------------------------------|-----|
|      | 2108726  | Engine Service Assy Yanmar 2.6L Diesel ..... | 1   |
|      | 2100625  | Engine Service Assy Yanmar 3.3L Diesel ..... | 1   |
| 1    | 1719937  | Starter .....                                | 1   |
| 2    | 1719938  | Armature .....                               | 1   |
| 3    | 1599847  | Ball Bearing .....                           | 1   |
| 4    | 1719964  | Bearing .....                                | 1   |
| 5    | 1719941  | Field Coil .....                             | 1   |
| 6    | 1599850  | Screw .....                                  | 4   |
| 7    | 1599851  | Brush .....                                  | 4   |
| 8    | 1719943  | Brush Holder .....                           | 1   |
| 9    | 1599853  | Brush Spring .....                           | 4   |
| 10   | 1719942  | Cover .....                                  | 1   |
| 11   | 1719948  | Switch .....                                 | 1   |
| 12   | 1719951  | Lever .....                                  | 1   |
| 13   | 1719952  | Dust Cover .....                             | 1   |
| 14   | 1719933  | Bolt .....                                   | 2   |
| 15   | 1719944  | Pinion .....                                 | 1   |
| 16   | 1719947  | Pinion .....                                 | 1   |
| 17   | 1719965  | Stopper Set .....                            | 1   |
| 18   | 1719945  | Clutch Assy .....                            | 1   |
| 19   | 1719946  | Bearing .....                                | 1   |
| 20   | 1719973  | Ball Bearing .....                           | 1   |
| 21   | 1719950  | Retainer .....                               | 1   |
| 22   | 1719949  | Gearbox .....                                | 1   |
| 23   | 1599868  | Cover .....                                  | 1   |
| 24   | 4122595  | Bolt .....                                   | 2   |



| ITEM | PART NO. | DESCRIPTION | QTY |
|------|----------|-------------|-----|
| 25   | 1719939  | Yoke .....  | 1   |
| 26   | 1719953  | Screw ..... | 2   |

## ENGINE GASKET KIT (FIGURE 3-21) YANMAR 2.6 AND 3.3L DIESEL



BP091027

### KEY:

A: 2.6L

B: 3.3L

| ITEM | PART NO. | DESCRIPTION                    | QTY |    |
|------|----------|--------------------------------|-----|----|
|      |          |                                | A   | B  |
| 1    | 2084470  | Gasket Set .....               | 1   | .. |
| 1    | 2084480  | Gasket Set .....               | ..  | 1  |
| 2    | 1599455  | Cylinder Head Gasket .....     | 1   | .. |
| 2    | 1599905  | Cylinder Head Gasket .....     | ..  | 1  |
| 3    | 1599520  | Seal (Intake Valve) .....      | 4   | 4  |
| 4    | 1599522  | Protector , Nozzle .....       | 4   | 4  |
| 5    | 1599523  | Gasket , Nozzle .....          | 8   | 8  |
| 6    | 1599546  | Gasket , Cyl Head .....        | 1   | 1  |
| 7    | 1599543  | Gasket , Intake Manifold ..... | 1   | 1  |
| 8    | 1599560  | Gasket .....                   | 1   | 1  |
| 9    | 1599519  | Seal (Exhaust Valve) .....     | 4   | 4  |
| 10   | 1599468  | O-Ring .....                   | 2   | 2  |
| 11   | 1599469  | O-Ring .....                   | 1   | 1  |
| 12   | 1599803  | Gasket , Water Pump .....      | 1   | 1  |
| 13   | 1597710  | Gasket .....                   | 1   | 1  |
| 14   | 1597709  | Gasket .....                   | 1   | 1  |
| 15   | 1599831  | Gasket , Return .....          | 4   | 4  |
| 16   | 1600086  | Seal .....                     | 7   | 7  |
| 17   | 4068201  | O-Ring .....                   | 1   | 1  |
| 18   | 1599550  | O-Ring .....                   | 3   | 3  |
| 19   | 1599464  | O-Ring .....                   | 2   | 2  |

**KEY:****A: 2.6L****B: 3.3L**

| ITEM | PART NO. | DESCRIPTION                                        | QTY |    |
|------|----------|----------------------------------------------------|-----|----|
|      |          |                                                    | A   | B  |
| 20   | 1599462  | O-Ring .....                                       | 1   | 1  |
| 21   | 1599445  | Washer .....                                       | 4   | 4  |
| 22   | 2084308  | O-Ring .....                                       | 1   | 1  |
| 23   | 1599481  | Oil Seal , Oil Drain Plug .....                    | 1   | 1  |
| 24   | 1599565  | Gasket .....                                       | 1   | 1  |
| 25   | 2068377  | Gasket , Exhaust .....                             | 1   | 1  |
| 26   | 1599906  | Tool .....                                         | 1   | .. |
| 26   | 1600087  | Brush .....                                        | ..  | 1  |
| 27   | 2084312  | Gasket , silicone sealant (Silicone Sealant) ..... | 1   | 1  |

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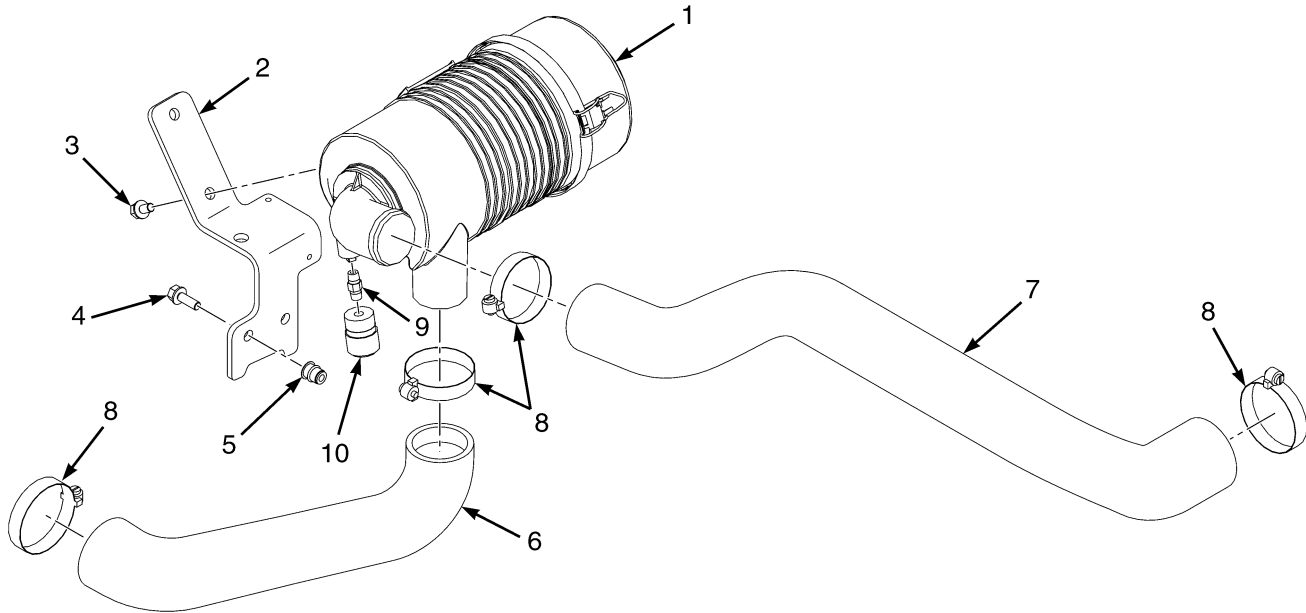




**SECTION 4  
FUEL SYSTEM**

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## AIR INTAKE (FIGURE 4-1) PSI ENGINE



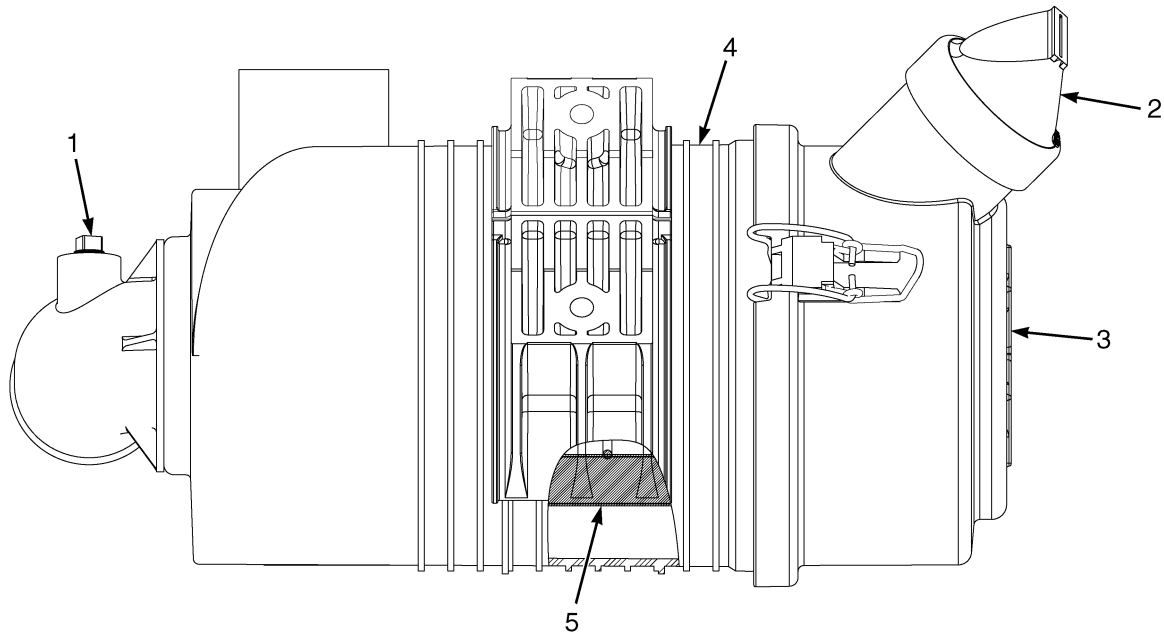
BP130549

| ITEM | PART NO.  | DESCRIPTION                                        | QTY |
|------|-----------|----------------------------------------------------|-----|
| 1    | 4641239   | Air Filter (☞ Figure 4-2).....                     | 1   |
| 1    | 4641268   | Air Filter (With Dual Element) (☞ Figure 4-3)..... | 1   |
| 2    | 4110388   | Bracket .....                                      | 1   |
| 3    | 1613324   | Capscrew .....                                     | 2   |
| 4    | 1583611   | Capscrew .....                                     | 2   |
| 5    | 1530243   | Insert .....                                       | 2   |
| 6    | 4637262   | Hose (Dirty Intake) .....                          | 1   |
| 7    | 4653154   | Hose (Clean Intake) .....                          | 1   |
| 8    | 112989    | Hose Clamp .....                                   | 4   |
| 9    | 16150     | Fitting .....                                      | 1   |
| 10   | 165991    | Indicator (Restriction) .....                      | 1   |
|      | a 17652   | Fitting (With Silencer) .....                      | 1   |
|      | a 2095889 | Label (Air Filter Installation) .....              | 1   |
|      | a 4151588 | Grille , Air Intake .....                          | 1   |

### FOOTNOTES:

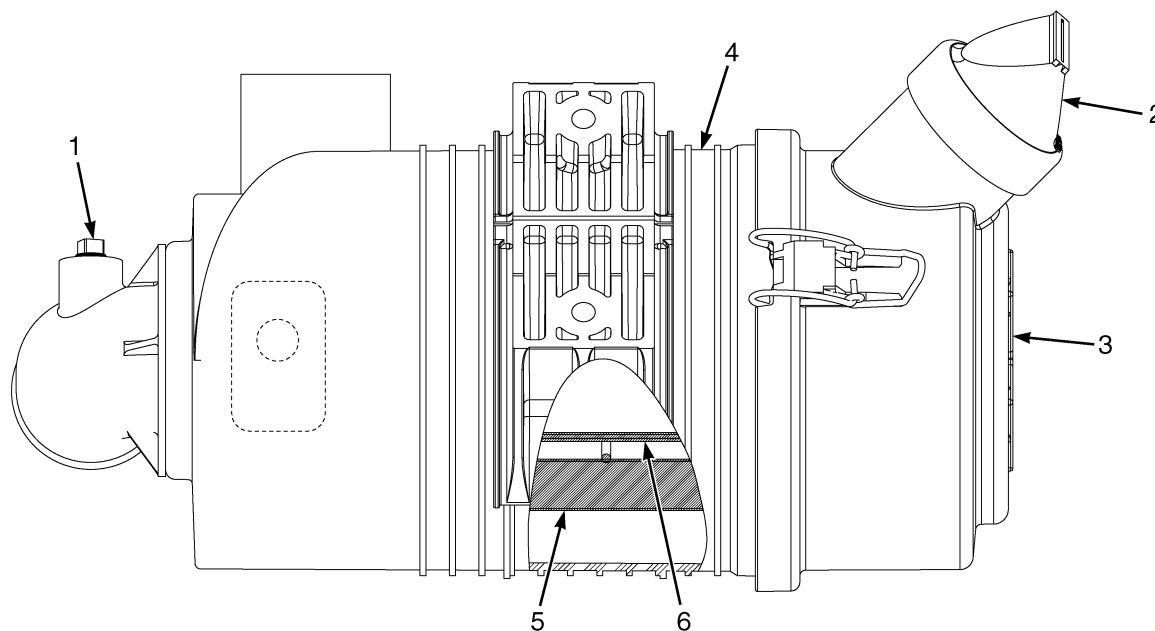
a Not Illustrated



**AIR FILTER ASSEMBLY (FIGURE 4-2)  
SINGLE ELEMENT**

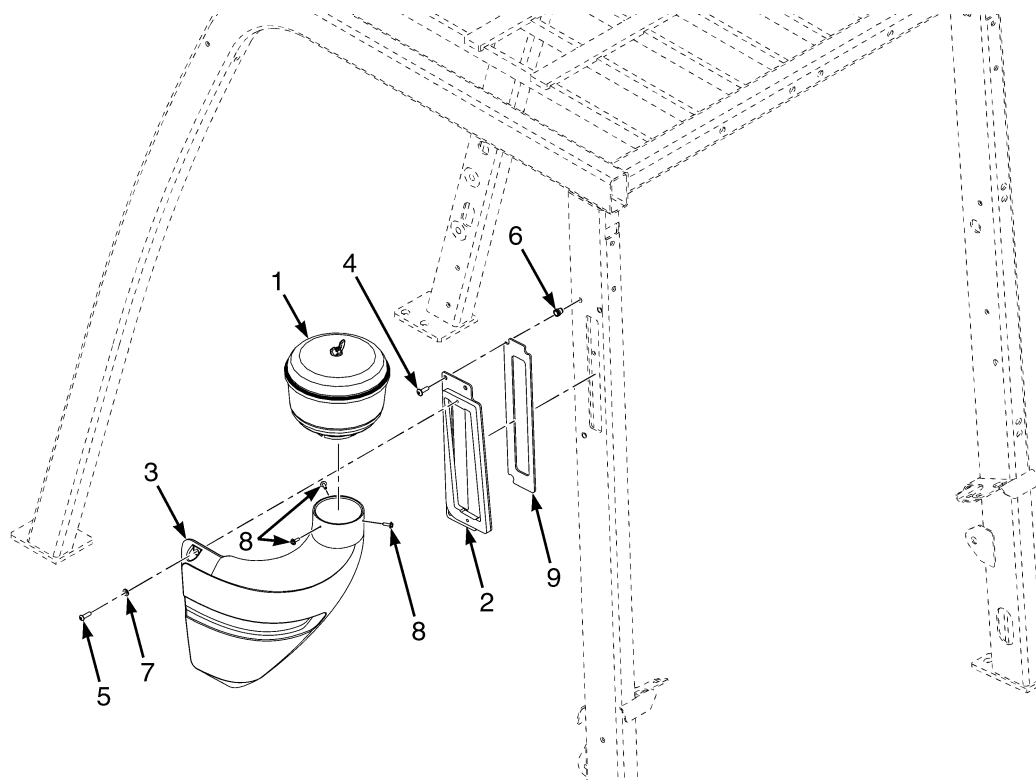
BP130574

| ITEM | PART NO. | DESCRIPTION          | QTY |
|------|----------|----------------------|-----|
|      | 4641239  | Air Filter .....     | 1   |
| 1    | 1462442  | Plug .....           | 1   |
| 2    | 1494024  | Valve .....          | 1   |
| 3    | 4137211  | Cover .....          | 1   |
| 4    | 4136998  | Body .....           | 1   |
| 5    | 4137212  | Filter Element ..... | 1   |

**AIR FILTER ASSEMBLY (FIGURE 4-3)**  
**DUAL ELEMENT**

BP130575

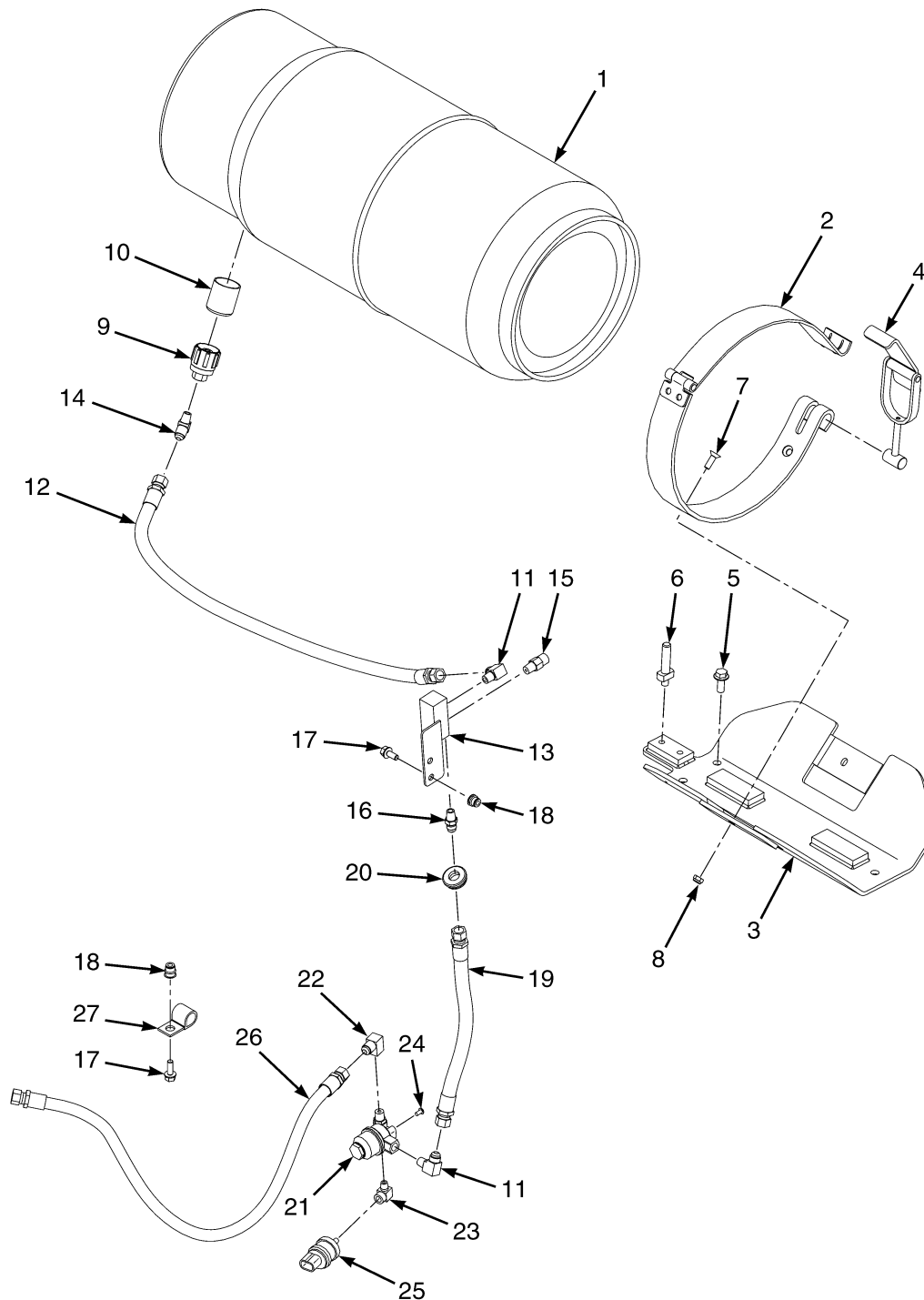
| ITEM | PART NO. | DESCRIPTION          | QTY |
|------|----------|----------------------|-----|
|      | 4641268  | Air Filter .....     | 1   |
| 1    | 1462442  | Plug .....           | 1   |
| 2    | 1494024  | Valve .....          | 1   |
| 3    | 4137002  | Cover .....          | 1   |
| 4    | 4136998  | Body .....           | 1   |
| 5    | 4642999  | Filter Element ..... | 1   |
| 6    | 4643000  | Filter Element ..... | 1   |

**AIR INTAKE SYSTEM (FIGURE 4-4)  
PRE-CLEANER**

BP090931

| ITEM | PART NO. | DESCRIPTION                  | QTY |
|------|----------|------------------------------|-----|
| 1    | 291974   | Pre-Cleaner (Assembly) ..... | 1   |
| 1    | 1374205  | Cover .....                  | 1   |
| 1    | 1374206  | Body .....                   | 1   |
| 1    | 1374207  | Sleeve .....                 | 1   |
| 1    | 115696   | Hose Clamp .....             | 1   |
| 2    | 4153049  | Mounting Weldment .....      | 1   |
| 3    | 1677793  | Air Duct .....               | 1   |
| 4    | 4613617  | Capscrew .....               | 3   |
| 5    | 4044968  | Capscrew .....               | 2   |
| 6    | 1531001  | Insert .....                 | 3   |
| 7    | 1506738  | Washer .....                 | 2   |
| 8    | 1677833  | Screw .....                  | 3   |
| 9    | 4148891  | Gasket .....                 | 1   |

## LPG TANK AND MOUNTING (FIGURE 4-5) WITH FIXED STEEL STRAP

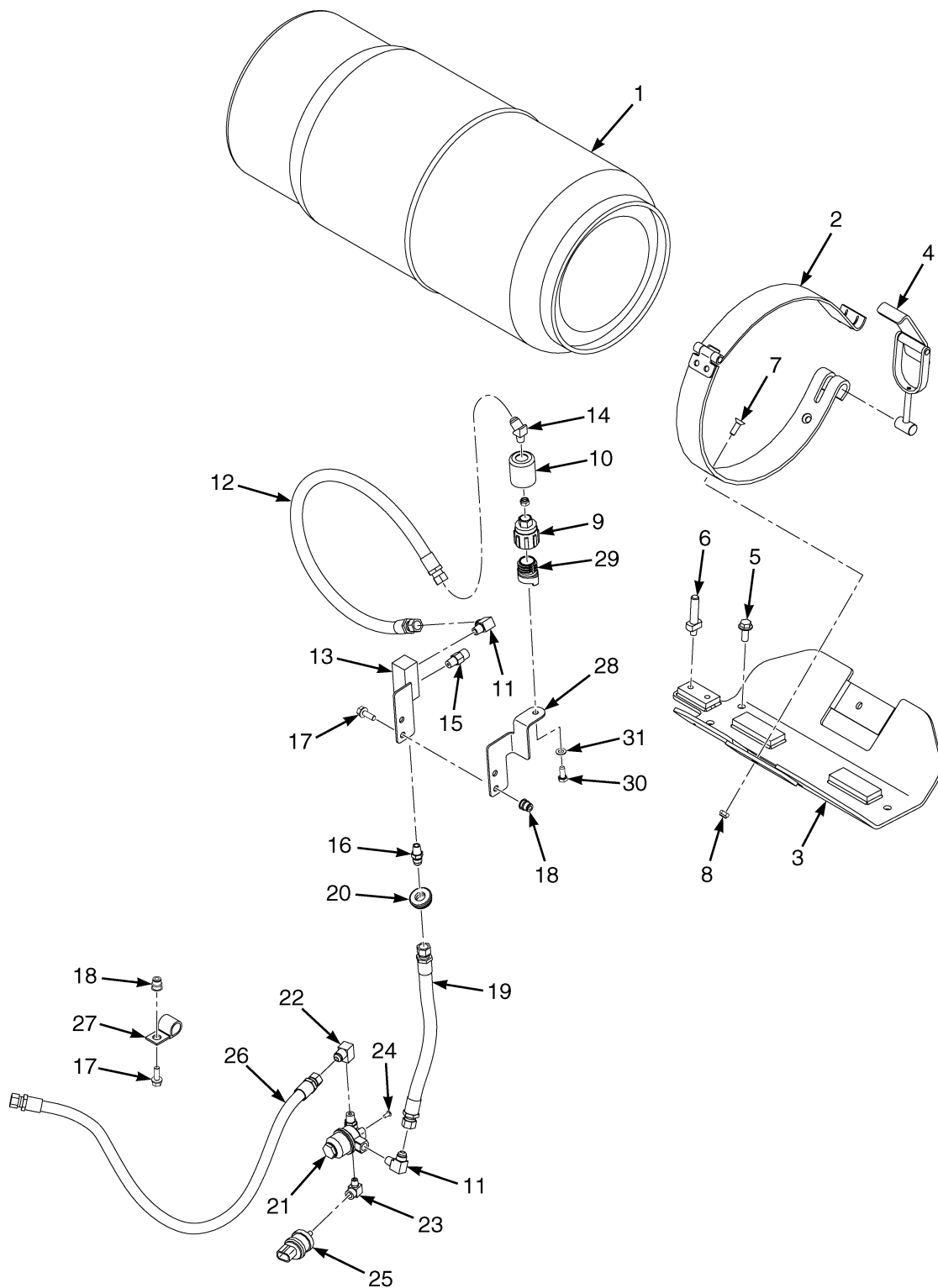


BP130552

**LPG TANK AND MOUNTING  
WITH FIXED STEEL STRAP**

| ITEM | PART NO. | DESCRIPTION                       | QTY |
|------|----------|-----------------------------------|-----|
| 1    | 1328890  | LPG Tank (33.5 LB Steel) .....    | 1   |
| 1    | 1328892  | LPG Tank (33.5 LB Aluminum) ..... | 1   |
| 2    | 1613749  | Strap .....                       | 1   |
| 3    | 4048414  | LPG Tank Bracket .....            | 1   |
| 4    | 1613755  | Latch .....                       | 1   |
| 5    | 1510117  | Capscrew .....                    | 3   |
| 6    | 4003902  | Pin .....                         | 1   |
| 7    | 296227   | Capscrew .....                    | 2   |
| 8    | 1581739  | Nut .....                         | 2   |
| 9    | 97999    | Fitting .....                     | 1   |
| 10   | 2071517  | Sleeve .....                      | 1   |
| 11   | 14358    | Fitting .....                     | 2   |
| 12   | 4640191  | Hose Assy .....                   | 1   |
| 13   | 4150577  | Adapter .....                     | 1   |
| 14   | 16863    | Fitting .....                     | 1   |
| 15   | 101809   | Relief Valve .....                | 1   |
| 16   | 16134    | Fitting .....                     | 1   |
| 17   | 1583611  | Capscrew .....                    | 3   |
| 18   | 1530243  | Insert .....                      | 3   |
| 19   | 4637706  | Hose Assy .....                   | 1   |
| 20   | 2021719  | Grommet .....                     | 1   |
| 21   | 2105803  | Fuel Filter (LPG) .....           | 1   |
| 21   | 1689544  | Kit-Filter Element .....          | 1   |
| 22   | 14372    | Fitting .....                     | 1   |
| 23   | 16151    | Fitting .....                     | 1   |
| 24   | 296151   | Capscrew .....                    | 2   |
| 25   | 1501970  | Pressure Switch (Low Fuel) .....  | 1   |
| 26   | 4637705  | Hose Assy .....                   | 1   |
| 27   | 298132   | Clamp .....                       | 1   |

## LPG TANK AND MOUNTING (FIGURE 4-6) WITH FIXED STEEL STRAP — BI-FUEL

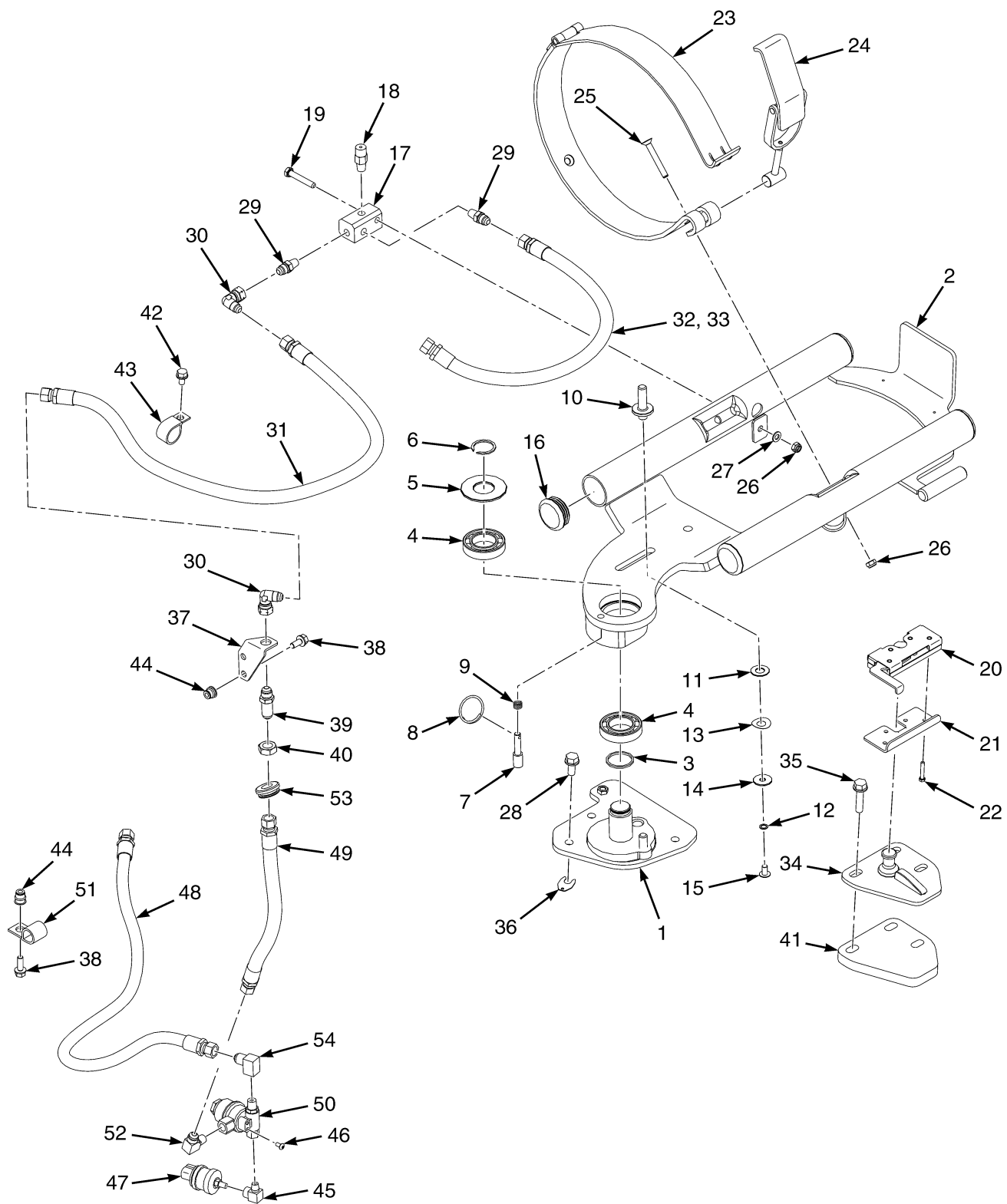


BP130596

**LPG TANK AND MOUNTING  
WITH FIXED STEEL STRAP – BI-FUEL**

| ITEM | PART NO. | DESCRIPTION                       | QTY |
|------|----------|-----------------------------------|-----|
| 1    | 1328890  | LPG Tank (33.5 LB Steel) .....    | 1   |
| 1    | 1328892  | LPG Tank (33.5 LB Aluminum) ..... | 1   |
| 2    | 1613749  | Strap .....                       | 1   |
| 3    | 4048414  | LPG Tank Bracket .....            | 1   |
| 4    | 1613755  | Latch .....                       | 1   |
| 5    | 1510117  | Capscrew .....                    | 3   |
| 6    | 4003902  | Pin .....                         | 1   |
| 7    | 296227   | Capscrew .....                    | 2   |
| 8    | 1581739  | Nut .....                         | 3   |
| 9    | 97999    | Fitting .....                     | 1   |
| 10   | 2071517  | Sleeve .....                      | 1   |
| 11   | 14358    | Fitting .....                     | 2   |
| 12   | 4640191  | Hose Assy .....                   | 1   |
| 13   | 4150577  | Adapter .....                     | 1   |
| 14   | 16863    | Fitting .....                     | 1   |
| 15   | 101809   | Relief Valve .....                | 1   |
| 16   | 16134    | Fitting .....                     | 1   |
| 17   | 1583611  | Capscrew .....                    | 3   |
| 18   | 1530243  | Insert .....                      | 3   |
| 19   | 4637706  | Hose Assy .....                   | 1   |
| 20   | 2021719  | Grommet .....                     | 1   |
| 21   | 2105803  | Fuel Filter (LPG) .....           | 1   |
| 21   | 1689544  | Kit-Filter Element .....          | 1   |
| 22   | 14372    | Fitting .....                     | 1   |
| 23   | 16151    | Fitting .....                     | 1   |
| 24   | 296151   | Capscrew .....                    | 2   |
| 25   | 1501970  | Pressure Switch (Low Fuel) .....  | 1   |
| 26   | 4637705  | Hose Assy .....                   | 1   |
| 27   | 298132   | Clamp .....                       | 1   |
| 28   | 4167516  | Bracket .....                     | 1   |
| 29   | 4139859  | Plug .....                        | 1   |
| 30   | 1581580  | Capscrew .....                    | 1   |
| 31   | 4166624  | Washer .....                      | 1   |
|      | 1581556  | Washer .....                      | 1   |

## LPG TANK BRACKET (FIGURE 4-7) SWING OUT WITH STEEL STRAP



BP130554



**LPG TANK BRACKET  
SWING OUT WITH STEEL STRAP**

| ITEM | PART NO.           | DESCRIPTION                       | QTY |
|------|--------------------|-----------------------------------|-----|
|      | 4115130            | LPG Tank Bracket .....            | 1   |
| 1    | 4115126            | Bracket Wldmt .....               | 1   |
| 2    | .....              | Bracket Weldment .....            | 1   |
| 3    | 1568853            | Thrust Washer .....               | 1   |
| 4    | 184451             | Ball Bearing .....                | 2   |
| 5    | 1568839            | Washer (Pivot) .....              | 1   |
| 6    | 34507              | Snap Ring .....                   | 1   |
| 7    | 1615956            | Pin .....                         | 1   |
| 8    | 1534672            | Ring .....                        | 1   |
| 9    | 1528903            | Spring .....                      | 1   |
| 10   | <del>1684323</del> |                                   |     |
|      | 4029506            | Pin .....                         | 1   |
| 11   | 4029538            | Washer .....                      | 1   |
| 12   | 4032292            | Spacer .....                      | 1   |
| 13   | 4029920            | Washer (Curved disc spring) ..... | 1   |
| 14   | 4032291            | Washer .....                      | 1   |
| 15   | 4031146            | Capscrew .....                    | 1   |
| 16   | 1398099            | Plug .....                        | 4   |
| 17   | 4048941            | Fitting (LPG Bulkhead Rear) ..... | 1   |
| 18   | 101809             | Relief Valve .....                | 1   |
| 19   | 1581583            | Capscrew .....                    | 1   |
| 20   | 1656325            | Latch .....                       | 1   |
| 21   | 1649565            | Plate .....                       | 1   |
| 22   | 4054932            | Capscrew .....                    | 4   |
| 23   | 1613749            | Strap .....                       | 1   |
| 24   | 1613755            | Latch .....                       | 1   |
| 25   | 1581733            | Capscrew .....                    | 2   |
| 26   | 1581739            | Nut .....                         | 3   |
| 27   | <del>4166624</del> |                                   |     |
|      | 1581556            | Washer .....                      | 1   |
| 28   | 1586013            | Capscrew .....                    | 3   |
| 29   | 16134              | Fitting .....                     | 2   |
| 30   | 4051434            | Fitting (Elbow) .....             | 2   |
| 31   | 4639665            | Hose Assy .....                   | 1   |
| 32   | 4619095            | Hose Assy .....                   | 1   |
| 33   | 2071517            | Sleeve .....                      | 1   |
| 34   | 1682758            | Striker .....                     | 1   |
| 35   | 1581400            | Capscrew .....                    | 3   |
| 36   | 1688803            | Shim .....                        | 3   |
| 37   | 4633506            | Bracket .....                     | 1   |
| 38   | 1583611            | Capscrew .....                    | 3   |
| 39   | 4075977            | Fitting .....                     | 1   |
| 40   | 15030              | Nut .....                         | 1   |
| 41   | 4115128            | Plate .....                       | 1   |
| 42   | 1613324            | Capscrew .....                    | 1   |
| 43   | 178119             | Clamp .....                       | 1   |
| 44   | 1530243            | Insert .....                      | 3   |
| 45   | 16151              | Fitting .....                     | 1   |
| 46   | 296151             | Capscrew .....                    | 2   |
| 47   | 1501970            | Pressure Switch (Low Fuel) .....  | 1   |

**LPG TANK BRACKET  
SWING OUT WITH STEEL STRAP**

| ITEM | PART NO. | DESCRIPTION              | QTY |
|------|----------|--------------------------|-----|
| 48   | 4637705  | Hose Assy .....          | 1   |
| 49   | 4637706  | Hose Assy .....          | 1   |
| 50   | 2105803  | Fuel Filter (LPG) .....  | 1   |
| 50   | 1689544  | Kit-Filter Element ..... | 1   |
| 51   | 298132   | Clamp .....              | 1   |
| 52   | 14358    | Fitting .....            | 1   |
| 53   | 2021719  | Grommet .....            | 1   |
| 54   | 14372    | Fitting .....            | 1   |

## NOTES

[illegible]

This exploded view diagram illustrates the assembly of a mechanical component, likely a pump or motor housing. The diagram includes the following numbered parts:

- 1**: Main housing or base plate.
- 2**: Flange or mounting plate.
- 3**: O-ring or seal.
- 4**: Washer or spacer.
- 5**: Nut or bolt.
- 6**: Washer or spacer.
- 7**: Bolt or screw.
- 8**: O-ring or seal.
- 9**: Bolt or screw.
- 10**: Bolt or screw.
- 11**: Washer or spacer.
- 12**: Bolt or screw.
- 13**: Washer or spacer.
- 14**: Bolt or screw.
- 15**: Bolt or screw.
- 16**: O-ring or seal.
- 17**: Bolt or screw.
- 18**: Bolt or screw.
- 19**: Bolt or screw.
- 20**: Bolt or screw.
- 21**: Bolt or screw.
- 22**: Bolt or screw.
- 23**: Belt or strap.
- 24**: Buckle or fastener.
- 25**: Bolt or screw.
- 26**: Bolt or screw.
- 27**: Bolt or screw.
- 28**: Bolt or screw.
- 29**: Bolt or screw.
- 30**: Bolt or screw.
- 31**: Hose or cable.
- 32**: Hose or cable.
- 33**: Bolt or screw.
- 34**: Bolt or screw.
- 35**: Bolt or screw.
- 36**: Bolt or screw.
- 37**: Bolt or screw.
- 38**: Bolt or screw.
- 39**: Bolt or screw.
- 40**: Bolt or screw.
- 41**: Bolt or screw.
- 42**: Bolt or screw.
- 43**: Bolt or screw.
- 44**: Bolt or screw.
- 45**: Bolt or screw.
- 46**: Bolt or screw.
- 47**: Bolt or screw.
- 48**: Hose or cable.
- 49**: Hose or cable.
- 50**: Bolt or screw.
- 51**: Bolt or screw.
- 52**: Bolt or screw.
- 53**: Bolt or screw.
- 54**: Bolt or screw.
- 55**: Bolt or screw.
- 56**: Bolt or screw.
- 57**: Bolt or screw.
- 58**: Bolt or screw.
- 59**: Bolt or screw.
- 60**: Bolt or screw.
- 61**: Bolt or screw.

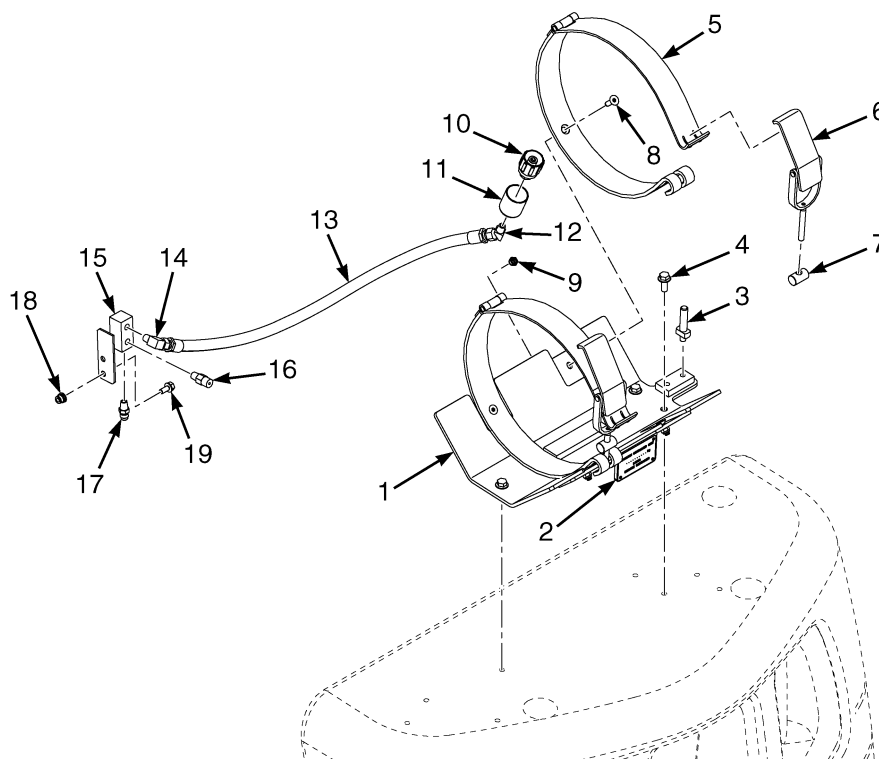
BP130595

# **LPG TANK BRACKET** **SWING OUT WITH STEEL STRAP – BI-FUEL**

| ITEM | PART NO.           | DESCRIPTION                       | QTY |
|------|--------------------|-----------------------------------|-----|
|      | 4115130            | LPG Tank Bracket .....            | 1   |
| 1    | 4115126            | Bracket Wldmt .....               | 1   |
| 2    | .....              | Bracket Weldment .....            | 1   |
| 3    | 1568853            | Thrust Washer .....               | 1   |
| 4    | 184451             | Ball Bearing .....                | 2   |
| 5    | 1568839            | Washer (Pivot) .....              | 1   |
| 6    | 34507              | Snap Ring .....                   | 1   |
| 7    | 1615956            | Pin .....                         | 1   |
| 8    | 1534672            | Ring .....                        | 1   |
| 9    | 1528903            | Spring .....                      | 1   |
| 10   | <del>1684323</del> |                                   |     |
|      | 4029506            | Pin .....                         | 1   |
| 11   | 4029538            | Washer .....                      | 1   |
| 12   | 4032292            | Spacer .....                      | 1   |
| 13   | 4029920            | Washer (Curved disc spring) ..... | 1   |
| 14   | 4032291            | Washer .....                      | 1   |
| 15   | 4031146            | Capscrew .....                    | 1   |
| 16   | 1398099            | Plug .....                        | 4   |
| 17   | 4048941            | Fitting (LPG Bulkhead Rear) ..... | 1   |
| 18   | 101809             | Relief Valve .....                | 1   |
| 19   | 1581583            | Capscrew .....                    | 1   |
| 20   | 1656325            | Latch .....                       | 1   |
| 21   | 1649565            | Plate .....                       | 1   |
| 22   | 4054932            | Capscrew .....                    | 4   |
| 23   | 1613749            | Strap .....                       | 1   |
| 24   | 1613755            | Latch .....                       | 1   |
| 25   | 1581733            | Capscrew .....                    | 2   |
| 26   | 1581739            | Nut .....                         | 3   |
| 27   | <del>4166624</del> |                                   |     |
|      | 1581556            | Washer .....                      | 1   |
| 28   | 1586013            | Capscrew .....                    | 3   |
| 29   | 16134              | Fitting .....                     | 2   |
| 30   | 4051434            | Fitting (Elbow) .....             | 2   |
| 31   | 4639665            | Hose Assy .....                   | 1   |
| 32   | 4619095            | Hose Assy .....                   | 1   |
| 33   | 2071517            | Sleeve .....                      | 1   |
| 34   | 1682758            | Striker .....                     | 1   |
| 35   | 1581400            | Capscrew .....                    | 3   |
| 36   | 1688803            | Shim .....                        | 3   |
| 37   | 4633506            | Bracket .....                     | 1   |
| 38   | 1583611            | Capscrew .....                    | 3   |
| 39   | 4075977            | Fitting .....                     | 1   |
| 40   | 15030              | Nut .....                         | 1   |
| 41   | 4115128            | Plate .....                       | 1   |
| 42   | 1613324            | Capscrew .....                    | 1   |
| 43   | 178119             | Clamp .....                       | 1   |
| 44   | 1530243            | Insert .....                      | 3   |
| 45   | 16151              | Fitting .....                     | 1   |
| 46   | 296151             | Capscrew .....                    | 2   |
| 47   | 1501970            | Pressure Switch (Low Fuel) .....  | 1   |

**LPG TANK BRACKET  
SWING OUT WITH STEEL STRAP – BI-FUEL**

| ITEM | PART NO.                      | DESCRIPTION              | QTY |
|------|-------------------------------|--------------------------|-----|
| 48   | 4637705                       | Hose Assy .....          | 1   |
| 49   | 4637706                       | Hose Assy .....          | 1   |
| 50   | 2105803                       | Fuel Filter (LPG) .....  | 1   |
| 50   | 1689544                       | Kit-Filter Element ..... | 1   |
| 51   | 298132                        | Clamp .....              | 1   |
| 52   | 14358                         | Fitting .....            | 1   |
| 53   | 2021719                       | Grommet .....            | 1   |
| 54   | 14372                         | Fitting .....            | 1   |
| 55   | 16863                         | Fitting .....            | 1   |
| 56   | 97999                         | Fitting .....            | 1   |
| 57   | 4154174                       | Pivot (Washer) .....     | 1   |
| 58   | 4139859                       | Plug .....               | 1   |
| 59   | 1581739                       | Nut .....                | 1   |
| 60   | 1581580                       | Capscrew .....           | 1   |
| 61   | <del>4166624</del><br>1581556 | Washer .....             | 1   |

**LPG TANK MOUNTING BRACKET ASSEMBLY (FIGURE 4-9)**  
**FIXED TWIN STEEL STRAP**

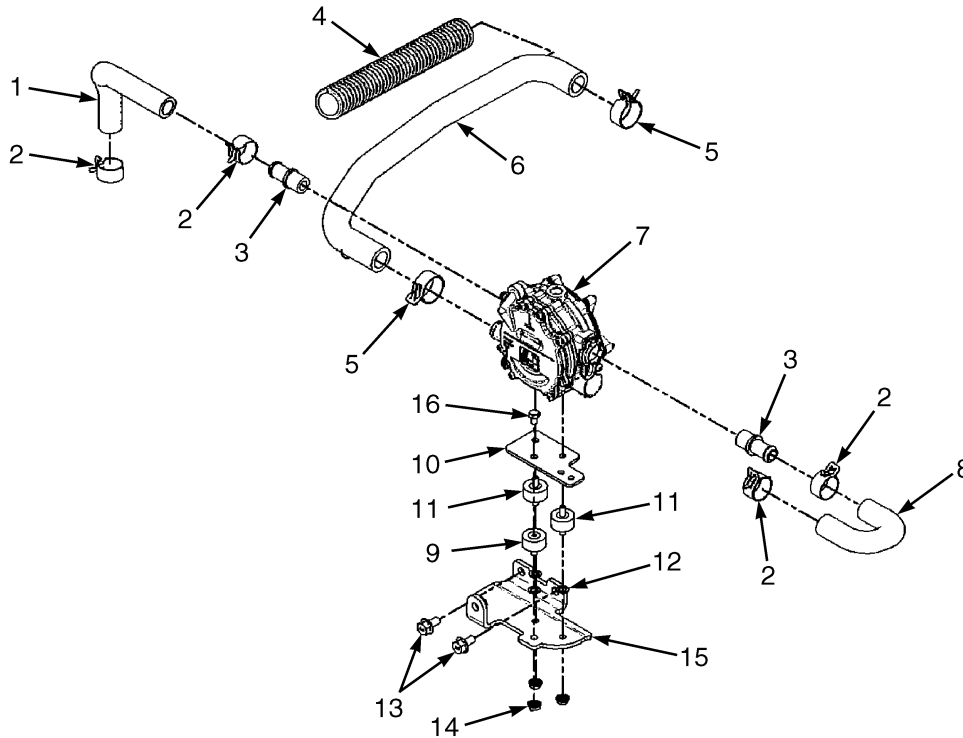
BP130572

| ITEM | PART NO.  | DESCRIPTION                  | QTY |
|------|-----------|------------------------------|-----|
| 1    | 4102526   | LPG Tank Bracket .....       | 1   |
| 2    | .....     | LPG Tank Dataplate .....     | 1   |
| 2    | 340044    | Gripnail .....               | 4   |
| 3    | 4003902   | Pin .....                    | 1   |
| 4    | 1510117   | Capscrew .....               | 3   |
| 5    | 1613749   | Strap .....                  | 2   |
| 6    | 1613755   | Latch .....                  | 2   |
| 7    | 1613763   | Nut .....                    | 2   |
| 8    | 296227    | Capscrew .....               | 4   |
| 9    | 1581739   | Nut .....                    | 4   |
| 10   | 97999     | Fitting .....                | 1   |
| 11   | 2071517   | Sleeve .....                 | 1   |
| 12   | 16863     | Fitting .....                | 1   |
| 13   | 4642193   | Hose Assy - LPG Supply ..... | 1   |
| 14   | 14358     | Fitting .....                | 1   |
| 15   | 4150577   | Adapter .....                | 1   |
| 16   | 101809    | Relief Valve .....           | 1   |
| 17   | 16134     | Fitting .....                | 1   |
| 18   | 1530243   | Insert .....                 | 2   |
| 19   | 1583611   | Capscrew .....               | 2   |
|      | a 1687376 | Sealant , Pipe Thread .....  | AR  |
|      | a 246108  | Sealant , Thread .....       | AR  |

**FOOTNOTES:****a** Not Illustrated

## FUEL REGULATING SYSTEM (FIGURE 4-10)

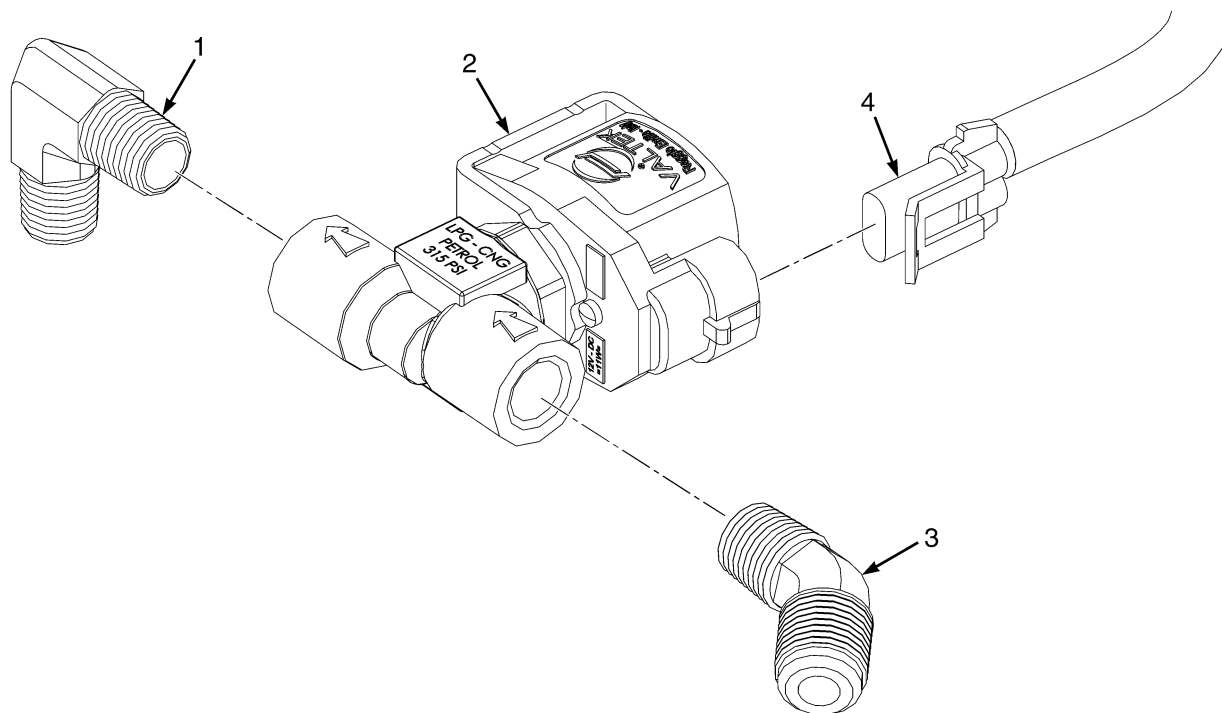
### PSI 2.4L LPG AND 2.4L BI-FUEL



BP090986

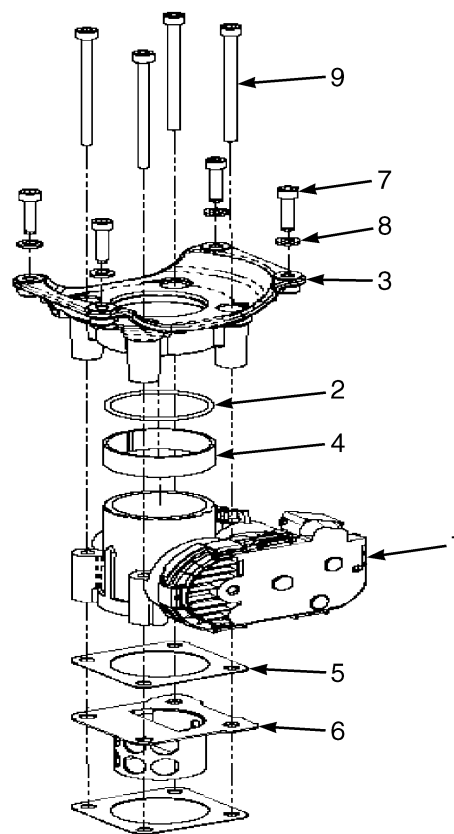
| ITEM | PART NO. | DESCRIPTION                                             | QTY |
|------|----------|---------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                       | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....       | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) .....   | 1   |
| 1    | 4111117  | Hose .....                                              | 1   |
| 2    | 4019092  | Clamp .....                                             | 4   |
| 3    | 4040259  | Fitting .....                                           | 2   |
| 4    | 4229474  | Loom .....                                              | 1   |
| 5    | 4019099  | Clamp .....                                             | 2   |
| 6    | 4137330  | Hose (Molded Fuel) .....                                | 1   |
| 7    | 4040260  | Regulator .....                                         | 1   |
| 7    | 4040288  | Kit-Regulator (Do not use on E2376005F or later.) ..... | 1   |
| 7    | 4148661  | Regulator (Alternate Part) .....                        | 1   |
| 7    | 4148667  | Kit-Regulator .....                                     | 1   |
| 8    | 4137333  | Hose (Coolant) .....                                    | 1   |
| 9    | 4153420  | Isolator .....                                          | 1   |
| 10   | 4111007  | Bracket .....                                           | 1   |
| 10   | 4646062  | Base .....                                              | 1   |
| 11   | 4153419  | Isolator .....                                          | 2   |
| 12   | 4153422  | Washer .....                                            | 3   |
| 13   | 4109993  | .....                                                   |     |
|      | 1527879  | Capscrew .....                                          | 2   |
| 14   | 1307884  | .....                                                   |     |
|      | 1514429  | Nut .....                                               | 3   |
| 15   | 4137328  | Bracket .....                                           | 1   |
| 16   | 4153421  | Bolt .....                                              | 1   |



**LPG LOCK-OFF (FIGURE 4-11)**  
**PSI 2.4L**

BP091048

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4019019  | Fitting .....                                         | 1   |
| 2    | 4112697  |                                                       |     |
|      | 4099352  | LPG Lock-Off .....                                    | 1   |
| 3    | 4112698  | Fitting .....                                         | 1   |
| 4    | .....    | Connector Assembly (Lock Off) (☞ Figure 5-28).....    | 1   |
| 4    | 1539872  | Connector .....                                       | 1   |
| 4    | 1345690  | Terminal (E FTG SEC LOCK) .....                       | 1   |
| 4    | 1330355  | Terminal .....                                        | 2   |

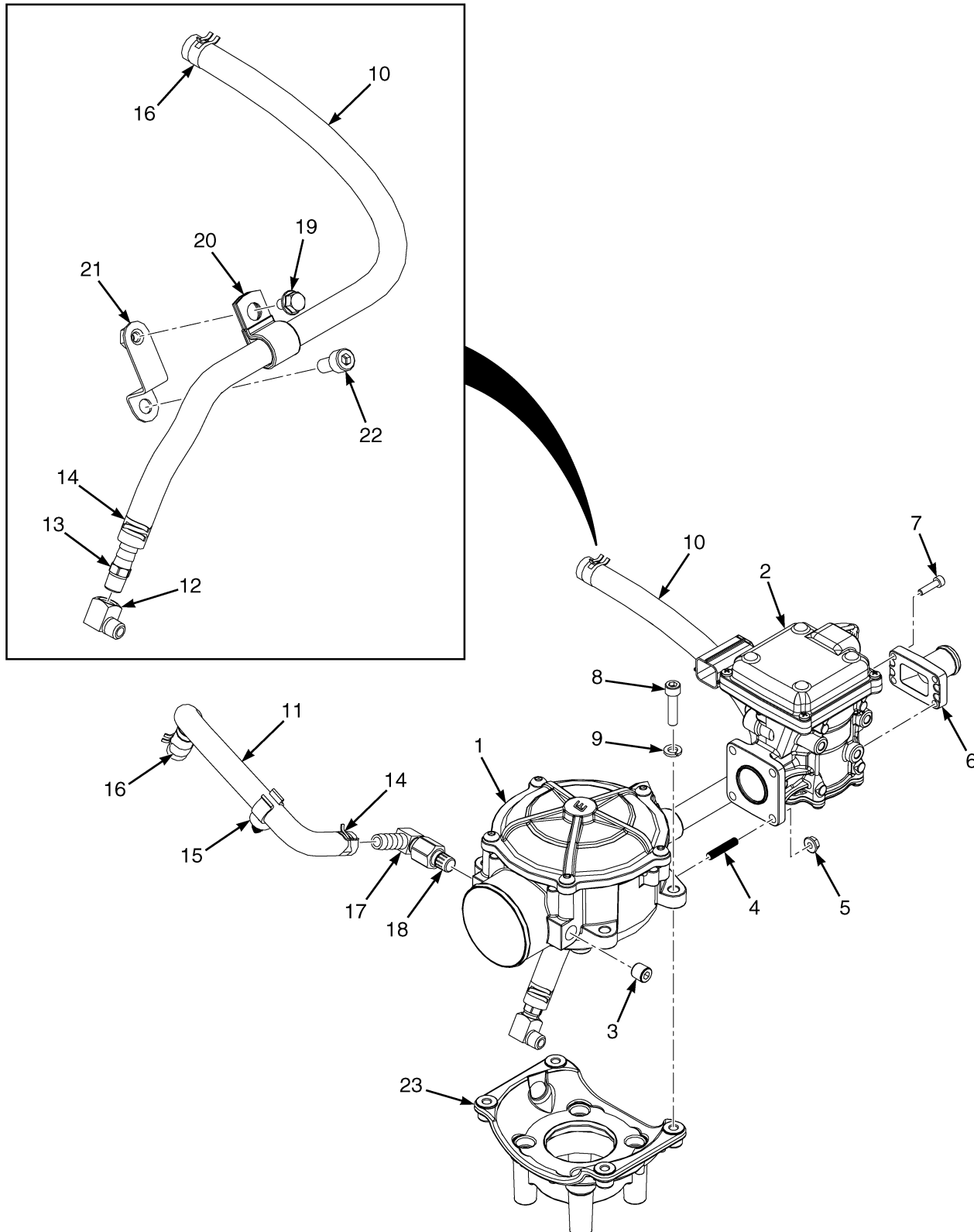
**THROTTLE BODY (FIGURE 4-12)**  
**PSI 2.4L**

BP090710

**THROTTLE BODY**  
**PSI 2.4L****KEY:****A: LPG Engine****B: Bi-Fuel**

| ITEM | PART NO.           | DESCRIPTION                                           | QTY |    |
|------|--------------------|-------------------------------------------------------|-----|----|
|      |                    |                                                       | A   | B  |
|      | 4639191            | Engine Assy-LPG (Certified) .....                     | 1   | .. |
|      | 4638134            | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   | .. |
|      | 4638137            | Engine Assy-Bi-Fuel (Certified with Cab Heater) ..... | ..  | 1  |
| 1    | <del>4097613</del> |                                                       |     |    |
|      | 1650404            | Throttle Body .....                                   | 1   | .. |
| 2    | 4110060            | O-Ring .....                                          | 1   | .. |
| 3    | 4110061            | Adapter .....                                         | 1   | .. |
| 4    | 4110062            | Spacer .....                                          | 1   | .. |
| 5    | 4110063            | Gasket (Throttle Body) .....                          | 2   | .. |
| 6    | 4137336            | Baffle .....                                          | 1   | .. |
| 7    | 4110065            | Bolt .....                                            | 4   | .. |
| 8    | 4110066            | Washer .....                                          | 4   | .. |
| 9    | 4137337            | Capscrew .....                                        | 4   | .. |

## MIXER/EPR AND PCV AIR HOSES (FIGURE 4-13) PSI 2.4L LPG AND 2.4L BI-FUEL

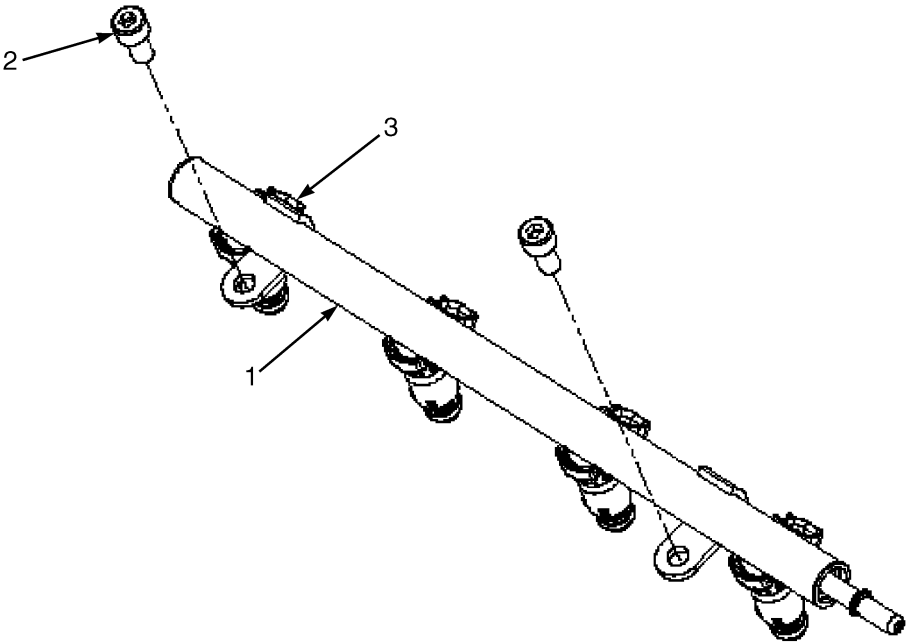


BP130569

**MIXER/EPR AND PCV AIR HOSES**  
**PSI 2.4L LPG AND 2.4L BI-FUEL****KEY:****A: With LPG Engine****B: With BI- Fuel Engine**

| ITEM | PART NO. | DESCRIPTION                                           | QTY |    |
|------|----------|-------------------------------------------------------|-----|----|
|      |          |                                                       | A   | B  |
|      | 4639191  | Engine Assy-LPG (Certified) .....                     | 1   | .. |
|      | 4638134  | Engine Assy-LPG (Certified with Cab Heater) .....     | 1   | .. |
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | ..  | 1  |
| 1    | 4111124  | Mixer-LPG .....                                       | 1   | 1  |
| 1    | 4111125  | Kit-Repair .....                                      | 1   | 1  |
| 2    | 4019119  | Regulator (EPR) .....                                 | 1   | 1  |
| 3    | 4019120  | Plug .....                                            | 1   | 1  |
| 4    | 4019121  | Stud .....                                            | 4   | 4  |
| 5    | 1565407  | Nut .....                                             | 4   | 4  |
| 6    | 4019118  | Fitting .....                                         | 1   | 1  |
| 7    | 292672   | Capscrew .....                                        | 4   | 4  |
| 8    | 4110065  | Bolt .....                                            | 4   | 4  |
| 9    | 4110066  | Washer .....                                          | 4   | 4  |
| 10   | 4116720  | Hose (PCV Foul Air) .....                             | 1   | 1  |
| 11   | 4137306  | Hose (PCV Fresh Air) .....                            | 1   | 1  |
| 12   | 4110072  | Fitting .....                                         | 1   | 1  |
| 13   | 4110071  | Fitting .....                                         | 1   | 1  |
| 14   | 4019090  | Clamp .....                                           | 2   | 2  |
| 15   | 4153432  | Clip .....                                            | 1   | 1  |
| 16   | 4137305  | Clamp .....                                           | 2   | 2  |
| 17   | 4110078  | Fitting .....                                         | 1   | 1  |
| 18   | 4110079  | Fitting .....                                         | 1   | 1  |
| 19   | 4019051  | Bolt .....                                            | 1   | 1  |
| 20   | 128408   | Clamp .....                                           | 1   | 1  |
| 21   | 4116715  | Bracket .....                                         | 1   | 1  |
| 22   | 4110075  | Bolt .....                                            | 1   | 1  |
| 23   | .....    | Throttle Body Assembly (Figure 4-12).....             | 1   | 1  |

**FUEL RAIL (FIGURE 4-14)**  
**PSI 2.4L BI-FUEL**



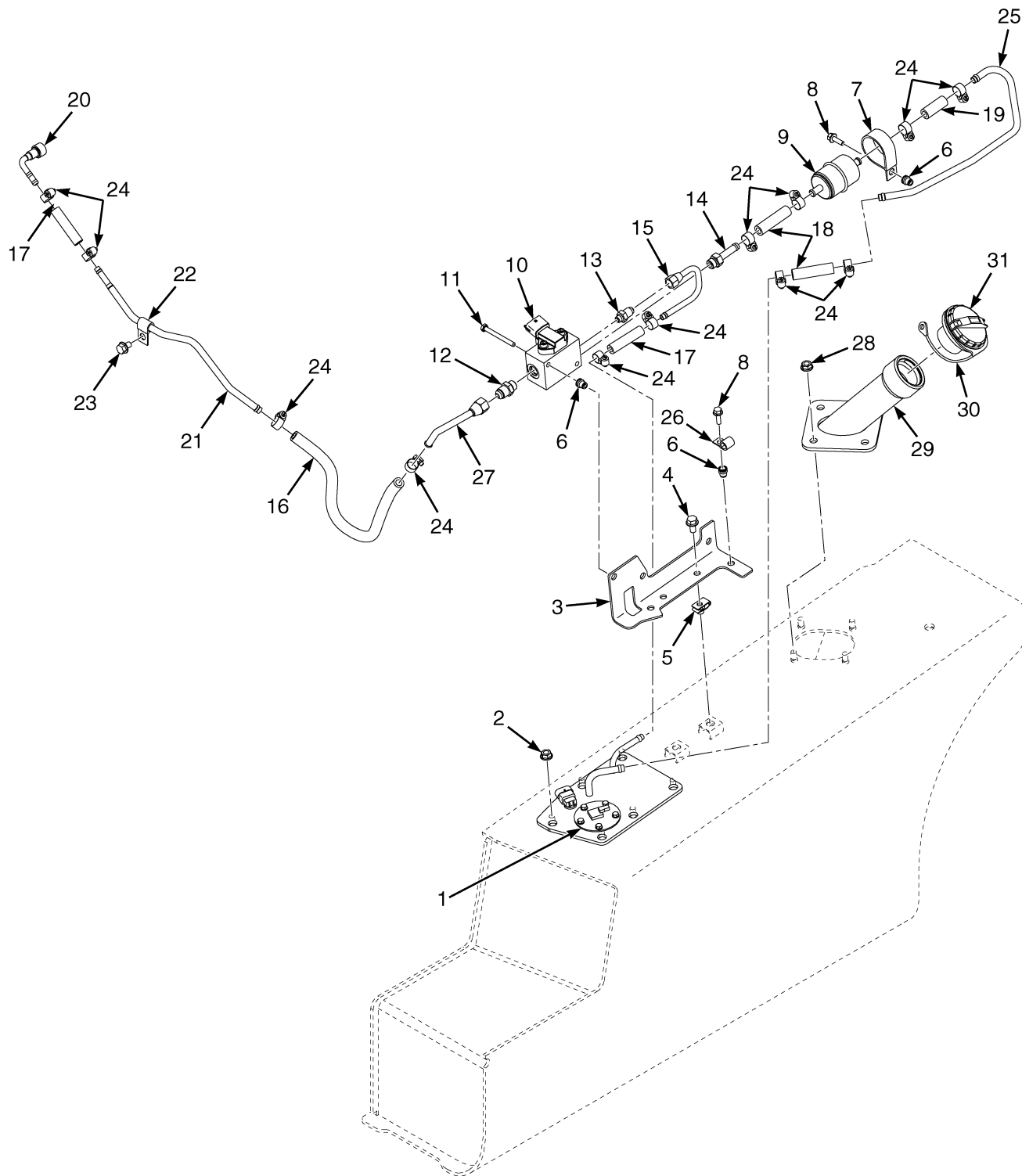
BP090729

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4638137  | Engine Assy-BI-Fuel (Certified with Cab Heater) ..... | 1   |
| 1    | 4111631  | Fuel Rail .....                                       | 1   |
| 2    | 4110075  | Bolt .....                                            | 2   |
| 3    | 4111190  | Injector .....                                        | 4   |

## NOTES

[illegible]

## FUEL SYSTEM (FIGURE 4-15) PSI 2.4L BI-FUEL



BP130582



**FUEL SYSTEM**  
**PSI 2.4L BI-FUEL**

| ITEM | PART NO.           | DESCRIPTION                                          | QTY |
|------|--------------------|------------------------------------------------------|-----|
| 1    | 4167403            | Fuel Sender (Gas) (☞ Figure 4-16).....               | 1   |
| 1    | <b>a</b> 4172858   | Fuel Sender (Gas) (☞ Figure 4-17).....               | 1   |
| 2    | <del>1382472</del> |                                                      |     |
|      | 1502543            | Nut .....                                            | 6   |
| 3    | 4113784            | Bracket .....                                        | 1   |
| 4    | <del>4109993</del> |                                                      |     |
|      | 1527879            | Capscrew .....                                       | 2   |
| 5    | 1480237            | Nut (Fold Over) .....                                | 2   |
| 6    | 1531558            | Insert .....                                         | 4   |
| 7    | 1316496            | Clamp .....                                          | 1   |
| 8    | 1527877            | Capscrew .....                                       | 2   |
| 9    | 1553541            | Fuel Filter .....                                    | 1   |
| 10   | 4047012            | Manifold Assy .....                                  | 1   |
| 11   | 292507             | Capscrew .....                                       | 2   |
| 12   | 4627283            | Fitting .....                                        | 1   |
| 13   | 4627282            | Fitting .....                                        | 1   |
| 14   | 222492             | Fitting .....                                        | 1   |
| 15   | 4154791            | Tube Assy .....                                      | 1   |
| 16   | 2076026            | Hose .....                                           | 1   |
| 17   | 1543900            | Hose .....                                           | 2   |
| 18   | 2066137            | Hose .....                                           | 2   |
| 19   | 4644610            | Hose .....                                           | 1   |
| 20   | 1543933            | Fitting .....                                        | 1   |
| 21   | 4154792            | Tube Assy .....                                      | 1   |
| 22   | 164488             | Clamp .....                                          | 1   |
| 23   | 1529366            | Capscrew .....                                       | 1   |
| 24   | 168718             | Clamp .....                                          | 12  |
| 25   | .....              | Tube Assembly .....                                  | 1   |
| 26   | 132131             | Clamp .....                                          | 1   |
| 27   | 4159793            | Tube Assy .....                                      | 1   |
| 28   | 4175771            | Filler Neck .....                                    | 1   |
| 29   | <del>1382472</del> |                                                      |     |
|      | 1502543            | Nut .....                                            | 4   |
| 30   | 325549             | Shim (0.020 in.) .....                               | AR  |
| 30   | 2021685            | Gasket .....                                         | 1   |
| 31   | 1579677            | Fuel Cap (Lockable Version) .....                    | 1   |
| 99   | 1528481            | Plug (With O-Ring for Drain) (Fuel Tank Drain) ..... | 1   |

**FOOTNOTES:****a** Manufacturing Option

This exploded view diagram illustrates the assembly of a medical device, likely a catheter or probe, mounted onto a base unit. The components are numbered as follows:

- 1**: Main base unit or housing.
- 2**: A small rectangular component, possibly a battery or control module.
- 3**: A mounting bracket or base plate.
- 4**: A cylindrical component, possibly a filter or sensor housing.
- 5**: A small cylindrical component, possibly a connector or seal.
- 6**: A small cylindrical component, possibly a connector or seal.
- 7**: A small cylindrical component, possibly a connector or seal.
- 8**: A small cylindrical component, possibly a connector or seal.
- 9**: A small cylindrical component, possibly a connector or seal.
- 10**: A small cylindrical component, possibly a connector or seal.
- 11**: A cable or wire.
- 12**: A small cylindrical component, possibly a connector or seal.
- 13**: A small cylindrical component, possibly a connector or seal.
- 14**: A small cylindrical component, possibly a connector or seal.
- 15**: A small cylindrical component, possibly a connector or seal.
- 16**: A cable or wire.
- 17**: A small cylindrical component, possibly a connector or seal.
- 18**: A small cylindrical component, possibly a connector or seal.
- 19**: A small cylindrical component, possibly a connector or seal.

The diagram shows the assembly path from the base unit (1) through various internal components (2-13) to the final cable assembly (14-19). Dashed lines indicate the alignment and assembly sequence of the parts.

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**FUEL SENDER AND ATTACHING PARTS**

PSI 2.4L BI-FUEL (S/N A380B01514P →)

| ITEM | PART NO. | DESCRIPTION                        | QTY |
|------|----------|------------------------------------|-----|
|      | 4167403  | Fuel Sender (Gas) .....            | 1   |
| 1    | .....    | Fuel Tube and Mounting Plate ..... | 1   |
| 2    | 1634455  | Fuel Pump .....                    | 1   |
| 3    | 1634456  | Strainer .....                     | 1   |
| 4    | 1644624  | Isolator .....                     | 1   |
| 5    | 2089368  | Hose .....                         | 1   |
| 6    | 168718   | Clamp .....                        | 2   |
| 7    | 369804   | Clamp .....                        | 1   |
| 8    | 1371149  | Connector .....                    | 1   |
| 9    | 1330325  | O-Ring .....                       | 1   |
| 10   | 1330326  | Nut .....                          | 1   |
| 11   | 4168115  | Wire Harness (Fuel Pump) .....     | 1   |
| 12   | 114312   | Strap Clamp .....                  | 2   |
| 13   | 2080643  | Sender .....                       | 1   |
| 14   | 2021687  | Bolt .....                         | 5   |
| 15   | 320155   | Washer .....                       | 5   |
| 16   | 4655548  | Jumper (Fuel Sender Harness) ..... | 1   |
| 17   | 1561871  | Clamp (Swivel) .....               | 1   |
| 18   | 4077618  | Clamp (Adjustable) .....           | 1   |
| 19   | 137852   | Strap Clamp .....                  | 2   |

This exploded view diagram illustrates the assembly of a medical device, likely a catheter or probe, mounted onto a base unit. The components are numbered as follows:

- 1**: Main base unit or housing.
- 2**: A small rectangular component, possibly a sensor or connector, attached to the side of the base.
- 3**: A mounting bracket or base plate for the lower assembly.
- 4**: A cylindrical component, possibly a filter or a connector, mounted on the bracket.
- 5**: A small cylindrical component, possibly a seal or a connector, mounted on the main body.
- 6**: A small cylindrical component, possibly a seal or a connector, mounted on the main body.
- 7**: A small cylindrical component, possibly a seal or a connector, mounted on the main body.
- 8**: A small cylindrical component, possibly a seal or a connector, mounted on the main body.
- 9**: A small cylindrical component, possibly a seal or a connector, mounted on the main body.
- 10**: A small rectangular component, possibly a sensor or connector, attached to the side of the base.
- 11**: A cable or wire connected to the side component.
- 12**: A small cylindrical component, possibly a seal or a connector, mounted on the main body.
- 13**: A small cylindrical component, possibly a seal or a connector, mounted on the main body.
- 14**: A small cylindrical component, possibly a seal or a connector, mounted on the main body.
- 15**: A small cylindrical component, possibly a seal or a connector, mounted on the main body.
- 16**: A cable or wire connected to the top of the device.
- 17**: A small rectangular component, possibly a sensor or connector, attached to the side of the base.
- 18**: A small cylindrical component, possibly a seal or a connector, mounted on the main body.
- 19**: A small cylindrical component, possibly a seal or a connector, mounted on the main body.

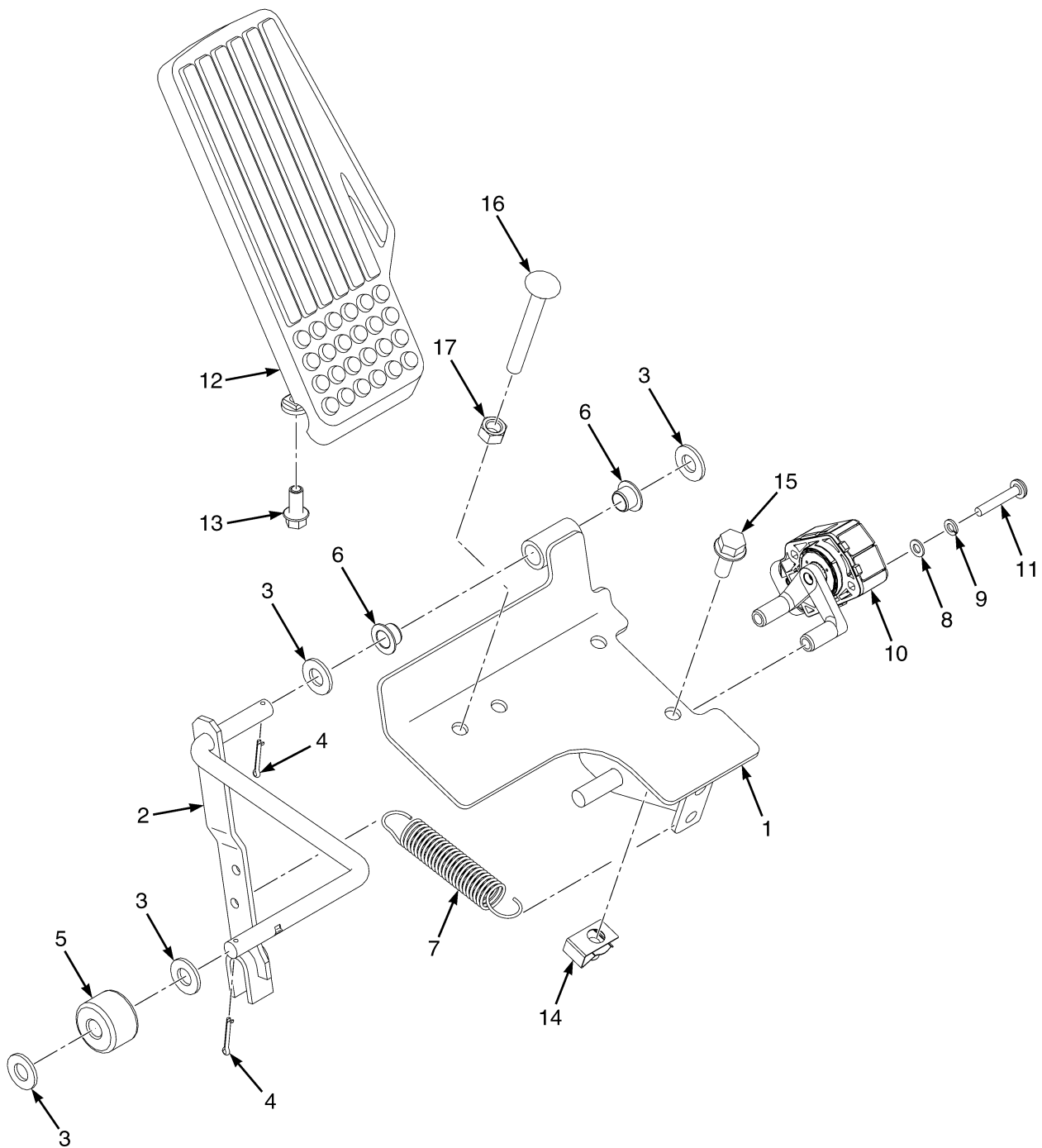
The diagram shows the relative positions and assembly sequence of these components, with dashed lines indicating the alignment and connection points. The base unit (1) is shown in a dashed outline, indicating its overall shape and the location of the internal components.

BP130583

**FUEL SENDER AND ATTACHING PARTS**  
**MANUFACTURING OPTION GASOLINE FUEL SENDER – PSI 2.4L BI-FUEL**

| ITEM | PART NO. | DESCRIPTION                        | QTY |
|------|----------|------------------------------------|-----|
|      | 4172858  | Fuel Sender (Gas) .....            | 1   |
| 1    | .....    | Fuel Tube and Mounting Plate ..... | 1   |
| 2    | 1634455  | Fuel Pump .....                    | 1   |
| 3    | 1634456  | Strainer .....                     | 1   |
| 4    | 1644624  | Isolator .....                     | 1   |
| 5    | 2089368  | Hose .....                         | 1   |
| 6    | 168718   | Clamp .....                        | 2   |
| 7    | 369804   | Clamp .....                        | 1   |
| 8    | 1371149  | Connector .....                    | 1   |
| 9    | 1330325  | O-Ring .....                       | 1   |
| 10   | 1330326  | Nut .....                          | 1   |
| 11   | 4168115  | Wire Harness (Fuel Pump) .....     | 1   |
| 12   | 114312   | Strap Clamp .....                  | 2   |
| 13   | 2080643  | Sender .....                       | 1   |
| 13   | 1367108  | Packing .....                      | 1   |
| 14   | 2021687  | Bolt .....                         | 5   |
| 15   | 320155   | Washer .....                       | 5   |
| 16   | 4655548  | Jumper (Fuel Sender Harness) ..... | 1   |
| 17   | 1561871  | Clamp (Swivel) .....               | 1   |
| 18   | 4077618  | Clamp (Adjustable) .....           | 1   |
| 19   | 137852   | Strap Clamp .....                  | 2   |

## THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS (FIGURE 4-18) PSI — STANDARD PEDAL (→ S/N A380B02499R)



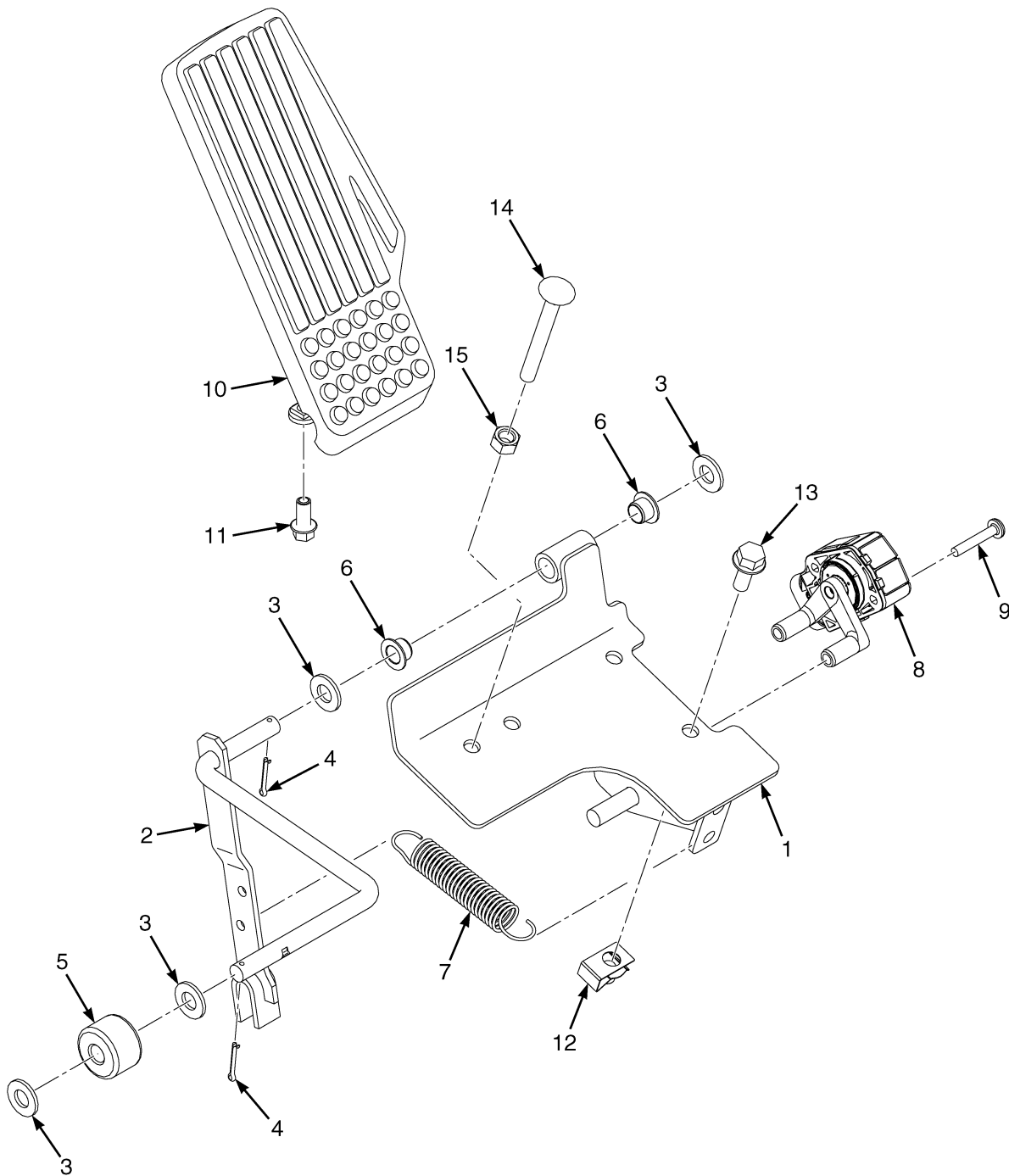
BP130560

**THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS**  
**PSI – STANDARD PEDAL (→ S/N A380B02499R)**

| ITEM | PART NO. | DESCRIPTION           | QTY |
|------|----------|-----------------------|-----|
| 1    | 4114974  | Bracket .....         | 1   |
| 2    | 4117525  | Lever .....           | 1   |
| 3    | 320159   | Washer .....          | 4   |
| 4    | 2027673  | Pin .....             | 2   |
| 5    | 2047782  | Roller .....          | 1   |
| 6    | 2021809  | Bushing .....         | 2   |
| 7    | 2082033  | Spring .....          | 2   |
| 8    | 320155   | Washer .....          | 2   |
| 9    | 292679   | Washer .....          | 2   |
| 10   | 4114979  | Sensor .....          | 1   |
| 11   | 302038   | Screw .....           | 2   |
| 12   | 2027337  | Pedal .....           | 1   |
| 13   | 4114055  |                       |     |
|      | 1527876  | Capscrew .....        | 2   |
| 14   | 1398062  | Nut (Fold Over) ..... | 2   |
| 15   | 1527880  | Capscrew .....        | 2   |
| 16   | 1669114  | Bolt .....            | 1   |
| 17   | 2022719  | Nut .....             | 1   |

## THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS (FIGURE 4-19)

PSI — STANDARD PEDAL (S/N A380B02500R →)



BP130587

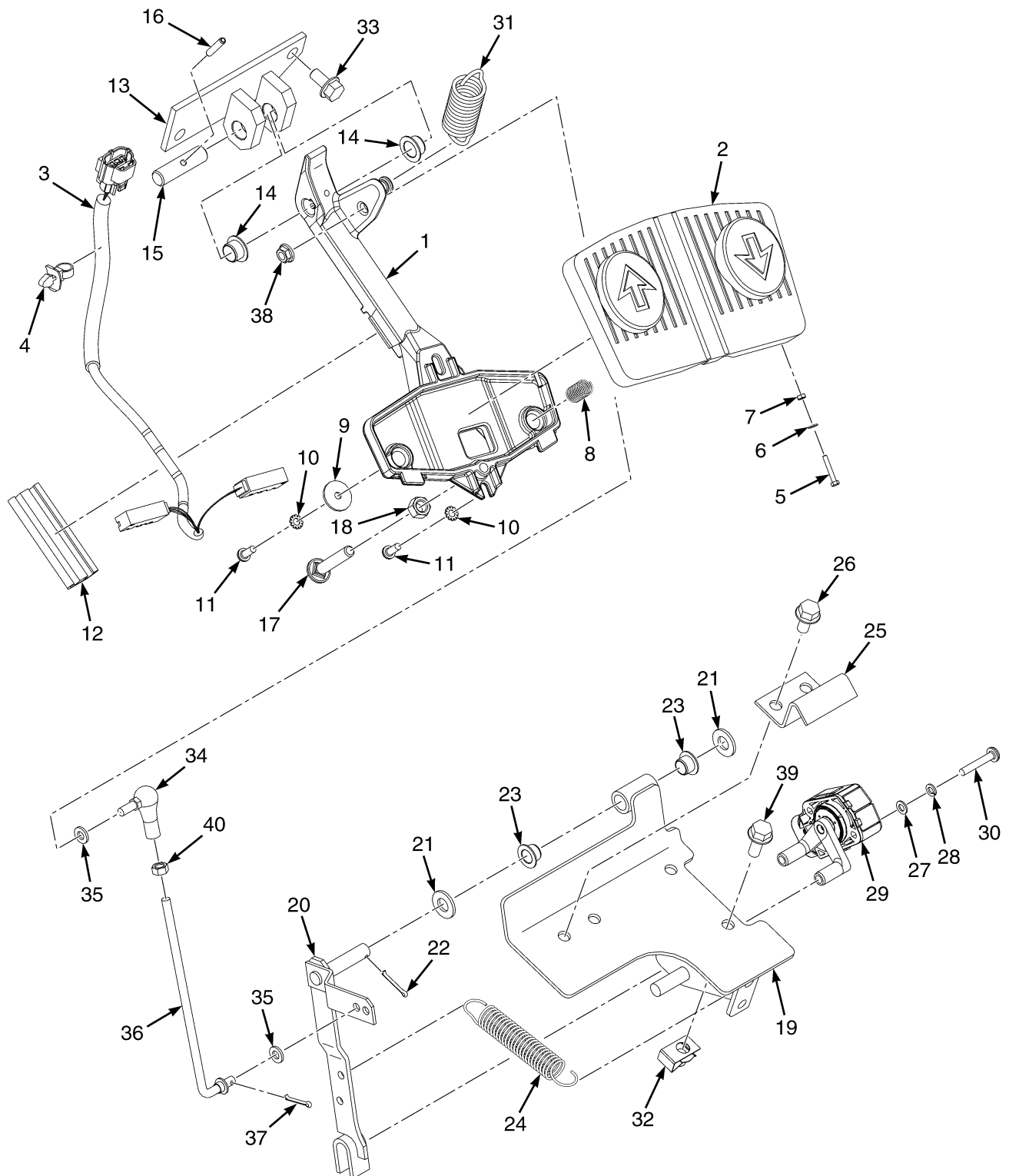


**THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS**  
**PSI – STANDARD PEDAL (S/N A380B02500R →)**

| ITEM | PART NO. | DESCRIPTION                        | QTY |
|------|----------|------------------------------------|-----|
|      | 4166596  | Lever , Accelerator Assembly ..... | 1   |
|      | 4166598  | Accelerator Pedal Assembly .....   | 1   |
| 1    | 4166603  | Bracket .....                      | 1   |
| 2    | .....    | Accelerator Lever .....            | 1   |
| 3    | 320159   | Washer .....                       | 4   |
| 4    | 2027673  | Pin .....                          | 2   |
| 5    | 2047782  | Roller .....                       | 1   |
| 6    | 2021809  | Bushing .....                      | 2   |
| 7    | 2082033  | Spring .....                       | 2   |
| 8    | 4114979  | Sensor .....                       | 1   |
| 9    | 302038   | Screw .....                        | 2   |
| 10   | 2027337  | Pedal .....                        | 1   |
| 11   | 4114055  |                                    |     |
|      | 1527876  | Capscrew .....                     | 2   |
| 12   | 1398062  | Nut (Fold Over) .....              | 2   |
| 13   | 1527880  | Capscrew .....                     | 2   |
| 14   | 1669114  | Bolt .....                         | 1   |
| 15   | 2022719  | Nut .....                          | 1   |

## THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS (FIGURE 4-20)

PSI — MONOTROL PEDAL (→ S/N A380B02499R)

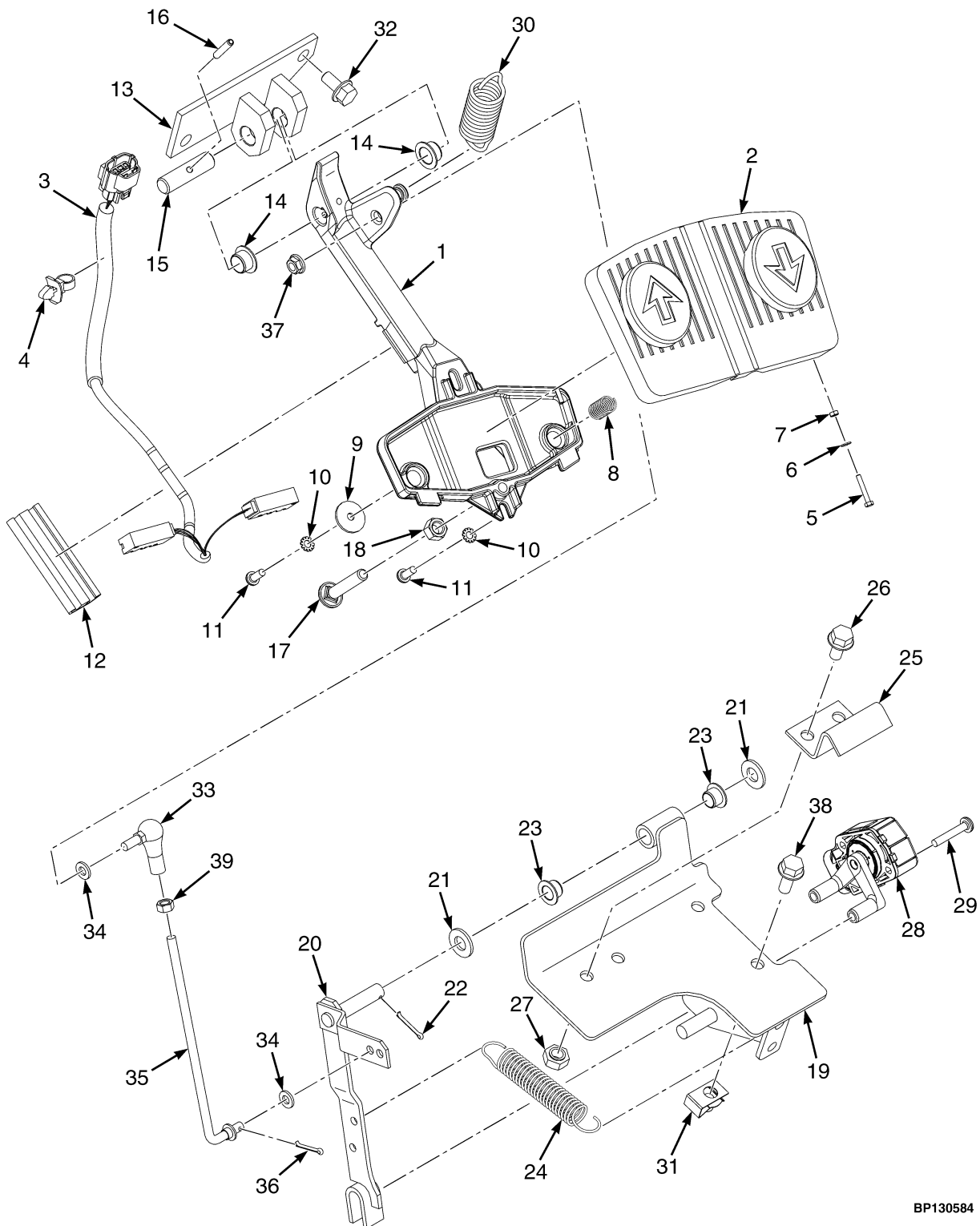


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**THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS**  
**PSI – MONOTROL PEDAL (→ S/N A380B02499R)**

| ITEM | PART NO. | DESCRIPTION                            | QTY |
|------|----------|----------------------------------------|-----|
|      | 1615251  | Monotrol Pedal Assembly .....          | 1   |
| 1    | 1556829  | Bracket (Pedal) .....                  | 1   |
| 2    | 1340470  | Pad .....                              | 1   |
| 3    | 2080783  | Wire Harness .....                     | 1   |
| 4    | 2081255  | Clip .....                             | 1   |
| 5    | 302231   | Capscrew .....                         | 4   |
| 6    | 296375   | Washer .....                           | 4   |
| 7    | 292665   | Nut .....                              | 4   |
| 8    | 325699   | Spring .....                           | 2   |
| 9    | 362036   | Washer .....                           | 2   |
| 10   | 15931    | Lockwasher .....                       | 4   |
| 11   | 16708    | Screw .....                            | 4   |
| 12   | 1539418  | Clip .....                             | 1   |
| 13   | 2083605  | Bracket .....                          | 1   |
| 14   | 2027716  | Bushing .....                          | 2   |
| 15   | 2083606  | Shaft .....                            | 1   |
| 16   | 302437   | Roll Pin .....                         | 1   |
| 17   | 2030158  | Square Neck Cup - bolt .....           | 1   |
| 18   | 2022719  | Nut .....                              | 1   |
| 19   | 4114974  | Bracket .....                          | 1   |
| 20   | 4117526  | Lever .....                            | 1   |
| 21   | 320159   | Washer .....                           | 2   |
| 22   | 2027673  | Pin .....                              | 1   |
| 23   | 2021809  | Bushing .....                          | 2   |
| 24   | 2082033  | Spring .....                           | 2   |
| 25   | 4633511  | Stop .....                             | 1   |
| 26   | 4109993  |                                        |     |
|      | 1527879  | Capscrew .....                         | 2   |
| 26   | 2079533  | Capscrew , M8x1.25x16 (Optional) ..... | 2   |
| 27   | 320155   | Washer .....                           | 2   |
| 28   | 292679   | Washer .....                           | 2   |
| 29   | 4114979  | Sensor .....                           | 1   |
| 30   | 302038   | Screw .....                            | 2   |
| 31   | 2099870  | Spring .....                           | 1   |
| 32   | 1398062  | Nut (Fold Over) .....                  | 2   |
| 33   | 4109993  |                                        |     |
|      | 1527879  | Capscrew .....                         | 2   |
| 34   | 2027949  | Ball Joint .....                       | 1   |
| 35   | 320156   | Washer .....                           | 2   |
| 36   | 2083607  | Throttle Link .....                    | 1   |
| 37   | 2027673  | Pin .....                              | 1   |
| 38   | 1307884  |                                        |     |
|      | 1514429  | Nut .....                              | 1   |
| 39   | 1527880  | Capscrew .....                         | 2   |
| 40   | 136687   | Nut .....                              | 1   |

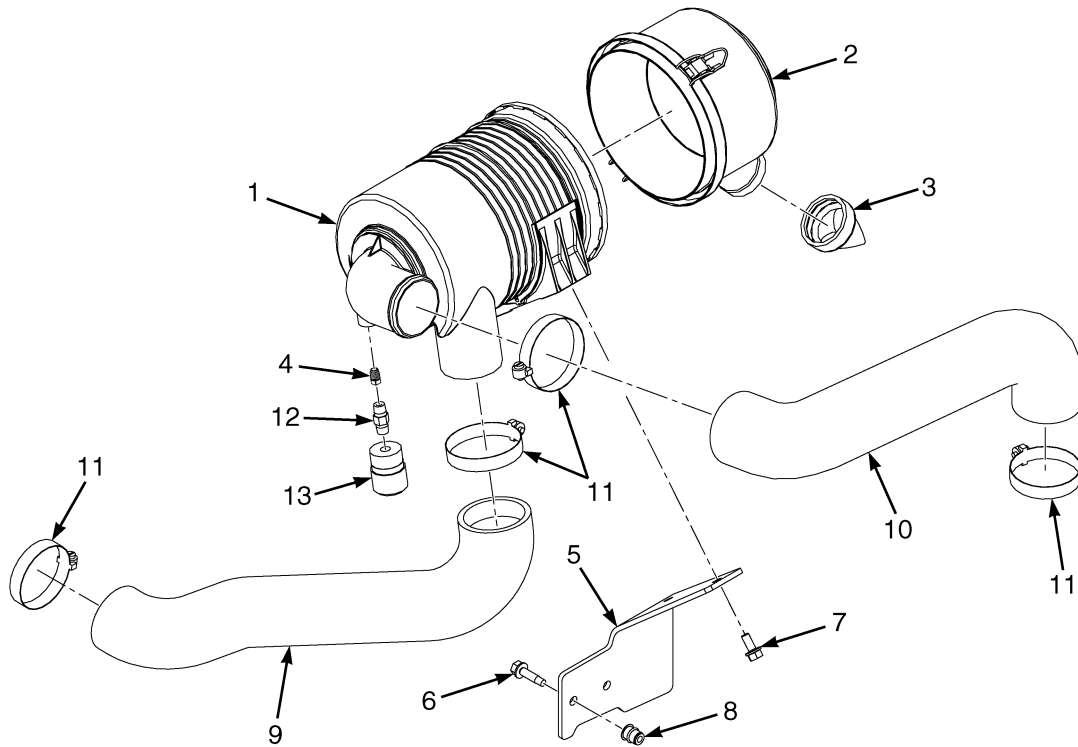
### THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS (FIGURE 4-21)



**THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS**  
**PSI – MONOTROL PEDAL (S/N A380B02500R →)**

| ITEM | PART NO. | DESCRIPTION                            | QTY |
|------|----------|----------------------------------------|-----|
|      | 1615251  | Monotrol Pedal Assembly .....          | 1   |
| 1    | 1556829  | Bracket (Pedal) .....                  | 1   |
| 2    | 1340470  | Pad .....                              | 1   |
| 3    | 2080783  | Wire Harness .....                     | 1   |
| 4    | 2081255  | Clip .....                             | 1   |
| 5    | 302231   | Capscrew .....                         | 4   |
| 6    | 296375   | Washer .....                           | 4   |
| 7    | 292665   | Nut .....                              | 4   |
| 8    | 325699   | Spring .....                           | 2   |
| 9    | 362036   | Washer .....                           | 2   |
| 10   | 15931    | Lockwasher .....                       | 4   |
| 11   | 16708    | Screw .....                            | 4   |
| 12   | 1539418  | Clip .....                             | 1   |
| 13   | 2083605  | Bracket .....                          | 1   |
| 14   | 2027716  | Bushing .....                          | 2   |
| 15   | 2083606  | Shaft .....                            | 1   |
| 16   | 302437   | Roll Pin .....                         | 1   |
| 17   | 2030158  | Square Neck Cup - bolt .....           | 1   |
| 18   | 2022719  | Nut .....                              | 1   |
| 19   | 4166603  | Bracket .....                          | 1   |
| 20   | .....    | Lever .....                            | 1   |
| 21   | 320159   | Washer .....                           | 2   |
| 22   | 2027673  | Pin .....                              | 1   |
| 23   | 2021809  | Bushing .....                          | 2   |
| 24   | 2082033  | Spring .....                           | 2   |
| 25   | 4633511  | Stop .....                             | 1   |
| 26   | 4109993  |                                        |     |
|      | 1527879  | Capscrew .....                         | 2   |
| 26   | 2079533  | Capscrew , M8x1.25x16 (Optional) ..... | 2   |
| 27   | 2066599  | Nut .....                              | 2   |
| 28   | 4114979  | Sensor .....                           | 1   |
| 29   | 302038   | Screw .....                            | 2   |
| 30   | 2099870  | Spring .....                           | 1   |
| 31   | 1398062  | Nut (Fold Over) .....                  | 2   |
| 32   | 4109993  |                                        |     |
|      | 1527879  | Capscrew .....                         | 2   |
| 33   | 2027949  | Ball Joint .....                       | 1   |
| 34   | 320156   | Washer .....                           | 2   |
| 35   | 2083607  | Throttle Link .....                    | 1   |
| 36   | 2027673  | Pin .....                              | 1   |
| 37   | 1307884  |                                        |     |
|      | 1514429  | Nut .....                              | 1   |
| 38   | 1527880  | Capscrew .....                         | 2   |
| 39   | 136687   | Nut .....                              | 1   |

## AIR INTAKE SYSTEM (FIGURE 4-22) WITHOUT SILENCER — YANMAR 2.6L AND 3.3L DIESEL

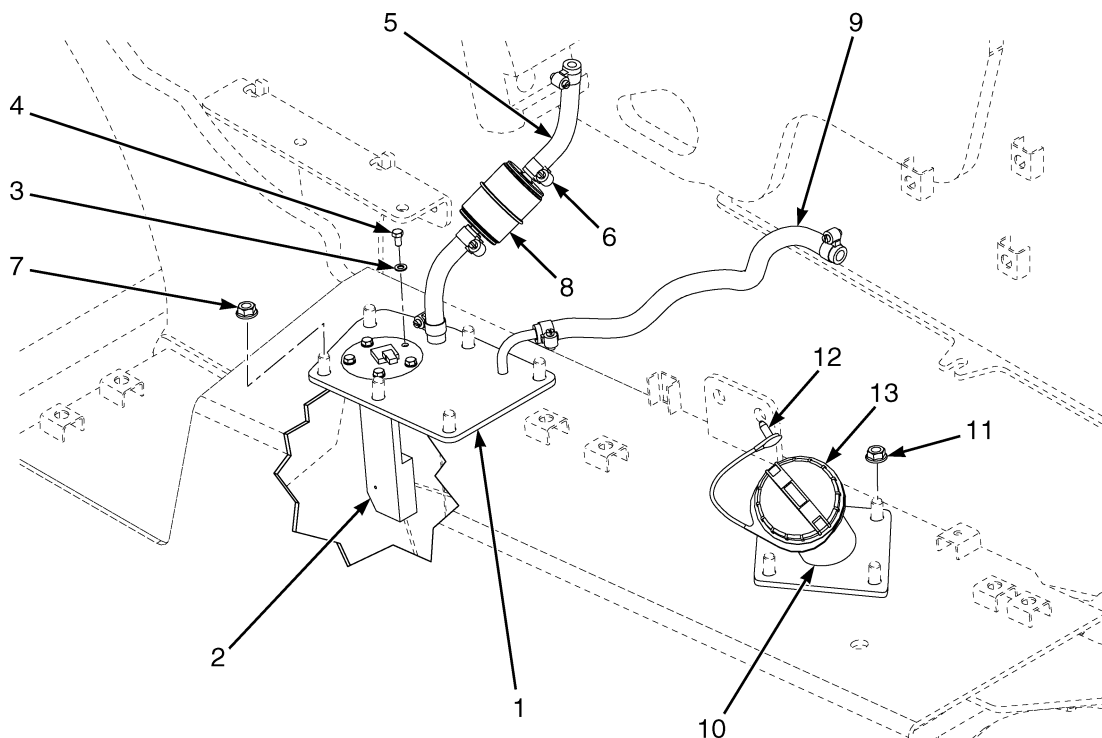


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| ITEM | PART NO.         | DESCRIPTION                                 | QTY |
|------|------------------|---------------------------------------------|-----|
| 1    | 4641251          | Air Filter (Assembly) .....                 | 1   |
|      | 4641272          | Air Filter (Dual Filter Assembly) .....     | 1   |
| 1    | 4137006          | Body (Air Filter Body) .....                | 1   |
| 1    | <b>a</b> 4643493 | Filter Element .....                        | 1   |
| 1    | <b>a</b> 4643003 | Filter Element (Used w/ Dual Element) ..... | 1   |
| 2    | 4137007          | Cover (Remove to change filter) .....       | 1   |
| 3    | 374923           | Valve .....                                 | 1   |
| 4    | 1462442          | Plug (Without Indicator) .....              | 1   |
| 5    | 4121433          | Bracket .....                               | 1   |
| 6    | 1583611          | Capscrew .....                              | 2   |
| 7    | 1608654          | Capscrew .....                              | 2   |
| 8    | 1530243          | Insert .....                                | 2   |
| 9    | 4641162          | Hose (Dirty Air) .....                      | 1   |
| 10   | 4641167          | Hose (Clean Air) .....                      | 1   |
| 11   | 112989           | Hose Clamp .....                            | 4   |
| 12   | 16150            | Fitting .....                               | 1   |
| 13   | 165991           | Indicator (Restriction) .....               | 1   |

### FOOTNOTES:

**a** Not Illustrated

**FUEL SYSTEM (FIGURE 4-23)**  
**YANMAR 2.6 AND 3.3L DIESEL**

BP001004

| ITEM | PART NO.           | DESCRIPTION                                          | QTY |
|------|--------------------|------------------------------------------------------|-----|
| 1    | 4167743            | Cover .....                                          | 1   |
| 2    | 2080643            | Sender .....                                         | 1   |
| 3    | 320155             | Washer .....                                         | 5   |
| 4    | 2021687            | Bolt .....                                           | 5   |
| 5    | 193656             | Hose .....                                           | 1   |
| 6    | 168718             | Clamp .....                                          | 6   |
| 7    | 4382472            | Nut .....                                            | 6   |
| 8    | 4617767            | Fuel Filter .....                                    | 1   |
| 9    | 1610852            | Hose .....                                           | 2   |
| 10   | <b>b</b> 4167745   | Filler Neck .....                                    | 1   |
| 10   | <b>c</b> 4175771   | Filler Neck .....                                    | 1   |
| 11   | 4382472            | Nut .....                                            | 4   |
| 12   | 1379945            | Fastener .....                                       | 1   |
| 13   | <b>b</b> 4122098   | Fuel Cap .....                                       | 1   |
| 13   | <b>c</b> 2081840   | Fuel Cap .....                                       | 1   |
| 13   | <b>a c</b> 2021683 | Gasket .....                                         | 1   |
| 13   | <b>c</b> 1579677   | Fuel Cap (Lockable Version) .....                    | 1   |
| 13   | <b>a c</b> 2021685 | Gasket (Locking Cap) .....                           | 1   |
|      | <b>a</b> 1331037   | Plug (LH, Rear OHG base) .....                       | 1   |
|      | <b>a</b> 1528481   | Plug (With O-Ring for Drain) (Fuel Tank Drain) ..... | 1   |

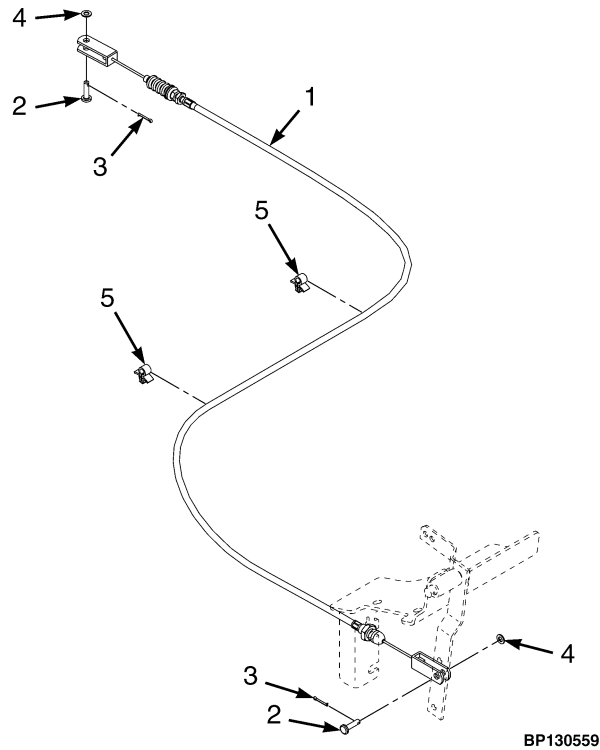
## FOOTNOTES:

**a** Not Illustrated

**b** → 6/2017

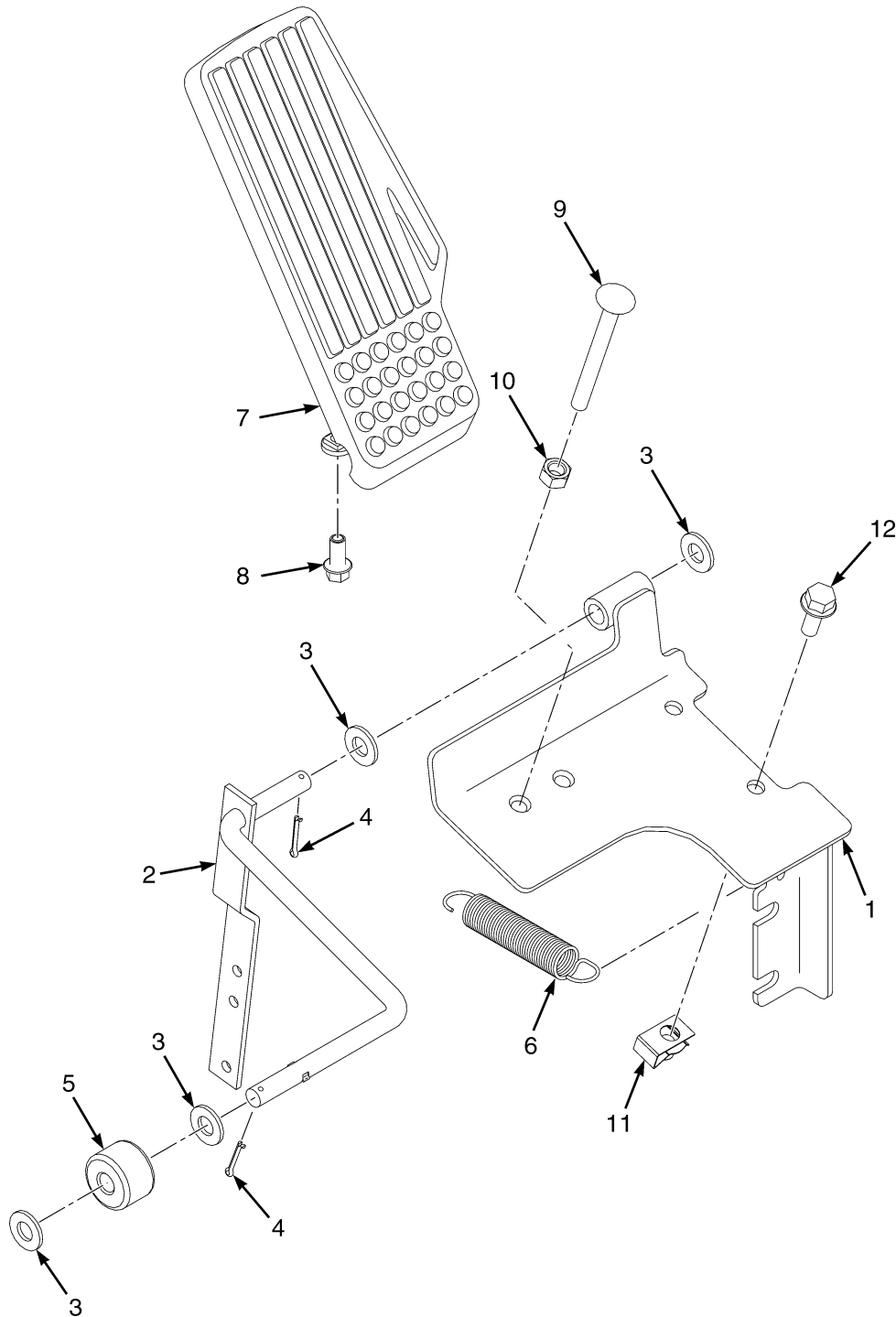
**c** 6/2017 →



**THROTTLE CABLE (FIGURE 4-24)**  
**YANMAR****KEY:****A: Without Speed Limit****B: With Speed Limit**

| ITEM | PART NO. | DESCRIPTION            | QTY |    |
|------|----------|------------------------|-----|----|
|      |          |                        | A   | B  |
| 1    | 2080619  | Throttle Cable .....   | 1   | .. |
| 1    | 2089928  | Cable , Throttle ..... | ..  | 1  |
| 2    | 2022509  | Pin .....              | 2   | 2  |
| 3    | 2027998  | Cotter Pin .....       | 2   | 1  |
| 4    | 320155   | Washer .....           | 2   | 1  |
| 5    | 2080187  | Clip .....             | 2   | 2  |

## THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS (FIGURE 4-25) STANDARD PEDAL YANMAR DIESEL (→ S/N A380B02499R)

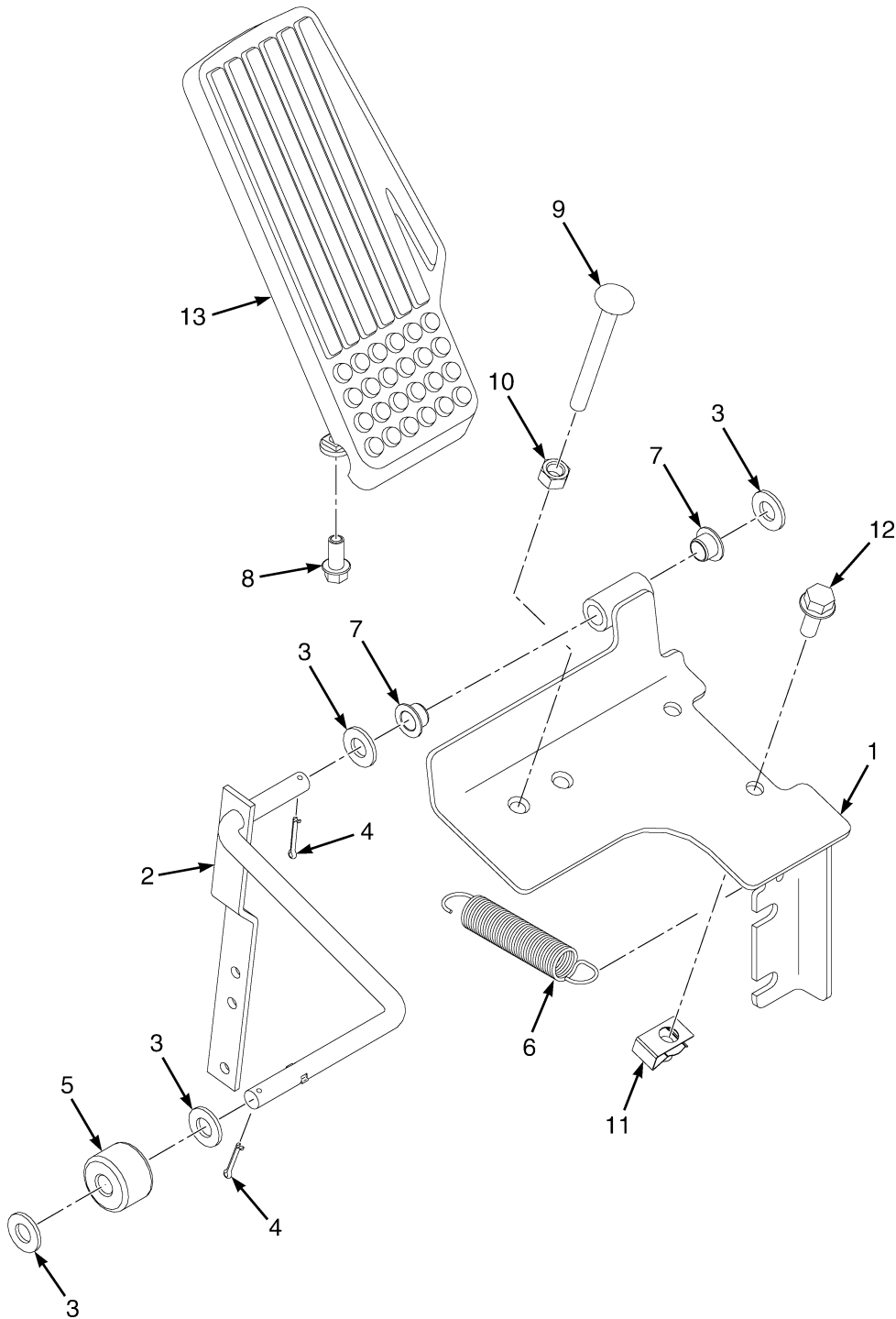


BP130567

**THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS**  
**STANDARD PEDAL YANMAR DIESEL (→ S/N A380B02499R)**

| ITEM | PART NO. | DESCRIPTION           | QTY |
|------|----------|-----------------------|-----|
|      | 2088400  | Bracket .....         | 1   |
| 1    | 2088402  | Bracket Wldmt .....   | 1   |
| 2    | 2082037  | Lever .....           | 1   |
| 3    | 320159   | Washer .....          | 4   |
| 4    | 2027673  | Pin .....             | 2   |
| 5    | 2047782  | Roller .....          | 1   |
| 6    | 2082033  | Spring .....          | 1   |
| 7    | 2027337  | Pedal .....           | 1   |
| 8    | 4111055  |                       |     |
|      | 1527876  | Capscrew .....        | 2   |
| 9    | 4151554  | Bolt .....            | 1   |
| 10   | 2022719  | Nut .....             | 1   |
| 11   | 1398062  | Nut (Fold Over) ..... | 2   |
| 12   | 1527880  | Capscrew .....        | 2   |

## THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS (FIGURE 4-26) STANDARD PEDAL YANMAR DIESEL (S/N A380B02500R →)

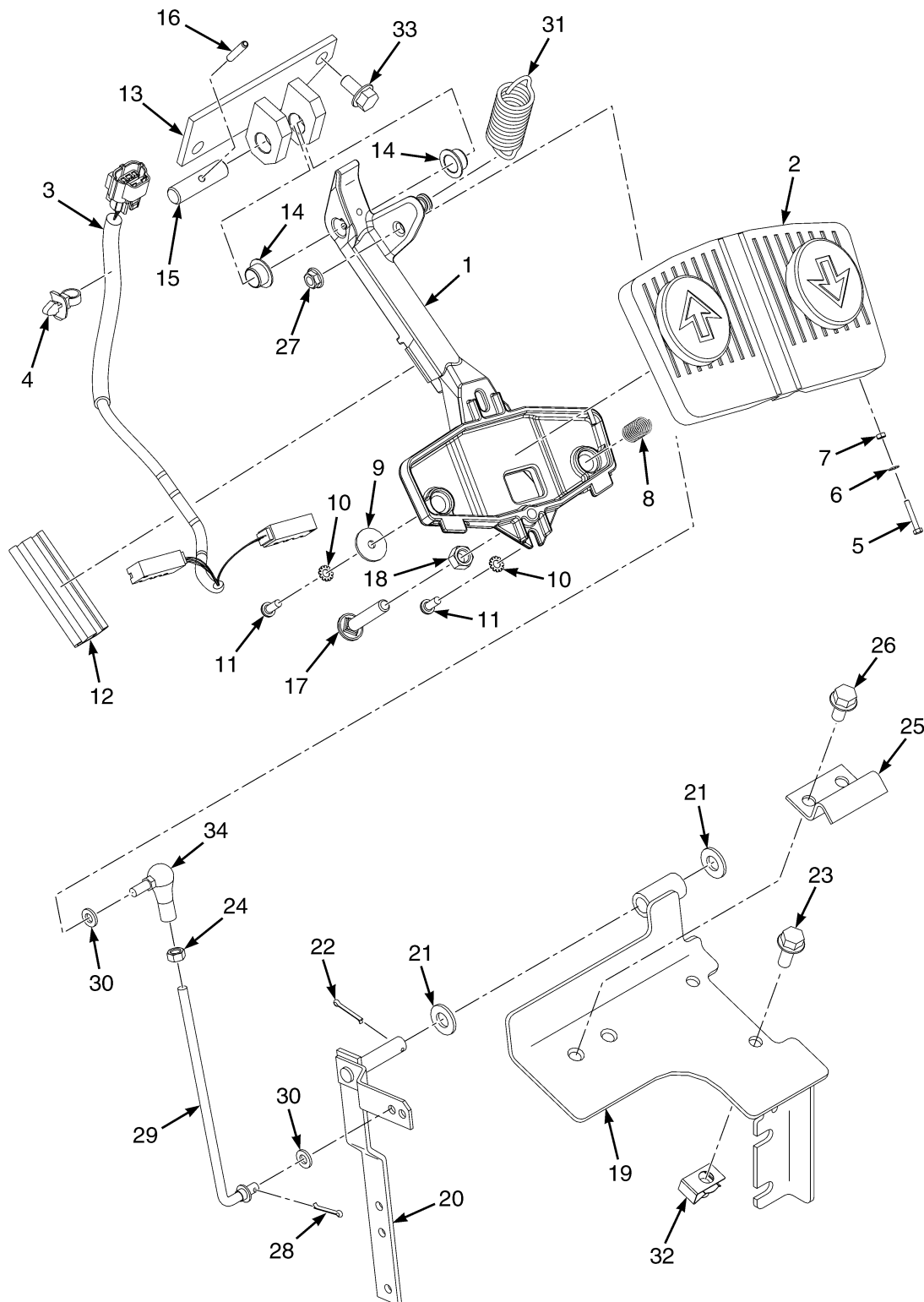


BP130585

**THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS**  
**STANDARD PEDAL YANMAR DIESEL (S/N A380B02500R →)**

| ITEM | PART NO. | DESCRIPTION                        | QTY |
|------|----------|------------------------------------|-----|
|      | 4168155  | Lever , Accelerator Assembly ..... | 1   |
| 1    | 4168154  | Bracket .....                      | 1   |
| 2    | 2082037  | Lever .....                        | 1   |
| 3    | 320159   | Washer .....                       | 4   |
| 4    | 2027673  | Pin .....                          | 2   |
| 5    | 2047782  | Roller .....                       | 1   |
| 6    | 2082033  | Spring .....                       | 1   |
| 7    | 2021809  | Bushing .....                      | 2   |
| 8    | 4111055  |                                    |     |
|      | 1527876  | Capscrew .....                     | 2   |
| 9    | 4151554  | Bolt .....                         | 1   |
| 10   | 2022719  | Nut .....                          | 1   |
| 11   | 1398062  | Nut (Fold Over) .....              | 2   |
| 12   | 1527880  | Capscrew .....                     | 2   |
| 13   | 2027337  | Pedal .....                        | 1   |

## THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS (FIGURE 4-27) MONOTROL PEDAL YANMAR DIESEL (→ S/N A380B02499R)

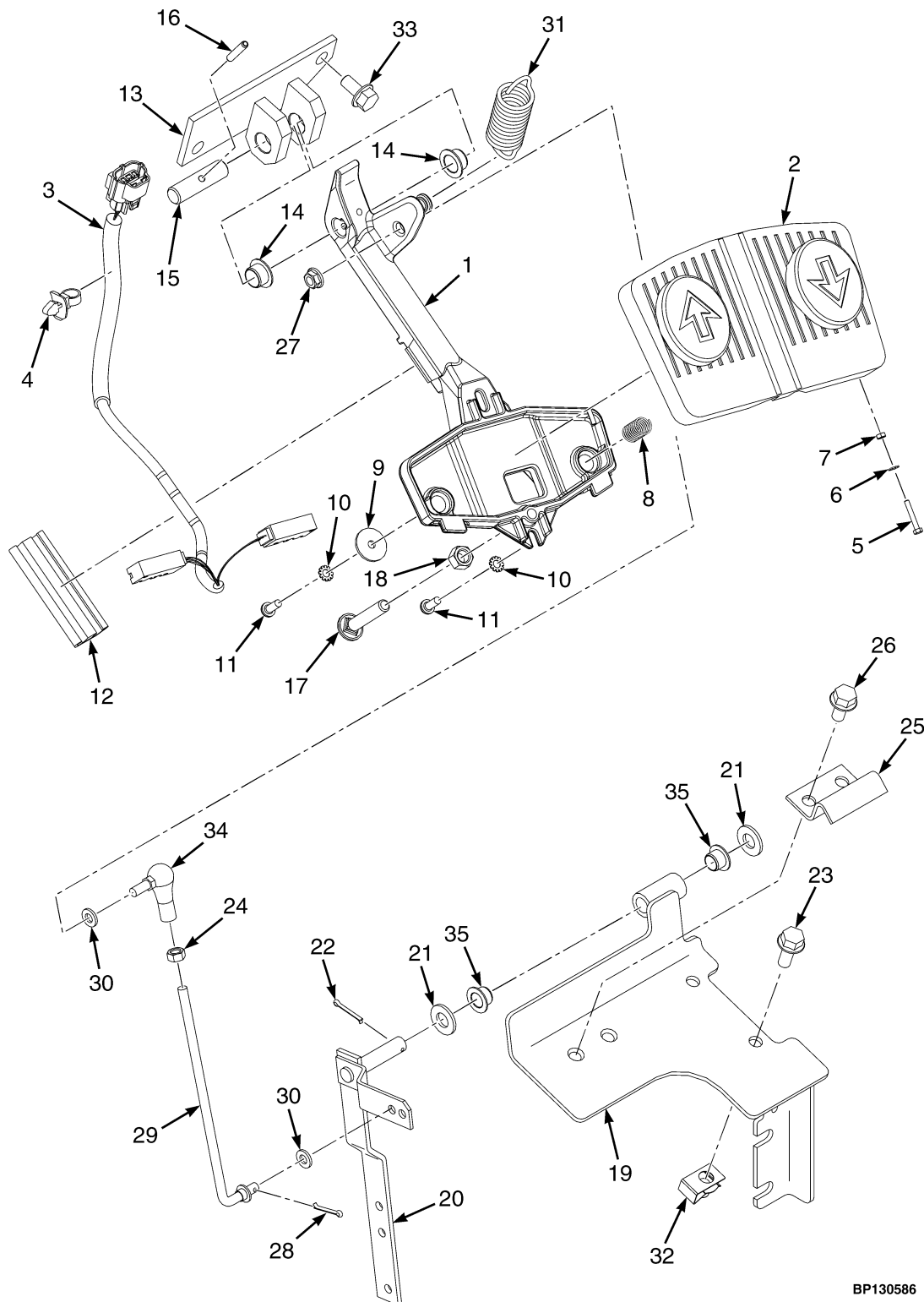


BP130565

**THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS**  
**MONOTROL PEDAL YANMAR DIESEL (→ S/N A380B02499R)**

| ITEM | PART NO. | DESCRIPTION                   | QTY |
|------|----------|-------------------------------|-----|
|      | 1615251  | Monotrol Pedal Assembly ..... | 1   |
| 1    | 1556829  | Bracket (Pedal) .....         | 1   |
| 2    | 1340470  | Pad .....                     | 1   |
| 3    | 2080783  | Wire Harness .....            | 1   |
| 4    | 2081255  | Clip .....                    | 1   |
| 5    | 302231   | Capscrew .....                | 4   |
| 6    | 296375   | Washer .....                  | 4   |
| 7    | 292665   | Nut .....                     | 4   |
| 8    | 325699   | Spring .....                  | 2   |
| 9    | 362036   | Washer .....                  | 2   |
| 10   | 15931    | Lockwasher .....              | 4   |
| 11   | 16708    | Screw .....                   | 4   |
| 12   | 1539418  | Clip .....                    | 1   |
| 13   | 2083605  | Bracket .....                 | 1   |
| 14   | 2027716  | Bushing .....                 | 2   |
| 15   | 2083606  | Shaft .....                   | 1   |
| 16   | 302437   | Roll Pin .....                | 1   |
| 17   | 2030158  | Square Neck Cup - bolt .....  | 1   |
| 18   | 2022719  | Nut .....                     | 1   |
| 19   | 2088402  | Bracket Wldmt .....           | 1   |
| 20   | 2082465  | Throttle Link .....           | 1   |
| 21   | 320159   | Washer .....                  | 2   |
| 22   | 2027673  | Pin .....                     | 1   |
| 23   | 1527880  | Capscrew .....                | 2   |
| 24   | 136687   | Nut .....                     | 1   |
| 25   | 2082912  | Bracket .....                 | 1   |
| 26   | 4109993  |                               |     |
|      | 1527879  | Capscrew .....                | 2   |
| 26   | 2079533  | Capscrew , M8x1.25x16 .....   | 2   |
| 27   | 1307884  |                               |     |
|      | 1514429  | Nut .....                     | 1   |
| 28   | 2027673  | Pin .....                     | 1   |
| 29   | 2083607  | Throttle Link .....           | 1   |
| 30   | 320156   | Washer .....                  | 2   |
| 31   | 2099870  | Spring .....                  | 1   |
| 32   | 1398062  | Nut (Fold Over) .....         | 2   |
| 33   | 4109993  |                               |     |
|      | 1527879  | Capscrew .....                | 2   |
| 34   | 2027949  | Ball Joint .....              | 2   |

## THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS (FIGURE 4-28) MONOTROL PEDAL YANMAR DIESEL (S/N A380B02500R →)



BP130586



# **THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS** **MONOTROL PEDAL YANMAR DIESEL (S/N A380B02500R →)**

| ITEM | PART NO. | DESCRIPTION                   | QTY |
|------|----------|-------------------------------|-----|
|      | 1615251  | Monotrol Pedal Assembly ..... | 1   |
| 1    | 1556829  | Bracket (Pedal) .....         | 1   |
| 2    | 1340470  | Pad .....                     | 1   |
| 3    | 2080783  | Wire Harness .....            | 1   |
| 4    | 2081255  | Clip .....                    | 1   |
| 5    | 302231   | Capscrew .....                | 4   |
| 6    | 296375   | Washer .....                  | 4   |
| 7    | 292665   | Nut .....                     | 4   |
| 8    | 325699   | Spring .....                  | 2   |
| 9    | 362036   | Washer .....                  | 2   |
| 10   | 15931    | Lockwasher .....              | 4   |
| 11   | 16708    | Screw .....                   | 4   |
| 12   | 1539418  | Clip .....                    | 1   |
| 13   | 2083605  | Bracket .....                 | 1   |
| 14   | 2027716  | Bushing .....                 | 2   |
| 15   | 2083606  | Shaft .....                   | 1   |
| 16   | 302437   | Roll Pin .....                | 1   |
| 17   | 2030158  | Square Neck Cup - bolt .....  | 1   |
| 18   | 2022719  | Nut .....                     | 1   |
| 19   | 4168154  | Bracket .....                 | 1   |
| 20   | 2082465  | Throttle Link .....           | 1   |
| 21   | 320159   | Washer .....                  | 2   |
| 22   | 2027673  | Pin .....                     | 1   |
| 23   | 1527880  | Capscrew .....                | 2   |
| 24   | 136687   | Nut .....                     | 1   |
| 25   | 2082912  | Bracket .....                 | 1   |
| 26   | 4109993  |                               |     |
|      | 1527879  | Capscrew .....                | 2   |
| 26   | 2079533  | Capscrew , M8x1.25x16 .....   | 2   |
| 27   | 1307884  |                               |     |
|      | 1514429  | Nut .....                     | 1   |
| 28   | 2027673  | Pin .....                     | 1   |
| 29   | 2083607  | Throttle Link .....           | 1   |
| 30   | 320156   | Washer .....                  | 2   |
| 31   | 2099870  | Spring .....                  | 1   |
| 32   | 1398062  | Nut (Fold Over) .....         | 2   |
| 33   | 4109993  |                               |     |
|      | 1527879  | Capscrew .....                | 2   |
| 34   | 2027949  | Ball Joint .....              | 2   |
| 35   | 2021809  | Bushing .....                 | 2   |

## This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

**5**

**ELECTRICAL SYSTEM-COMMON TO UNIT**

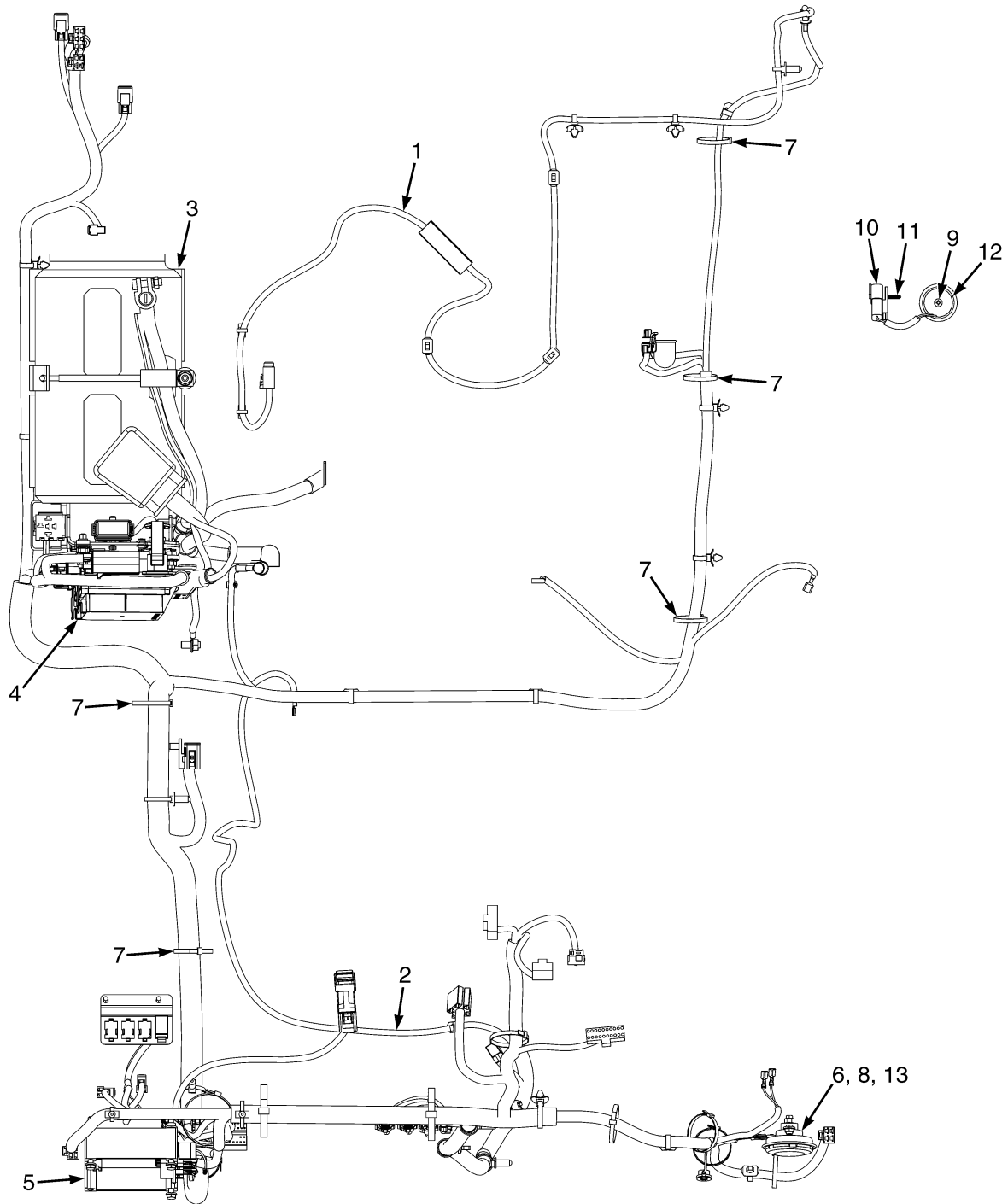


## SECTION 5

### ELECTRICAL SYSTEM-COMMON TO UNIT

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## ELECTRICAL ARRANGEMENT (FIGURE 5-1) FRAME — PSI 2.4L LPG AND 2.4L BI-FUEL



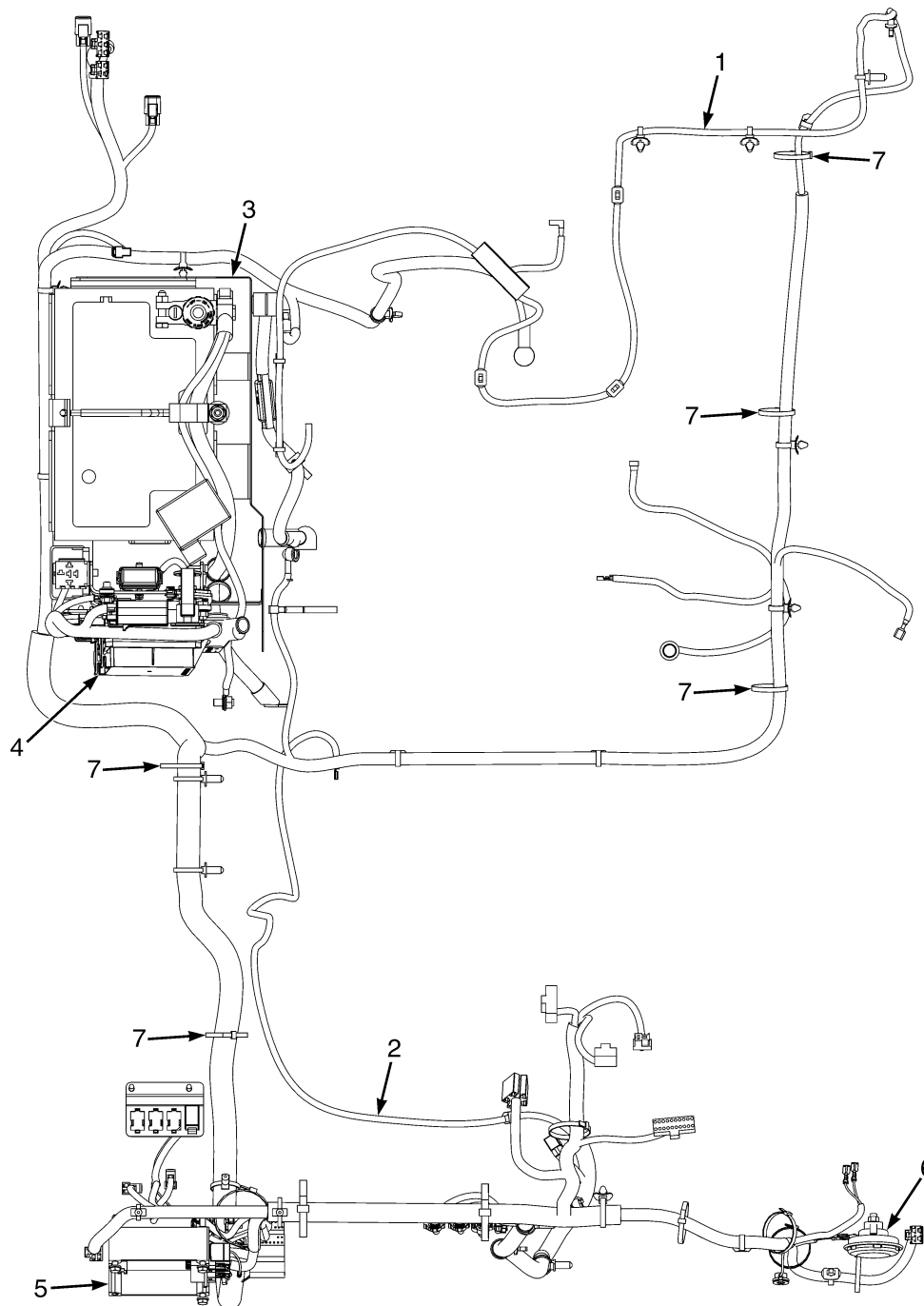
BP082290

**ELECTRICAL ARRANGEMENT**  
**FRAME – PSI 2.4L LPG AND 2.4L BI-FUEL**

| ITEM | PART NO.                    | DESCRIPTION                                                             | QTY |
|------|-----------------------------|-------------------------------------------------------------------------|-----|
| 1    | <b>b</b> 4653304            | Wire Harness (Frame / LPG) (☞ Figure 5-3, ☞ Figure 5-29).....           | 1   |
| 1    | <b>c</b> 4656379            | Wire Harness (Frame / LPG) (☞ Figure 5-3, ☞ Figure 5-29).....           | 1   |
| 1    | <b>c</b> 4655553            | Wire Harness (Frame / LPG w/MLM) (☞ Figure 5-3, ☞ Figure 5-30).....     | 1   |
| 1    | <b>b</b> 4653303            | Wire Harness (Frame / Bi-Fuel) (☞ Figure 5-3, ☞ Figure 5-29).....       | 1   |
| 1    | <b>c</b> 4656443            | Wire Harness (Frame / Bi-Fuel) (☞ Figure 5-3, ☞ Figure 5-29).....       | 1   |
| 1    | <b>c</b> 4655552            | Wire Harness (Frame / Bi-Fuel w/MLM) (☞ Figure 5-3, ☞ Figure 5-30)..... | 1   |
| 2    | 4641177                     | Wire Harness (Cowl) (Forward and Reverse Lever) (☞ Figure 5-7).....     | 1   |
| 2    | 4641181                     | Wire Harness (Cowl) (Monotrol) (☞ Figure 5-6).....                      | 1   |
| 3    | .....                       | Battery and Cables (☞ Figure 5-15, ☞ Figure 5-13).....                  | 1   |
| 4    | .....                       | Fuse Box (Power Distribution Module) (☞ Figure 5-9).....                | 1   |
| 5    | <del>4653388</del>          |                                                                         |     |
|      | <del>4656574</del>          |                                                                         |     |
|      | <del>4666940</del>          |                                                                         |     |
|      | 4674509                     | Controller .....                                                        | 1   |
| 5    | <b>a</b> 292507             | Capscrew .....                                                          | 3   |
| 5    | <b>a</b> <del>1307884</del> |                                                                         |     |
|      | 1514429                     | Nut .....                                                               | 3   |
| 5    | <b>a</b> 320156             | Washer .....                                                            | 3   |
| 5    | <b>a</b> 296379             | Washer .....                                                            | 3   |
| 6    | 2090881                     | Horn .....                                                              | 1   |
| 7    | 137852                      | Strap Clamp .....                                                       | 7   |
| 8    | <del>1307884</del>          |                                                                         |     |
|      | 1514429                     | Nut .....                                                               | 1   |
| 9    | 4147108                     | Screw .....                                                             | 1   |
| 10   | 1500912                     | Clip .....                                                              | 1   |
| 11   | 1582464                     | Fastener .....                                                          | 1   |
| 12   | 4133287                     | Buzzer .....                                                            | 1   |
| 13   | 1534417                     | Capscrew .....                                                          | 1   |

**FOOTNOTES:****a** Not Illustrated**c** 2/2017 →**b** → 2/2017

## ELECTRICAL ARRANGEMENT (FIGURE 5-2) FRAME — YANMAR DIESEL



BP082289



**ELECTRICAL ARRANGEMENT  
FRAME – YANMAR DIESEL**

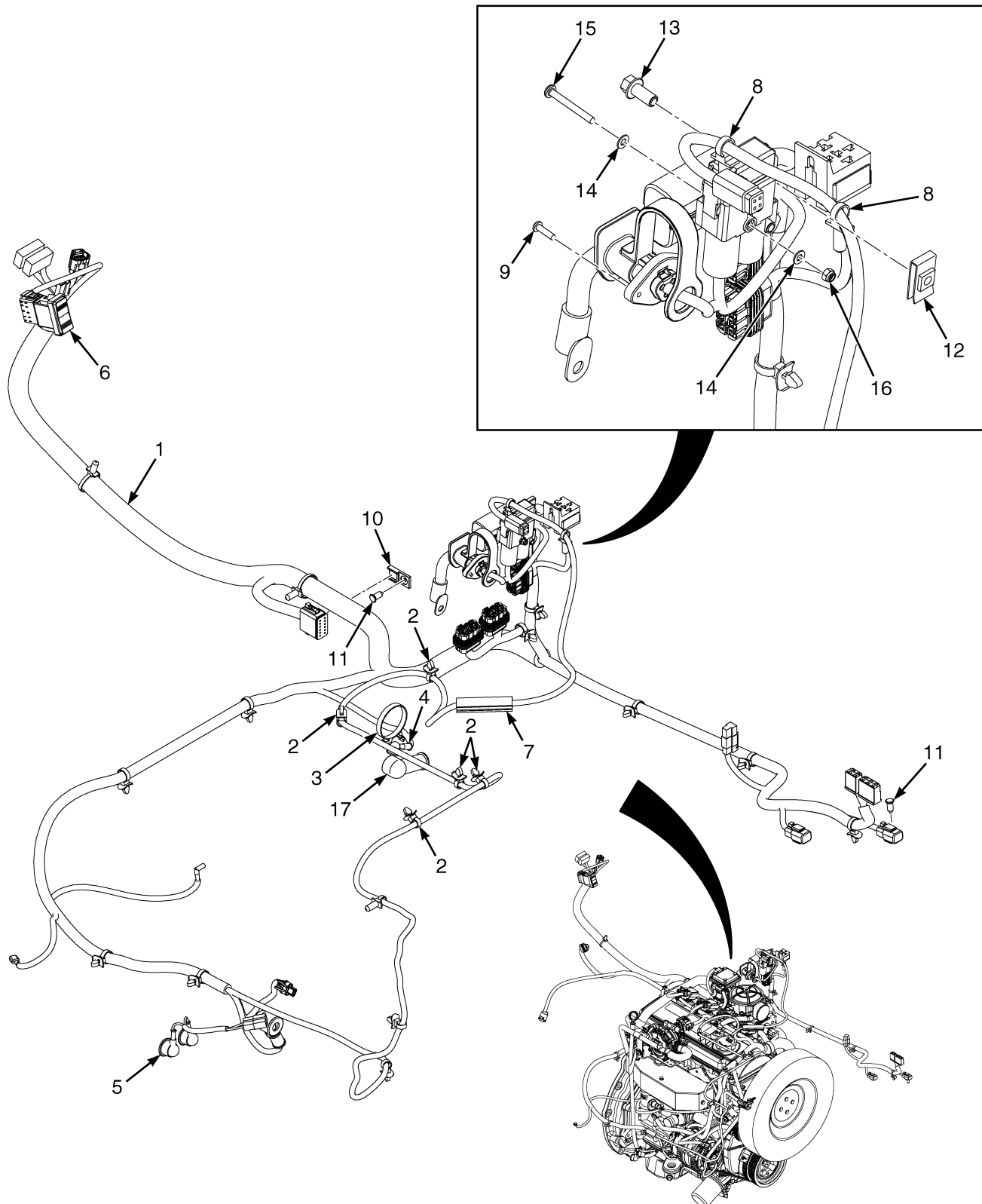
| ITEM | PART NO.                    | DESCRIPTION                                                          | QTY |
|------|-----------------------------|----------------------------------------------------------------------|-----|
| 1    | <b>b</b> 4653302            | Wire Harness (Frame / Diesel) (☞Figure 5-4, ☞Figure 5-31).....       | 1   |
| 1    | <b>c</b> 4656380            | Wire Harness (Frame / Diesel) (☞Figure 5-5, ☞Figure 5-31).....       | 1   |
| 1    | 4655683                     | Wire Harness (Frame / Diesel w/MLM) (☞Figure 5-5, ☞Figure 5-32)..... | 1   |
| 2    | 4641177                     | Wire Harness (Cowl) (Forward and Reverse Lever) (☞Figure 5-25).....  | 1   |
| 2    | 4641181                     | Wire Harness (Cowl) (Monotrol) (☞Figure 5-26).....                   | 1   |
| 3    | .....                       | Battery and Cables (☞Figure 5-14, ☞Figure 5-16).....                 | 1   |
| 4    | .....                       | Fuse Box (Power Distribution Module) (☞Figure 5-9).....              | 1   |
| 5    | <del>4653388</del>          |                                                                      |     |
|      | <del>4656574</del>          |                                                                      |     |
|      | <del>4666940</del>          |                                                                      |     |
|      | 4674509                     | Controller .....                                                     | 1   |
| 5    | <b>a</b> 292507             | Capscrew .....                                                       | 3   |
| 5    | <b>a</b> <del>1307884</del> |                                                                      |     |
|      | 1514429                     | Nut .....                                                            | 3   |
| 5    | <b>a</b> 320156             | Washer .....                                                         | 3   |
| 5    | <b>a</b> 296379             | Washer .....                                                         | 3   |
| 6    | 2090881                     | Horn .....                                                           | 1   |
| 6    | 1534417                     | Capscrew .....                                                       | 1   |
| 7    | 137852                      | Strap Clamp .....                                                    | 7   |

**FOOTNOTES:**

**a** Not Illustrated  
**b** → 2/2017

**c** 2/2017 →

## HARNESS GROUP (FIGURE 5-3) FRAME — PSI 2.4L LPG AND 2.4L BI-FUEL



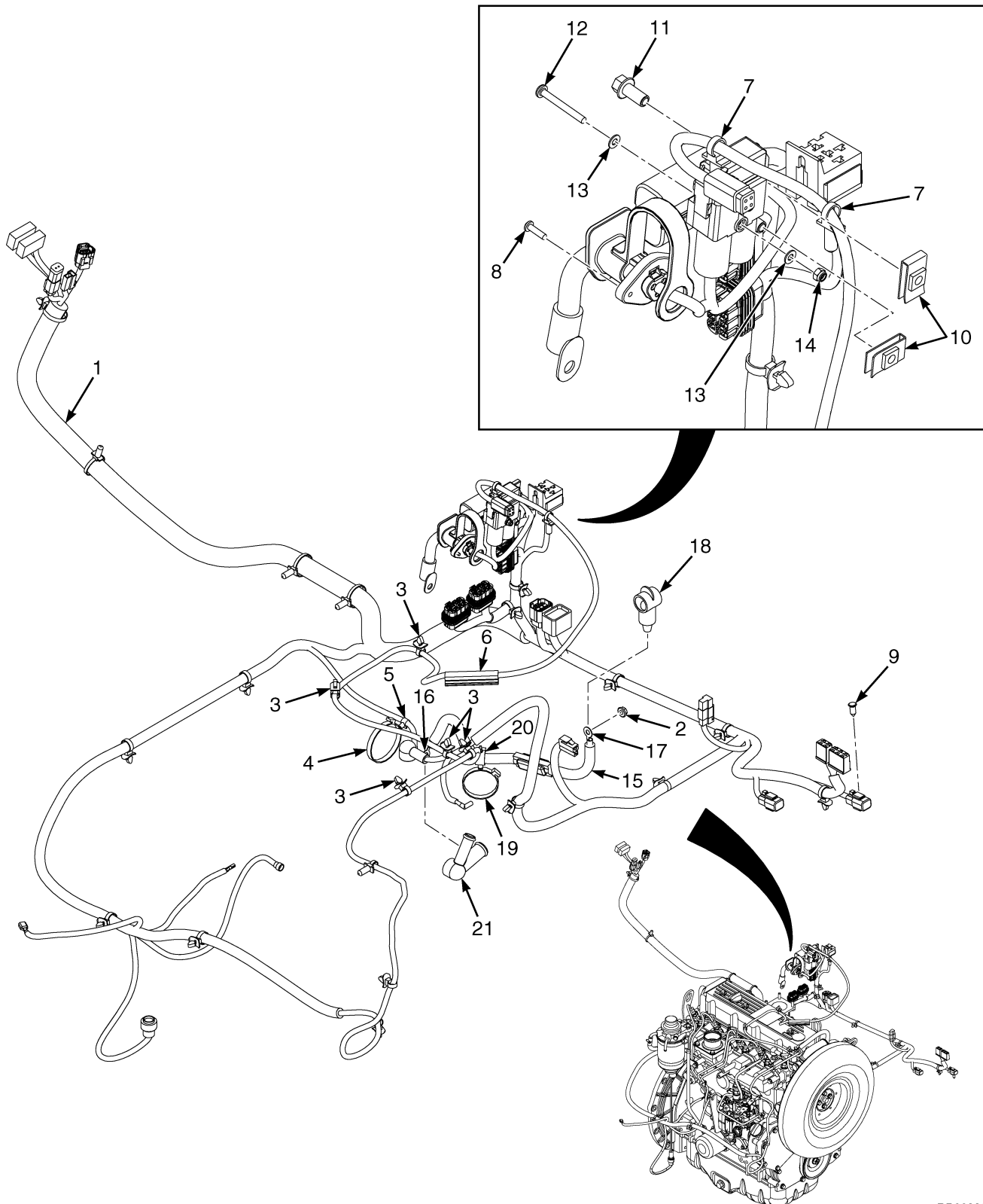
BP082262

**HARNESS GROUP**  
**FRAME – PSI 2.4L LPG AND 2.4L BI-FUEL**

| ITEM | PART NO.           | DESCRIPTION                                           | QTY |
|------|--------------------|-------------------------------------------------------|-----|
| 1    | <b>a</b> 4653303   | Wire Harness (PSI Bi-Fuel) (☞ Figure 5-29).....       | 1   |
| 1    | <b>b</b> 4656443   | Wire Harness (PSI Bi-Fuel) (☞ Figure 5-29).....       | 1   |
| 1    | <b>b</b> 4655552   | Wire Harness (PSI Bi-Fuel w/MLM) (☞ Figure 5-30)..... | 1   |
| 1    | <b>a</b> 4653304   | Wire Harness (PSI LPG) (☞ Figure 5-29).....           | 1   |
| 1    | <b>b</b> 4656379   | Wire Harness (PSI LPG) (☞ Figure 5-29).....           | 1   |
| 1    | <b>b</b> 4655553   | Wire Harness (PSI LPG w/MLM) (☞ Figure 5-30).....     | 1   |
| 2    | 4140362            | Cable Clip .....                                      | 5   |
| 3    | 4160428            | Clamp (Swivel Tie) .....                              | 1   |
| 4    | 1542440            | Clamp (Swivel) .....                                  | 1   |
| 5    | <b>a</b> 4640596   | Wire Harness (Pump Motor) .....                       | 1   |
| 6    | 2081385            | Switch .....                                          | 1   |
| 7    | 2314499            | Duct .....                                            | 1   |
| 8    | 4140361            | Cable Clip .....                                      | 2   |
| 9    | 1554902            | Screw .....                                           | 2   |
| 10   | 1500912            | Clip .....                                            | 1   |
| 11   | 1582464            | Fastener .....                                        | 2   |
| 12   | 1566420            | Nut (Foldover) .....                                  | 2   |
| 13   | <del>4111055</del> |                                                       |     |
|      | 1527876            | Capscrew .....                                        | 2   |
| 14   | 320154             | Washer .....                                          | 4   |
| 15   | 302027             | Screw .....                                           | 2   |
| 16   | 815597             | Nut .....                                             | 2   |
| 17   | 4007955            | Boot .....                                            | 1   |

**FOOTNOTES:****a** → 2/2017**b** 2/2017 →

## HARNESS GROUP (FIGURE 5-4) FRAME — YANMAR DIESEL (→ 2/2017)

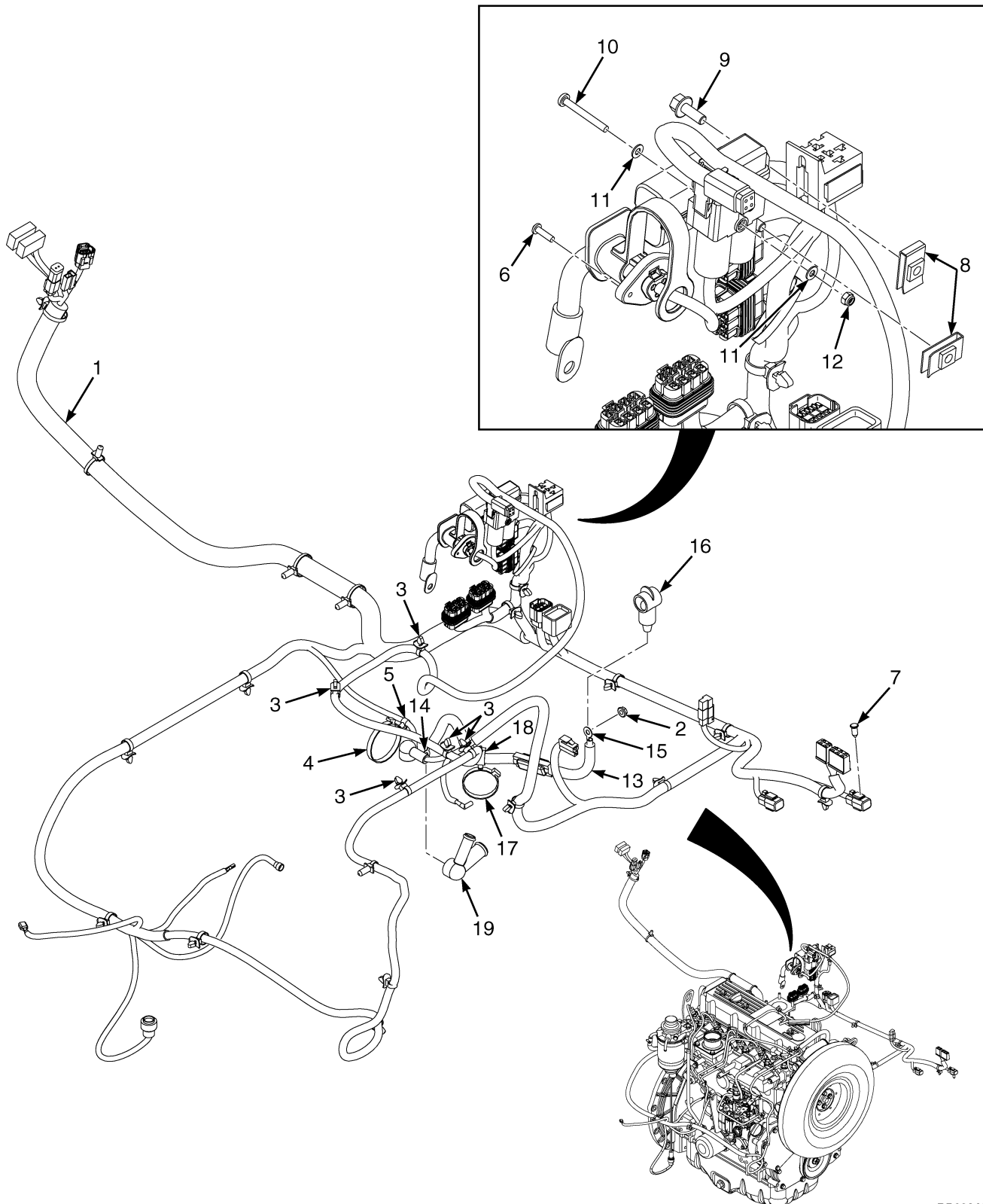


BP082263

**HARNES GROUP**  
**FRAME – YANMAR DIESEL (→ 2/2017)**

| ITEM | PART NO.           | DESCRIPTION                                        | QTY |
|------|--------------------|----------------------------------------------------|-----|
| 1    | 4653302            | Wire Harness (Frame / Diesel) (☞ Figure 5-31)..... | 1   |
| 2    | <del>1307884</del> |                                                    |     |
|      | 1514429            | Nut .....                                          | 1   |
| 3    | 4140362            | Cable Clip .....                                   | 5   |
| 4    | 1502061            | Clamp (Swivel) .....                               | 1   |
| 5    | 1542440            | Clamp (Swivel) .....                               | 1   |
| 6    | 2314499            | Duct .....                                         | 1   |
| 7    | 4140361            | Cable Clip .....                                   | 2   |
| 8    | 1554902            | Screw .....                                        | 2   |
| 9    | 1582464            | Fastener .....                                     | 1   |
| 10   | 1566420            | Nut (Foldover) .....                               | 2   |
| 11   | <del>4111055</del> |                                                    |     |
|      | 1527876            | Capscrew .....                                     | 2   |
| 12   | 302027             | Screw .....                                        | 2   |
| 13   | 320154             | Washer .....                                       | 4   |
| 14   | 815597             | Nut .....                                          | 2   |
| 15   | 4632723            | Wire Harness (Fused Alternator) .....              | 1   |
| 16   | 148615             | E-Ring 5/16 .....                                  | 1   |
| 17   | 148614             | E-Ring 1/4 .....                                   | 1   |
| 18   | 4050800            | Boot .....                                         | 1   |
| 19   | 1644398            | Clamp (Swivel) .....                               | 1   |
| 20   | 1543691            | Clamp (Swivel) .....                               | 1   |
| 21   | 1661688            | Boot .....                                         | 1   |
|      | 222523             | Heat Shrink .....                                  | AR  |

## HARNESS GROUP (FIGURE 5-5) FRAME — YANMAR DIESEL (2/2017 →)

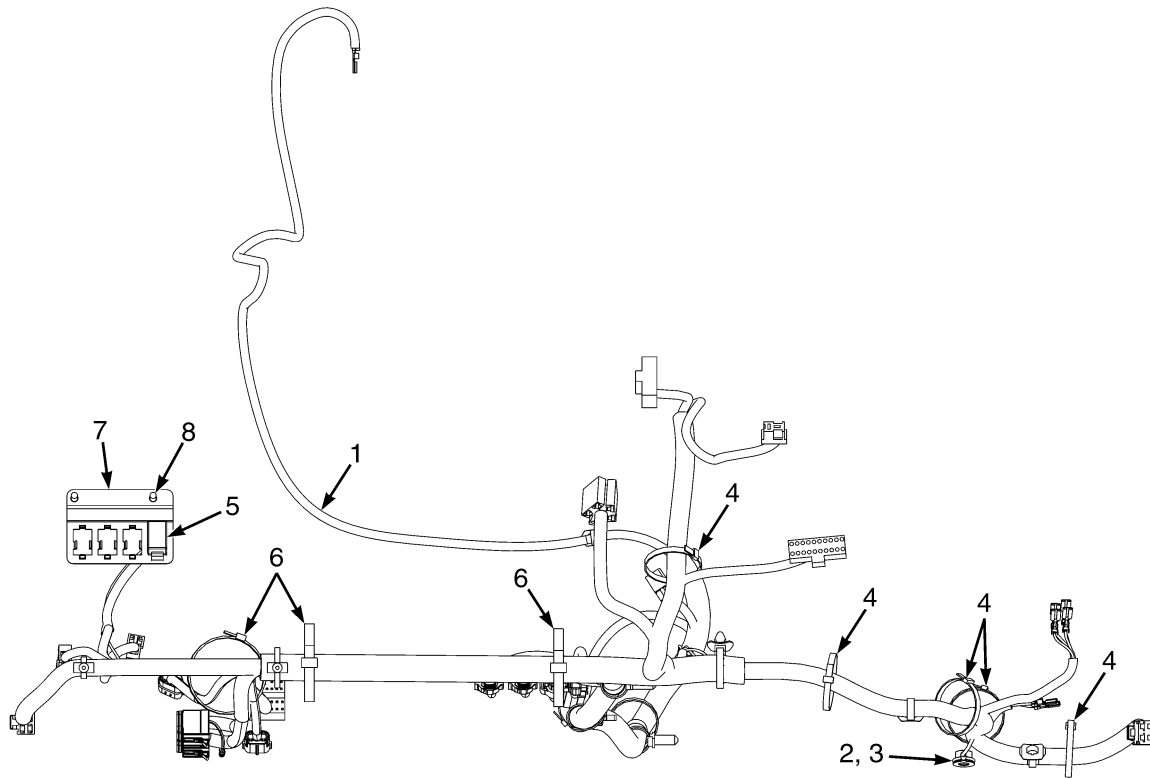


BP082422

## HARNES GROUP

### FRAME – YANMAR DIESEL (2/2017 →)

| ITEM | PART NO.           | DESCRIPTION                                             | QTY |
|------|--------------------|---------------------------------------------------------|-----|
| 1    | 4656380            | Wire Harness (Frame / Diesel) (☞Figure 5-31).....       | 1   |
| 1    | 4655683            | Wire Harness (Frame / Diesel w/MLM) (☞Figure 5-30)..... | 1   |
| 2    | <del>1307884</del> |                                                         |     |
|      | 1514429            | Nut .....                                               | 1   |
| 3    | 4140362            | Cable Clip .....                                        | 5   |
| 4    | 1502061            | Clamp (Swivel) .....                                    | 1   |
| 5    | 1542440            | Clamp (Swivel) .....                                    | 1   |
| 6    | 1554902            | Screw .....                                             | 2   |
| 7    | 1582464            | Fastener .....                                          | 1   |
| 8    | 1566420            | Nut (Foldover) .....                                    | 2   |
| 9    | <del>4111055</del> |                                                         |     |
|      | 1527876            | Capscrew .....                                          | 2   |
| 10   | 302027             | Screw .....                                             | 2   |
| 11   | 320154             | Washer .....                                            | 4   |
| 12   | 815597             | Nut .....                                               | 2   |
| 13   | 4632723            | Wire Harness (Fused Alternator) .....                   | 1   |
| 14   | 148615             | E-Ring 5/16 .....                                       | 1   |
| 15   | 148614             | E-Ring 1/4 .....                                        | 1   |
| 16   | 4050800            | Boot .....                                              | 1   |
| 17   | 1644398            | Clamp (Swivel) .....                                    | 1   |
| 18   | 1543691            | Clamp (Swivel) .....                                    | 1   |
| 19   | 1661688            | Boot .....                                              | 1   |
|      | 222523             | Heat Shrink .....                                       | AR  |

**COWL ELECTRICAL (FIGURE 5-6)  
MONOTROL**

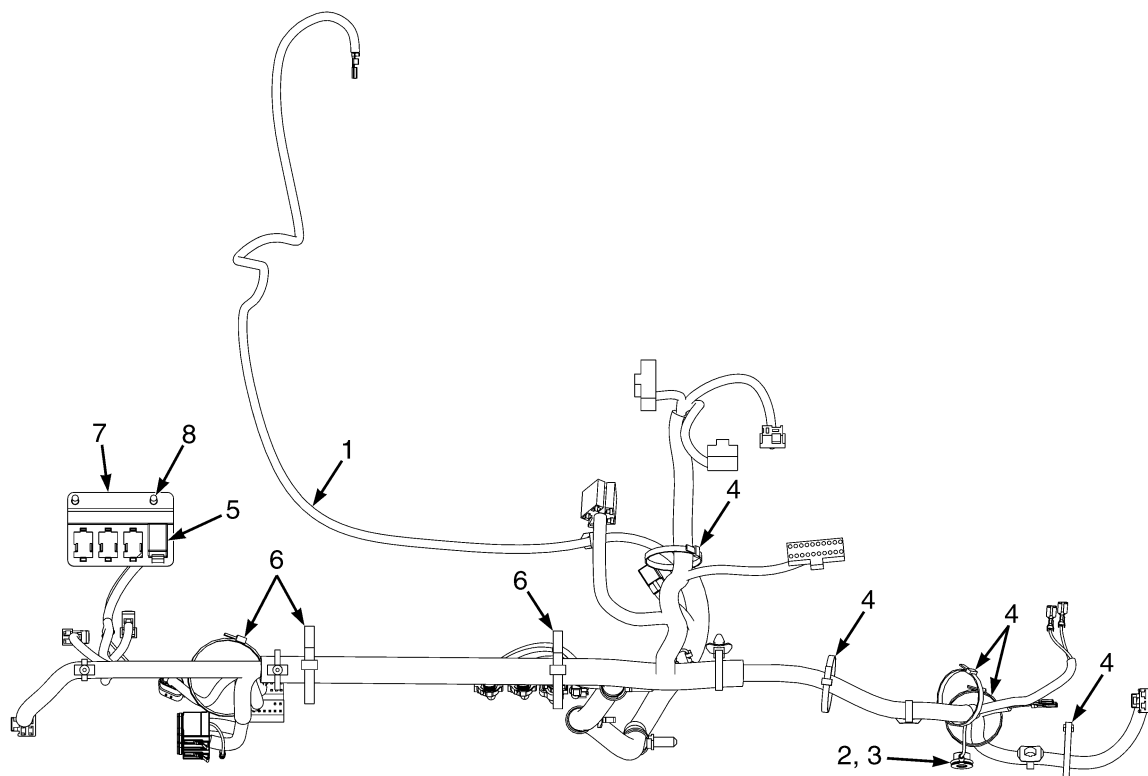
BP082286

| ITEM | PART NO.         | DESCRIPTION                                         | QTY |
|------|------------------|-----------------------------------------------------|-----|
| 1    | 4641181          | Wire Harness (Cowl) (Monotrol) (☞ Figure 5-26)..... | 1   |
| 2    | 296380           | Washer .....                                        | 1   |
| 3    | 1382472          |                                                     |     |
|      | 1502543          | Nut .....                                           | 1   |
| 4    | 137852           | Strap Clamp .....                                   | 7   |
| 5    | 4145648          | Relay .....                                         | 1   |
| 5    | <b>a</b> 4158371 | Relay .....                                         | 1   |
| 6    | 129563           | Strap Clamp .....                                   | 3   |
| 7    | 2085247          | Bracket (Relay) .....                               | 1   |
| 8    | 2027655          | Screw .....                                         | 2   |

**FOOTNOTES:****a** Optional



### COWL ELECTRICAL (FIGURE 5-7) FORWARD AND REVERSE LEVER



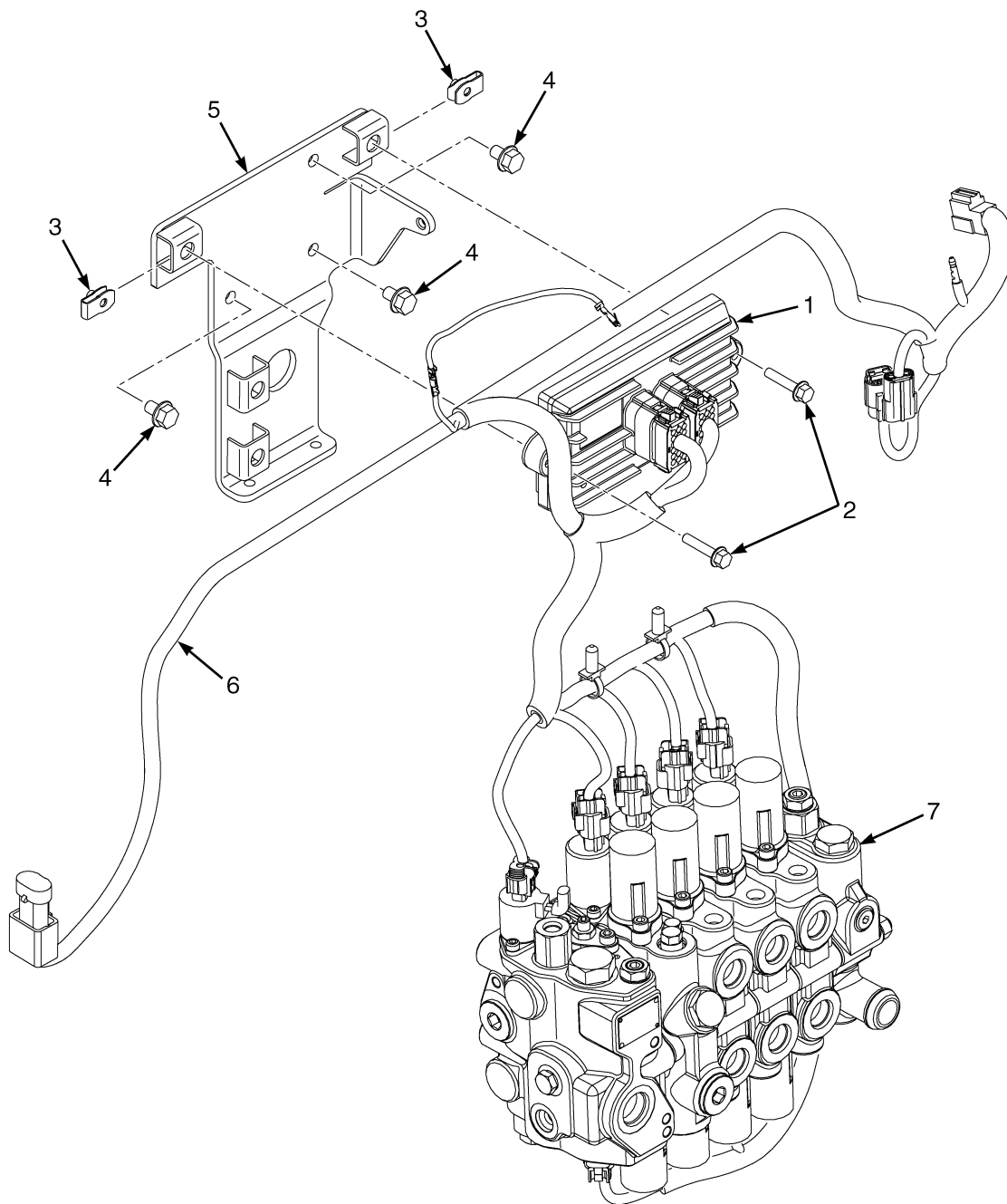
BP082286

| ITEM | PART NO.           | DESCRIPTION                                         | QTY |
|------|--------------------|-----------------------------------------------------|-----|
| 1    | 4641177            | Wire Harness (Cowl) (F/R Lever) (☞Figure 5-25)..... | 1   |
| 2    | <del>4382472</del> |                                                     |     |
|      | 1502543            | Nut .....                                           | 1   |
| 3    | 296380             | Washer .....                                        | 1   |
| 4    | 137852             | Strap Clamp .....                                   | 7   |
| 5    | 4145648            | Relay .....                                         | 1   |
| 5    | <b>a</b> 4158371   | Relay .....                                         | 1   |
| 6    | 129563             | Strap Clamp .....                                   | 3   |
| 7    | 2085247            | Bracket (Relay) .....                               | 1   |
| 8    | 2027655            | Screw .....                                         | 2   |

**FOOTNOTES:**

**a** Optional

## CONTROLLER (FIGURE 5-8) E-HYDRAULICS



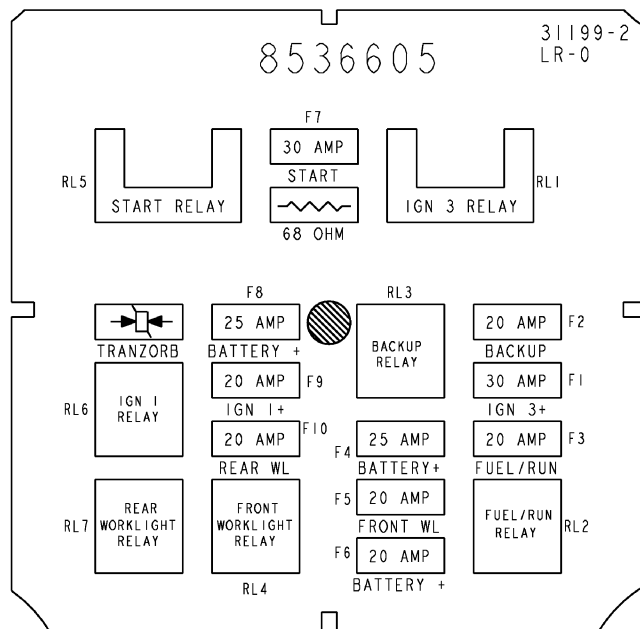
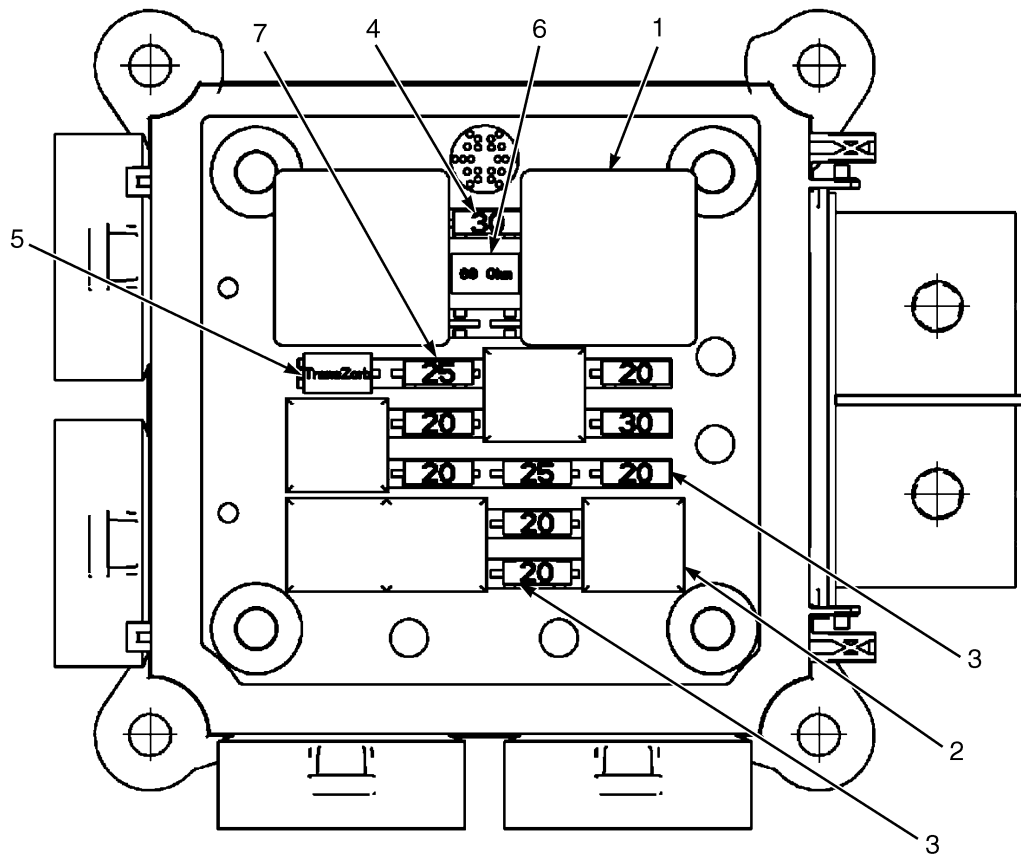
BP082395

**CONTROLLER  
E-HYDRAULICS**

| ITEM | PART NO.                      | DESCRIPTION                                   | QTY |
|------|-------------------------------|-----------------------------------------------|-----|
| 1    | 4656057                       | Controller (E-Hydraulics) .....               | 1   |
| 2    | 1531479                       | Capscrew .....                                | 1   |
| 3    | 1566420                       | Nut (Foldover) .....                          | 1   |
| 4    | 1529366                       | Capscrew .....                                | 3   |
| 5    | <del>4150189</del><br>4168480 | Bracket Wldmt .....                           | 1   |
| 6    | <b>b</b> 4653938              | Wire Harness (E-Hyd 3 Function) .....         | 1   |
| 6    | <b>b</b> 4653937              | Wire Harness (E-Hyd 4 Function) .....         | 1   |
| 7    | .....                         | Hydraulic Control Valve (☞ Figure 10-17)..... | 1   |
| 8    | <b>a</b> 137852               | Strap Clamp .....                             | 1   |

**FOOTNOTES:****a** Not illustrated**b** 10/2016 →

## POWER DISTRIBUTION MODULE (FIGURE 5-9)



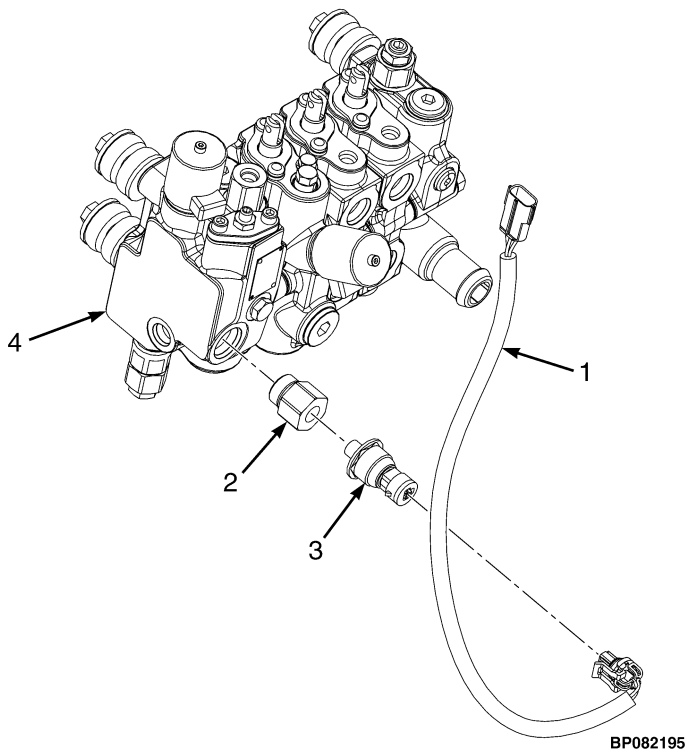
BP080485

**POWER DISTRIBUTION MODULE**

| ITEM | PART NO.         | DESCRIPTION                     | QTY |
|------|------------------|---------------------------------|-----|
|      | 2090613          | Fuse Box (PDM) .....            | 1   |
| 1    | 2044712          | Relay (30 Amp) .....            | 2   |
| 2    | 1528315          | Relay (20 Amp) .....            | 5   |
| 3    | 1528132          | Fuse (20 Amp) .....             | 6   |
| 4    | 1528133          | Fuse (30 Amp) .....             | 2   |
| 5    | 1528630          | Semiconductor .....             | 1   |
| 6    | 1528631          | Resistor (68 Ohm, 5 Watt) ..... | 1   |
| 7    | 1544255          | Fuse (25 Amp) .....             | 2   |
|      | <b>a</b> 4046933 | Fuse Box Cover .....            | 1   |

**FOOTNOTES:****a** Not Illustrated

**LOAD WEIGH ELECTRICAL (FIGURE 5-10)**

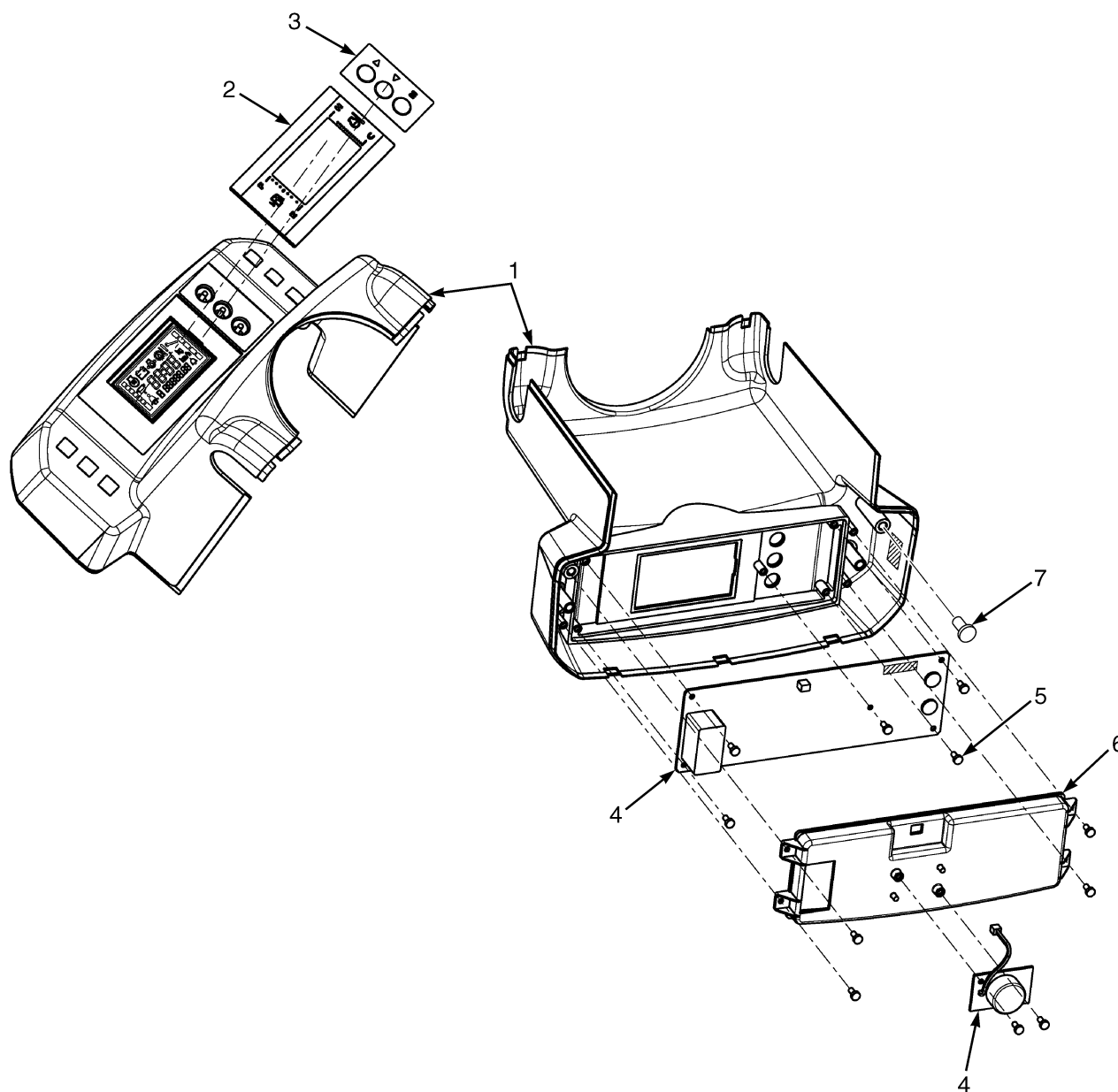


| ITEM | PART NO. | DESCRIPTION                                                                         | QTY |
|------|----------|-------------------------------------------------------------------------------------|-----|
| 1    | 4641395  | Wire Harness (To Cowl Harness) .....                                                | 1   |
| 2    | 4641708  | Fitting .....                                                                       | 1   |
| 3    | 1606735  |                                                                                     |     |
|      | 4213804  | Pressure Transducer (Load Weight Indicator) .....                                   | 1   |
| 4    | .....    | Control Valve (Manual Hydraulics Valve Shown) (☞ Figure 10-11, ☞ Figure 10-17)..... | 1   |

## NOTES

[illegible]

## INSTRUMENT PANEL ASSEMBLY (FIGURE 5-11)



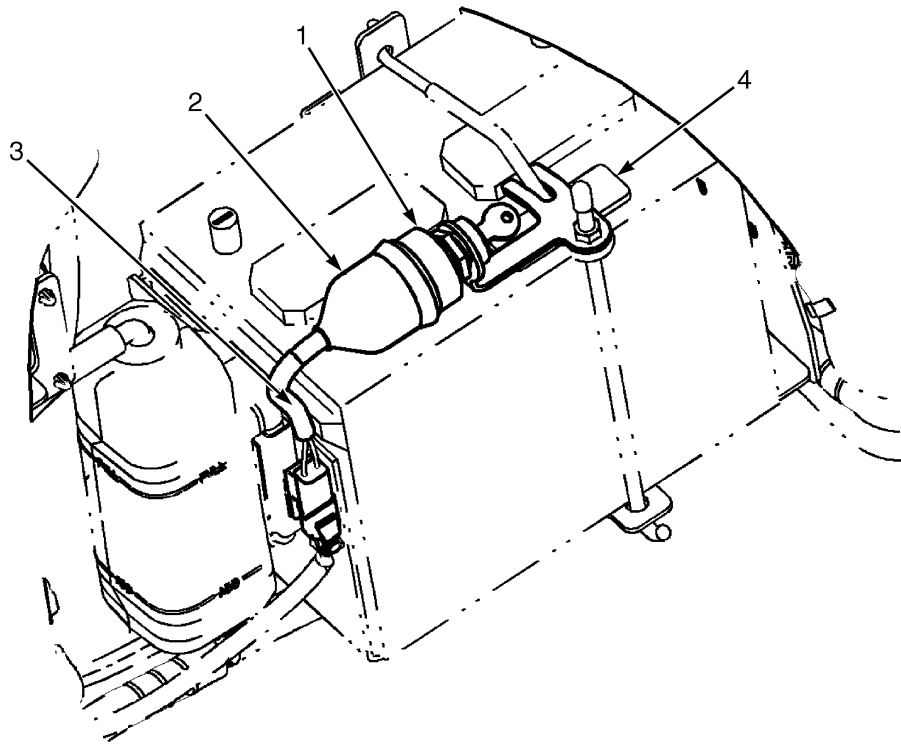
BP082237



**INSTRUMENT PANEL ASSEMBLY****KEY:****A: GASOLINE/BI FUEL/DIESEL****B: LPG**

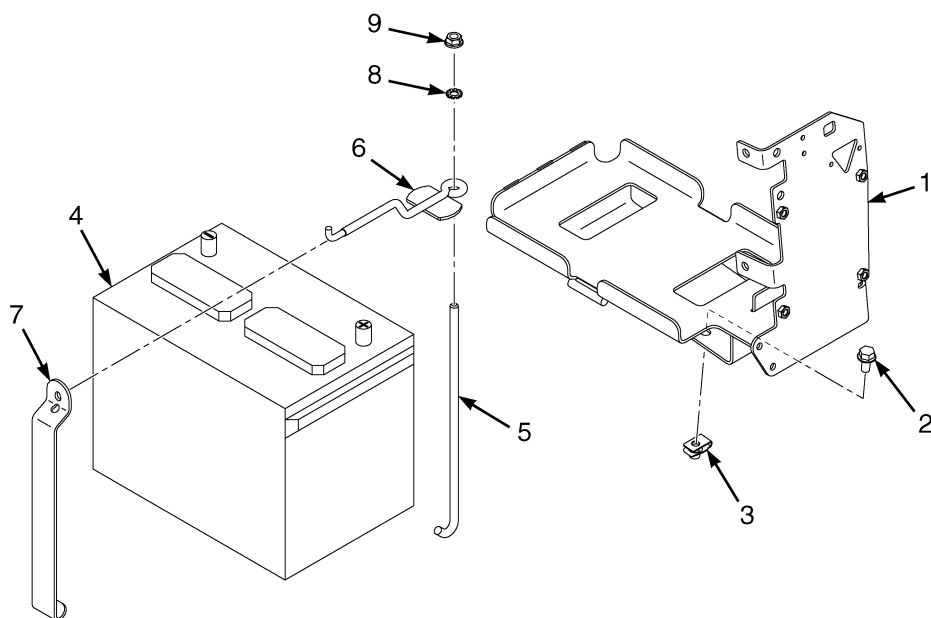
| ITEM | PART NO. | DESCRIPTION            | QTY |    |
|------|----------|------------------------|-----|----|
|      |          |                        | A   | B  |
|      | 4116472  | Display .....          | 1   | .. |
|      | 4116473  | Display (LPG) .....    | ..  | 1  |
| 1    | 2080167  | Cover .....            | 1   | 1  |
| 2    | 2080047  | Instrument Panel ..... | 1   | .. |
| 2    | 2080048  | Instrument Panel ..... | ..  | 1  |
| 3    | 2080050  | Label .....            | 1   | 1  |
| 4    | 4116475  | Display .....          | 1   | 1  |
| 5    | 2057764  | Screw .....            | 11  | 11 |
| 6    | 2080171  | Case .....             | 1   | 1  |
| 7    | 2027655  | Screw .....            | 2   | 2  |

## REMOTE KEY SWITCH (FIGURE 5-12)



BP080857

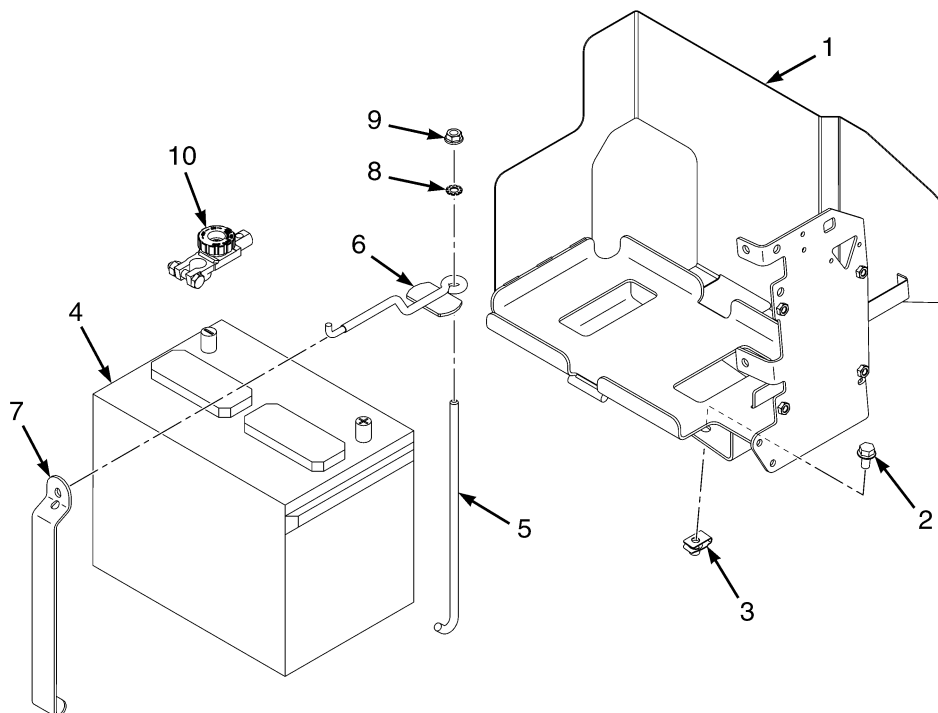
| ITEM | PART NO. | DESCRIPTION                         | QTY |
|------|----------|-------------------------------------|-----|
| 1    | 2058111  | Ignition Switch (With Key) .....    | 1   |
| 1    | 262798   | Key Set .....                       | 1   |
| 1    | 4153136  | Ignition Switch (Without Key) ..... | 1   |
| 1    | 1687435  | Knob (Keyless Start) .....          | 1   |
| 2    | 190380   | Boot .....                          | 1   |
| 3    | 4641400  | Wire Harness (Aux Plug) .....       | 1   |
| 3    | 1308260  | Connector Body .....                | 1   |
| 3    | 1310142  | Terminal Housing (Blue) .....       | 2   |
| 3    | 314773   | Terminal .....                      | 2   |
| 4    | 4121438  | Bracket .....                       | 1   |
|      | 1337197  | Key Set (Optional) .....            | 1   |
|      | 186304   | Key .....                           | 2   |

**BATTERY (FIGURE 5-13)**

BP082292

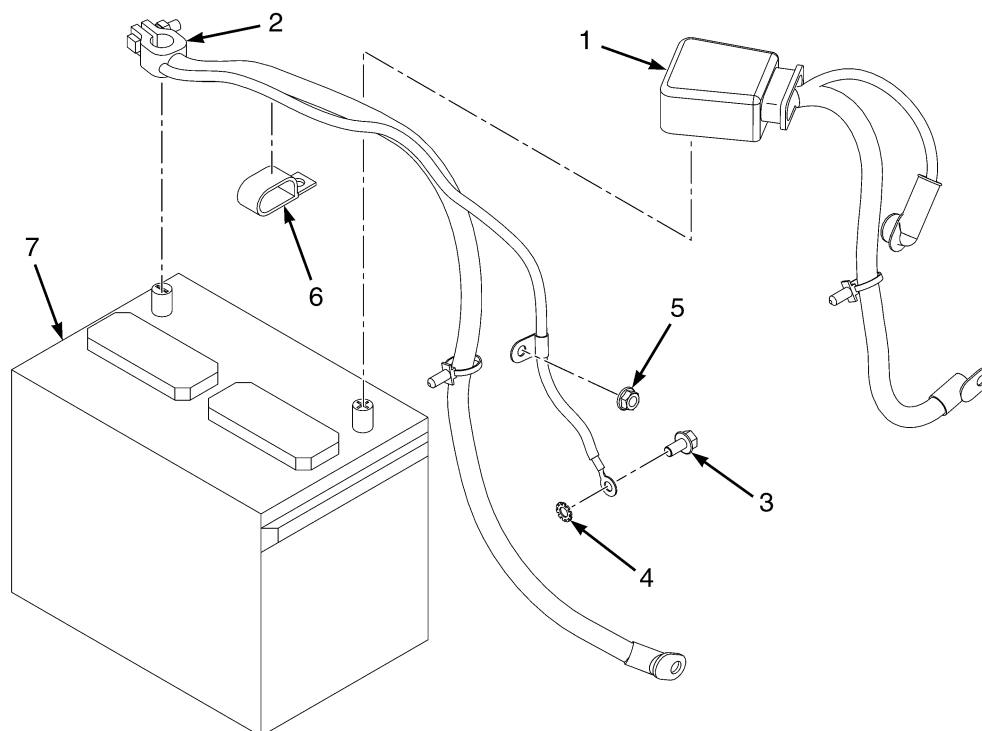
| ITEM | PART NO. | DESCRIPTION                    | QTY |
|------|----------|--------------------------------|-----|
| 1    | 4113614  | Battery Tray .....             | 1   |
| 2    | 4109993  |                                |     |
|      | 1527879  | Capscrew .....                 | 4   |
| 3    | 1480237  | Nut (Fold Over) .....          | 4   |
| 4    | 1643935  | Start Battery Wet .....        | 1   |
| 5    | 2065745  | Link (Battery Hold Down) ..... | 1   |
| 6    | 4109974  | Link .....                     | 1   |
| 7    | 4112007  | Battery Hold Down .....        | 1   |
| 8    | 296380   | Washer .....                   | 1   |
| 9    | 1382472  |                                |     |
|      | 1502543  | Nut .....                      | 1   |

## BATTERY AND DISCONNECT SWITCH (FIGURE 5-14) YANMAR DIESEL



BP082168

| ITEM | PART NO. | DESCRIPTION                    | QTY |
|------|----------|--------------------------------|-----|
| 1    | 4113717  | Battery Tray .....             | 1   |
| 2    | 4109993  |                                |     |
|      | 1527879  | Capscrew .....                 | 4   |
| 3    | 1480237  | Nut (Fold Over) .....          | 4   |
| 4    | 1643936  | Start Battery Wet .....        | 1   |
| 5    | 2065745  | Link (Battery Hold Down) ..... | 1   |
| 6    | 4109974  | Link .....                     | 1   |
| 7    | 4112007  | Battery Hold Down .....        | 1   |
| 8    | 296380   | Washer .....                   | 1   |
| 9    | 1382472  |                                |     |
|      | 1502543  | Nut .....                      | 1   |
| 10   | 4085110  | Battery Disconnect .....       | 1   |

**BATTERY CABLES (FIGURE 5-15)**

BP082169

| ITEM | PART NO. | DESCRIPTION                    | QTY |
|------|----------|--------------------------------|-----|
| 1    | 4641112  | Battery Cable (Positive) ..... | 1   |
| 1    | 1357268  | Battery Cable (Red) .....      | AR  |
| 1    | 1357266  | Battery Cable (Red) .....      | AR  |
| 1    | 16079    | Terminal .....                 | 1   |
| 1    | 148798   | Terminal .....                 | 1   |
| 1    | 1539153  | Conduit .....                  | AR  |
| 1    | 204223   | Boot .....                     | 1   |
| 1    | 1536304  | Boot .....                     | 1   |
| 2    | 4641113  | Battery Cable (Negative) ..... | 1   |
| 2    | 16078    | Battery Cable .....            | AR  |
| 2    | 1357533  | Wire-Bulk .....                | AR  |
| 2    | 148789   | Terminal .....                 | 1   |
| 2    | 1564044  | E-Ring .....                   | 1   |
| 2    | 806426   | E-Ring .....                   | 1   |
| 2    | 1520490  | Terminal .....                 | 1   |
| 3    | 1529366  | Capscrew .....                 | 1   |
| 4    | 296380   | Washer .....                   | 2   |
| 5    | 4382472  | Nut .....                      | 3   |
| 6    | 110322   | Clamp .....                    | 1   |
| 7    | .....    | Battery (☞ Figure 5-13).....   | 1   |

This diagram shows the exploded view of the battery assembly. The components are numbered as follows:

- 1:** Battery pack with a cable.
- 2:** Cable connecting the battery pack to the terminal.
- 3:** Terminal connector.
- 4:** Nut for the terminal connector.
- 5:** Washer for the terminal connector.
- 6:** Battery terminal cover.
- 7:** Battery terminal.
- 8:** Battery housing.

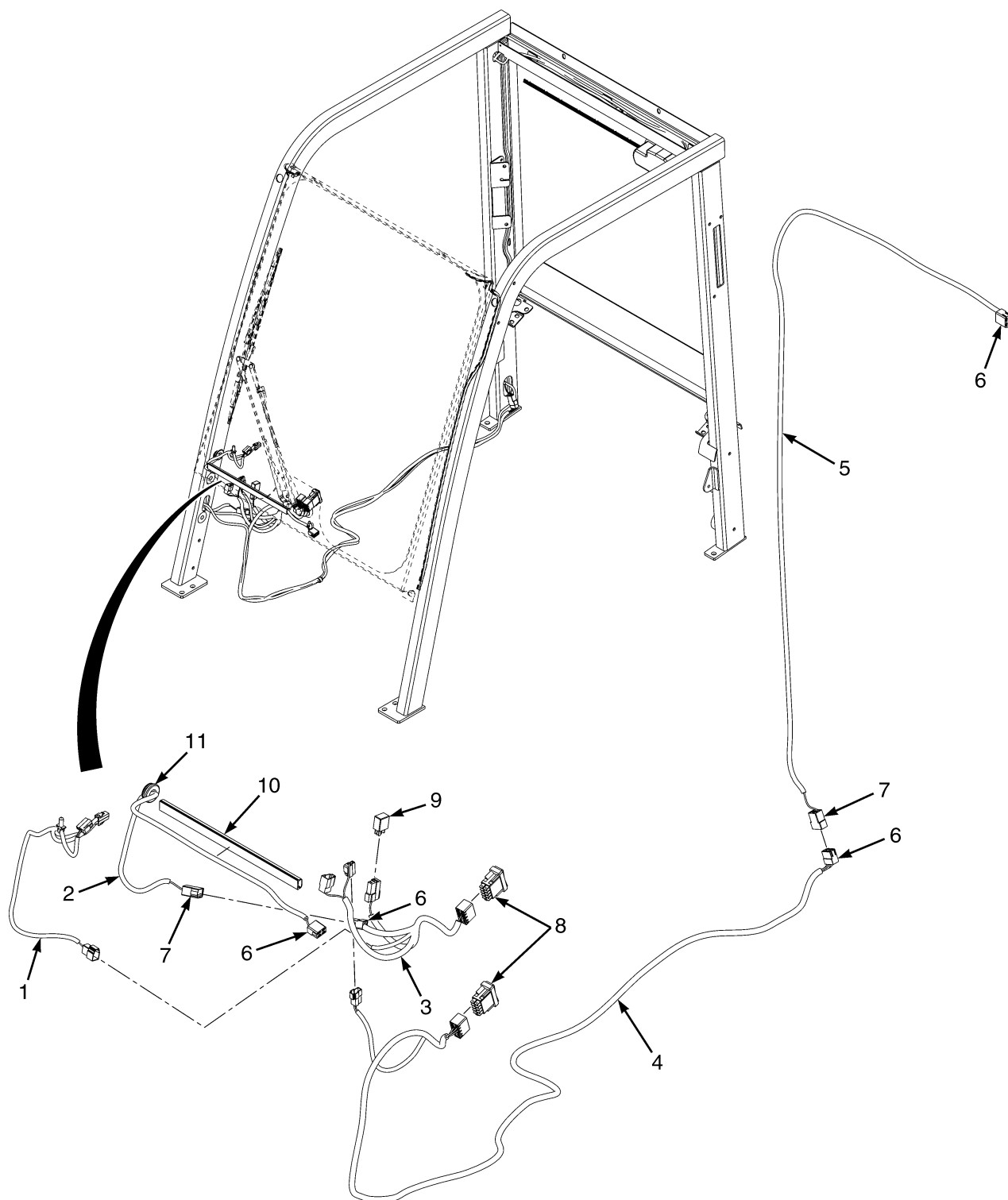
**A: w/ Marine Battery Connector**  
**B: w/o Marine Battery Connector**

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**KEY:****A: w/ Marine Battery Connector****B: w/o Marine Battery Connector**

| ITEM | PART NO. | DESCRIPTION                                           | QTY |    |
|------|----------|-------------------------------------------------------|-----|----|
|      |          |                                                       | A   | B  |
|      | 1502543  |                                                       |     |    |
| 6    | 110322   | Clamp .....                                           | 1   | 1  |
| 7    | 4121870  | Battery Connector (Neg) (Not used with 4641113) ..... | 1   | .. |
| 8    | .....    | Battery (☞ Figure 5-14).....                          | 1   | 1  |

## CAB WIRING (FIGURE 5-17)



BP082268

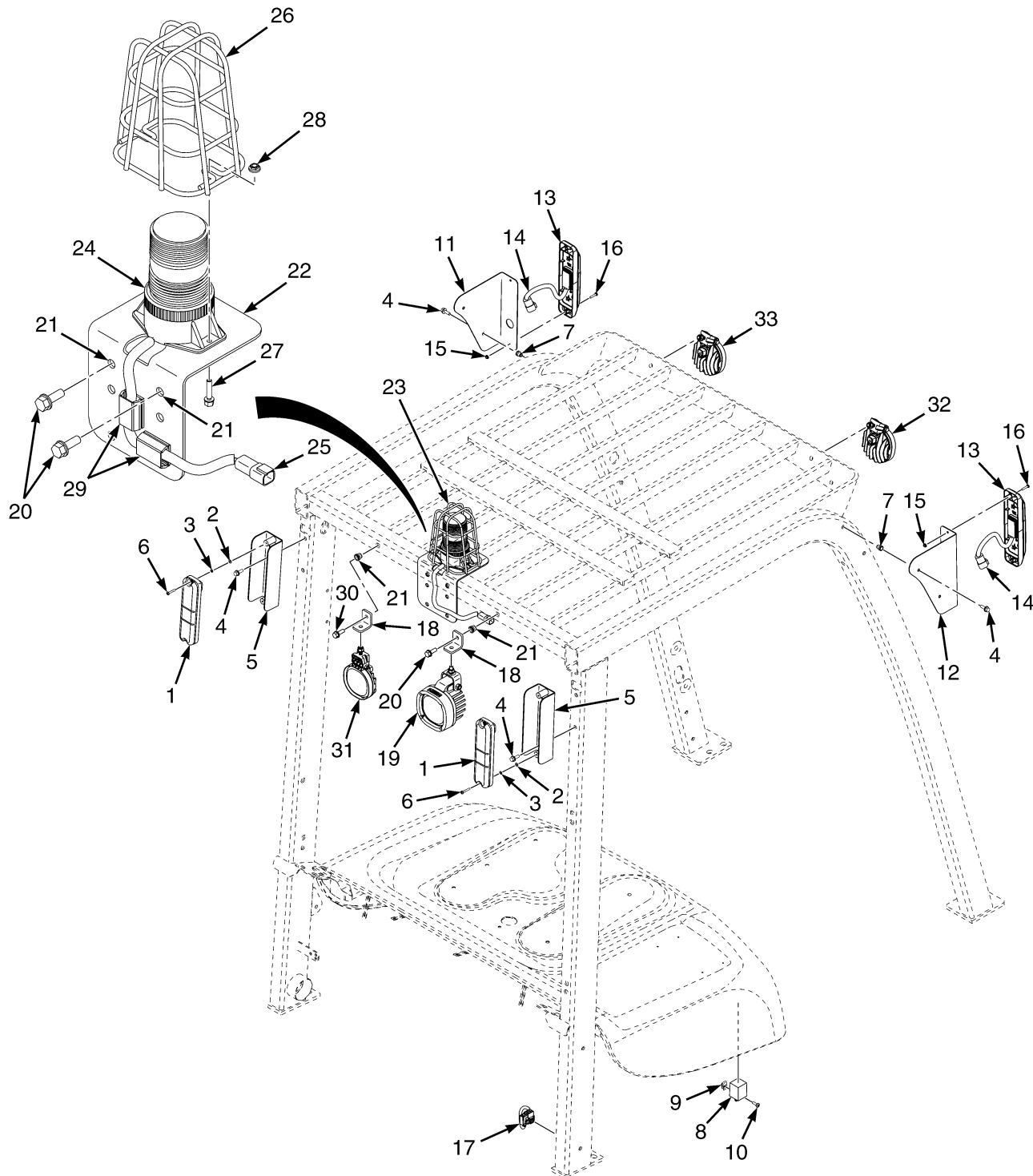


**CAB WIRING**

| ITEM | PART NO. | DESCRIPTION                            | QTY |
|------|----------|----------------------------------------|-----|
| 1    | 4641191  | Wire Harness (Cab Washer) .....        | 1   |
| 2    | 4641410  | Wire Harness (Front Wiper Motor) ..... | 1   |
| 3    | 4641318  | Wire Harness (Wiper Relay) .....       | 1   |
| 4    | 4641408  | Wire Harness (Rear Wiper) .....        | 1   |
| 5    | 4655293  | Wire Harness (Rear Wiper Motor) .....  | 1   |
| 6    | 4145491  | Connector .....                        | 4   |
| 7    | 4154855  | Connector .....                        | 2   |
| 8    | 2081385  | Switch .....                           | 2   |
| 9    | 4145648  | Relay .....                            | 1   |
| 10   | 2059656  | Duct .....                             | 1   |
| 11   | 2021719  | Grommet .....                          | 1   |

## LIGHT GROUP (FIGURE 5-18)

### TAIL, BRAKE, BACKUP, TURN, SIDE MARKER, WORK AND STROBE LIGHTS



BP082267

## LIGHT GROUP

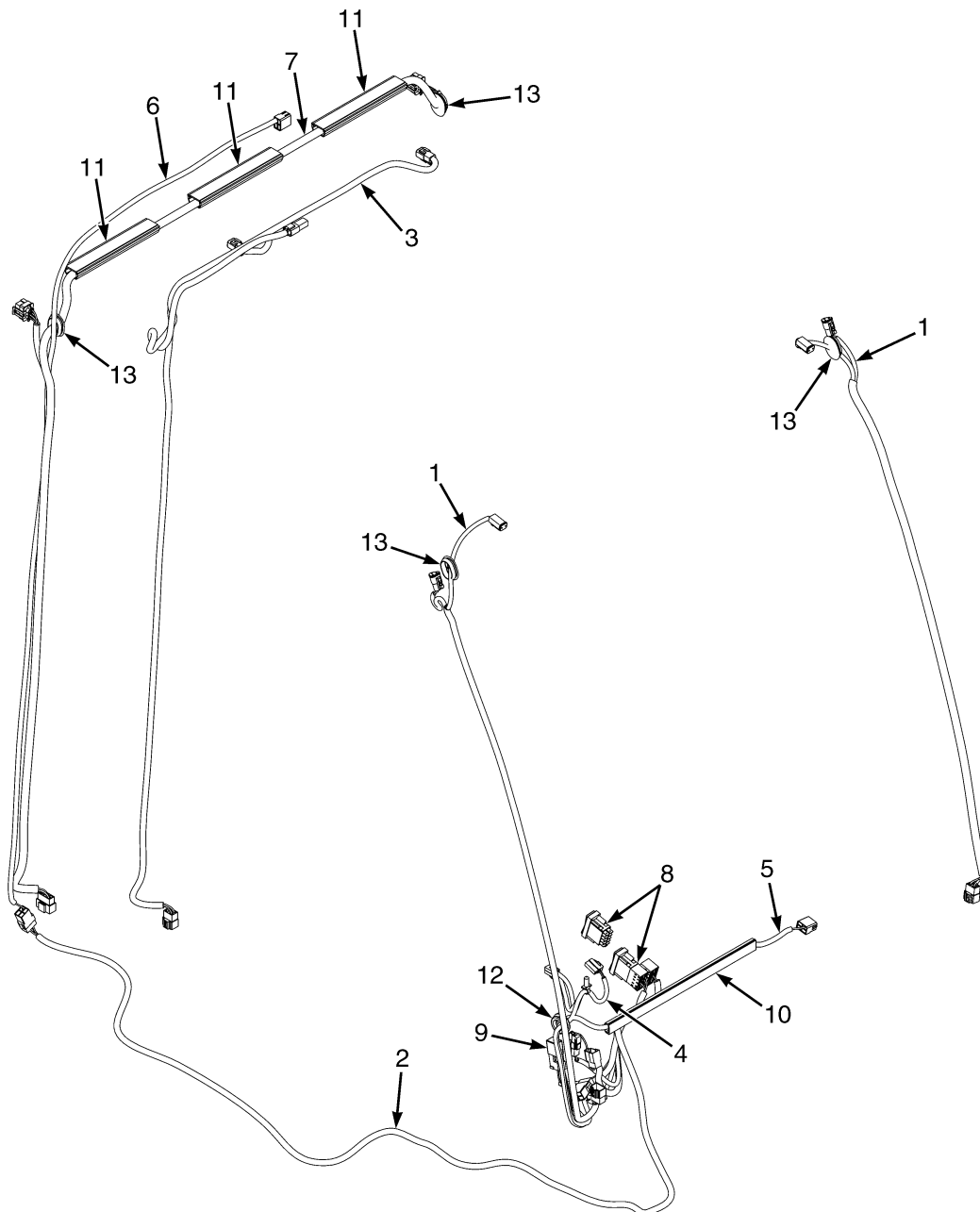
### TAIL, BRAKE, BACKUP, TURN, SIDE MARKER, WORK AND STROBE LIGHTS

| ITEM | PART NO.  | DESCRIPTION                                              | QTY |
|------|-----------|----------------------------------------------------------|-----|
| 1    | 2056826   | Reflector (Tail) .....                                   | 2   |
| 1    | 2056824   | Brake/Backup Light (Stop, Turn, Tail, And Back-Up) ..... | 2   |
| 2    | 320154    | Washer .....                                             | 4   |
| 3    | 292678    | Lockwasher .....                                         | 4   |
| 4    | 1665758   | Capscrew .....                                           | 8   |
| 5    | 4152752   | Guard .....                                              | 2   |
| 6    | 302025    | Screw .....                                              | 4   |
| 7    | 1531001   | Insert .....                                             | 4   |
| 8    | 1694442   | Flasher .....                                            | 1   |
| 9    | 4019192   | Clip , Nut .....                                         | 1   |
| 10   | 302035    | Screw .....                                              | 1   |
| 10   | 302036    | Screw (78 inch Light Group only) .....                   | 1   |
| 11   | 4134835   | Mounting Plate .....                                     | 1   |
| 11   | 4143756   | Mounting Plate (78 inch Light Group only) .....          | 1   |
| 12   | 4134482   | Mounting Plate .....                                     | 1   |
| 12   | 4143023   | Mounting Plate (78 inch Light Group only) .....          | 1   |
| 13   | 4644657   | Light , LED Marker and Turn .....                        | 2   |
| 14   | 1330410   | Connector (DT REC 3-Pin) .....                           | 2   |
| 15   | 1549398   | Nut .....                                                | 4   |
| 16   | 302024    | Screw .....                                              | 4   |
| 17   | 4653422   | Wire Harness (Reverse activated rear work light) .....   | 1   |
| 18   | 4133036   | Bracket .....                                            | 2   |
| 19   | 4629729   | Light , Blue LED (Includes Mounting Hardware) .....      | 1   |
| 20   | 1583611   | Capscrew .....                                           | 3   |
| 21   | 1530243   | Insert .....                                             | 4   |
| 22   | 4122774   | Bracket .....                                            | 1   |
| 23   | 1654013   | Strobe Light Assembly .....                              | 1   |
| 24   | 1652290   | Strobe Light (Amber LED) .....                           | 1   |
| 25   | 1561559   | Connector (2 Pin) .....                                  | 1   |
| 25   | 1561755   | Connector (Secondary Lock) .....                         | 1   |
| 25   | 1463138   | Terminal Pin .....                                       | 2   |
| 26   | 1302024   | Guard (Strobe Light) .....                               | 1   |
| 27   | 1586759   | Capscrew .....                                           | 2   |
| 28   | 1586428   | Nut .....                                                | 2   |
| 29   | a 2072975 | Duct .....                                               | 2   |
| 29   | a 4654288 | Duct (Alternate Part) .....                              | 2   |
| 30   | 1583611   | Capscrew .....                                           | 1   |
| 31   | 2098083   | Work Light (Rear, Includes Hardware) (Halogen) .....     | 1   |
| 31   | 4650809   | Head/Work Light (Rear LED) (LED) .....                   | 1   |
| 32   | 2098084   | Work Light (RH Front, Includes Hardware) (Halogen) ..... | 1   |
| 32   | 4650810   | Head/Work Light (Front RH LED) .....                     | 1   |
| 33   | 2098085   | Work Light (LH Front, Includes Hardware) (Halogen) ..... | 1   |
| 33   | 4650811   | Head/Work Light (Front LH LED) .....                     | 1   |

**FOOTNOTES:**

**a** → PENDING PER ECN 162833

## HARNESS ARRANGEMENT (FIGURE 5-19) LIGHTS



BP082293

**HARNESS ARRANGEMENT  
LIGHTS**

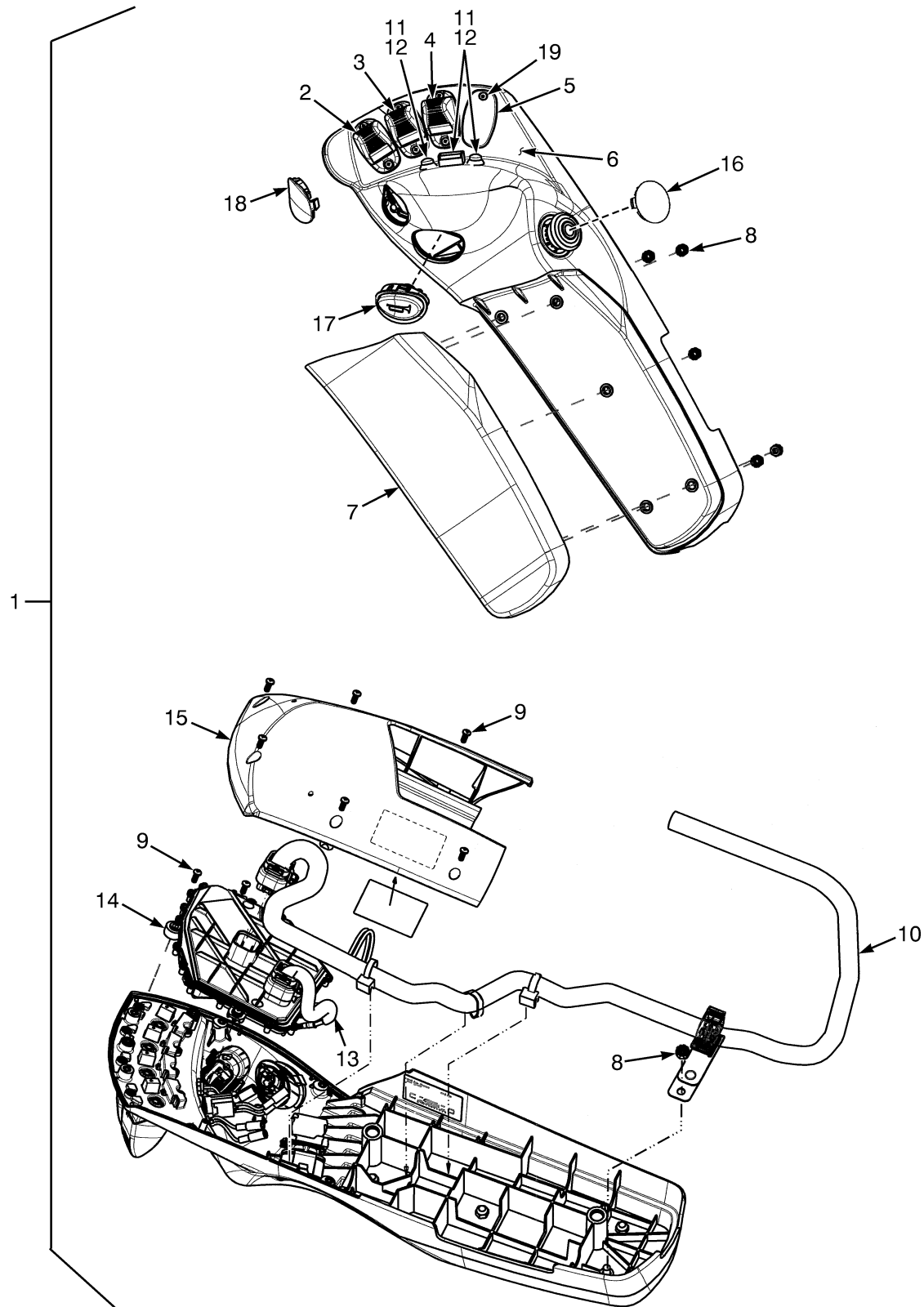
| ITEM | PART NO.         | DESCRIPTION                                           | QTY |
|------|------------------|-------------------------------------------------------|-----|
| 1    | 4641471          | Wire Harness (Front Work Light) .....                 | 2   |
| 1    | 4641392          | Wire Harness (Front Work, Marker Light) .....         | 2   |
| 2    | 4641408          | Wire Harness (Rear Wiper) .....                       | 1   |
| 3    | 4653405          | Wire Harness (Rear Light, With Blue Spot) .....       | 1   |
| 3    | 4652496          | Wire Harness - Rear Light (w/o Blue Spot Light) ..... | 1   |
| 4    | 4641191          | Wire Harness (Cab Washer) .....                       | 1   |
| 5    | 4641410          | Wire Harness (Front Wiper Motor) .....                | 1   |
| 6    | <b>b</b> 4641413 | Wire Harness (Rear Wiper Motor) .....                 | 1   |
| 6    | <b>d</b> 4655293 | Wire Harness (Rear Wiper Motor) .....                 | 1   |
| 7    | 4641197          | Wire Harness (Tail Light) .....                       | 1   |
| 8    | 2081385          | Switch .....                                          | 2   |
| 9    | 4145648          | Relay .....                                           | 1   |
| 10   | 2059656          | Duct .....                                            | 1   |
| 11   | <b>c</b> 2029596 | Duct .....                                            | 3   |
| 12   | 2021719          | Grommet .....                                         | 1   |
| 13   | 2070996          | Grommet .....                                         | 4   |
| 14   | <b>a</b> 304195  | Grommet (w/High OHG Option) .....                     | 1   |

**FOOTNOTES:**

**a** Not illustrated  
**b** → 2/2017

**c** → PENDING PER ECN 162833  
**d** 2/2017 →

## MINI-LEVER CONTROLS (FIGURE 5-20) WITH ARMREST — THREE FUNCTION (→ 4/2020)



BP082861

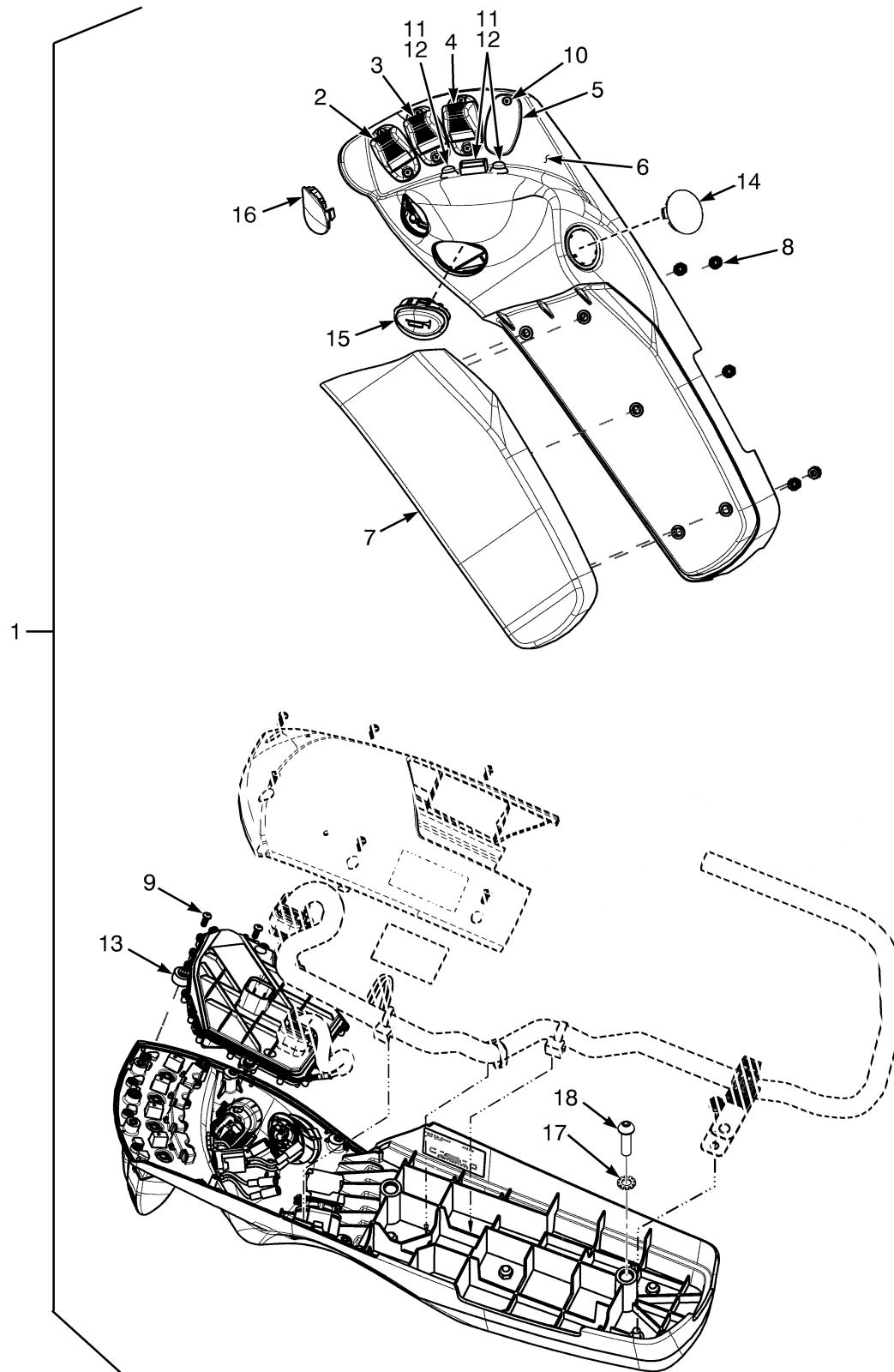
### MINI-LEVER CONTROLS WITH ARMREST – THREE FUNCTION (→ 4/2020)

| ITEM | PART NO.           | DESCRIPTION                                                           | QTY   |
|------|--------------------|-----------------------------------------------------------------------|-------|
| 1    | 4601093            | Mini-Lever Assembly .....                                             | 1     |
| 1    | <b>b</b> 4601265   | Mini-Lever Assembly .....                                             | 1     |
| 2    | .....              | Lever Position 1 .....                                                | 1     |
| 2    | 2110791            | Lever (Single Function) .....                                         | 1     |
| 3    | .....              | Lever Position 2 .....                                                | 1     |
| 3    | 2110791            | Lever (Single Function) .....                                         | 1     |
| 4    | .....              | Lever Position 3 .....                                                | 1     |
| 4    | 2110791            | Lever (Single Function) .....                                         | 1     |
| 4    | <b>b</b> 2110792   | Lever (Clamping) .....                                                | 1     |
| 5    | 2108249            | Plug .....                                                            | 1     |
| 6    | 2111799            | Armrest (Without Push Buttons Holes) .....                            | 1     |
| 6    | <b>b</b> 4603439   | Armrest (With Push Buttons) .....                                     | 1     |
| 7    | 2111769            | Cushion (Armrest) .....                                               | 1     |
| 8    | 1709587            | Nut .....                                                             | 5     |
| 9    | 1698449            | Capscrew .....                                                        | 6     |
| 10   | 4605336            | Wire Harness .....                                                    | 1     |
| 11   | <b>a b</b> 1704528 | Push Button (Position 3) .....                                        | 1     |
| 12   | <b>b</b> 1705359   | Cover (Push Button) .....                                             | 1     |
| 13   | 1704529            | Wire Harness (Forward/Reverse Switch in the MLM) (Push Buttons) ..... | 1     |
| 14   | 2111802            | .....                                                                 | ..... |
|      | 4605337            | Printed Circuit Board .....                                           | 1     |
| 15   | 2111800            | Cover (Bottom Armrest) .....                                          | 1     |
| 16   | 4601120            | Plug .....                                                            | 1     |
| 17   | 2111770            | Horn Button .....                                                     | 1     |
| 18   | 2110942            | Plug (Directional Control Switch) .....                               | 1     |
| 19   | 1698449            | Capscrew .....                                                        | 8     |

**FOOTNOTES:**

- a** Not all Lift Trucks may have all the switches and buttons shown.      **b** With Clamping

## MINI-LEVER CONTROLS (FIGURE 5-21) WITH ARMREST THREE FUNCTION (4/2020 →)



BP082864



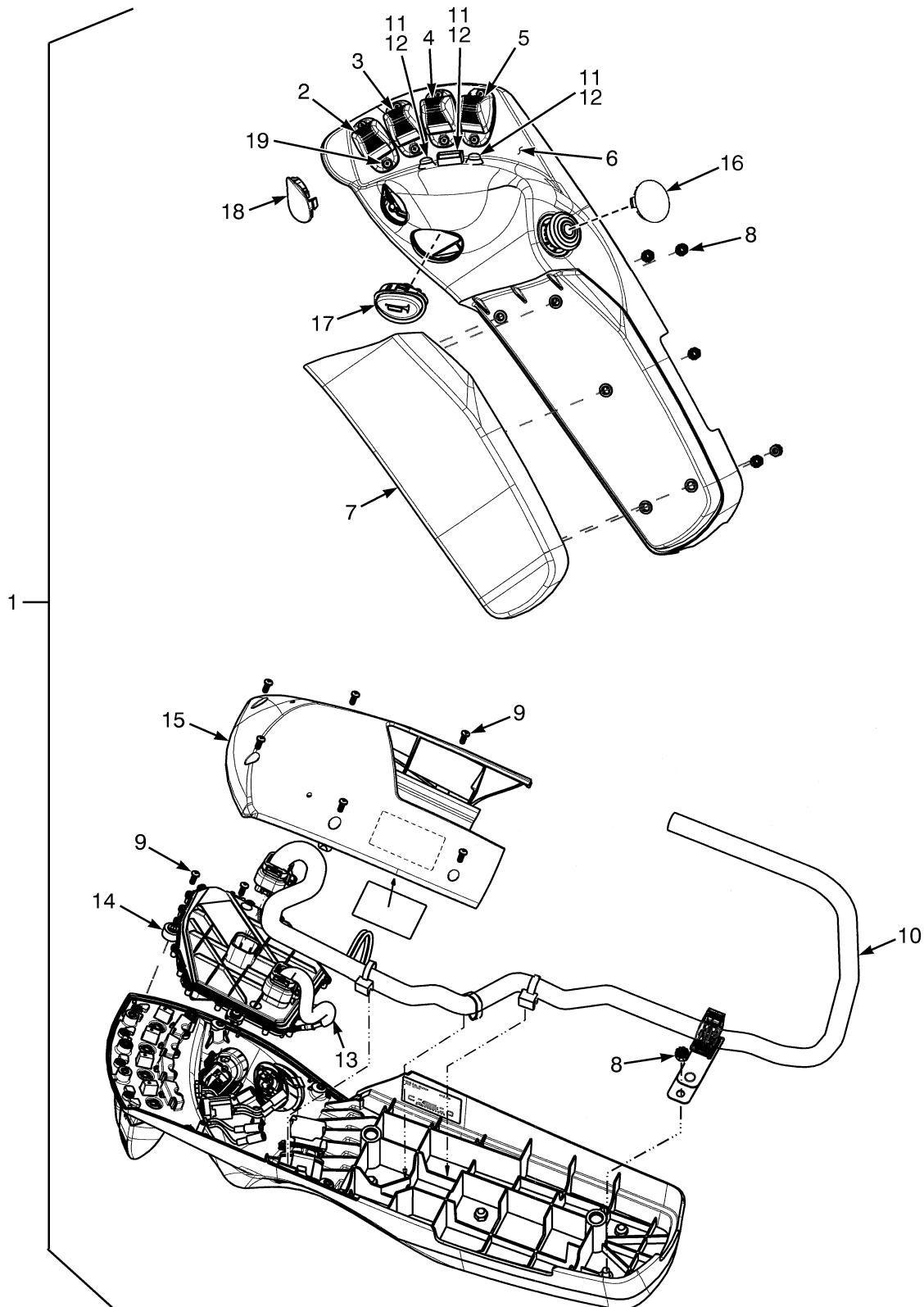
### MINI-LEVER CONTROLS WITH ARMREST THREE FUNCTION (4/2020 →)

| ITEM | PART NO.           | DESCRIPTION                                | QTY |
|------|--------------------|--------------------------------------------|-----|
| 1    | 4680565            | Mini-Lever (Assembly) .....                | 1   |
| 1    | <b>b</b> 4680567   | Mini-Lever (Assembly) .....                | 1   |
| 2    | .....              | Lever Position 1 .....                     | 1   |
| 2    | 2110791            | Lever (Single Function) .....              | 1   |
| 3    | .....              | Lever Position 2 .....                     | 1   |
| 3    | 2110791            | Lever (Single Function) .....              | 1   |
| 4    | .....              | Lever Position 3 .....                     | 1   |
| 4    | 2110791            | Lever (Single Function) .....              | 1   |
| 4    | <b>b</b> 2110792   | Lever (Clamping) .....                     | 1   |
| 5    | 2108249            | Plug .....                                 | 1   |
| 6    | 4680672            | Armrest (Without Push Buttons Holes) ..... | 1   |
| 6    | <b>b</b> 4680673   | Armrest (With Push Buttons Holes) .....    | 1   |
| 7    | 2111769            | Cushion (Armrest) .....                    | 1   |
| 8    | 1709587            | Nut .....                                  | 5   |
| 9    | 1703513            | Screw .....                                | 6   |
| 10   | 1698449            | Capscrew .....                             | 8   |
| 11   | <b>a b</b> 1704528 | Push Button (Position 3) .....             | 1   |
| 12   | <b>b</b> 1705359   | Cover (Push Button) .....                  | 1   |
| 13   | 4674933            | Printed Circuit Board .....                | 1   |
| 14   | 4601120            | Plug .....                                 | 1   |
| 15   | 2111770            | Horn Button .....                          | 1   |
| 16   | 2110942            | Plug (Directional Control Switch) .....    | 1   |
| 17   | 296380             | Washer .....                               | 2   |
| 18   | 296166             | Capscrew .....                             | 2   |

**FOOTNOTES:**

- a** Not all Lift Trucks may have all the switches and buttons shown.      **b** With Clamping

## MINI-LEVER CONTROLS (FIGURE 5-22) WITH ARMREST — FOUR FUNCTION (→ 4/2020)



BP082862

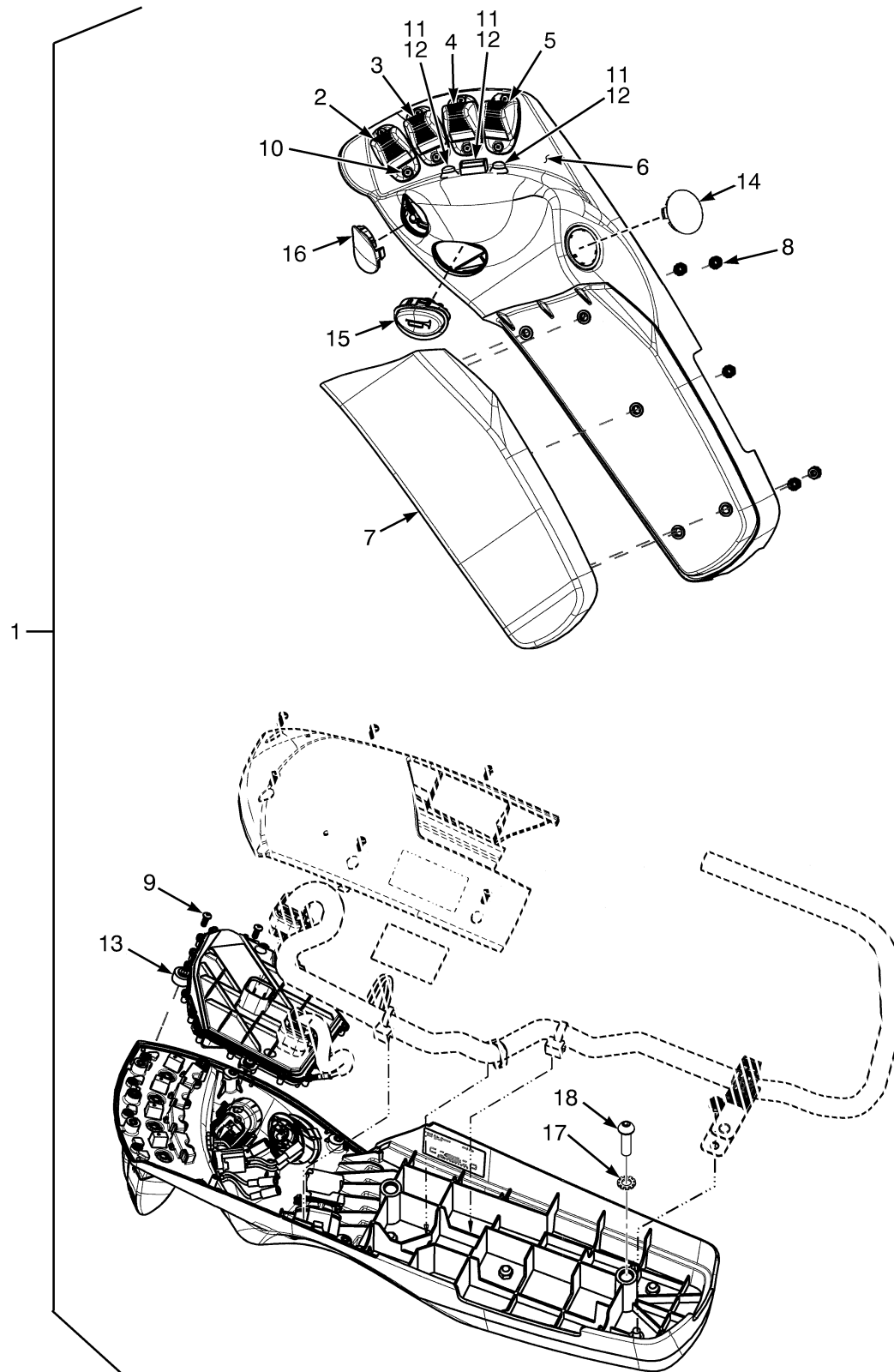
### MINI-LEVER CONTROLS WITH ARMREST – FOUR FUNCTION (→ 4/2020)

| ITEM | PART NO.           | DESCRIPTION                                                           | QTY   |
|------|--------------------|-----------------------------------------------------------------------|-------|
| 1    | 4601094            | Mini-Lever Assembly .....                                             | 1     |
| 1    | <b>b</b> 4601096   | Mini-Lever Assembly .....                                             | 1     |
| 2    | .....              | Lever Position 1 .....                                                | 1     |
| 2    | 2110791            | Lever (Single Function) .....                                         | 1     |
| 3    | .....              | Lever Position 2 .....                                                | 1     |
| 3    | 2110791            | Lever (Single Function) .....                                         | 1     |
| 4    | .....              | Lever Position 3 .....                                                | 1     |
| 4    | 2110791            | Lever (Single Function) .....                                         | 1     |
| 5    | .....              | Lever Position 4 .....                                                | 1     |
| 5    | 2110791            | Lever (Single Function) .....                                         | 1     |
| 5    | <b>b</b> 2110792   | Lever (Clamping) .....                                                | 1     |
| 6    | 2111799            | Armrest (Without Push Buttons Holes) .....                            | 1     |
| 6    | <b>b</b> 4603439   | Armrest (With Push Buttons) .....                                     | 1     |
| 7    | 2111769            | Cushion (Armrest) .....                                               | 1     |
| 8    | 1709587            | Nut .....                                                             | 5     |
| 9    | 1698449            | Capscrew .....                                                        | 6     |
| 10   | 4605336            | Wire Harness (MLM) .....                                              | 1     |
| 11   | <b>a b</b> 1704528 | Push Button .....                                                     | 1     |
| 12   | <b>b</b> 1705359   | Cover (Push Button) .....                                             | 2     |
| 13   | 1704529            | Wire Harness (Forward/Reverse Switch in the MLM) (Push Buttons) ..... | 1     |
| 14   | 2111802            | .....                                                                 | ..... |
|      | 4605337            | Printed Circuit Board .....                                           | 1     |
| 15   | 2111800            | Cover (Bottom Armrest) .....                                          | 1     |
| 16   | 4601120            | Plug .....                                                            | 1     |
| 17   | 2111770            | Horn Button .....                                                     | 1     |
| 18   | 2110942            | Plug (Directional Control Switch) .....                               | 1     |
| 19   | 1698449            | Capscrew .....                                                        | 8     |

**FOOTNOTES:**

- a** Not all Lift Trucks may have all the switches and buttons shown.
- b** With Clamping

## MINI-LEVER CONTROLS (FIGURE 5-23) WITH ARMREST FOUR FUNCTION (4/2020 →)



BP082863

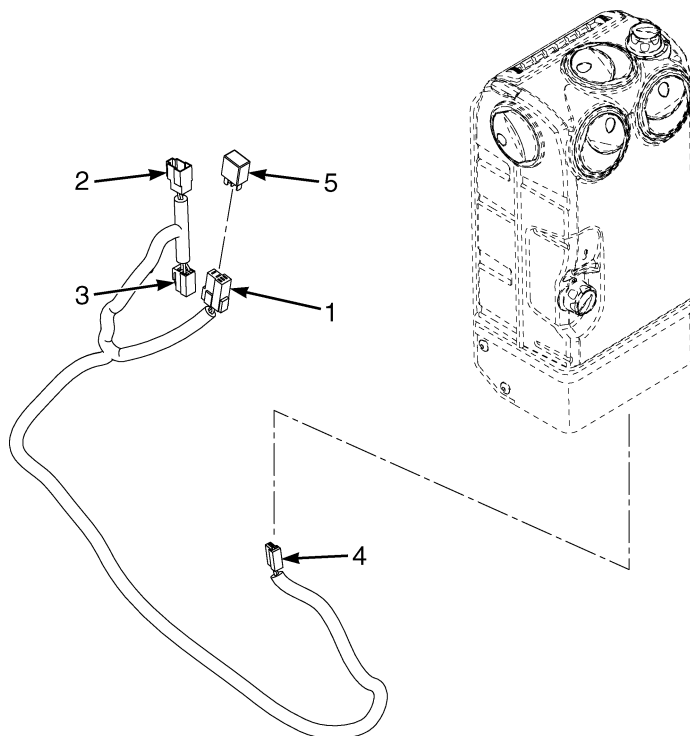
### MINI-LEVER CONTROLS WITH ARMREST FOUR FUNCTION (4/2020 →)

| ITEM | PART NO.           | DESCRIPTION                                | QTY |
|------|--------------------|--------------------------------------------|-----|
| 1    | <b>b</b> 4680568   | Mini-Lever (Assembly) .....                | 1   |
| 1    | 4680566            | Mini-Lever (Assembly) .....                | 1   |
| 2    | .....              | Lever Position 1 .....                     | 1   |
| 2    | 2110791            | Lever (Single Function) .....              | 1   |
| 3    | .....              | Lever Position 2 .....                     | 1   |
| 3    | 2110791            | Lever (Single Function) .....              | 1   |
| 4    | .....              | Lever Position 3 .....                     | 1   |
| 4    | 2110791            | Lever (Single Function) .....              | 1   |
| 5    | .....              | Lever Position 4 .....                     | 1   |
| 5    | 2110791            | Lever (Single Function) .....              | 1   |
| 5    | <b>b</b> 2110792   | Lever (Clamping) .....                     | 1   |
| 6    | <b>b</b> 4680673   | Armrest (With Push Buttons Holes) .....    | 1   |
| 6    | 4680672            | Armrest (Without Push Buttons Holes) ..... | 1   |
| 7    | 2111769            | Cushion (Armrest) .....                    | 1   |
| 8    | 1709587            | Nut .....                                  | 5   |
| 9    | 1703513            | Screw .....                                | 6   |
| 10   | 1698449            | Capscrew .....                             | 8   |
| 11   | <b>a b</b> 1704528 | Push Button .....                          | 1   |
| 12   | <b>b</b> .....     | Push Button Cover .....                    | 2   |
| 13   | 4674933            | Printed Circuit Board .....                | 1   |
| 14   | 4601120            | Plug .....                                 | 1   |
| 15   | 2111770            | Horn Button .....                          | 1   |
| 16   | 2110942            | Plug (Directional Control Switch) .....    | 1   |
| 17   | 296380             | Washer .....                               | 2   |
| 18   | 296166             | Capscrew .....                             | 2   |

**FOOTNOTES:**

- a** Not all Lift Trucks may have all the switches and buttons shown.      **b** With Clamping

## WIRE HARNESS (FIGURE 5-24) CAB HEATER



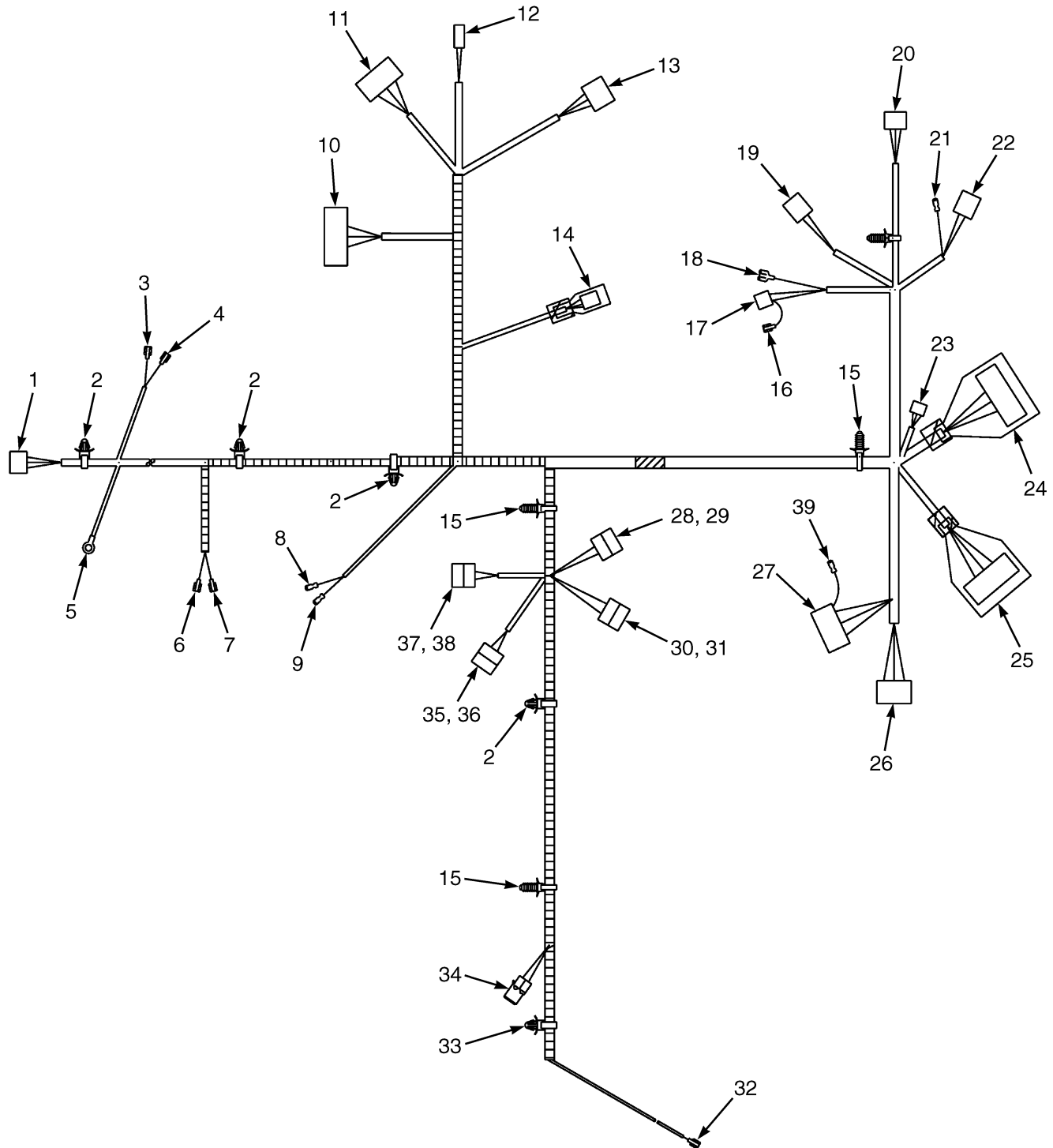
BP082240

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4653911  | Wire Harness .....                                    | 1   |
| 1    | .....    | Connector Assembly (CPS348 Heater Relay) .....        | 1   |
| 1    | .....    | Connector Body .....                                  | 1   |
| 1    | .....    | Terminal .....                                        | 4   |
| 2    | .....    | Connector Assembly (CRP322H Wire Harness Cowl) .....  | 1   |
| 2    | 2049855  | Connector .....                                       | 1   |
| 2    | 1361303  | Terminal .....                                        | 3   |
| 3    | .....    | Connector Assembly (CPS322H Optional Connector) ..... | 1   |
| 3    | 2022901  | Connector Body .....                                  | 1   |
| 3    | 1361303  | Terminal .....                                        | 3   |
| 4    | .....    | Connector Assembly (CPS44 To Heater Harness) .....    | 1   |
| 4    | 1537135  | Connector Body .....                                  | 1   |
| 4    | 233141   | Terminal .....                                        | 2   |
| 5    | 4145648  | Relay .....                                           | 1   |

## NOTES

[illegible]

## WIRE HARNESS (FIGURE 5-25) COWL — FORWARD AND REVERSE LEVER



BP082243

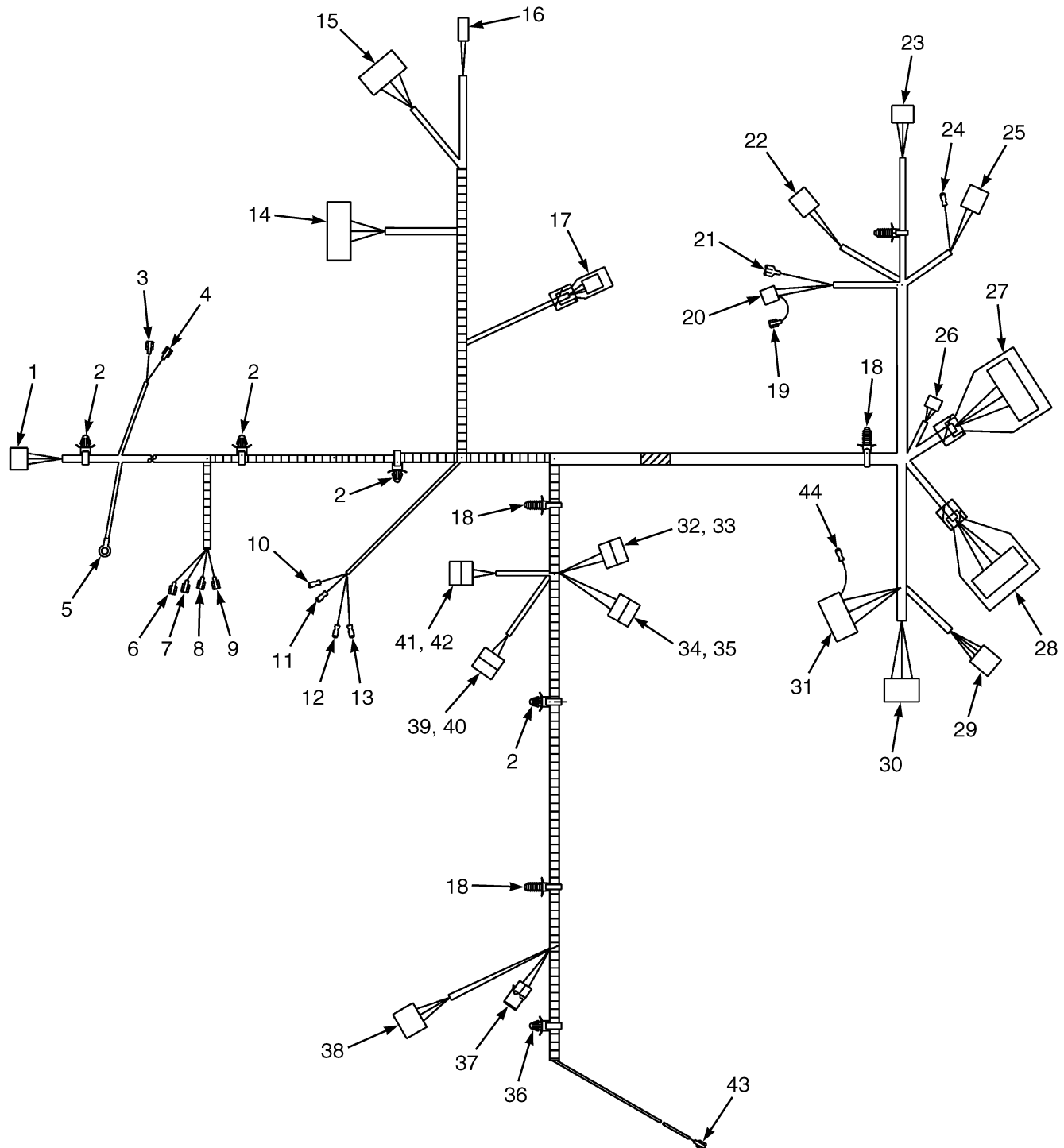


## WIRE HARNESS

### COWL – FORWARD AND REVERSE LEVER

| ITEM | PART NO. | DESCRIPTION                                                        | QTY |
|------|----------|--------------------------------------------------------------------|-----|
|      | 4641177  | Wire Harness (Cowl) .....                                          | 1   |
| 1    | 2314777  | Connector Body (CPS4A Wire Harness - Front Light, LH) .....        | 1   |
| 2    | 2081255  | Clip .....                                                         | 4   |
| 3    | 4644502  | Electrical Terminal (T89A Horn) .....                              | 1   |
| 4    | 4644502  | Electrical Terminal (T89B Horn) .....                              | 1   |
| 5    | 1493458  | E-Ring (T316 Earth) .....                                          | 1   |
| 6    | 4644502  | Electrical Terminal (T22A-NO Park Brake Switch) .....              | 1   |
| 7    | 4644502  | Electrical Terminal (T22B-NO Park Brake Switch) .....              | 1   |
| 8    | 1324310  | Terminal (T317A Stop Lamp Switch) .....                            | 1   |
| 9    | 1324310  | Terminal (T318A Stop Lamp Switch) .....                            | 1   |
| 10   | .....    | Connector Assembly (CPS50 Display, CN5) .....                      | 1   |
| 10   | .....    | Connector Assembly (CPS50 Display, CN5) .....                      | 1   |
| 11   | 4648567  | Connector (CPS314 Light/Turn Switch) .....                         | 1   |
| 11   | 4648568  | Connector Lock (CPS314 Light/Turn Switch) .....                    | 1   |
| 12   | .....    | Connector Assembly (CPS76 Horn Switch) .....                       | 1   |
| 12   | .....    | Connector Assembly (CPS76 Horn Switch) .....                       | 1   |
| 13   | .....    | Connector Assembly (CPS349 Forward/Reverse Switch) .....           | 1   |
| 13   | .....    | Connector Assembly (CPS349 Forward/Reverse Switch) .....           | 1   |
| 14   | 2314778  | Cover (CPS313 Ignition Switch) .....                               | 1   |
| 15   | 2081253  | Clip .....                                                         | 3   |
| 16   | 1324310  | Terminal (TS413 Telemetry) .....                                   | 1   |
| 17   | .....    | Connector Assembly (CRS315 Horn Relay) .....                       | 1   |
| 18   | 2044949  | Terminal (TS321 Telemetry/Speed Limiter) .....                     | 1   |
| 19   | 2022901  | Connector Body (CPS322 Cab) .....                                  | 1   |
| 20   | 2314777  | Connector Body (CPS4B Wire Harness - Front Light, RH) .....        | 1   |
| 21   | 1324310  | Terminal (T319 Horn Button Option) .....                           | 1   |
| 22   | 2022901  | Connector Body (CPS323 Hydraulic/SBS) .....                        | 1   |
| 23   | 2050634  | Connector (CRP88 CAN Connection) .....                             | 1   |
| 23   | 2050635  | Connector Lock (CRP88 CAN Connection) .....                        | 1   |
| 24   | 2081173  | Cover (CRP84A Wire Harness - Frame, CN1) .....                     | 1   |
| 25   | 2081173  | Cover (CRP84B Wire Harness - Frame, CN2) .....                     | 1   |
| 26   | .....    | Connector Assembly (CPS1 V-ECU, CN3) .....                         | 1   |
| 27   | .....    | Connector Assembly (CPS5 V-ECU, CN4) .....                         | 1   |
| 28   | 4613153  | Connector (CPS354 Speed Sensor) .....                              | 1   |
| 29   | 4613154  | Connector (CRS354 End Cap, Speed Sensor) .....                     | 1   |
| 29   | 4613011  | Plug (CRS354 End Cap, Speed Sensor) .....                          | 1   |
| 30   | 4612835  | Connector (CPS149 Pressure Sensor) .....                           | 1   |
| 30   | 2314770  | Connector Lock (CPS149 Pressure Sensor) .....                      | 1   |
| 31   | 2050634  | Connector (CRS149 End Cap, Pressure Sensor) .....                  | 1   |
| 31   | 2314771  | Plug (CRS149 End Cap, Pressure Sensor) .....                       | 1   |
| 32   | 4644502  | Electrical Terminal (T51 Torque Converter Oil Thermo Switch) ..... | 1   |
| 33   | 2081254  | Clip .....                                                         | 1   |
| 34   | 4613115  | Connector (CPS57 Forward/Reverse Solenoid) .....                   | 1   |
| 35   | .....    | Connector Assembly (CPS151 Lowering Solenoid) .....                | 1   |
| 36   | .....    | End Cap (CRS151 End Cap, Lowering Solenoid) .....                  | 1   |
| 37   | .....    | Connector Assembly (CPS150 Unload Solenoid) .....                  | 1   |
| 38   | .....    | End Cap (CRS150 End Cap, Unload Solenoid) .....                    | 1   |
| 39   | 1324310  | Terminal (TS326 Option Speed Alarm) .....                          | 1   |

## WIRE HARNESS (FIGURE 5-26) COWL — MONOTROL PEDAL



BP082244

**WIRE HARNESS  
COWL – MONOTROL PEDAL**

| ITEM | PART NO. | DESCRIPTION                                                        | QTY |
|------|----------|--------------------------------------------------------------------|-----|
|      | 4641181  | Wire Harness (Cowl) .....                                          | 1   |
| 1    | 2314777  | Connector Body (CPS4A Wire Harness - Front Light, LH) .....        | 1   |
| 2    | 2081255  | Clip .....                                                         | 4   |
| 3    | 4644502  | Electrical Terminal (T89A Horn) .....                              | 1   |
| 4    | 4644502  | Electrical Terminal (T89B Horn) .....                              | 1   |
| 5    | 1493458  | E-Ring (T316 Earth) .....                                          | 1   |
| 6    | 4644502  | Electrical Terminal (T22C-NC Park Brake Switch) .....              | 1   |
| 7    | 4644502  | Electrical Terminal (T22D-NC Park Brake Switch) .....              | 1   |
| 8    | 4644502  | Electrical Terminal (T22A-NO Park Brake Switch) .....              | 1   |
| 9    | 4644502  | Electrical Terminal (T22B-NO Park Brake Switch) .....              | 1   |
| 10   | 1324310  | Terminal (T317A Stop Lamp Switch) .....                            | 1   |
| 11   | 1324310  | Terminal (T317B Stop Lamp Switch) .....                            | 1   |
| 12   | 1324310  | Terminal (T318A Neutral Switch) .....                              | 1   |
| 13   | 1324310  | Terminal (T318B Neutral Switch) .....                              | 1   |
| 14   | .....    | Connector Assembly (CPS50 Display, CN5) .....                      | 1   |
| 14   | .....    | Connector Assembly (CPS50 Display, CN5) .....                      | 1   |
| 15   | 4648567  | Connector (CPS314 Light/Turn Switch) .....                         | 1   |
| 15   | 4648568  | Connector Lock (CPS314 Light/Turn Switch) .....                    | 1   |
| 16   | .....    | Connector Assembly (CPS76 Horn Switch) .....                       | 1   |
| 16   | .....    | Connector Assembly (CPS76 Horn Switch) .....                       | 1   |
| 17   | 2314778  | Cover (CPS313 Ignition Switch) .....                               | 1   |
| 17   | 370728   | Connector Body (CPS313 Ignition Switch) .....                      | 1   |
| 18   | 2081253  | Clip .....                                                         | 3   |
| 19   | 1324310  | Terminal (TS413 Telemetry) .....                                   | 1   |
| 20   | .....    | Connector Assembly (CRS315 Horn Relay) .....                       | 1   |
| 21   | 2044949  | Terminal (TS321 Telemetry/Speed Limiter) .....                     | 1   |
| 22   | 2022901  | Connector Body (CPS322 Cab) .....                                  | 1   |
| 23   | 2314777  | Connector Body (CPS4B Wire Harness - Front Light, RH) .....        | 1   |
| 24   | 1324310  | Terminal (T319 Horn Button Option) .....                           | 1   |
| 25   | 2022901  | Connector Body (CPS323 Hydraulic/SBS) .....                        | 1   |
| 26   | 2050634  | Connector (CRP88 CAN Connection) .....                             | 1   |
| 26   | 2050635  | Connector Lock (CRP88 CAN Connection) .....                        | 1   |
| 27   | .....    | Connector Assembly (CRP84A Wire Harness - Frame, CN1) .....        | 1   |
| 28   | .....    | Connector Assembly (CRP84B Wire Harness - Frame, CN2) .....        | 1   |
| 29   | 2050634  | Connector (CRP26 Monotrol Transmission Control Switch) .....       | 1   |
| 29   | 2050635  | Connector Lock (CRP26 Monotrol Transmission Control Switch) .....  | 1   |
| 30   | .....    | Connector Assembly (CPS1 V-ECU, CN3) .....                         | 1   |
| 31   | .....    | Connector Assembly (CPS5 V-ECU, CN4) .....                         | 1   |
| 32   | 4613153  | Connector (CPS354 Speed Sensor) .....                              | 1   |
| 33   | 4613154  | Connector (CRS354 End Cap, Speed Sensor) .....                     | 1   |
| 34   | 4612835  | Connector (CPS149 Pressure Sensor) .....                           | 1   |
| 35   | 2050634  | Connector (CRS149 End Cap, Pressure Sensor) .....                  | 1   |
| 36   | 2081254  | Clip .....                                                         | 1   |
| 37   | 4613115  | Connector (CPS57 Forward/Reverse Solenoid) .....                   | 1   |
| 38   | 346330   | Connector Body (CPS25 Service Brake Switch) .....                  | 1   |
| 39   | .....    | Connector Assembly (CPS151 Lowering Solenoid) .....                | 1   |
| 40   | .....    | End Cap (CRS151 End Cap, Lowering Solenoid) .....                  | 1   |
| 41   | .....    | Connector Assembly (CPS150 Unload Solenoid) .....                  | 1   |
| 42   | .....    | End Cap (CRS150 End Cap, Unload Solenoid) .....                    | 1   |
| 43   | 4644502  | Electrical Terminal (T51 Torque Converter Oil Thermo Switch) ..... | 1   |

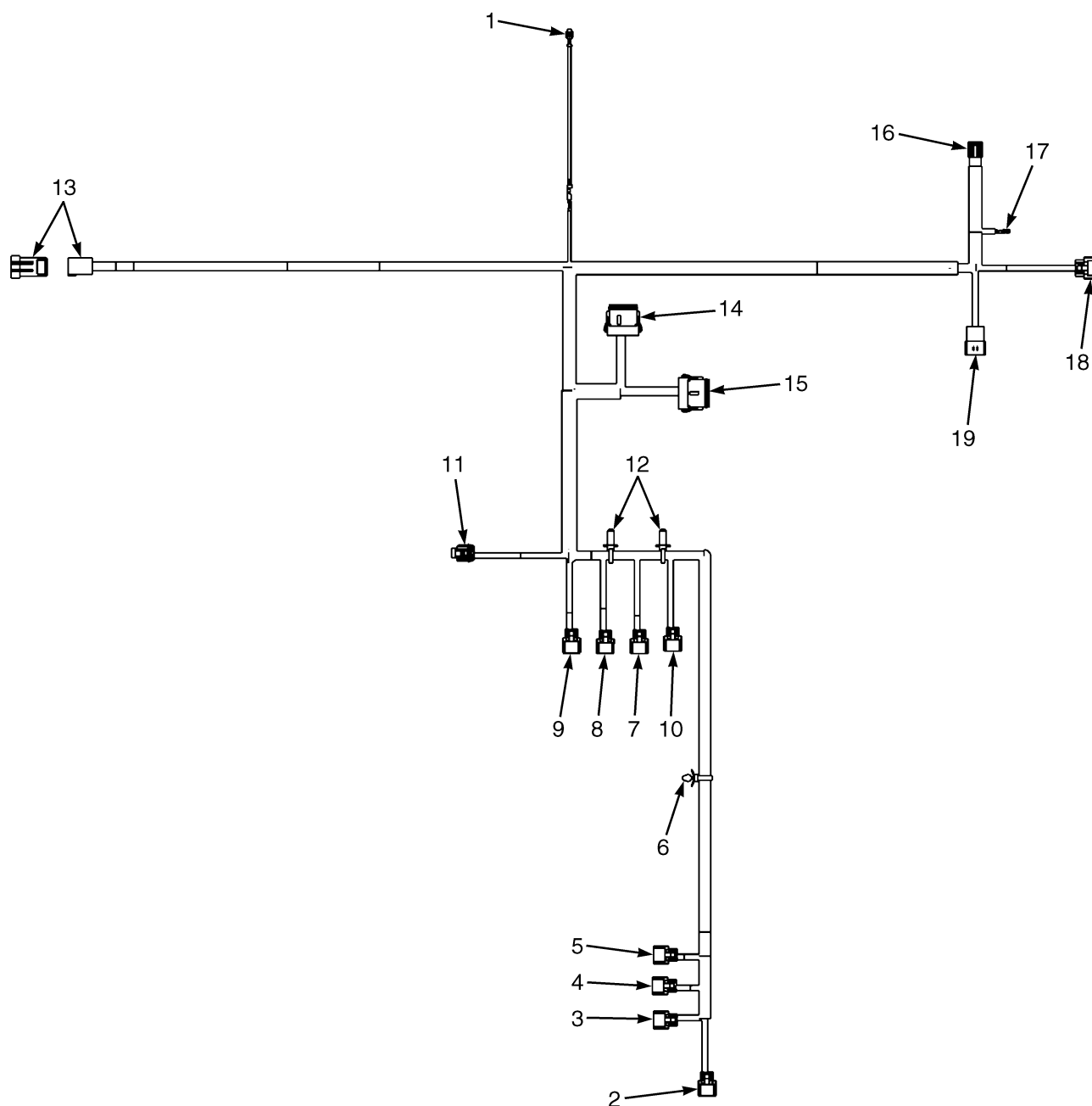
**WIRE HARNESS  
COWL – MONOTROL PEDAL**

| ITEM | PART NO. | DESCRIPTION                               | QTY |
|------|----------|-------------------------------------------|-----|
| 44   | 1324310  | Terminal (TS326 Option Speed Alarm) ..... | 1   |

## NOTES

[illegible]

## WIRE HARNESS (FIGURE 5-27) E-HYDRAULICS



BP082394

**WIRE HARNESS  
E-HYDRAULICS**

| ITEM | PART NO.         | DESCRIPTION                                | QTY |
|------|------------------|--------------------------------------------|-----|
|      | <b>b</b> 4653938 | Wire Harness (E-Hyd 3 Function) .....      | 1   |
|      | <b>b</b> 4653937 | Wire Harness (E-Hyd 4 Function) .....      | 1   |
| 1    | 1402908          | Terminal (Ignition Switch ACC) .....       | 1   |
| 2    | .....            | Connector Assembly (CPS99 1A Lift) .....   | 1   |
| 2    | 4612834          | Connector .....                            | 1   |
| 2    | 4612843          | Connector Lock .....                       | 1   |
| 2    | 4612827          | Terminal .....                             | 2   |
| 2    | 2061333          | Wire Seal .....                            | 2   |
| 3    | .....            | Connector Assembly (CPS101 2A Tilt) .....  | 1   |
| 3    | 4612834          | Connector .....                            | 1   |
| 3    | 4612843          | Connector Lock .....                       | 1   |
| 3    | 4612827          | Terminal .....                             | 2   |
| 3    | 2061333          | Wire Seal .....                            | 2   |
| 4    | .....            | Connector Assembly (CPS103 3A Aux 1) ..... | 1   |
| 4    | 4612834          | Connector .....                            | 1   |
| 4    | 4612843          | Connector Lock .....                       | 1   |
| 4    | 4612827          | Terminal .....                             | 1   |
| 4    | 2314741          | Terminal .....                             | 1   |
| 4    | 2061333          | Wire Seal .....                            | 2   |
| 5    | <b>a</b> .....   | Connector Assembly (CPS105 4A Aux 2) ..... | 1   |
| 5    | 4612834          | Connector .....                            | 1   |
| 5    | 4612843          | Connector Lock .....                       | 1   |
| 5    | 4612827          | Terminal .....                             | 1   |
| 5    | 2061333          | Wire Seal .....                            | 2   |
| 5    | 2314741          | Terminal .....                             | 1   |
| 6    | 2081255          | Clip .....                                 | 1   |
| 7    | .....            | Connector Assembly (CPS103 3B Aux 1) ..... | 1   |
| 7    | 4612834          | Connector .....                            | 1   |
| 7    | 4612843          | Connector Lock .....                       | 1   |
| 7    | 2314741          | Terminal .....                             | 1   |
| 7    | 4612827          | Terminal .....                             | 1   |
| 7    | 2061333          | Wire Seal .....                            | 2   |
| 8    | .....            | Connector Assembly (CPS102 2B Tilt) .....  | 1   |
| 8    | 4612834          | Connector .....                            | 1   |
| 8    | 4612843          | Connector Lock .....                       | 1   |
| 8    | 4612827          | Terminal .....                             | 1   |
| 8    | 2314741          | Terminal .....                             | 1   |
| 8    | 2061333          | Wire Seal .....                            | 1   |
| 9    | .....            | Connector Assembly (CPS100 1B Lower) ..... | 1   |
| 9    | 4612834          | Connector .....                            | 1   |
| 9    | 4612843          | Connector Lock .....                       | 1   |
| 9    | 4612827          | Terminal .....                             | 2   |
| 9    | 2061333          | Wire Seal .....                            | 2   |
| 10   | .....            | Connector Assembly (CPS106 4B Aux2) .....  | 1   |
| 10   | 4612834          | Connector .....                            | 1   |
| 10   | 4612843          | Connector Lock .....                       | 1   |
| 10   | 2061333          | Wire Seal .....                            | 2   |
| 10   | 4612827          | Terminal .....                             | 1   |
| 10   | 2314741          | Terminal .....                             | 1   |
| 11   | .....            | Connector Assembly (CPS325 C1-Sol) .....   | 1   |

**WIRE HARNESS  
E-HYDRAULICS**

| ITEM | PART NO.       | DESCRIPTION                                      | QTY |
|------|----------------|--------------------------------------------------|-----|
| 11   | .....          | Connector .....                                  | 1   |
| 11   | .....          | Retainer .....                                   | 1   |
| 12   | 2081253        | Clip .....                                       | 2   |
| 13   | .....          | Connector Assembly (CPS53 Tilt Sensor) .....     | 1   |
| 13   | 4614793        | Connector .....                                  | 1   |
| 13   | 4614809        | Connector Lock .....                             | 1   |
| 13   | 2314747        | Terminal .....                                   | 3   |
| 13   | 4614516        | Wire Seal .....                                  | 3   |
| 13   | 2795583        | Connector (3 Way) (CRP53 End Cap) .....          | 1   |
| 14   | .....          | Connector Assembly (CPS2 Controller C1) .....    | 1   |
| 14   | 4108249        | Connector .....                                  | 1   |
| 14   | 1330438        | Terminal (Socket) .....                          | 6   |
| 14   | 1484377        | Plug .....                                       | 8   |
| 14   | 1597773        | Terminal .....                                   | 4   |
| 15   | <b>a</b> ..... | Connector Assembly (CPS3 Controller C2) .....    | 1   |
| 15   | 4108250        | Connector .....                                  | 1   |
| 15   | 1597773        | Terminal .....                                   | 8   |
| 15   | 1484377        | Plug .....                                       | 6   |
| 15   | 1330438        | Terminal (Socket) .....                          | 4   |
| 16   | .....          | Connector Assembly (CRP323E Cowl Harness) .....  | 1   |
| 16   | 2049855        | Connector .....                                  | 1   |
| 16   | 2314741        | Terminal .....                                   | 6   |
| 16   | 2061333        | Wire Seal .....                                  | 6   |
| 17   | 1324308        | Terminal (TP319 Cowl Harness) .....              | 1   |
| 18   | .....          | Connector Assembly (CPS88E Can Connection) ..... | 1   |
| 18   | 4612835        | Connector .....                                  | 1   |
| 18   | 2314770        | Connector Lock .....                             | 1   |
| 18   | 4612827        | Terminal .....                                   | 2   |
| 18   | 2314741        | Terminal .....                                   | 1   |
| 18   | 2061333        | Wire Seal .....                                  | 3   |
| 19   | .....          | Connector Assembly (CRP88E Can Connector) .....  | 1   |
| 19   | 2050634        | Connector .....                                  | 1   |
| 19   | 2050635        | Connector Lock .....                             | 1   |
| 19   | 2061328        | Terminal .....                                   | 2   |
| 19   | 2314740        | Terminal .....                                   | 1   |
| 19   | 2061333        | Wire Seal .....                                  | 3   |

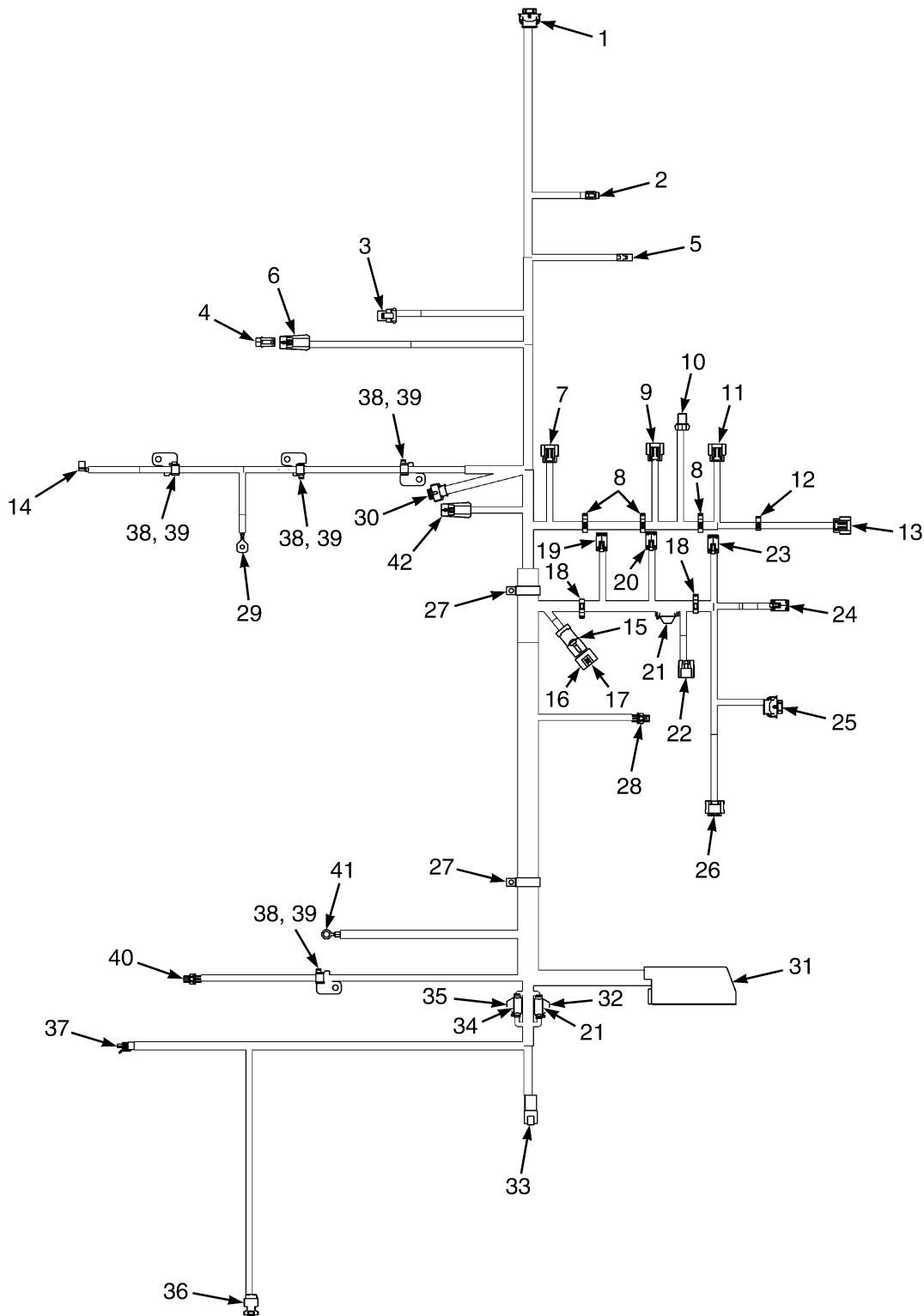
**FOOTNOTES:****a** Used on Four Function Harness**b** 10/2016 →



## NOTES

[illegible]

## WIRE HARNESS (FIGURE 5-28) ENGINE — PSI 2.4L LPG AND 2.4L BI-FUEL



BP082192

**WIRE HARNESS**  
**ENGINE – PSI 2.4L LPG AND 2.4L BI-FUEL**

| ITEM | PART NO. | DESCRIPTION                                                 | QTY |
|------|----------|-------------------------------------------------------------|-----|
|      | 4644871  | Wire Harness .....                                          | 1   |
|      | 4644872  | Wire Harness (Bi-Fuel) .....                                | 1   |
| 1    | .....    | Connector Assembly (Fuel Pressure Manifold - Bi-Fuel) ..... | 1   |
| 1    | 1567469  | Plug .....                                                  | 1   |
| 1    | 4053417  | Terminal .....                                              | 4   |
| 1    | 1567470  | Wire Seal .....                                             | 4   |
| 2    | .....    | Connector Assembly (LPG Buzzer - Common) .....              | 1   |
| 2    | 1484557  | Connector (2 Socket) .....                                  | 1   |
| 2    | 1484558  | Connector (Secondary Lock) .....                            | 1   |
| 2    | 1463139  | Terminal .....                                              | 2   |
| 3    | .....    | Connector Assembly (LPG Sensor Switch - Common) .....       | 1   |
| 3    | 1329152  | Plug .....                                                  | 1   |
| 3    | 1329151  | Secondary Lock .....                                        | 1   |
| 3    | 1330281  | Terminal .....                                              | 2   |
| 3    | 1402888  | Seal (Purple) .....                                         | 2   |
| 4    | .....    | Connector Assembly (End Cap - Common) .....                 | 1   |
| 4    | 1483329  | Connector Body .....                                        | 1   |
| 4    | 1487441  | Housing .....                                               | 1   |
| 4    | 1482668  | Plug (Cavity Plug) .....                                    | 4   |
| 5    | .....    | Connector Assembly (Fuel Pump - Bi-Fuel) .....              | 1   |
| 5    | 1308259  | Connector Body .....                                        | 1   |
| 5    | 314775   | Terminal .....                                              | 2   |
| 6    | .....    | Connector Assembly (EGO2 - Common) .....                    | 1   |
| 6    | 1498424  | Housing .....                                               | 1   |
| 6    | 1650797  | Lock .....                                                  | 1   |
| 6    | 1330355  | Terminal .....                                              | 4   |
| 6    | 1476108  | Wire Seal (White) .....                                     | 4   |
| 7    | .....    | Connector Assembly (CYL1 - Common) .....                    | 1   |
| 7    | 4612989  | Connector .....                                             | 1   |
| 7    | 4612978  | Terminal .....                                              | 3   |
| 7    | 4614516  | Wire Seal .....                                             | 3   |
| 8    | 1509890  | Clip .....                                                  | 3   |
| 9    | .....    | Connector Assembly (CYL2 - Common) .....                    | 1   |
| 9    | 4612989  | Connector .....                                             | 1   |
| 9    | 4612978  | Terminal .....                                              | 3   |
| 9    | 4614516  | Wire Seal .....                                             | 3   |
| 10   | .....    | Connector Assembly (Lock Off - Common) .....                | 1   |
| 10   | 1539872  | Connector .....                                             | 1   |
| 10   | 1345690  | Terminal (E FTG SEC LOCK) .....                             | 1   |
| 10   | 1330355  | Terminal .....                                              | 2   |
| 10   | 1476108  | Wire Seal (White) .....                                     | 2   |
| 11   | .....    | Connector Assembly (CYL3 - Common) .....                    | 1   |
| 11   | 4612989  | Connector .....                                             | 1   |
| 11   | 4612978  | Terminal .....                                              | 3   |
| 11   | 4614516  | Wire Seal .....                                             | 3   |
| 12   | 1509888  | Clip (Conduit) .....                                        | 1   |
| 13   | .....    | Connector Assembly (CYL4 - Common) .....                    | 1   |
| 13   | 4612989  | Connector .....                                             | 1   |
| 13   | 4612978  | Terminal .....                                              | 3   |
| 13   | 4614516  | Wire Seal .....                                             | 3   |

# WIRE HARNESS

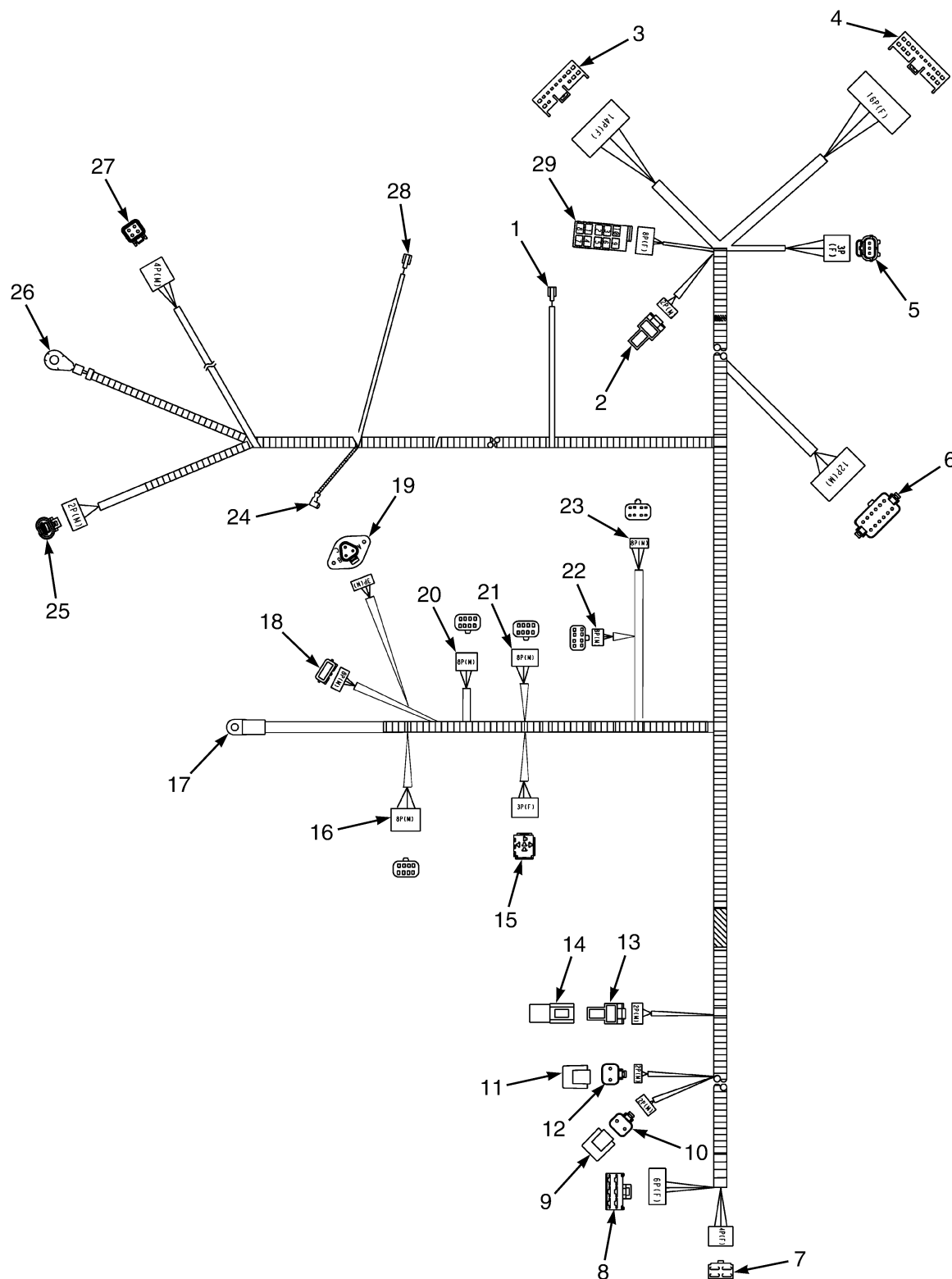
## ENGINE – PSI 2.4L LPG AND 2.4L BI-FUEL

| ITEM | PART NO. | DESCRIPTION                                             | QTY |
|------|----------|---------------------------------------------------------|-----|
| 14   | .....    | Connector Assembly (Oil Pressure - Common) .....        | 1   |
| 14   | 1402823  | Terminal .....                                          | 1   |
| 15   | .....    | Connector Assembly (Diagnostic - Common) .....          | 1   |
| 15   | 1641944  | Connector .....                                         | 1   |
| 15   | 1641945  | Spacer .....                                            | 1   |
| 16   | .....    | Connector Assembly (Endcap) .....                       | 1   |
| 17   | 1641947  | Cap .....                                               | 1   |
| 18   | 1402815  | Clip .....                                              | 2   |
| 19   | .....    | Connector Assembly (CYL INJ 1 - Bi-Fuel) .....          | 1   |
| 19   | 4063797  | Connector .....                                         | 1   |
| 19   | 4073259  | Connector Lock (Secondary) .....                        | 1   |
| 19   | 1402919  | Terminal .....                                          | 2   |
| 19   | 1503648  | Connector Seal .....                                    | 2   |
| 20   | .....    | Connector Assembly (CYL INJ 2 - Bi-Fuel) .....          | 1   |
| 20   | 4063797  | Connector .....                                         | 1   |
| 20   | 4073259  | Connector Lock (Secondary) .....                        | 1   |
| 20   | 1402919  | Terminal .....                                          | 2   |
| 20   | 1503648  | Connector Seal .....                                    | 2   |
| 21   | 1498044  | Fuse (5 Amp) .....                                      | 2   |
| 22   | .....    | Connector Assembly (DEPR - Common) .....                | 1   |
| 22   | 4612836  | Connector .....                                         | 1   |
| 22   | 4612844  | Connector Lock .....                                    | 1   |
| 22   | 2314741  | Terminal .....                                          | 6   |
| 22   | 2061333  | Wire Seal .....                                         | 6   |
| 23   | .....    | Connector Assembly (CYL INJ 3 - Bi-Fuel) .....          | 1   |
| 23   | 4063797  | Connector .....                                         | 1   |
| 23   | 4073259  | Connector Lock (Secondary) .....                        | 1   |
| 23   | 1402919  | Terminal .....                                          | 2   |
| 23   | 1503648  | Connector Seal .....                                    | 2   |
| 24   | .....    | Connector Assembly (CYL INJ 4 - Bi-Fuel) .....          | 1   |
| 24   | 4063797  | Connector .....                                         | 1   |
| 24   | 4073259  | Connector Lock (Secondary) .....                        | 1   |
| 24   | 1402919  | Terminal .....                                          | 2   |
| 24   | 1503648  | Connector Seal .....                                    | 2   |
| 25   | .....    | Connector Assembly (TMAP - Common) .....                | 1   |
| 25   | 1567469  | Plug .....                                              | 1   |
| 25   | 4053417  | Terminal .....                                          | 4   |
| 25   | 1567470  | Wire Seal .....                                         | 4   |
| 26   | .....    | Connector Assembly (Throttle - Common) .....            | 1   |
| 26   | 1569973  | Connector Body .....                                    | 1   |
| 26   | 1525596  | Terminal .....                                          | 6   |
| 26   | 1533810  | Seal (Green) .....                                      | 6   |
| 27   | 147006   | Clamp .....                                             | 2   |
| 28   | .....    | Connector Assembly (ECT - Common) .....                 | 1   |
| 28   | 4062635  | Connector .....                                         | 1   |
| 28   | 4073293  | Connector Lock (Secondary) .....                        | 1   |
| 28   | 1548517  | Terminal (Socket) .....                                 | 2   |
| 28   | 1548519  | Seal .....                                              | 2   |
| 29   | .....    | Connector Assembly (Alternator Negative - Common) ..... | 1   |
| 29   | 4062637  | Terminal .....                                          | 1   |

**WIRE HARNESS**  
**ENGINE – PSI 2.4L LPG AND 2.4L BI-FUEL**

| ITEM | PART NO. | DESCRIPTION                                          | QTY |
|------|----------|------------------------------------------------------|-----|
| 30   | .....    | Connector Assembly (CAM Sensor Common) .....         | 1   |
| 30   | 4062712  | Connector .....                                      | 1   |
| 30   | 4053417  | Terminal .....                                       | 3   |
| 30   | 1567470  | Wire Seal .....                                      | 3   |
| 31   | .....    | Connector Assembly (ECM - Common) .....              | 1   |
| 31   | 1641949  | Connector .....                                      | 1   |
| 31   | 1607549  | Terminal .....                                       | 44  |
| 31   | 4025685  | Plug .....                                           | 40  |
| 31   | 4023295  | Terminal .....                                       | 6   |
| 32   | .....    | Connector Assembly (VSW 5A - Common) .....           | 1   |
| 32   | 1602431  | Fuse Holder .....                                    | 1   |
| 33   | .....    | Connector Assembly (To Frame Harness - Common) ..... | 1   |
| 33   | 4047908  | Connector .....                                      | 1   |
| 33   | 1352603  | Secondary Lock .....                                 | 1   |
| 33   | 1330437  | Terminal (Pin) .....                                 | 10  |
| 33   | 1363885  | Terminal (Pin) .....                                 | 2   |
| 34   | 1498046  | Fuse (10 Amp) .....                                  | 1   |
| 35   | .....    | Connector Assembly (Fuel Pump 10A - Bi-Fuel) .....   | 1   |
| 35   | 1602431  | Fuse Holder .....                                    | 1   |
| 36   | .....    | Connector Assembly (VSS - Common) .....              | 1   |
| 36   | 4128658  | Connector .....                                      | 1   |
| 37   | 1532571  | Terminal .....                                       | 6   |
| 37   | .....    | Connector Assembly (ACC Pedal Sensor - Common) ..... | 1   |
| 37   | 1525584  | Connector .....                                      | 1   |
| 38   | 1532761  | Clip .....                                           | 4   |
| 39   | 1532774  | Clip .....                                           | 4   |
| 40   | .....    | Connector Assembly (Crank Sensor - Common) .....     | 1   |
| 40   | 4062635  | Connector .....                                      | 1   |
| 40   | 4073293  | Connector Lock (Secondary) .....                     | 1   |
| 40   | 1548517  | Terminal (Socket) .....                              | 2   |
| 40   | 1548519  | Seal .....                                           | 2   |
| 41   | 148616   | E-Ring (Ground - Common) .....                       | 1   |
| 42   | .....    | Connector Assembly (EGO1 - Common) .....             | 1   |
| 42   | 1498424  | Housing .....                                        | 1   |
| 42   | 1650797  | Lock .....                                           | 1   |
| 42   | 1330355  | Terminal .....                                       | 4   |
| 42   | 1476108  | Wire Seal (White) .....                              | 4   |

## WIRE HARNESS (FIGURE 5-29) FRAME — PSI 2.4L LPG AND 2.4L BI-FUEL



BP082434

**WIRE HARNESS**  
**FRAME – PSI 2.4L LPG AND 2.4L BI-FUEL****KEY:****A: PSI 2.4L Bi-Fuel****B: PSI 2.4L LPG**

| ITEM | PART NO.         | DESCRIPTION                                              | QTY |    |
|------|------------------|----------------------------------------------------------|-----|----|
|      |                  |                                                          | A   | B  |
|      | <b>a</b> 4653303 | Wire Harness (PSI 2.4L Bi-Fuel) .....                    | 1   | .. |
|      | <b>b</b> 4656443 | Wire Harness (PSI 2.4L Bi-Fuel) .....                    | 1   | .. |
|      | <b>a</b> 4653304 | Wire Harness (PSI 2.4L LPG) .....                        | ..  | 1  |
|      | <b>b</b> 4656379 | Wire Harness (PSI 2.4L LPG) .....                        | ..  | 1  |
| 1    | .....            | Connector Assembly (T200 Starter) .....                  | 1   | 1  |
| 1    | 1521309          | Connector Body .....                                     | 1   | 1  |
| 1    | 4646194          | Boot .....                                               | 1   | 1  |
| 2    | .....            | Connector Assembly (CPS21 Opt B+) .....                  | 1   | 1  |
| 2    | 1308259          | Connector Body .....                                     | 1   | 1  |
| 3    | .....            | Connector Assembly (CPS84B Wire Harness Cowl) .....      | 1   | 1  |
| 4    | .....            | Connector Assembly (CPS84A Wire Harness Cowl) .....      | 1   | 1  |
| 5    | .....            | Connector Assembly (CPS88 Wire Harness Can) .....        | 1   | 1  |
| 5    | 4612835          | Connector .....                                          | 1   | 1  |
| 5    | 2314770          | Connector Lock .....                                     | 1   | 1  |
| 6    | .....            | Connector Assembly (CPS55 Wire Harness Engine) .....     | 1   | 1  |
| 6    | 1525563          | Connector .....                                          | 1   | 1  |
| 7    | .....            | Connector Assembly (CPS17B Rear Light B) .....           | 1   | 1  |
| 7    | 2314777          | Connector Body .....                                     | 1   | 1  |
| 8    | .....            | Connector Assembly (CPS17A Rear Light A) .....           | 1   | 1  |
| 9    | .....            | Connector Assembly (CRP54 End Cap) .....                 | 1   | 1  |
| 9    | 1626727          | Connector .....                                          | 1   | 1  |
| 10   | .....            | Connector Assembly (CPS54 Backup Alarm) .....            | 1   | 1  |
| 10   | 1490242          | Connector (2 Way) .....                                  | 1   | 1  |
| 10   | 1490243          | Connector (Secondary Lock) .....                         | 1   | 1  |
| 11   | .....            | Connector Assembly (CRP79 End Cap) .....                 | 1   | 1  |
| 11   | 1626727          | Connector .....                                          | 1   | 1  |
| 12   | .....            | Connector Assembly (Rear Horn Button) .....              | 1   | 1  |
| 12   | 1490242          | Connector (2 Way) .....                                  | 1   | 1  |
| 12   | 1490243          | Connector (Secondary Lock) .....                         | 1   | 1  |
| 13   | .....            | Connector Assembly (CPS67 Remote Keyswitch) .....        | 1   | 1  |
| 13   | 1308259          | Connector Body .....                                     | 1   | 1  |
| 14   | .....            | Connector Assembly (CRP67 Jumper) .....                  | 1   | 1  |
| 14   | 1308260          | Connector Body .....                                     | 1   | 1  |
| 15   | .....            | Connector Assembly (CPS312 Opt Flasher) .....            | 1   | 1  |
| 15   | 2100204          | Receptacle .....                                         | 1   | 1  |
| 16   | .....            | Connector Assembly (CPS20 Fuse Block) .....              | 1   | 1  |
| 16   | 1521185          | Connector .....                                          | 1   | 1  |
| 16   | 1521188          | Lock .....                                               | 1   | 1  |
| 16   | 4045422          | Cover .....                                              | 1   | 1  |
| 16   | 4045423          | Bracket .....                                            | 1   | 1  |
| 17   | .....            | Connector Assembly (T257 PDM+) .....                     | 1   | 1  |
| 17   | 148800           | Terminal (Battery Cable) .....                           | 1   | 1  |
| 18   | .....            | Connector Assembly (CRS221 Alternator Fuse 50 Amp) ..... | 1   | 1  |
| 18   | <b>b</b> 4159458 | Fuse Holder .....                                        | 1   | 1  |
| 18   | 1378418          | Fuse (50 Amp) .....                                      | 1   | 1  |

## WIRE HARNESS

### FRAME – PSI 2.4L LPG AND 2.4L BI-FUEL

**KEY:****A: PSI 2.4L Bi-Fuel****B: PSI 2.4L LPG**

| ITEM | PART NO.  | DESCRIPTION                                          | QTY |    |
|------|-----------|------------------------------------------------------|-----|----|
|      |           |                                                      | A   | B  |
| 18   | a 4136560 | Fuse Holder .....                                    | 1   | 1  |
| 18   | a 4136561 | Cover .....                                          | 1   | 1  |
| 18   | a 4136562 | Terminal .....                                       | 1   | 1  |
| 18   | a 4136563 | Wire Seal .....                                      | 1   | 1  |
| 19   | .....     | Connector Assembly (CPS111 Diagnostic) .....         | 1   | 1  |
| 19   | 1566116   | Connector (DT PLU 3-Socket, With Flange) .....       | 1   | 1  |
| 19   | 1532664   | Connector (Secondary Lock) .....                     | 1   | 1  |
| 19   | 1566117   | Dust Cap (For Diagnostic Cable) .....                | 1   | 1  |
| 20   | .....     | Connector Assembly (CPS13 PDM) .....                 | 1   | 1  |
| 20   | 1521183   | Connector .....                                      | 1   | 1  |
| 20   | 1521188   | Lock .....                                           | 1   | 1  |
| 21   | .....     | Connector Assembly (CPS14 PDM) .....                 | 1   | 1  |
| 21   | 1521184   | Connector .....                                      | 1   | 1  |
| 21   | 1521188   | Lock .....                                           | 1   | 1  |
| 22   | .....     | Connector Assembly (CPS16 PDM) .....                 | 1   | 1  |
| 22   | 1521186   | Connector .....                                      | 1   | 1  |
| 22   | 1521188   | Lock .....                                           | 1   | 1  |
| 23   | .....     | Connector Assembly (CPS15 PDM) .....                 | 1   | 1  |
| 23   | 1521185   | Connector .....                                      | 1   | 1  |
| 23   | 1521188   | Lock .....                                           | 1   | 1  |
| 24   | .....     | Connector Assembly (TS216 Water Thermo Sender) ..... | 1   | 1  |
| 24   | 2023463   | Terminal .....                                       | 1   | 1  |
| 25   | .....     | Connector Assembly (CPS214 Alternator) .....         | 1   | 1  |
| 25   | 4062635   | Connector .....                                      | 1   | 1  |
| 26   | .....     | Connector Assembly (T215 Alternator) .....           | 1   | 1  |
| 26   | 4062637   | Terminal .....                                       | 1   | 1  |
| 26   | 4646197   | Boot .....                                           | 1   | 1  |
| 27   | .....     | Connector Assembly (CPS52 Wire Harness Seat) .....   | 1   | 1  |
| 27   | 1463189   | Connector .....                                      | 1   | 1  |
| 27   | 1463196   | Connector (DTM PLU 4-Socket) .....                   | 1   | 1  |
| 27   | 1484377   | Plug .....                                           | 1   | 1  |
| 28   | .....     | Connector Assembly (T69 Fuel Sender) .....           | 1   | .. |
| 28   | 1402849   | Connector Body .....                                 | 1   | .. |
| 29   | .....     | Connector Assembly (CPS308 Fuel Select Switch) ..... | 1   | .. |
| 29   | 2081332   | Electrical Connector .....                           | 1   | .. |

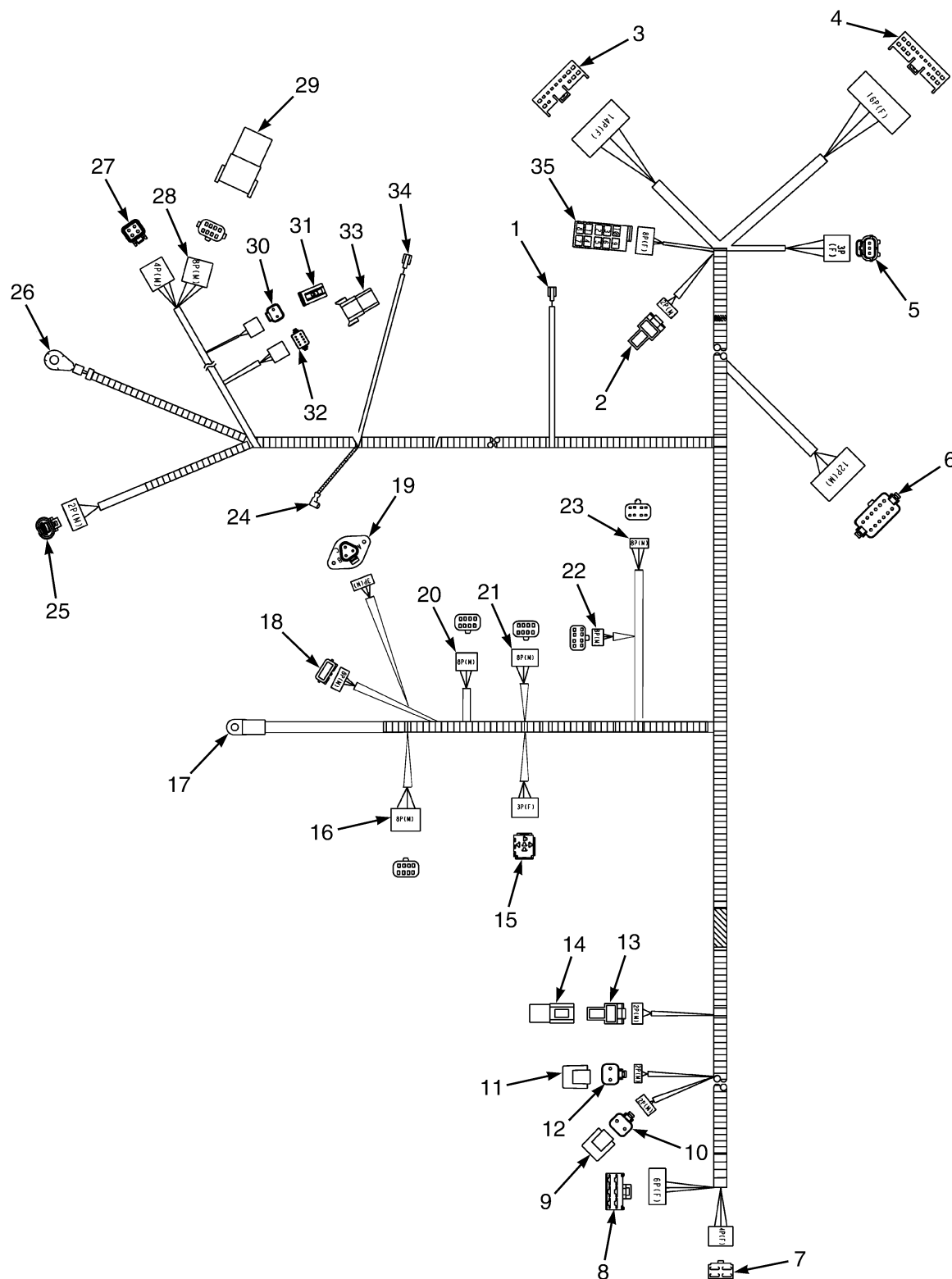
**FOOTNOTES:****a** → 2/2017**b** 2/2017 →



## NOTES

[illegible]

## WIRE HARNESS (FIGURE 5-30) FRAME — PSI 2.4L LPG AND 2.4L BI-FUEL W/MLM



BP082433

## WIRE HARNESS

### FRAME – PSI 2.4L LPG AND 2.4L BI-FUEL W/MLM

**KEY:****A: PSI 2.4L Bi-Fuel****B: PSI 2.4L LPG**

| ITEM | PART NO. | DESCRIPTION                                              | QTY |    |
|------|----------|----------------------------------------------------------|-----|----|
|      |          |                                                          | A   | B  |
|      | 4655552  | Wire Harness (PSI 2.4L Bi-Fuel w/MLM) .....              | 1   | .. |
|      | 4655553  | Wire Harness (PSI 2.4L LPG w/MLM) .....                  | ..  | 1  |
| 1    | .....    | Connector Assembly (T200 Starter) .....                  | 1   | 1  |
| 1    | 1521309  | Connector Body .....                                     | 1   | 1  |
| 1    | 4646194  | Boot .....                                               | 1   | 1  |
| 2    | .....    | Connector Assembly (CPS21 Opt B+) .....                  | 1   | 1  |
| 2    | 1308259  | Connector Body .....                                     | 1   | 1  |
| 3    | .....    | Connector Assembly (CPS84B Wire Harness Cowl) .....      | 1   | 1  |
| 4    | .....    | Connector Assembly (CPS84A Wire Harness Cowl) .....      | 1   | 1  |
| 5    | .....    | Connector Assembly (CPS88 Wire Harness Can) .....        | 1   | 1  |
| 5    | 4612835  | Connector .....                                          | 1   | 1  |
| 5    | 2314770  | Connector Lock .....                                     | 1   | 1  |
| 6    | .....    | Connector Assembly (CPS55 Wire Harness Engine) .....     | 1   | 1  |
| 6    | 1525563  | Connector .....                                          | 1   | 1  |
| 7    | .....    | Connector Assembly (CPS17B Rear Light B) .....           | 1   | 1  |
| 7    | 2314777  | Connector Body .....                                     | 1   | 1  |
| 8    | .....    | Connector Assembly (CPS17A Rear Light A) .....           | 1   | 1  |
| 9    | .....    | Connector Assembly (CRP54 End Cap) .....                 | 1   | 1  |
| 9    | 1626727  | Connector .....                                          | 1   | 1  |
| 10   | .....    | Connector Assembly (CPS54 Backup Alarm) .....            | 1   | 1  |
| 10   | 1490242  | Connector (2 Way) .....                                  | 1   | 1  |
| 10   | 1490243  | Connector (Secondary Lock) .....                         | 1   | 1  |
| 11   | .....    | Connector Assembly (CRP79 End Cap) .....                 | 1   | 1  |
| 11   | 1626727  | Connector .....                                          | 1   | 1  |
| 12   | .....    | Connector Assembly (Rear Horn Button) .....              | 1   | 1  |
| 12   | 1490242  | Connector (2 Way) .....                                  | 1   | 1  |
| 12   | 1490243  | Connector (Secondary Lock) .....                         | 1   | 1  |
| 13   | .....    | Connector Assembly (CPS67 Remote Keyswitch) .....        | 1   | 1  |
| 13   | 1308259  | Connector Body .....                                     | 1   | 1  |
| 14   | .....    | Connector Assembly (CRP67 Jumper) .....                  | 1   | 1  |
| 14   | 1308260  | Connector Body .....                                     | 1   | 1  |
| 15   | .....    | Connector Assembly (CPS312 Opt Flasher) .....            | 1   | 1  |
| 15   | 2100204  | Receptacle .....                                         | 1   | 1  |
| 16   | .....    | Connector Assembly (CPS20 Fuse Block) .....              | 1   | 1  |
| 16   | 1521185  | Connector .....                                          | 1   | 1  |
| 16   | 1521188  | Lock .....                                               | 1   | 1  |
| 16   | 4045422  | Cover .....                                              | 1   | 1  |
| 16   | 4045423  | Bracket .....                                            | 1   | 1  |
| 17   | .....    | Connector Assembly (T257 PDM+) .....                     | 1   | 1  |
| 17   | 148800   | Terminal (Battery Cable) .....                           | 1   | 1  |
| 18   | .....    | Connector Assembly (CRS221 Alternator Fuse 50 Amp) ..... | 1   | 1  |
| 18   | 4159458  | Fuse Holder .....                                        | 1   | 1  |
| 18   | 1378418  | Fuse (50 Amp) .....                                      | 1   | 1  |
| 19   | .....    | Connector Assembly (CPS111 Diagnostic) .....             | 1   | 1  |
| 19   | 1566116  | Connector (DT PLU 3-Socket, With Flange) .....           | 1   | 1  |

## WIRE HARNESS

### FRAME – PSI 2.4L LPG AND 2.4L BI-FUEL W/MLM

**KEY:****A: PSI 2.4L Bi-Fuel****B: PSI 2.4L LPG**

| ITEM | PART NO. | DESCRIPTION                                               | QTY |   |
|------|----------|-----------------------------------------------------------|-----|---|
|      |          |                                                           | A   | B |
| 19   | 1532664  | Connector (Secondary Lock) .....                          | 1   | 1 |
| 19   | 1566117  | Dust Cap (For Diagnostic Cable) .....                     | 1   | 1 |
| 20   | .....    | Connector Assembly (CPS13 PDM) .....                      | 1   | 1 |
| 20   | 1521183  | Connector .....                                           | 1   | 1 |
| 20   | 1521188  | Lock .....                                                | 1   | 1 |
| 21   | .....    | Connector Assembly (CPS14 PDM) .....                      | 1   | 1 |
| 21   | 1521184  | Connector .....                                           | 1   | 1 |
| 21   | 1521188  | Lock .....                                                | 1   | 1 |
| 22   | .....    | Connector Assembly (CPS16 PDM) .....                      | 1   | 1 |
| 22   | 1521186  | Connector .....                                           | 1   | 1 |
| 22   | 1521188  | Lock .....                                                | 1   | 1 |
| 23   | .....    | Connector Assembly (CPS15 PDM) .....                      | 1   | 1 |
| 23   | 1521185  | Connector .....                                           | 1   | 1 |
| 23   | 1521188  | Lock .....                                                | 1   | 1 |
| 24   | .....    | Connector Assembly (TS216 Water Thermo Sender) .....      | 1   | 1 |
| 24   | 2023463  | Terminal .....                                            | 1   | 1 |
| 25   | .....    | Connector Assembly (CPS214 Alternator) .....              | 1   | 1 |
| 25   | 4062635  | Connector .....                                           | 1   | 1 |
| 26   | .....    | Connector Assembly (T215 Alternator) .....                | 1   | 1 |
| 26   | 4062637  | Terminal .....                                            | 1   | 1 |
| 26   | 4646197  | Boot .....                                                | 1   | 1 |
| 27   | .....    | Connector Assembly (CPS52 Wire Harness Seat) .....        | 1   | 1 |
| 27   | 1463189  | Connector .....                                           | 1   | 1 |
| 27   | 1463196  | Connector (DTM PLU 4-Socket) .....                        | 1   | 1 |
| 27   | 1484377  | Plug .....                                                | 1   | 1 |
| 28   | .....    | Connector Assembly (CPS90 MLM) .....                      | 1   | 1 |
| 28   | 1541991  | Connector (DTM PLU 8-Socket) .....                        | 1   | 1 |
| 28   | 1541992  | Connector (Secondary Lock) .....                          | 1   | 1 |
| 28   | 1463139  | Terminal .....                                            | 1   | 1 |
| 28   | 1463141  | Terminal (Socket) .....                                   | 1   | 1 |
| 28   | 1484377  | Plug .....                                                | 1   | 1 |
| 29   | .....    | Connector Assembly (CRP90 End Cap) .....                  | 1   | 1 |
| 29   | 1541988  | Connector (8 Pin) .....                                   | 1   | 1 |
| 29   | 1484377  | Plug .....                                                | 1   | 1 |
| 30   | .....    | Connector Assembly (CRP75 Seat Belt Switch Harness) ..... | 1   | 1 |
| 30   | 1493465  | Connector (2 Pin) .....                                   | 1   | 1 |
| 30   | 1330414  | Connector (Secondary Lock) .....                          | 1   | 1 |
| 30   | 1531312  | Terminal .....                                            | 1   | 1 |
| 31   | .....    | Connector Assembly (CPS75 End Cap) .....                  | 1   | 1 |
| 31   | 1490242  | Connector (2 Way) .....                                   | 1   | 1 |
| 31   | 1490243  | Connector (Secondary Lock) .....                          | 1   | 1 |
| 32   | .....    | Connector Assembly (CPS310 Control Module) .....          | 1   | 1 |
| 32   | 1502625  | Connector (DT PLU 8-Socket) .....                         | 1   | 1 |
| 32   | 1502626  | Connector (Secondary Lock) .....                          | 1   | 1 |
| 32   | 1484377  | Plug .....                                                | 1   | 1 |

## WIRE HARNESS

### FRAME – PSI 2.4L LPG AND 2.4L BI-FUEL W/MLM

**KEY:****A: PSI 2.4L Bi-Fuel****B: PSI 2.4L LPG**

| ITEM | PART NO. | DESCRIPTION                                          | QTY |    |
|------|----------|------------------------------------------------------|-----|----|
|      |          |                                                      | A   | B  |
| 32   | 1330438  | Terminal (Socket) .....                              | 1   | 1  |
| 32   | 1597773  | Terminal .....                                       | 1   | 1  |
| 33   | .....    | Connector Assembly (CRP310 End Cap) .....            | 1   | 1  |
| 33   | 1623050  | Housing .....                                        | 1   | 1  |
| 33   | 1330418  | Connector (DT REC 8-Pin) .....                       | 1   | 1  |
| 33   | 1531212  | Stud .....                                           | 1   | 1  |
| 33   | 1484377  | Plug .....                                           | 1   | 1  |
| 34   | .....    | Connector Assembly (T69 Fuel Sender) .....           | 1   | .. |
| 34   | 1402849  | Connector Body .....                                 | 1   | .. |
| 35   | .....    | Connector Assembly (CPS308 Fuel Select Switch) ..... | 1   | .. |
| 35   | 2081332  | Electrical Connector .....                           | 1   | .. |

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**WIRE HARNESS  
FRAME – YANMAR DIESEL**

| ITEM | PART NO.         | DESCRIPTION                                           | QTY |
|------|------------------|-------------------------------------------------------|-----|
|      | <b>a</b> 4653302 | Wire Harness (Frame / Yanmar Diesel) .....            | 1   |
|      | <b>b</b> 4656380 | Wire Harness (Frame / Yanmar Diesel) .....            | 1   |
| 1    | .....            | Connector Assembly (CPS52 Wire Harness Seat) .....    | 1   |
| 1    | 1463189          | Connector .....                                       | 1   |
| 1    | 1463196          | Connector (DTM PLU 4-Socket) .....                    | 1   |
| 1    | 1484377          | Plug .....                                            | 1   |
| 2    | .....            | Connector Assembly (TS201 Oil Pressure Switch) .....  | 1   |
| 2    | 1324310          | Terminal .....                                        | 1   |
| 3    | .....            | Connector Assembly (CPS227 Sedimenter) .....          | 1   |
| 4    | .....            | Connector Assembly (T69 Fuel Sender) .....            | 1   |
| 4    | 1402849          | Connector Body .....                                  | 1   |
| 5    | .....            | Connector Assembly (T200 Starter) .....               | 1   |
| 5    | 148609           | E-Ring .....                                          | 1   |
| 5    | 4646194          | Boot (Terminal) .....                                 | 1   |
| 6    | .....            | Connector Assembly (CPS21 Opt B+) .....               | 1   |
| 6    | 1308259          | Connector Body .....                                  | 1   |
| 7    | .....            | Connector Assembly (CPS84B Wire Harness Cowl) .....   | 1   |
| 8    | .....            | Connector Assembly (CRP78 Terminating Resistor) ..... | 1   |
| 8    | 1547847          | Resistor , 2 pin connector .....                      | 1   |
| 9    | .....            | Connector Assembly (CPS78 Terminating Resistor) ..... | 1   |
| 9    | 1484557          | Connector (2 Socket) .....                            | 1   |
| 10   | .....            | Connector Assembly (CPS84A Wire Harness Cowl) .....   | 1   |
| 11   | .....            | Connector Assembly (CPS88 Wire Harness Cowl) .....    | 1   |
| 11   | 4612835          | Connector .....                                       | 1   |
| 11   | 2314770          | Connector Lock .....                                  | 1   |
| 12   | .....            | Connector Assembly (CPS203 QGS Controller) .....      | 1   |
| 12   | 4612972          | Connector .....                                       | 1   |
| 12   | 4610605          | Plug .....                                            | 1   |
| 13   | .....            | Connector Assembly (CPS204 QGS Controller) .....      | 1   |
| 14   | .....            | Connector Assembly (CPS17B Rear Light B) .....        | 1   |
| 14   | 2314777          | Connector Body .....                                  | 1   |
| 15   | .....            | Connector Assembly (CPS17A Rear Light A) .....        | 1   |
| 16   | .....            | Connector Assembly (CPS54 Backup Alarm) .....         | 1   |
| 16   | 1490242          | Connector (2 Way) .....                               | 1   |
| 16   | 1490243          | Connector (Secondary Lock) .....                      | 1   |
| 17   | .....            | Connector Assembly (CRP54 End Cap) .....              | 1   |
| 17   | 1626727          | Connector .....                                       | 1   |
| 18   | .....            | Connector Assembly (CPS79 Rear Horn Button) .....     | 1   |
| 18   | 1490242          | Connector (2 Way) .....                               | 1   |
| 18   | 1490243          | Connector (Secondary Lock) .....                      | 1   |
| 19   | .....            | Connector Assembly (CRP79 End Cap) .....              | 1   |
| 19   | 1626727          | Connector .....                                       | 1   |
| 20   | .....            | Connector Assembly (CPS67 Remote Keyswitch) .....     | 1   |
| 20   | 1308259          | Connector Body .....                                  | 1   |
| 21   | .....            | Connector Assembly (CRP67 Jumper) .....               | 1   |
| 21   | 1308260          | Connector Body .....                                  | 1   |
| 22   | .....            | Connector Assembly (CPS214 Alternator) .....          | 1   |
| 22   | 1361304          | Connector Body .....                                  | 1   |
| 23   | .....            | Connector Assembly (TS216 Water Thermo Sender) .....  | 1   |
| 23   | 2023463          | Terminal .....                                        | 1   |

# WIRE HARNESS

## FRAME – YANMAR DIESEL

| ITEM | PART NO.         | DESCRIPTION                                              | QTY |
|------|------------------|----------------------------------------------------------|-----|
| 24   | .....            | Connector Assembly (T224 Glow Plug) .....                | 1   |
| 24   | 1550626          | E-Ring .....                                             | 1   |
| 24   | 1520864          | Boot .....                                               | 1   |
| 25   | .....            | Connector Assembly (CPS312 Opt Flasher) .....            | 1   |
| 25   | 2100204          | Receptacle (Mini Relay) .....                            | 1   |
| 26   | .....            | Connector Assembly (CPS20 Fuse Block) .....              | 1   |
| 26   | 1521185          | Connector .....                                          | 1   |
| 26   | 1521188          | Lock .....                                               | 1   |
| 26   | 4045422          | Cover .....                                              | 1   |
| 26   | 4045423          | Bracket .....                                            | 1   |
| 27   | .....            | Connector Assembly (T257 PDM+) .....                     | 1   |
| 27   | 148800           | Terminal (Battery Cable) .....                           | 1   |
| 28   | .....            | Connector Assembly (CRS221 Glow Plug Fuse 60 Amp) .....  | 1   |
| 28   | <b>b</b> 4159458 | Fuse Holder (Maxi Fuse Kit 80 Amp) .....                 | 1   |
| 28   | 1454829          | Fuse (60 Amp) .....                                      | 1   |
| 28   | <b>a</b> 4136560 | Fuse Holder .....                                        | 1   |
| 28   | <b>a</b> 4136561 | Cover .....                                              | 1   |
| 28   | <b>a</b> 4136562 | Terminal .....                                           | 1   |
| 28   | <b>a</b> 4136563 | Wire Seal .....                                          | 1   |
| 29   | .....            | Connector Assembly (CPS111 Diagnostic) .....             | 1   |
| 29   | 1566116          | Connector (DT PLU 3-Socket, With Flange) .....           | 1   |
| 29   | 1532664          | Connector (Secondary Lock) .....                         | 1   |
| 29   | 1566117          | Dust Cap (For Diagnostic Cable) .....                    | 1   |
| 30   | .....            | Connector Assembly (CPS13 PDM) .....                     | 1   |
| 30   | 1521183          | Connector .....                                          | 1   |
| 30   | 1521188          | Lock .....                                               | 1   |
| 31   | .....            | Connector Assembly (CPS14 PDM) .....                     | 1   |
| 31   | 1521184          | Connector .....                                          | 1   |
| 31   | 1521188          | Lock .....                                               | 1   |
| 32   | .....            | Connector Assembly (CPS16 PDM) .....                     | 1   |
| 32   | 1521186          | Connector .....                                          | 1   |
| 32   | 1521188          | Lock .....                                               | 1   |
| 33   | .....            | Connector Assembly (CPS15 PDM) .....                     | 1   |
| 33   | 1521185          | Connector .....                                          | 1   |
| 33   | 1521188          | Lock .....                                               | 1   |
| 34   | .....            | Connector Assembly (CPS207 Fuel Shut-off Solenoid) ..... | 1   |
| 34   | 1351070          | Connector Body .....                                     | 1   |

### FOOTNOTES:

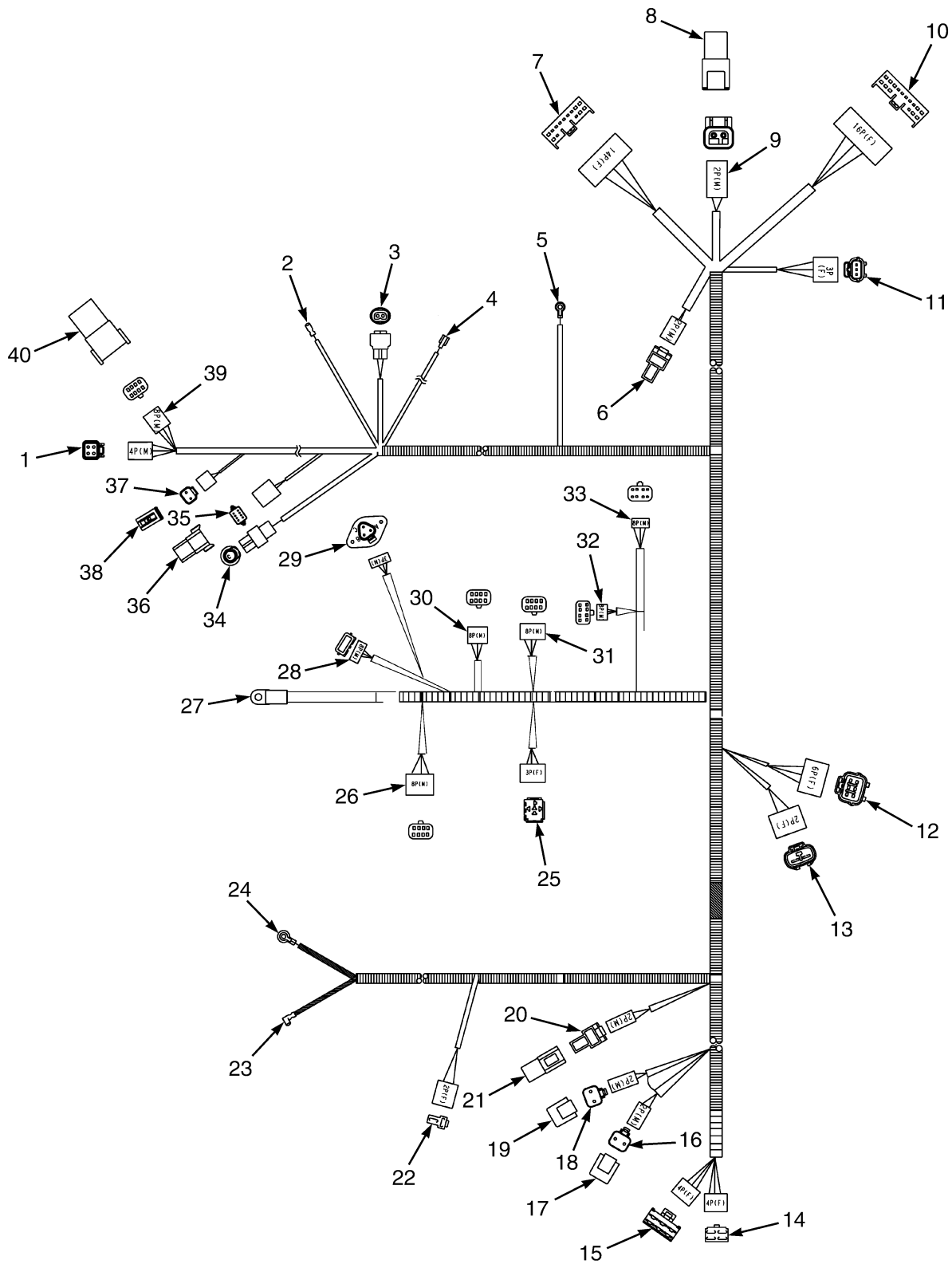
**a** → 2/2017

**b** 2/2017 →



## NOTES

[illegible]

**WIRE HARNESS (FIGURE 5-32)**  
**FRAME — YANMAR DIESEL W/MLM**

BP082431

**WIRE HARNESS**  
**FRAME – YANMAR DIESEL W/MLM**

| ITEM | PART NO. | DESCRIPTION                                           | QTY |
|------|----------|-------------------------------------------------------|-----|
|      | 4655683  | Wire Harness (Frame / Yanmar Diesel w/MLM) .....      | 1   |
| 1    | .....    | Connector Assembly (CPS52 Wire Harness Seat) .....    | 1   |
| 1    | 1463189  | Connector .....                                       | 1   |
| 1    | 1463196  | Connector (DTM PLU 4-Socket) .....                    | 1   |
| 1    | 1484377  | Plug .....                                            | 1   |
| 2    | .....    | Connector Assembly (TS201 Oil Pressure Switch) .....  | 1   |
| 2    | 1324310  | Terminal .....                                        | 1   |
| 3    | .....    | Connector Assembly (CPS227 Sedimenter) .....          | 1   |
| 4    | .....    | Connector Assembly (T69 Fuel Sender) .....            | 1   |
| 4    | 1402849  | Connector Body .....                                  | 1   |
| 5    | .....    | Connector Assembly (T200 Starter) .....               | 1   |
| 5    | 148609   | E-Ring .....                                          | 1   |
| 5    | 4646194  | Boot (Terminal) .....                                 | 1   |
| 6    | .....    | Connector Assembly (CPS21 Opt B+) .....               | 1   |
| 6    | 1308259  | Connector Body .....                                  | 1   |
| 7    | .....    | Connector Assembly (CPS84B Wire Harness Cowl) .....   | 1   |
| 8    | .....    | Connector Assembly (CRP78 Terminating Resistor) ..... | 1   |
| 8    | 1547847  | Resistor , 2 pin connector .....                      | 1   |
| 9    | .....    | Connector Assembly (CPS78 Terminating Resistor) ..... | 1   |
| 9    | 1484557  | Connector (2 Socket) .....                            | 1   |
| 10   | .....    | Connector Assembly (CPS84A Wire Harness Cowl) .....   | 1   |
| 11   | .....    | Connector Assembly (CPS88 Wire Harness Cowl) .....    | 1   |
| 11   | 4612835  | Connector .....                                       | 1   |
| 11   | 2314770  | Connector Lock .....                                  | 1   |
| 12   | .....    | Connector Assembly (CPS203 QGS Controller) .....      | 1   |
| 12   | 4612972  | Connector .....                                       | 1   |
| 12   | 4610605  | Plug .....                                            | 1   |
| 13   | .....    | Connector Assembly (CPS204 QGS Controller) .....      | 1   |
| 14   | .....    | Connector Assembly (CPS17B Rear Light B) .....        | 1   |
| 14   | 2314777  | Connector Body .....                                  | 1   |
| 15   | .....    | Connector Assembly (CPS17A Rear Light A) .....        | 1   |
| 16   | .....    | Connector Assembly (CPS54 Backup Alarm) .....         | 1   |
| 16   | 1490242  | Connector (2 Way) .....                               | 1   |
| 16   | 1490243  | Connector (Secondary Lock) .....                      | 1   |
| 17   | .....    | Connector Assembly (CRP54 End Cap) .....              | 1   |
| 17   | 1626727  | Connector .....                                       | 1   |
| 18   | .....    | Connector Assembly (CPS79 Rear Horn Button) .....     | 1   |
| 18   | 1490242  | Connector (2 Way) .....                               | 1   |
| 18   | 1490243  | Connector (Secondary Lock) .....                      | 1   |
| 19   | .....    | Connector Assembly (CRP79 End Cap) .....              | 1   |
| 19   | 1626727  | Connector .....                                       | 1   |
| 20   | .....    | Connector Assembly (CPS67 Remote Keyswitch) .....     | 1   |
| 20   | 1308259  | Connector Body .....                                  | 1   |
| 21   | .....    | Connector Assembly (CRP67 Jumper) .....               | 1   |
| 21   | 1308260  | Connector Body .....                                  | 1   |
| 22   | .....    | Connector Assembly (CPS214 Alternator) .....          | 1   |
| 22   | 1361304  | Connector Body .....                                  | 1   |
| 23   | .....    | Connector Assembly (TS216 Water Thermo Sender) .....  | 1   |
| 23   | 2023463  | Terminal .....                                        | 1   |
| 24   | .....    | Connector Assembly (T224 Glow Plug) .....             | 1   |

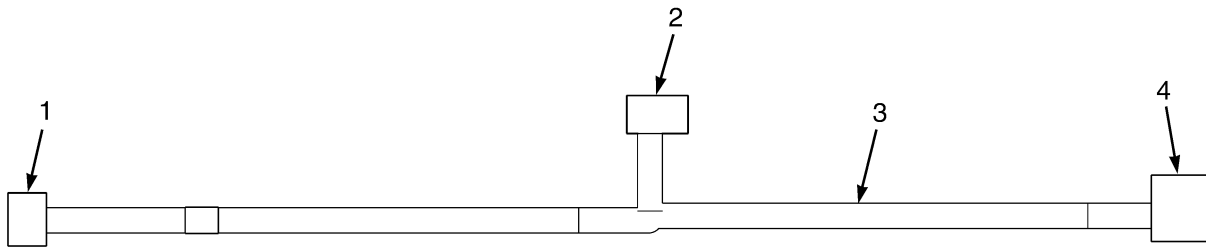
# WIRE HARNESS

## FRAME – YANMAR DIESEL W/MLM

| ITEM | PART NO. | DESCRIPTION                                               | QTY |
|------|----------|-----------------------------------------------------------|-----|
| 24   | 1550626  | E-Ring .....                                              | 1   |
| 24   | 1520864  | Boot .....                                                | 1   |
| 25   | .....    | Connector Assembly (CPS312 Opt Flasher) .....             | 1   |
| 25   | 2100204  | Receptacle (Mini Relay) .....                             | 1   |
| 26   | .....    | Connector Assembly (CPS20 Fuse Block) .....               | 1   |
| 26   | 1521185  | Connector .....                                           | 1   |
| 26   | 1521188  | Lock .....                                                | 1   |
| 26   | 4045422  | Cover .....                                               | 1   |
| 26   | 4045423  | Bracket .....                                             | 1   |
| 27   | .....    | Connector Assembly (T257 PDM+) .....                      | 1   |
| 27   | 148800   | Terminal (Battery Cable) .....                            | 1   |
| 28   | .....    | Connector Assembly (CRS221 Glow Plug Fuse 60 Amp) .....   | 1   |
| 28   | 4159458  | Fuse Holder (Maxi Fuse Kit 80 Amp) .....                  | 1   |
| 28   | 1454829  | Fuse (60 Amp) .....                                       | 1   |
| 29   | .....    | Connector Assembly (CPS111 Diagnostic) .....              | 1   |
| 29   | 1566116  | Connector (DT PLU 3-Socket, With Flange) .....            | 1   |
| 29   | 1532664  | Connector (Secondary Lock) .....                          | 1   |
| 29   | 1566117  | Dust Cap (For Diagnostic Cable) .....                     | 1   |
| 30   | .....    | Connector Assembly (CPS13 PDM) .....                      | 1   |
| 30   | 1521183  | Connector .....                                           | 1   |
| 30   | 1521188  | Lock .....                                                | 1   |
| 31   | .....    | Connector Assembly (CPS14 PDM) .....                      | 1   |
| 31   | 1521184  | Connector .....                                           | 1   |
| 31   | 1521188  | Lock .....                                                | 1   |
| 32   | .....    | Connector Assembly (CPS16 PDM) .....                      | 1   |
| 32   | 1521186  | Connector .....                                           | 1   |
| 32   | 1521188  | Lock .....                                                | 1   |
| 33   | .....    | Connector Assembly (CPS15 PDM) .....                      | 1   |
| 33   | 1521185  | Connector .....                                           | 1   |
| 33   | 1521188  | Lock .....                                                | 1   |
| 34   | .....    | Connector Assembly (CPS207 Fuel Shut-off Solenoid) .....  | 1   |
| 34   | 1351070  | Connector Body .....                                      | 1   |
| 35   | .....    | Connector Assembly (CPS310 Control Module) .....          | 1   |
| 35   | 1502625  | Connector (DT PLU 8-Socket) .....                         | 1   |
| 35   | 1502626  | Connector (Secondary Lock) .....                          | 1   |
| 35   | 1484377  | Plug .....                                                | 1   |
| 35   | 1330438  | Terminal (Socket) .....                                   | 1   |
| 35   | 1597773  | Terminal .....                                            | 1   |
| 36   | .....    | Connector Assembly (CRP310 End Cap) .....                 | 1   |
| 36   | 1623050  | Housing .....                                             | 1   |
| 36   | 1330418  | Connector (DT REC 8-Pin) .....                            | 1   |
| 36   | 1531312  | Terminal .....                                            | 1   |
| 36   | 1484377  | Plug .....                                                | 1   |
| 37   | .....    | Connector Assembly (CRP75 Seat Belt Switch Harness) ..... | 1   |
| 37   | 1493465  | Connector (2 Pin) .....                                   | 1   |
| 37   | 1330414  | Connector (Secondary Lock) .....                          | 1   |
| 37   | 1531312  | Terminal .....                                            | 1   |
| 38   | .....    | Connector Assembly (CPS75 End Cap) .....                  | 1   |
| 38   | 1490242  | Connector (2 Way) .....                                   | 1   |
| 38   | 1490243  | Connector (Secondary Lock) .....                          | 1   |

**WIRE HARNESS**  
**FRAME – YANMAR DIESEL W/MLM**

| ITEM | PART NO. | DESCRIPTION                                        | QTY |
|------|----------|----------------------------------------------------|-----|
| 39   | .....    | Connector Assembly (CPS90 Mini-Lever Module) ..... | 1   |
| 39   | 1541991  | Connector (DTM PLU 8-Socket) .....                 | 1   |
| 39   | 1541992  | Connector (Secondary Lock) .....                   | 1   |
| 39   | 1463139  | Terminal .....                                     | 1   |
| 39   | 1463141  | Terminal (Socket) .....                            | 1   |
| 39   | 1484377  | Plug .....                                         | 1   |
| 40   | .....    | Connector Assembly (CRP90 End Cap) .....           | 1   |
| 40   | 1541988  | Connector (8 Pin) .....                            | 1   |
| 40   | 1484377  | Plug .....                                         | 1   |

**WIRE HARNESS (FIGURE 5-33)**  
**HAZARD LIGHT**

BP082191

| ITEM | PART NO. | DESCRIPTION                                  | QTY |
|------|----------|----------------------------------------------|-----|
|      | 4654935  | Wire Harness .....                           | 1   |
| 1    | .....    | Connector Assembly (Switch) .....            | 1   |
| 1    | 2081332  | Electrical Connector .....                   | 1   |
| 1    | 233141   | Terminal .....                               | 4   |
| 2    | .....    | Connector Assembly (Cowl Harness) .....      | 1   |
| 2    | 4648567  | Connector .....                              | 1   |
| 2    | 4648568  | Connector Lock .....                         | 1   |
| 2    | 4648519  | Terminal .....                               | 5   |
| 2    | 4648517  | Terminal .....                               | 1   |
| 3    | 275495   | Conduit .....                                | AR  |
| 4    | .....    | Connector Assembly (Light/Turn Switch) ..... | 1   |
| 4    | 4648569  | Connector .....                              | 1   |
| 4    | 4648568  | Connector Lock .....                         | 1   |
| 4    | 4648518  | Terminal .....                               | 5   |
| 4    | 4648516  | Terminal .....                               | 1   |

**WIRE HARNESS (FIGURE 5-34)**  
**SEAT BELT**

BP082247

| ITEM | PART NO. | DESCRIPTION                                      | QTY |
|------|----------|--------------------------------------------------|-----|
|      | 4653525  | Wire Harness (Seat Belt Ext) .....               | 1   |
| 1    | .....    | Connector Assembly (Seat Belt Seq Harness) ..... | 1   |
| 1    | 1490242  | Connector (2 Way) .....                          | 1   |
| 1    | 1490243  | Connector (Secondary Lock) .....                 | 1   |
| 1    | 1330438  | Terminal (Socket) .....                          | 2   |
| 2    | .....    | Connector Assembly (Seat Belt) .....             | 1   |
| 2    | 1493465  | Connector (2 Pin) .....                          | 1   |
| 2    | 1330414  | Connector (Secondary Lock) .....                 | 1   |
| 2    | 1330437  | Terminal (Pin) .....                             | 2   |

## WIRE HARNESS (FIGURE 5-35) SEAT BELT INTERLOCK



BP082460

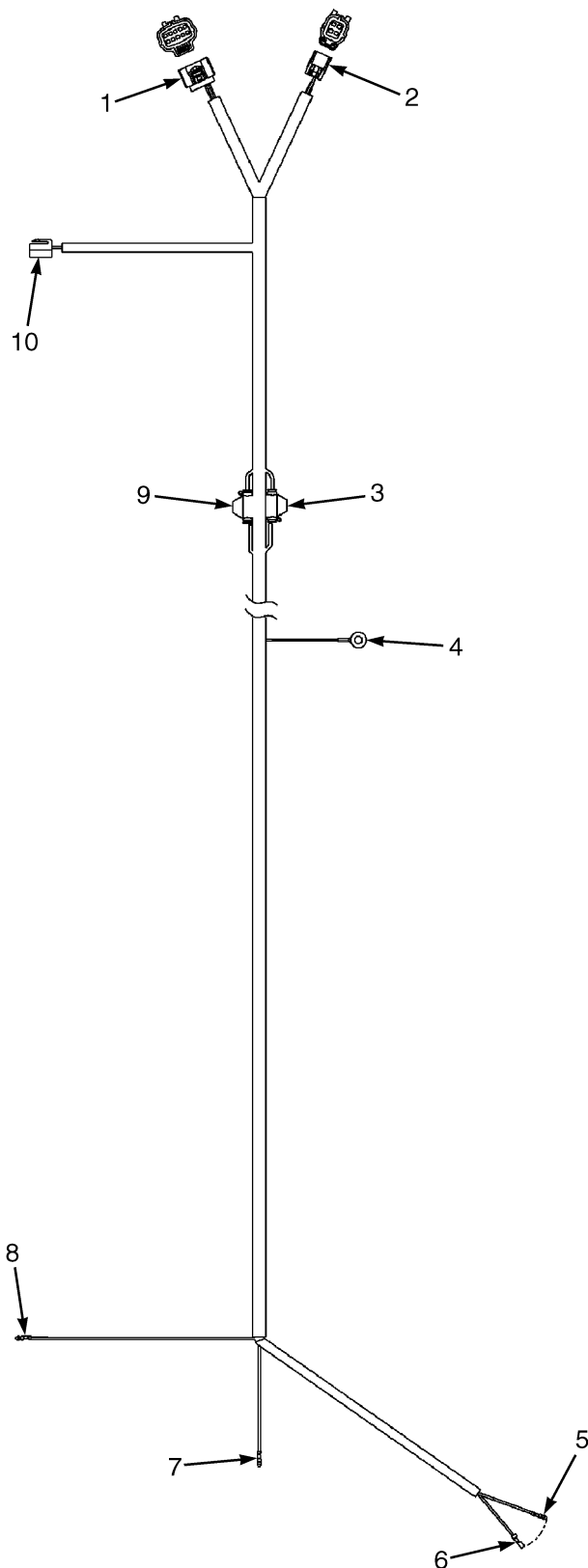
| ITEM | PART NO. | DESCRIPTION                                               | QTY |
|------|----------|-----------------------------------------------------------|-----|
|      | 4656381  | Wire Harness (Seat Belt Interlock) .....                  | 1   |
| 1    | .....    | Connector Assembly (CRP52S Wire Harness Frame) .....      | 1   |
| 1    | 1463184  | Connector .....                                           | 1   |
| 1    | 4046140  | Connector (DTM REC 4-Pin) .....                           | 1   |
| 1    | 1463193  | Plug .....                                                | 1   |
| 1    | 1484377  | Connector Assembly (CPS310 Control Module) .....          | 1   |
| 2    | .....    | Connector (DT PLU 8-Socket) .....                         | 1   |
| 2    | 1502625  | Connector (Secondary Lock) .....                          | 1   |
| 2    | 1484377  | Plug .....                                                | 1   |
| 3    | .....    | Connector Assembly (CRP75 Seat Belt Switch Harness) ..... | 1   |
| 3    | 1493465  | Connector (2 Pin) .....                                   | 1   |
| 3    | 1330414  | Connector (Secondary Lock) .....                          | 1   |
| 4    | .....    | Connector Assembly (CPS52S Wire Harness Seat) .....       | 1   |
| 4    | 1463189  | Connector .....                                           | 1   |
| 4    | 1463196  | Connector (DTM PLU 4-Socket) .....                        | 1   |
| 4    | 1484377  | Plug .....                                                | 1   |
| 5    | 2081253  | Clip .....                                                | 1   |
| 6    | 2081255  | Clip .....                                                | 1   |



## NOTES

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## WIRE HARNESS (FIGURE 5-36) SPEED LIMITER

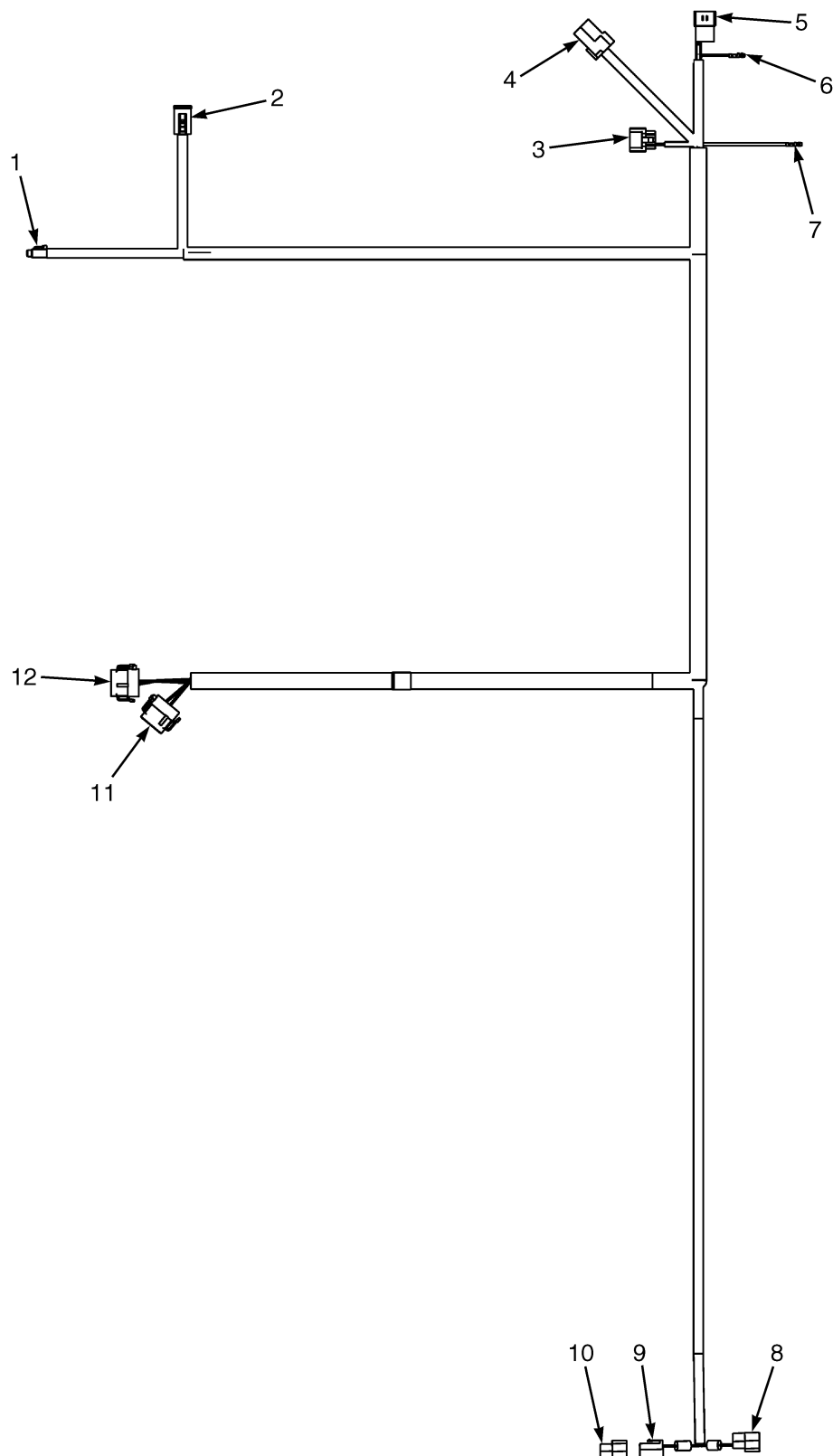


BP082469

**WIRE HARNESS  
SPEED LIMITER**

| ITEM | PART NO. | DESCRIPTION                                            | QTY |
|------|----------|--------------------------------------------------------|-----|
|      | 4655901  | Wire Harness (Speed Limiter) .....                     | 1   |
| 1    | .....    | Connector Assembly (CPS335 Driver Speed Limiter) ..... | ..  |
| 1    | 4612838  | Connector .....                                        | 1   |
| 1    | 2314775  | Connector Lock .....                                   | 1   |
| 1    | 2314771  | Plug .....                                             | 1   |
| 2    | .....    | Connector Assembly (CPS336 Driver Speed Limiter) ..... | ..  |
| 2    | 2314772  | Connector .....                                        | 1   |
| 2    | 2314773  | Connector Lock .....                                   | 1   |
| 3    | .....    | Connector Assembly (CRS342 Fuse B) .....               | ..  |
| 3    | 2081171  | Fuse Holder .....                                      | 1   |
| 3    | 4087450  | Fuse (2 Amp) .....                                     | 1   |
| 4    | .....    | Connector Assembly (T338 Ground) .....                 | ..  |
| 4    | 1402620  | Ring Terminal .....                                    | 1   |
| 5    | .....    | Connector Assembly (TP339 Indicator) .....             | ..  |
| 5    | 1324308  | Terminal .....                                         | 1   |
| 6    | .....    | Connector Assembly (TS340 Indicator) .....             | ..  |
| 6    | 1324310  | Terminal .....                                         | 1   |
| 7    | .....    | Connector Assembly (TP326 Wire Harness Cowl) .....     | ..  |
| 7    | 1324308  | Terminal .....                                         | 1   |
| 8    | .....    | Connector Assembly (TP321 Wire Harness Cowl) .....     | ..  |
| 8    | 1324308  | Terminal .....                                         | 1   |
| 9    | .....    | Connector Assembly (CRS341 Fuse A) .....               | ..  |
| 9    | 2081171  | Fuse Holder .....                                      | 1   |
| 9    | 4087450  | Fuse (2 Amp) .....                                     | 1   |
| 10   | .....    | Connector Assembly (CPS337 Actuator) .....             | ..  |
| 10   | 1361304  | Connector Body .....                                   | 1   |

## WIRE HARNESS (FIGURE 5-37) TELEMETRY FM1A AND FM1B



BP082477

**WIRE HARNESS  
TELEMETRY FM1A AND FM1B**

| ITEM | PART NO. | DESCRIPTION                                                    | QTY |
|------|----------|----------------------------------------------------------------|-----|
|      | 4653293  | Wire Harness (Telemetry FM1A) (XIC) .....                      | 1   |
| 1    | .....    | Connector Assembly (CPS418 Buzzer) .....                       | ..  |
| 1    | 1330421  | Connector (4 Soc) .....                                        | 1   |
| 1    | 1489657  | Connector (Secondary Lock) .....                               | 1   |
| 1    | 1463139  | Terminal .....                                                 | 2   |
| 2    | .....    | Connector Assembly (CPS419 Accessory) .....                    | ..  |
| 2    | 1330421  | Connector (4 Soc) .....                                        | 1   |
| 2    | 1489657  | Connector (Secondary Lock) .....                               | 1   |
| 2    | 1330438  | Terminal (Socket) .....                                        | 4   |
| 3    | .....    | Connector Assembly (CRP409 To Cowl Harness) .....              | ..  |
| 3    | 4612835  | Connector .....                                                | 1   |
| 3    | 2314770  | Connector Lock .....                                           | 1   |
| 3    | 4612827  | Terminal .....                                                 | 2   |
| 3    | 2314741  | Terminal .....                                                 | 1   |
| 3    | 2061333  | Wire Seal .....                                                | 3   |
| 4    | .....    | Connector Assembly (CRS441 Telemetry Relay) .....              | ..  |
| 5    | .....    | Connector Assembly (CPS408 To Frame Harness) .....             | ..  |
| 5    | 2050634  | Connector .....                                                | 1   |
| 5    | 2050635  | Connector Lock .....                                           | 1   |
| 5    | 2061328  | Terminal .....                                                 | 2   |
| 5    | 2314740  | Terminal .....                                                 | 1   |
| 5    | 2061333  | Wire Seal .....                                                | 3   |
| 6    | .....    | Connector Assembly (T416 To Cowl Harness (Telemetry)) .....    | ..  |
| 6    | 1324308  | Terminal .....                                                 | 1   |
| 6    | 1324307  | Sleeve .....                                                   | 1   |
| 7    | .....    | Connector Assembly (T413 To Cowl Harness (Opt Terminal)) ..... | ..  |
| 7    | 1324308  | Terminal .....                                                 | 1   |
| 7    | 1324307  | Sleeve .....                                                   | 1   |
| 8    | .....    | Connector Assembly (CRP407 To Frame Harness) .....             | ..  |
| 8    | 1308260  | Connector Body .....                                           | 1   |
| 8    | 4649061  | Terminal .....                                                 | 3   |
| 9    | .....    | Connector Assembly (CPS406 Remote Key Switch) .....            | ..  |
| 9    | 1308259  | Connector Body .....                                           | 1   |
| 9    | 4649062  | Terminal .....                                                 | 2   |
| 10   | .....    | Connector Assembly (CRP406-1 Jumper) .....                     | ..  |
| 10   | 1308260  | Connector Body .....                                           | 1   |
| 10   | 4649061  | Terminal .....                                                 | 2   |
| 11   | .....    | Connector Assembly (CPS401 FM1A) .....                         | ..  |
| 11   | 1525567  | Connector (DTM PLU 12-Socket) .....                            | 1   |
| 11   | 1529046  | Connector (Secondary Lock) .....                               | 1   |
| 11   | 1463141  | Terminal (Socket) .....                                        | 4   |
| 11   | 1484377  | Plug .....                                                     | 6   |
| 11   | 1463139  | Terminal .....                                                 | 2   |
| 12   | .....    | Connector Assembly (CPS417 FM1B) .....                         | ..  |
| 12   | 1525568  | Connector (STM PLU 12-Socket) .....                            | 1   |
| 12   | 1529046  | Connector (Secondary Lock) .....                               | 1   |
| 12   | 1463141  | Terminal (Socket) .....                                        | 2   |
| 12   | 1484377  | Plug .....                                                     | 5   |
| 12   | 1463139  | Terminal .....                                                 | 5   |

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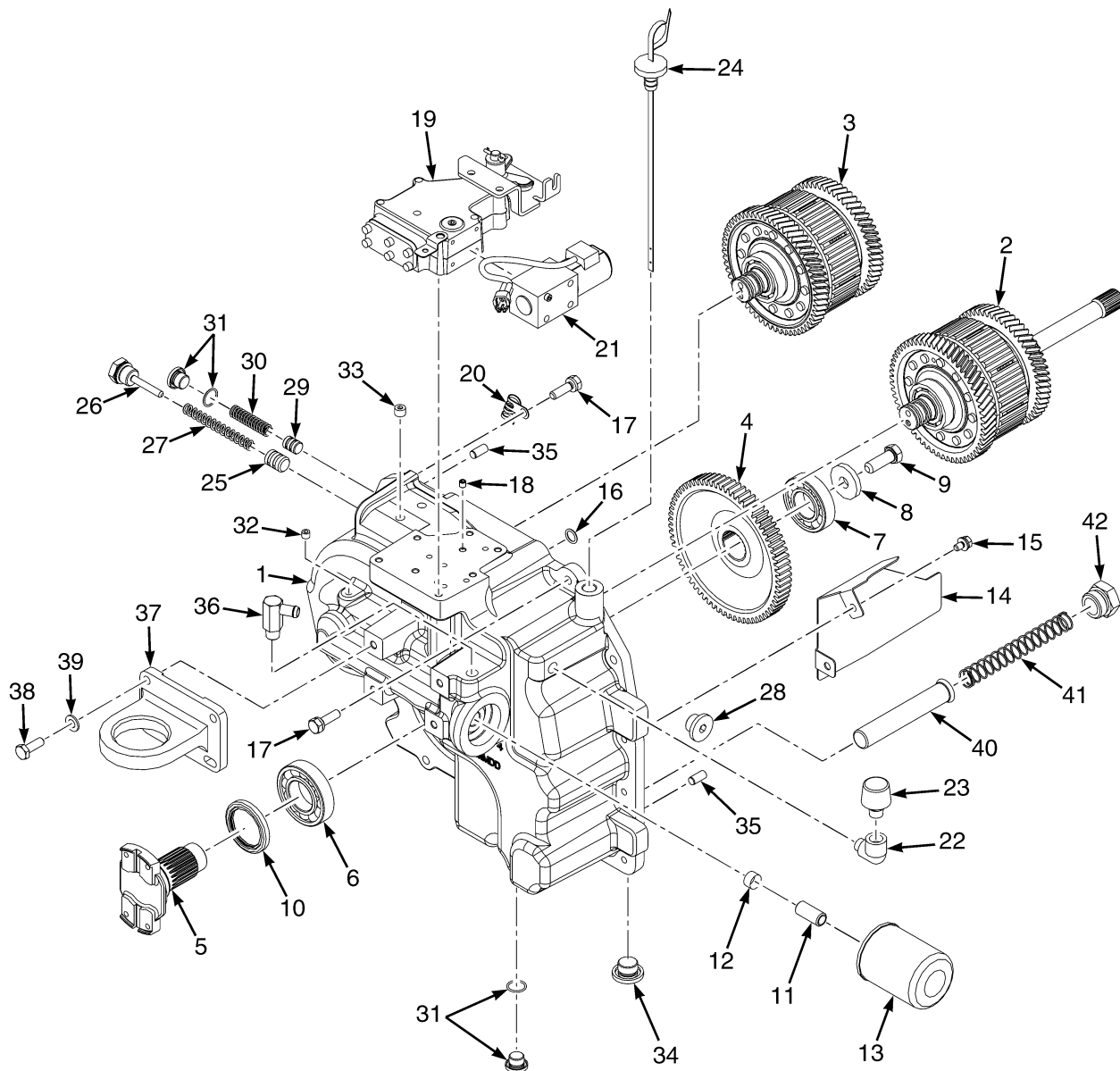




**SECTION 6  
TRANSMISSION**

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## TRANSMISSION HOUSING AND ASSEMBLY (FIGURE 6-1)

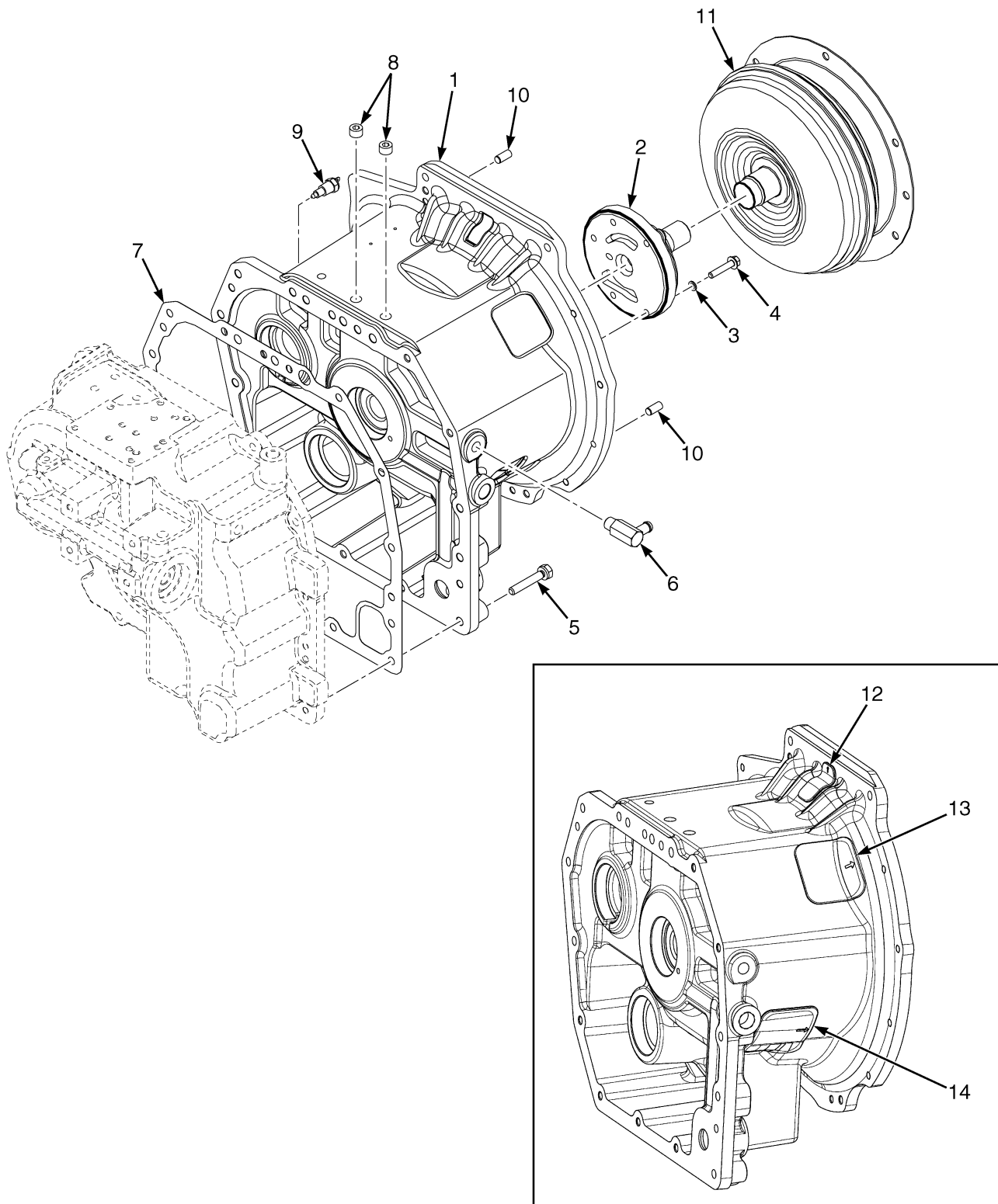


BP240296

**TRANSMISSION HOUSING AND ASSEMBLY**

| ITEM | PART NO. | DESCRIPTION                                     | QTY |
|------|----------|-------------------------------------------------|-----|
|      | 4118449  | Transmission Assy .....                         | 1   |
| 1    | 4118451  | Case .....                                      | 1   |
| 1    | 4170684  | Case .....                                      | 1   |
| 2    | 4640435  | Clutch Pack (Forward) (☞ Figure 6-4).....       | 1   |
| 3    | 4640436  | Clutch Pack (Reverse) (☞ Figure 6-5).....       | 1   |
| 4    | 4136760  | Gear .....                                      | 1   |
| 5    | 4136635  | Shaft .....                                     | 1   |
| 6    | 43208    | Ball Bearing .....                              | 1   |
| 7    | 43207    | Ball Bearing .....                              | 1   |
| 8    | 2079433  | Washer .....                                    | 1   |
| 9    | 293665   | Capscrew .....                                  | 1   |
| 10   | 2080616  | Oil Seal .....                                  | 1   |
| 11   | 2029610  | Fitting .....                                   | 1   |
| 12   | 15032    | Nut .....                                       | 1   |
| 13   | 4623975  | Filter .....                                    | 1   |
| 14   | 2105105  | Baffle .....                                    | 1   |
| 15   | 2079554  | Capscrew .....                                  | 2   |
| 16   | 104681   | O-Ring .....                                    | 1   |
| 17   | 2079541  | Capscrew .....                                  | 6   |
| 18   | 2043276  | Choke .....                                     | 1   |
| 19   | 4606741  | Inching Valve (☞ Figure 6-6, ☞ Figure 6-7)..... | 1   |
| 20   | 2022013  | Clamp .....                                     | 1   |
| 21   | 2104666  | Solenoid .....                                  | 1   |
| 22   | 2060858  | Elbow .....                                     | 1   |
| 23   | 2021389  | Breather .....                                  | 1   |
| 24   | 2105226  | Gauge .....                                     | 1   |
| 25   | 2043274  | Piston .....                                    | 1   |
| 26   | 4151120  | Plug .....                                      | 1   |
| 27   | 1367415  | Spring .....                                    | 1   |
| 28   | 2023976  | Plug .....                                      | 2   |
| 29   | 1367416  | Piston .....                                    | 1   |
| 30   | 1367417  | Spring .....                                    | 1   |
| 31   | 2029432  | Plug .....                                      | 2   |
| 32   | 2021917  | Plug .....                                      | 2   |
| 33   | 2045300  | Plug .....                                      | 4   |
| 34   | 2105107  | Plug .....                                      | 1   |
| 35   | 302385   | Dowel .....                                     | 2   |
| 36   | 2023719  | Elbow .....                                     | 1   |
| 37   | 2105228  | Bracket .....                                   | 1   |
| 38   | 136985   | Capscrew .....                                  | 4   |
| 39   | 296420   | Washer .....                                    | 4   |
| 40   | 334450   | Screen .....                                    | 1   |
| 41   | 334452   | Spring .....                                    | 1   |
| 42   | 14604    | Plug .....                                      | 1   |

## TORQUE CONVERTER HOUSING AND ATTACHING PARTS (FIGURE 6-2)

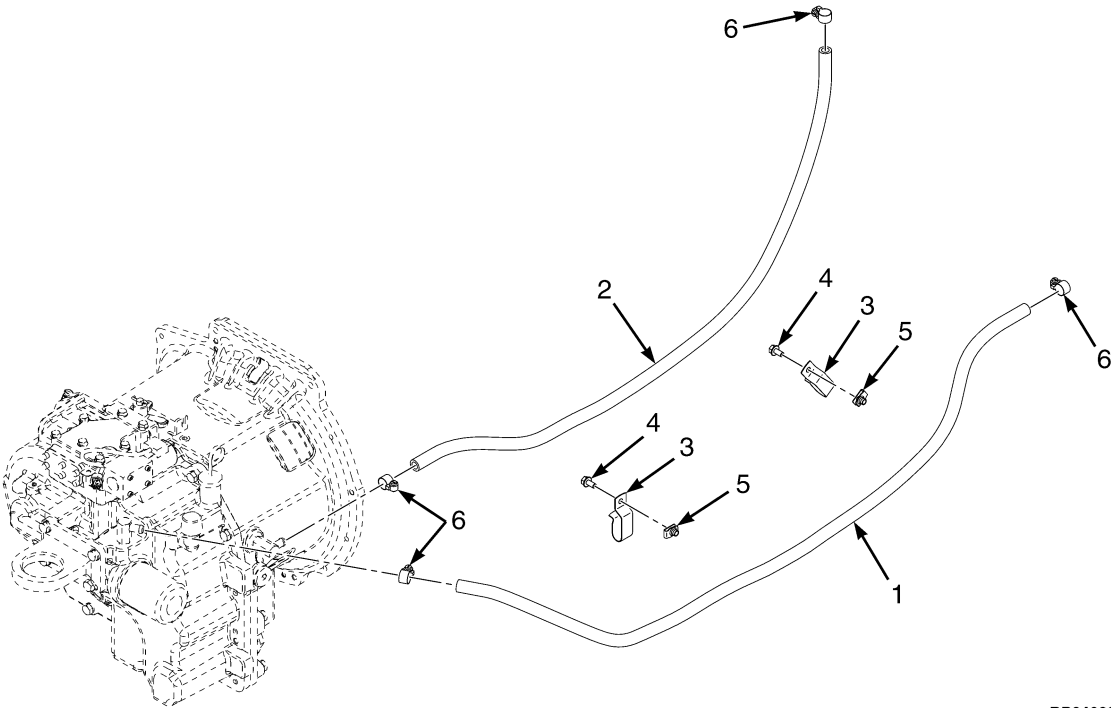


BP240298

**TORQUE CONVERTER HOUSING AND ATTACHING PARTS**

| ITEM | PART NO.          | DESCRIPTION                                            | QTY |
|------|-------------------|--------------------------------------------------------|-----|
|      | 4118449           | Transmission Assy .....                                | 1   |
| 1    | 4170685           | Housing (Torque Converter) .....                       | 1   |
| 2    | 2080612           | Gear Pump .....                                        | 1   |
| 2    | 296462            | Screw .....                                            | 1   |
| 2    | 2023995           | Oil Seal (Torque Converter) .....                      | 1   |
| 2    | 2043438           | O-Ring .....                                           | 1   |
| 3    | 2105054           | Packing .....                                          | 5   |
| 4    | 2105104           | Bolt .....                                             | 5   |
| 5    | 2105103           | Bolt .....                                             | 9   |
| 6    | 2023719           | Elbow .....                                            | 1   |
| 7    | 2105106           | Gasket .....                                           | 1   |
| 8    | 2021915           | Plug .....                                             | 2   |
| 8    | 4170690           | Plug .....                                             | 1   |
| 9    | 2021388           | Switch .....                                           | 1   |
| 10   | 302385            | Dowel .....                                            | 2   |
| 11   | 2081279           | Torque Converter (BI-Fuel, LPG, DSL-Yanmar 2.6L) ..... | 1   |
| 11   | 2081280           | Torque Converter (DSL-Yanmar 3.3L) .....               | 1   |
| 11   | 2028867           | Plate .....                                            | 1   |
| 11   | 293626            | Capscrew .....                                         | 6   |
| 11   | <del>388049</del> |                                                        |     |
|      | 292682            | Lockwasher .....                                       | 6   |
| 12   | 4650886           | Plug (Top) .....                                       | 1   |
| 13   | 4650885           | Plug (Side) .....                                      | 1   |
| 14   | 4650884           | Plug (Bottom) .....                                    | 1   |

TRANSMISSION COOLING (FIGURE 6-3)



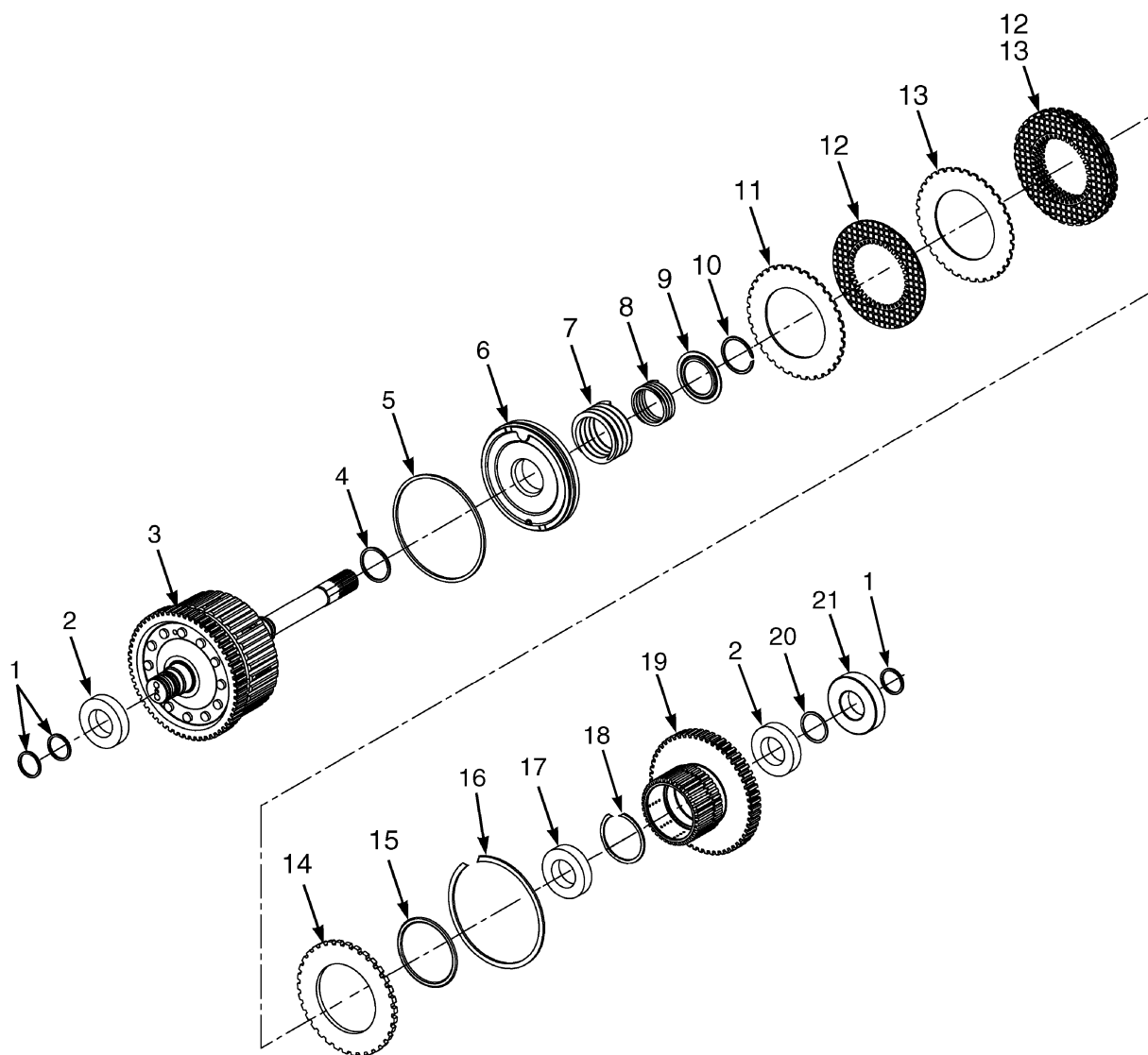
BP240290

| ITEM | PART NO. | DESCRIPTION                  | QTY |
|------|----------|------------------------------|-----|
| 1    | 4640850  | Hose (Lower Radiator) .....  | 1   |
| 2    | 4640851  | Hose (Higher Radiator) ..... | 1   |
| 3    | 1544157  | Clip .....                   | 2   |
| 4    | 4109993  | Capscrew .....               | 2   |
|      | 1527879  |                              |     |
| 5    | 1480237  | Nut (Fold Over) .....        | 2   |
| 6    | 166857   | Clamp .....                  | 4   |

## NOTES

[illegible]

## INPUT/FORWARD CLUTCH (FIGURE 6-4)



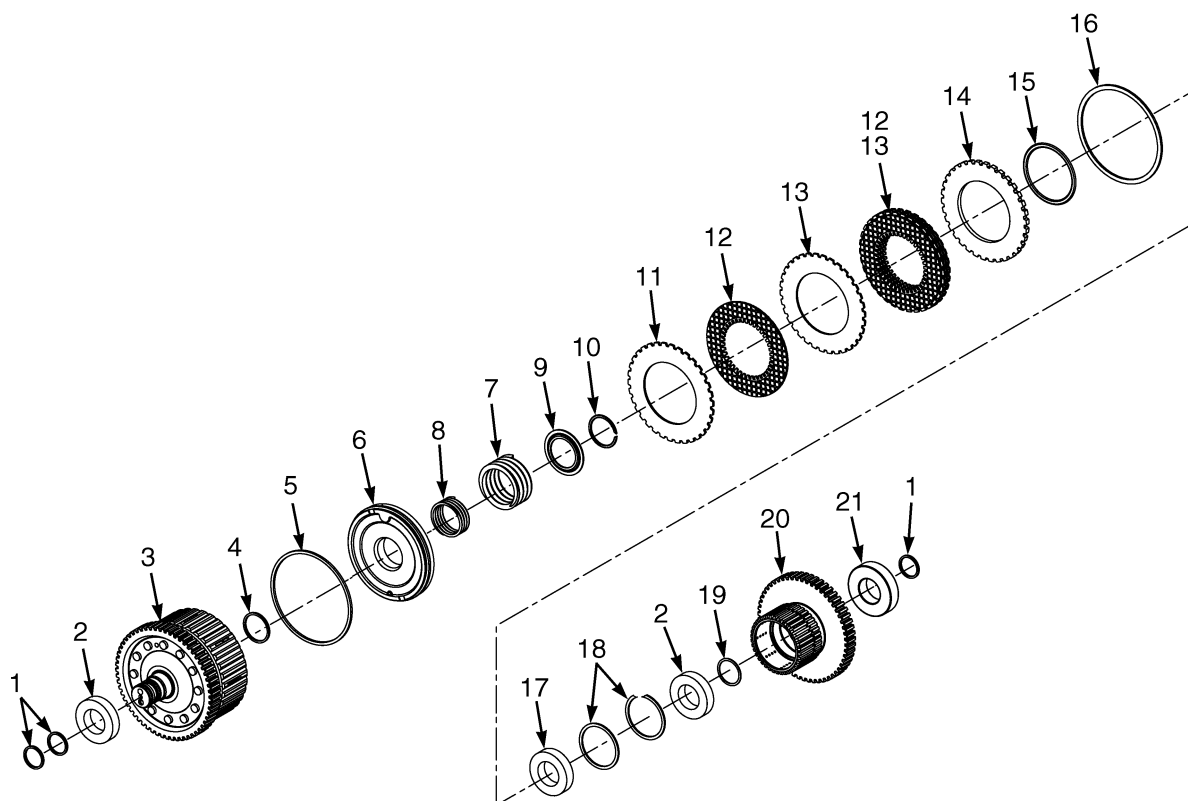
BP240240



**INPUT/FORWARD CLUTCH**

| ITEM | PART NO. | DESCRIPTION                       | QTY |
|------|----------|-----------------------------------|-----|
|      | 4640435  | Clutch Pack (Input/Forward) ..... | 1   |
| 1    | .....    | Ring Seal .....                   | 3   |
| 2    | 1581116  |                                   |     |
|      | 4025477  | Ball Bearing .....                | 2   |
| 3    | .....    | Shaft Assembly .....              | 1   |
| 4    | .....    | Ring Seal .....                   | 1   |
| 5    | .....    | Ring Seal .....                   | 1   |
| 6    | 2085129  | Piston .....                      | 1   |
| 7    | 1581108  | Spring .....                      | 1   |
| 8    | 1581098  | Spring .....                      | 1   |
| 9    | 1581099  | Spring Guide .....                | 1   |
| 10   | 1581100  | Snap Ring .....                   | 1   |
| 11   | .....    | Conical Plate .....               | 1   |
| 12   | .....    | Friction Plates .....             | 5   |
| 13   | .....    | Separator Plates .....            | 4   |
| 14   | 1543094  | Pressure Plate (5.8 mm) .....     | 1   |
| 15   | .....    | O-Ring .....                      | 1   |
| 16   | 1537450  | Snap Ring .....                   | 1   |
| 17   | 124603   | Ball Bearing .....                | 1   |
| 18   | 1581107  | Snap Ring .....                   | 1   |
| 19   | 4648969  | Clutch Gear .....                 | 1   |
| 20   | 1537459  | Snap Ring .....                   | 1   |
| 21   | 43207    | Ball Bearing .....                | 1   |
|      | 2085127  | Kit-Repair .....                  | 1   |
|      | 2085125  | Kit-Drive Plate Torque Conv ..... | 1   |
|      | 2085126  | Kit-Seal .....                    | 1   |

## COUNTER/REVERSE CLUTCH (FIGURE 6-5)

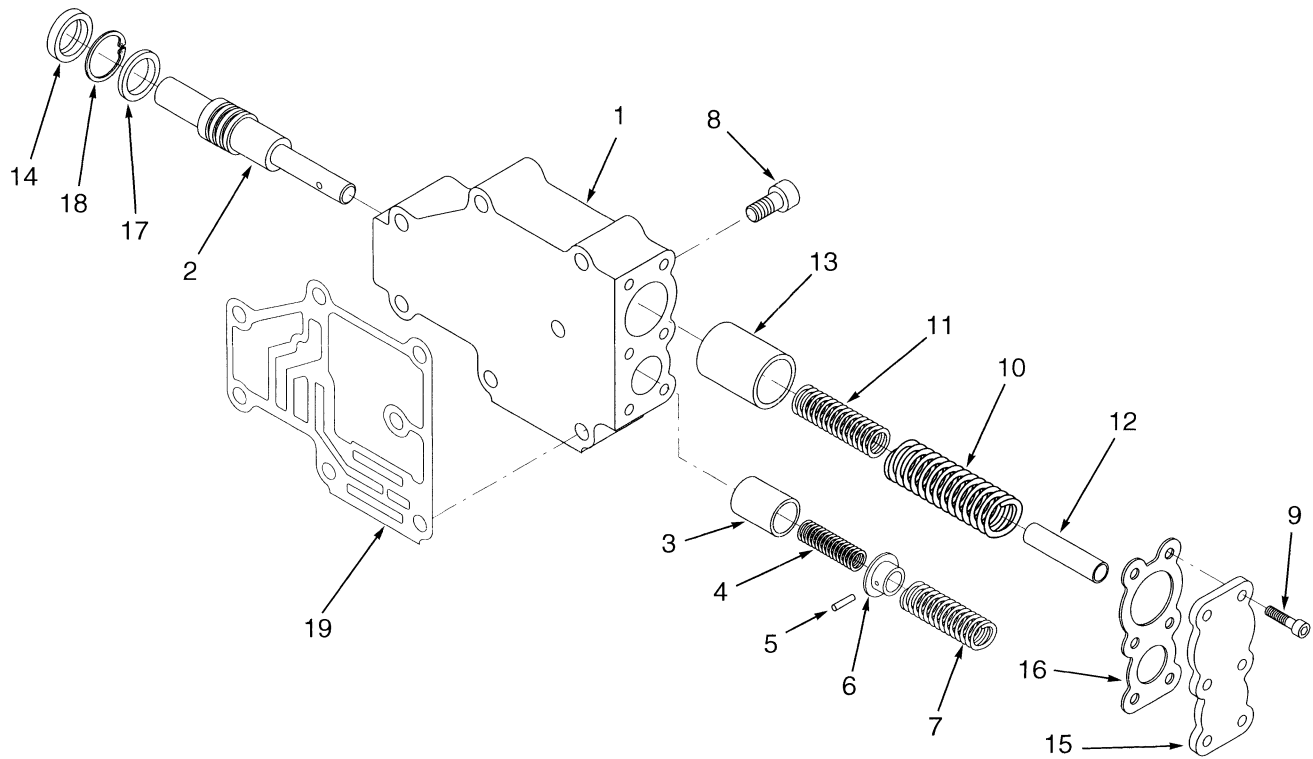


BP240099

**COUNTER/REVERSE CLUTCH**

| ITEM | PART NO. | DESCRIPTION                         | QTY |
|------|----------|-------------------------------------|-----|
|      | 4640436  | Clutch Pack (Counter/Reverse) ..... | 1   |
| 1    | .....    | Seal .....                          | 2   |
| 2    | 1581116  |                                     |     |
|      | 4025477  | Ball Bearing .....                  | 2   |
| 3    | .....    | Shaft .....                         | 1   |
| 4    | .....    | Seal .....                          | 1   |
| 5    | .....    | Seal .....                          | 1   |
| 6    | 2085129  | Piston .....                        | 1   |
| 7    | 1581108  | Spring .....                        | 1   |
| 8    | 1581098  | Spring .....                        | 1   |
| 9    | 1581099  | Spring Guide .....                  | 1   |
| 10   | 1581100  | Snap Ring .....                     | 1   |
| 11   | .....    | Conical Plate .....                 | 1   |
| 12   | .....    | Friction Plate .....                | 5   |
| 13   | .....    | Separator Plate .....               | 4   |
| 14   | 1537449  | Pressure Plate (6.0 mm) .....       | 1   |
| 15   | .....    | O-Ring .....                        | 1   |
| 16   | 1537450  | Snap Ring .....                     | 1   |
| 17   | 124603   | Ball Bearing .....                  | 1   |
| 18   | 1581107  | Snap Ring .....                     | 1   |
| 19   | 1537459  | Snap Ring .....                     | 1   |
| 20   | 4648969  | Clutch Gear .....                   | 1   |
| 21   | 43207    | Ball Bearing .....                  | 1   |
|      | 1543102  | Kit-Clutch Pack Plates .....        | 1   |
|      | 1595425  | Kit-Clutch Pack Seals .....         | 1   |

## INCHING VALVE ASSEMBLY (FIGURE 6-6)



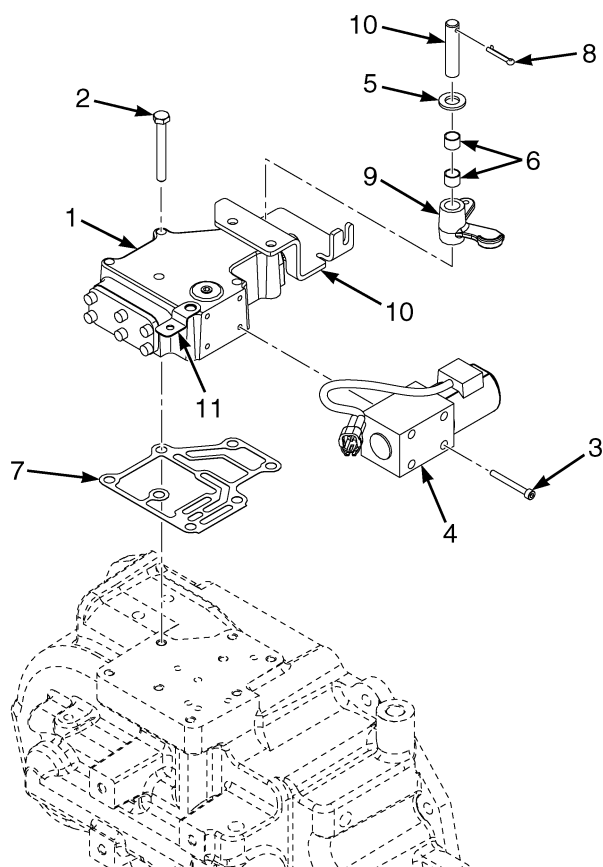
HP240328

**INCHING VALVE ASSEMBLY**

| ITEM | PART NO.         | DESCRIPTION                          | QTY |
|------|------------------|--------------------------------------|-----|
|      | 4606741          | Inching Valve .....                  | 1   |
| 1    | .....            | Valve Body .....                     | 1   |
| 2    | 2023997          | Inching Spool .....                  | 1   |
| 3    | 2045648          | Piston .....                         | 1   |
| 4    | .....            | Pressure Spring .....                | 1   |
| 5    | 1367402          | Pin .....                            | 1   |
| 6    | 1367403          | Stop .....                           | 1   |
| 7    | .....            | Pressure Spring .....                | 1   |
| 8    | 2021917          | Plug (Oil Pressure Check Port) ..... | 1   |
| 9    | 2029338          | Bolt .....                           | 6   |
| 10   | .....            | Pressure Spring .....                | 1   |
| 11   | .....            | Pressure Spring .....                | 1   |
| 12   | 2029351          | Stop .....                           | 1   |
| 13   | 1367412          | Piston .....                         | 1   |
| 14   | .....            | Oil Seal .....                       | 1   |
| 15   | 2029350          | Cover .....                          | 1   |
| 16   | .....            | Gasket .....                         | 1   |
| 17   | 2029351          | Stop .....                           | 1   |
| 18   | 2029261          | Retaining Ring .....                 | 1   |
| 19   | <b>a</b> 2045647 | Gasket .....                         | 1   |
| 19   | <b>b</b> 4166725 | Gasket .....                         | 1   |
|      | 2045649          | Kit-Transmission Control Valve ..... | 1   |
|      | 4606739          | Kit-Spring For Inching .....         | 1   |
|      | 4606740          | Kit-Spring For Acc. ....             | 1   |

**FOOTNOTES:****a** → 11/2016**b** 11/2016 →

## INCHING VALVE AND ATTACHING PART (FIGURE 6-7)



BP240295

| ITEM | PART NO.         | DESCRIPTION                        | QTY |
|------|------------------|------------------------------------|-----|
| 1    | 4606741          | Inching Valve (☞ Figure 6-6).....  | 1   |
| 2    | 293622           | Capscrew .....                     | 7   |
| 3    | 2021328          | Capscrew .....                     | 4   |
| 4    | 2104666          | Solenoid .....                     | 1   |
| 5    | 320161           | Washer .....                       | 1   |
| 6    | 2021326          | Bushing .....                      | 1   |
| 7    | <b>b</b> 2045647 | Gasket .....                       | 1   |
| 7    | <b>c</b> 4166725 | Gasket .....                       | 1   |
| 8    | 2022553          | Cotter Pin .....                   | 1   |
| 9    | 4613249          | Bellcrank .....                    | 1   |
| 10   | 4158591          | Bracket , Bellcrank Weldment ..... | 1   |
| 10   | .....            | Shaft .....                        | 1   |
| 11   | 2081274          | Bracket (Harness Clamp) .....      | 1   |
|      | <b>a</b> 296418  | Washer .....                       | 8   |

## FOOTNOTES:

**a** Not Illustrated  
**b** → 11/2016

**c** 11/2016 →

7

DRIVE AXLE



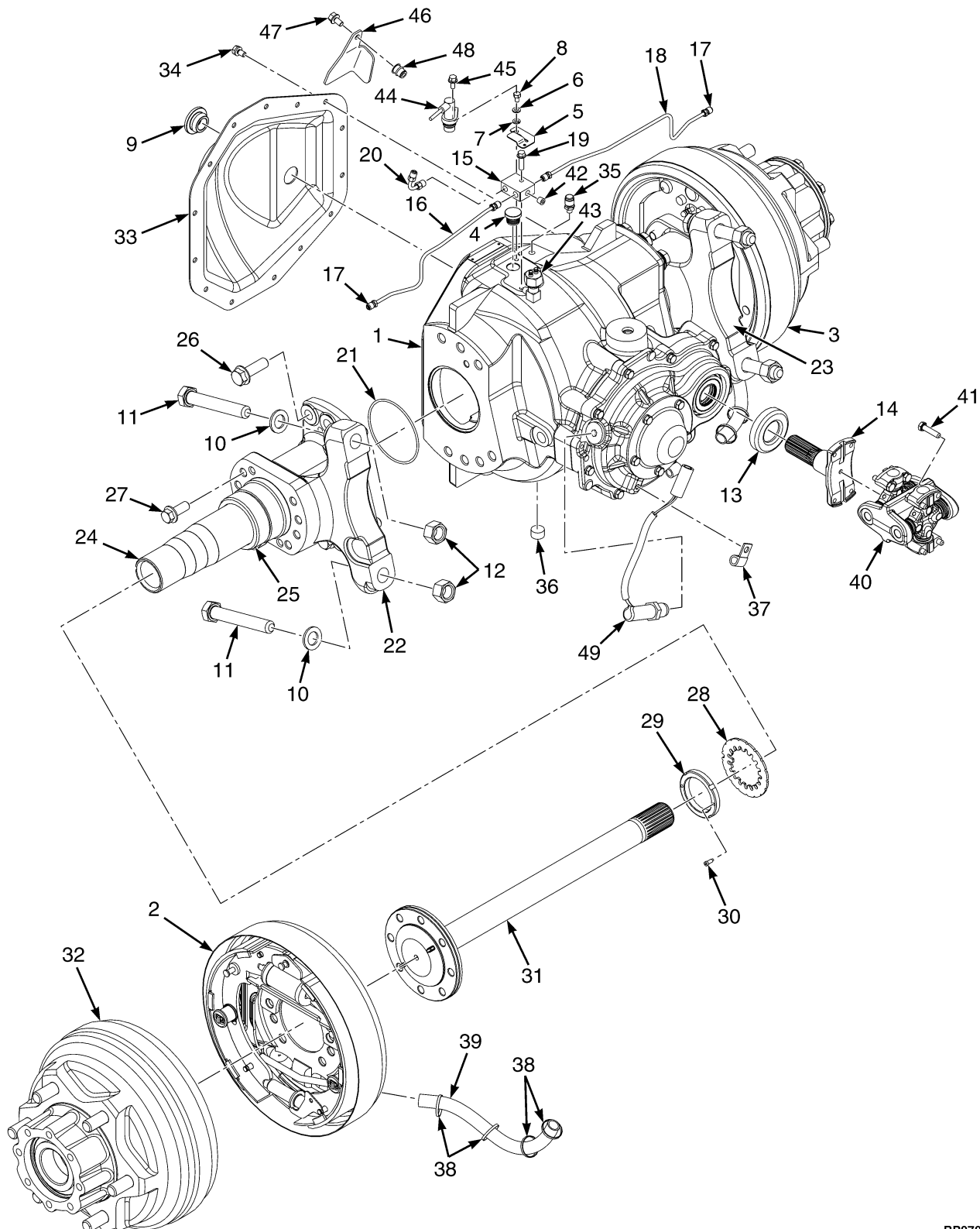


**SECTION 7  
DRIVE AXLE**

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| H40-50XT (PENDING PER ECN 166624 →) .....    | 7-6         |
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| DRIVE AXLE CENTER SECTION AND HUB ASSY ..... | 7-14        |
| DRIVE TIRES AND WHEELS                       |             |
| DIVIDED SOLID TIRE .....                     | 7-23        |
| PNEUMATIC .....                              | 7-22        |
| SOLID - WIDE OPTION .....                    | 7-20        |
| SOLID PNEUMATIC - 7.00 X 15 RIM .....        | 7-24        |
| SOLID PNEUMATIC - 5.00 X 12 RIM .....        | 7-25        |
| SOLID TIRE .....                             | 7-18        |
| UNIVERSAL JOINT COVER .....                  | 7-17        |

## DRIVE AXLE AND ATTACHING PARTS (FIGURE 7-1)

### H40-50XT (→ PENDING PER ECN 166624)



BP070206

**DRIVE AXLE AND ATTACHING PARTS**  
**H40-50XT (→ PENDING PER ECN 166624)**

| ITEM | PART NO.        | DESCRIPTION                                   | QTY |
|------|-----------------|-----------------------------------------------|-----|
|      | 4653670         | Drive Axle Assembly, .....                    | 1   |
| 1    | 4162972         | Drive Axle Center Section (☞ Figure 7-4)..... | 1   |
| 2    | 4154242         | Brake Assy (LH) (☞ Figure 9-1).....           | 1   |
| 3    | 4154243         | Brake Assy (RH) (☞ Figure 9-1).....           | 1   |
| 4    | 4626501         | Plug .....                                    | 1   |
| 5    | 4638929         | Plate .....                                   | 1   |
| 6    | 320156          | Washer .....                                  | 1   |
| 7    | 292680          | Washer .....                                  | 1   |
| 8    | 302256          | Capscrew .....                                | 1   |
| 9    | 1516075         | Plug , Oil Level .....                        | 1   |
| 10   | 296430          | Washer .....                                  | 4   |
| 11   | 293717          | Capscrew .....                                | 4   |
| 12   | 292659          | Nut .....                                     | 4   |
| 13   | 4000205         | Dust Cover .....                              | 1   |
| 14   | 1517673         | Shaft .....                                   | 1   |
| 15   | 2021470         | Valve , 4-Way Block .....                     | 1   |
| 16   | 4649005         | Tube Assy (LH) .....                          | 1   |
| 17   | 1327241         | Nut .....                                     | 4   |
| 18   | 4649006         | Tube Assy (RH) .....                          | 1   |
| 19   | 1527878         | Capscrew .....                                | 1   |
| 20   | 2029523         | Tube Assembly .....                           | 1   |
| 21   | 2027828         | O-Ring .....                                  | 2   |
| 22   | 2081469         | Hanger Assembly (LH) .....                    | 1   |
| 22   | 2082856         | Hanger , LH .....                             | 1   |
| 23   | 2081468         | Hanger Assembly (RH) .....                    | 1   |
| 23   | 2082857         | Hanger , RH .....                             | 1   |
| 24   | 1532338         | Spindle , Drive Axle .....                    | 2   |
| 25   | 1502422         | Spacer .....                                  | 2   |
| 26   | 2079522         | Bolt .....                                    | 14  |
| 27   | 2027633         | Capscrew .....                                | 16  |
| 28   | 2080650         | Washer .....                                  | 2   |
| 29   | 2080648         | Nut .....                                     | 2   |
| 30   | 2081841         | Setscrew .....                                | 2   |
| 31   | 2029499         | Drive Shaft Axle .....                        | 2   |
| 32   | 2082641         | Hub (L and R Drive Axle) (☞ Figure 7-4).....  | 2   |
| 33   | 4622226         | Cover .....                                   | 1   |
| 34   | 2079533         | Capscrew , M8x1.25x16 .....                   | 15  |
| 35   | 2021510         | Breather , Air .....                          | 1   |
| 36   | 2023421         | Plug .....                                    | 1   |
| 37   | 124297          | Clamp .....                                   | 2   |
| 38   | 2021652         | Strap Clamp .....                             | 8   |
| 39   | 2061325         | Tube Assy , Vinyl .....                       | 2   |
| 40   | 1547757         | Drive Shaft .....                             | 1   |
| 40   | 1566461         | Coupling .....                                | 1   |
| 40   | 1566462         | Universal Joint .....                         | 2   |
| 41   | 293616          | Capscrew .....                                | 8   |
| 42   | <b>c</b> 15483  | Fitting .....                                 | 1   |
| 42   | <b>b</b> 16151  | Fitting .....                                 | 1   |
| 43   | <b>b</b> 387867 | Pressure Switch .....                         | 1   |
| 44   | 2080654         | Sensor , Speed (Yanmar) .....                 | 1   |

**DRIVE AXLE AND ATTACHING PARTS**  
**H40-50XT (→ PENDING PER ECN 166624)**

| ITEM | PART NO.         | DESCRIPTION                | QTY |
|------|------------------|----------------------------|-----|
| 45   | 1693371          | Capscrew .....             | 1   |
| 46   | 4148884          | Cover .....                | 1   |
| 47   | 1613324          | Capscrew .....             | 1   |
| 48   | 1530243          | Insert .....               | 1   |
| 49   | 2314892          | Sensor , Speed (PSI) ..... | 1   |
|      | <b>a</b> 2092591 | Cover (U-Joint) .....      | 1   |

**FOOTNOTES:**

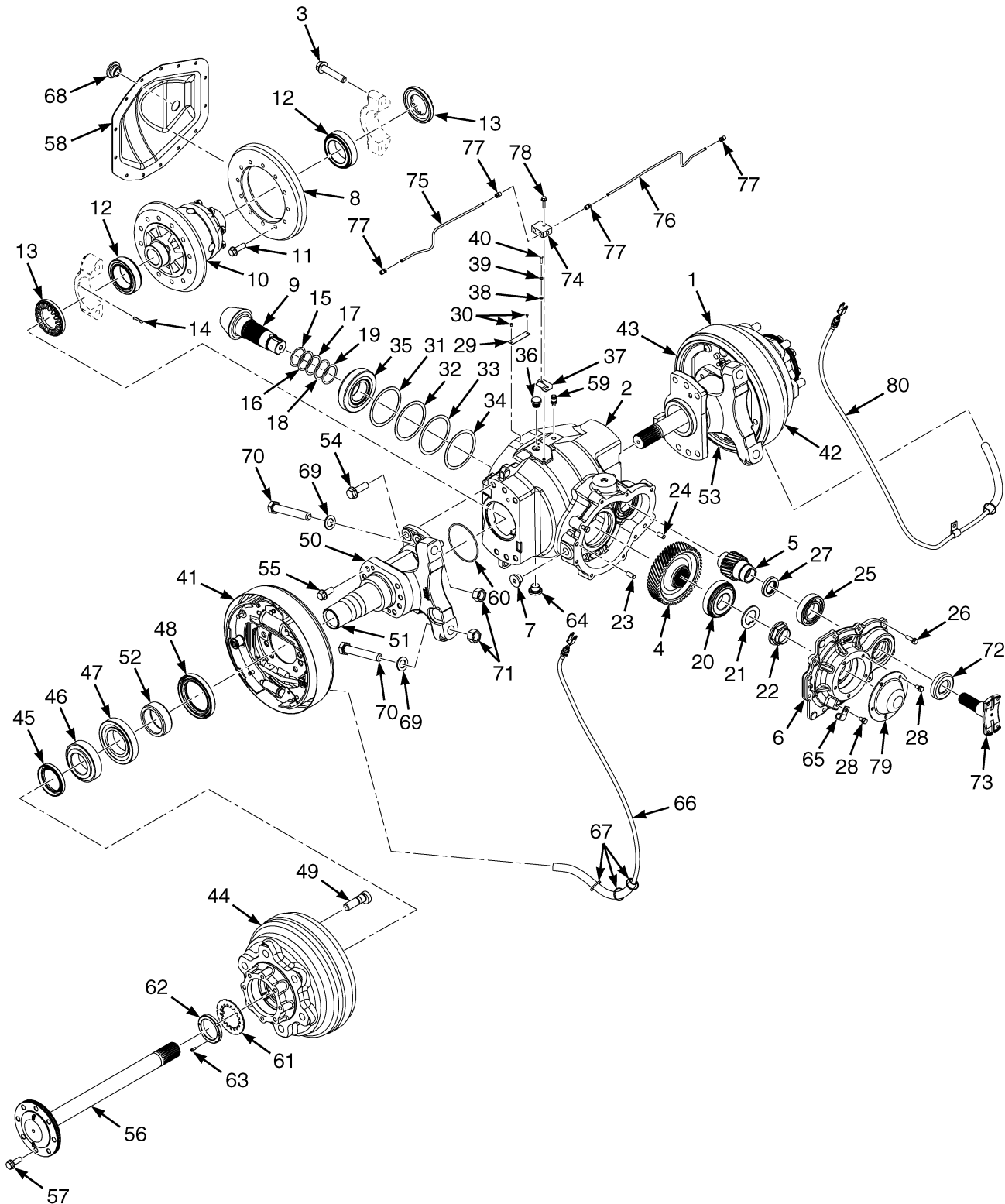
- a** Not Illustrated  
**b** With Monotrol

- c** Without Monotrol

## NOTES

[illegible]

## DRIVE AXLE AND ATTACHING PARTS (FIGURE 7-2) H40-50XT (PENDING PER ECN 166624 →)



BP070240

**DRIVE AXLE AND ATTACHING PARTS**  
**H40-50XT (PENDING PER ECN 166624 →)**

| ITEM | PART NO. | DESCRIPTION                     | QTY |
|------|----------|---------------------------------|-----|
|      | 4662414  | Drive Axle .....                | 1   |
| 1    | 4662413  | Drive Axle Center Section ..... | 1   |
| 2    | 4662404  | Housing .....                   | 1   |
| 3    | 2079523  | Bolt .....                      | 4   |
| 4    | 4662405  | Gear (Drive) .....              | 1   |
| 5    | 4662406  | Gear (Drive) .....              | 1   |
| 6    | 4662403  | Housing .....                   | 1   |
| 7    | 2023976  | Plug .....                      | 1   |
| 8    | 4674172  | Gear (Hypoid) .....             | 1   |
| 9    | 4674173  | Pinion (Hypoid) .....           | 1   |
| 10   | 2067574  | Differential .....              | 1   |
| 11   | 4657502  | Bolt .....                      | 12  |
| 12   | 2027661  | Roller Bearing .....            | 2   |
| 13   | 2021287  | Bearing .....                   | 2   |
| 14   | 2081542  | Cotter Pin .....                | 2   |
| 15   | 1516331  | Shim (0.004 in.) .....          | 2   |
| 16   | 1516332  | Shim (0.005 in.) .....          | 1   |
| 17   | 1516333  | Shim (0.007 in.) .....          | 1   |
| 18   | 1516334  | Shim (0.009 in.) .....          | 1   |
| 19   | 1516335  | Shim (0.019 in.) .....          | 1   |
| 20   | 2022352  | Tapered Roller Bearing .....    | 1   |
| 21   | 1530588  | Washer .....                    | 1   |
| 22   | 2026861  | Nut .....                       | 1   |
| 23   | 2099571  | Metric Pin , 10x25 .....        | 4   |
| 24   | 302385   | Dowel .....                     | 4   |
| 25   | 1523479  | Ball Bearing .....              | 2   |
| 26   | 2079536  | Capscrew .....                  | 9   |
| 27   | 1522377  | Oil Seal .....                  | 1   |
| 28   | 2079533  | Capscrew , M8x1.25x16 .....     | 5   |
| 29   | 4604965  | Plate .....                     | 1   |
| 30   | 2023748  | Rivet .....                     | 2   |
| 31   | 4668094  | Shim .....                      | 1   |
| 32   | 4668095  | Shim .....                      | 1   |
| 33   | 4668096  | Shim .....                      | 1   |
| 34   | 4668097  | Shim .....                      | 1   |
| 35   | 4667195  | Bearing .....                   | 1   |
| 36   | 4626501  | Plug .....                      | 1   |
| 37   | 4638929  | Plate .....                     | 1   |
| 38   | 320156   | Washer .....                    | 1   |
| 39   | 292680   | Washer .....                    | 1   |
| 40   | 302256   | Capscrew .....                  | 1   |
| 41   | 4154242  | Brake Assy (LH) .....           | 1   |
| 42   | 4154243  | Brake Assy (RH) .....           | 1   |
| 43   | 4662412  | Hub .....                       | 2   |
| 44   | 4662400  | Hub .....                       | 1   |
| 45   | 4615139  | Oil Seal .....                  | 1   |
| 46   | 2027663  | Bearing Set (Tapered) .....     | 1   |
| 47   | 1375492  |                                 |     |
|      | 2027662  | Bearing Set (Tapered) .....     | 1   |
| 48   | 2027817  | Oil Seal .....                  | 1   |

**DRIVE AXLE AND ATTACHING PARTS**  
**H40-50XT (PENDING PER ECN 166624 →)**

| ITEM | PART NO.         | DESCRIPTION               | QTY |
|------|------------------|---------------------------|-----|
| 49   | 1532337          | Wheel Stud .....          | 6   |
| 50   | 4662410          | Hanger .....              | 1   |
| 50   | 4662401          | Hanger .....              | 1   |
| 51   | 4662408          | Spindle .....             | 1   |
| 52   | 1502422          | Spacer .....              | 1   |
| 53   | 4662411          | Hanger .....              | 1   |
| 53   | 4662402          | Hanger .....              | 1   |
| 54   | 2079522          | Bolt .....                | 12  |
| 55   | 4657503          | Bolt .....                | 1   |
| 56   | 4662407          | Axle Shaft .....          | 1   |
| 57   | 2079518          | Bolt .....                | 1   |
| 58   | 4662409          | Cover .....               | 1   |
| 59   | 2021510          | Breather , Air .....      | 1   |
| 60   | 2027828          | O-Ring .....              | 1   |
| 61   | 2080650          | Washer .....              | 2   |
| 62   | 2080648          | Nut (Bearing Lock) .....  | 2   |
| 63   | 2081841          | Setscrew .....            | 2   |
| 64   | 2023421          | Plug .....                | 1   |
| 65   | 124297           | Clamp .....               | 2   |
| 66   | 2061325          | Tube Assy , Vinyl .....   | 2   |
| 67   | 2021652          | Strap Clamp .....         | 8   |
| 68   | 1516075          | Plug , Oil Level .....    | 1   |
| 69   | 296430           | Washer .....              | 4   |
| 70   | 293717           | Capscrew .....            | 4   |
| 71   | 292659           | Nut .....                 | 4   |
| 72   | 4000205          | Dust Cover .....          | 1   |
| 73   | 1517673          | Shaft .....               | 1   |
| 74   | 2021470          | Valve , 4-Way Block ..... | 1   |
| 75   | 4671657          | Tube Assy .....           | 1   |
| 76   | 4671658          | Tube Assy .....           | 1   |
| 77   | 1327241          | Nut .....                 | 4   |
| 78   | 1527878          | Capscrew .....            | 1   |
| 79   | 1516536          | Cover (Pinion) .....      | 1   |
| 80   | 2080796          | Cable Assy .....          | 1   |
|      | <b>a</b> 2092591 | Cover (U-Joint) .....     | 1   |

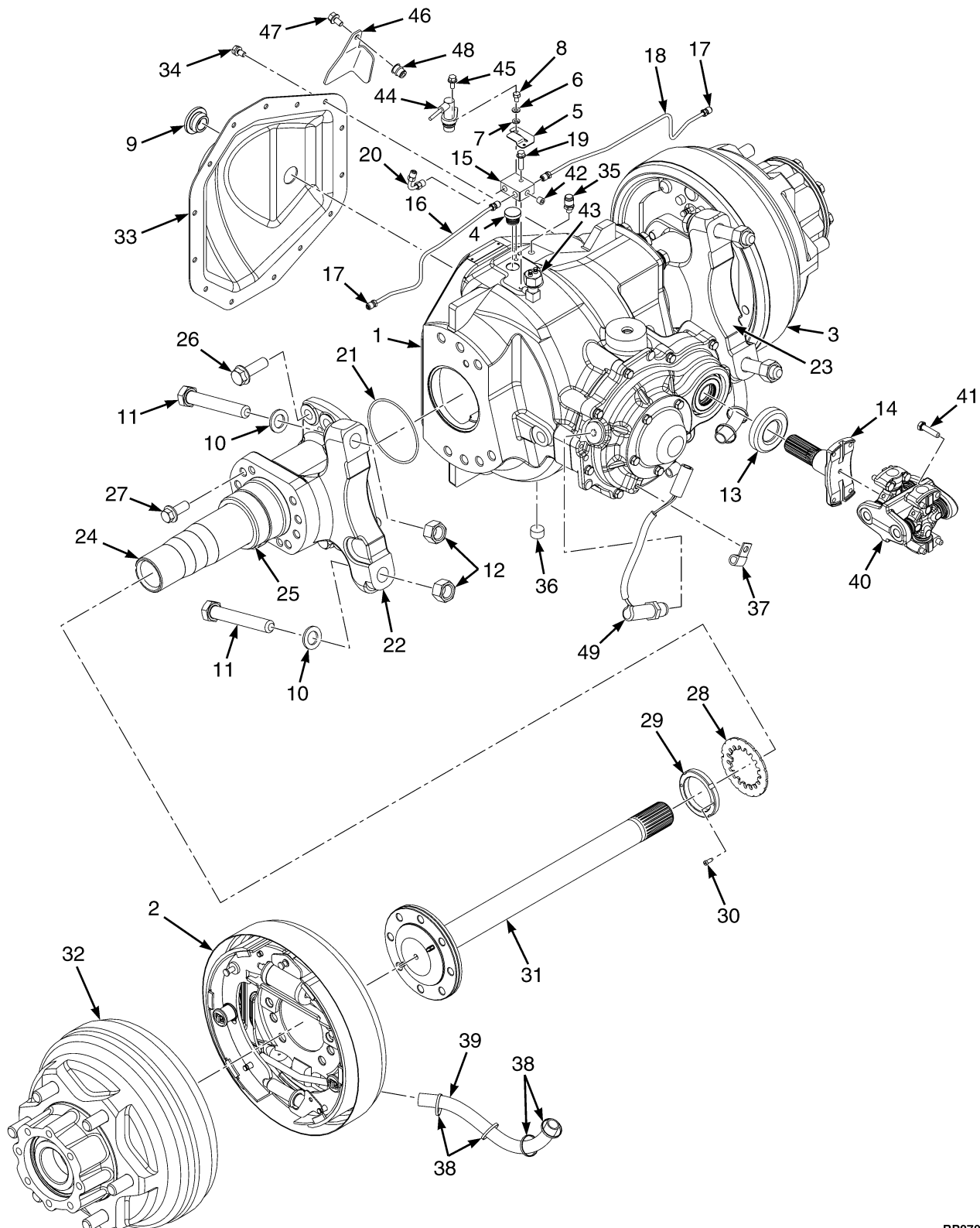
**FOOTNOTES:****a** Not Illustrated



## NOTES

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## DRIVE AXLE AND ATTACHING PARTS (FIGURE 7-3) H60XT



BP070206

**DRIVE AXLE AND ATTACHING PARTS**  
**H60XT**

| ITEM | PART NO.        | DESCRIPTION                                  | QTY |
|------|-----------------|----------------------------------------------|-----|
|      | 4653671         | Drive Axle Assembly .....                    | 1   |
| 1    | 4162972         | Drive Axle Center Section (☞Figure 7-4)..... | 1   |
| 2    | 2097069         | Brake Assy (LH) (☞Figure 9-2).....           | 1   |
| 3    | 2097070         | Brake Assy (RH) (☞Figure 9-2).....           | 1   |
| 4    | 4626501         | Plug .....                                   | 1   |
| 5    | 4638929         | Plate .....                                  | 1   |
| 6    | 320156          | Washer .....                                 | 1   |
| 7    | 292680          | Washer .....                                 | 1   |
| 8    | 302256          | Capscrew .....                               | 1   |
| 9    | 1516075         | Plug , Oil Level .....                       | 1   |
| 10   | 296430          | Washer .....                                 | 4   |
| 11   | 293717          | Capscrew .....                               | 4   |
| 12   | 292659          | Nut .....                                    | 4   |
| 13   | 4000205         | Dust Cover .....                             | 1   |
| 14   | 1517673         | Shaft .....                                  | 1   |
| 15   | 2021470         | Valve , 4-Way Block .....                    | 1   |
| 16   | 4649005         | Tube Assy (LH) .....                         | 1   |
| 17   | 1327241         | Nut .....                                    | 4   |
| 18   | 4649006         | Tube Assy (RH) .....                         | 1   |
| 19   | 1527878         | Capscrew .....                               | 1   |
| 20   | 2029523         | Tube Assembly .....                          | 1   |
| 21   | 2027828         | O-Ring .....                                 | 2   |
| 22   | 2081469         | Hanger Assembly (LH) .....                   | 1   |
| 22   | 2082856         | Hanger , LH .....                            | 1   |
| 23   | 2081468         | Hanger Assembly (RH) .....                   | 1   |
| 23   | 2082857         | Hanger , RH .....                            | 1   |
| 24   | 1532338         | Spindle , Drive Axle .....                   | 2   |
| 25   | 1502422         | Spacer .....                                 | 2   |
| 26   | 2079522         | Bolt .....                                   | 14  |
| 27   | 2027633         | Capscrew .....                               | 16  |
| 28   | 2080650         | Washer .....                                 | 2   |
| 29   | 2080648         | Nut .....                                    | 2   |
| 30   | 2081841         | Setscrew .....                               | 2   |
| 31   | 2029499         | Drive Shaft Axle .....                       | 2   |
| 32   | 2082641         | Hub (L and R Drive Axle) (☞Figure 7-4).....  | 2   |
| 33   | 4622226         | Cover .....                                  | 1   |
| 34   | 2079533         | Capscrew , M8x1.25x16 .....                  | 15  |
| 35   | 2021510         | Breather , Air .....                         | 1   |
| 36   | 2023421         | Plug .....                                   | 1   |
| 37   | 124297          | Clamp .....                                  | 2   |
| 38   | 2021652         | Strap Clamp .....                            | 8   |
| 39   | 2061325         | Tube Assy , Vinyl .....                      | 2   |
| 40   | 1547757         | Drive Shaft .....                            | 1   |
| 40   | 1566461         | Coupling .....                               | 1   |
| 40   | 1566462         | Universal Joint .....                        | 2   |
| 41   | 293616          | Capscrew .....                               | 8   |
| 42   | <b>b</b> 15483  | Fitting .....                                | 1   |
| 42   | <b>a</b> 16151  | Fitting .....                                | 1   |
| 43   | <b>a</b> 387867 | Pressure Switch .....                        | 1   |
| 44   | 2080654         | Sensor , Speed (Yanmar) .....                | 1   |

**DRIVE AXLE AND ATTACHING PARTS**  
**H60XT**

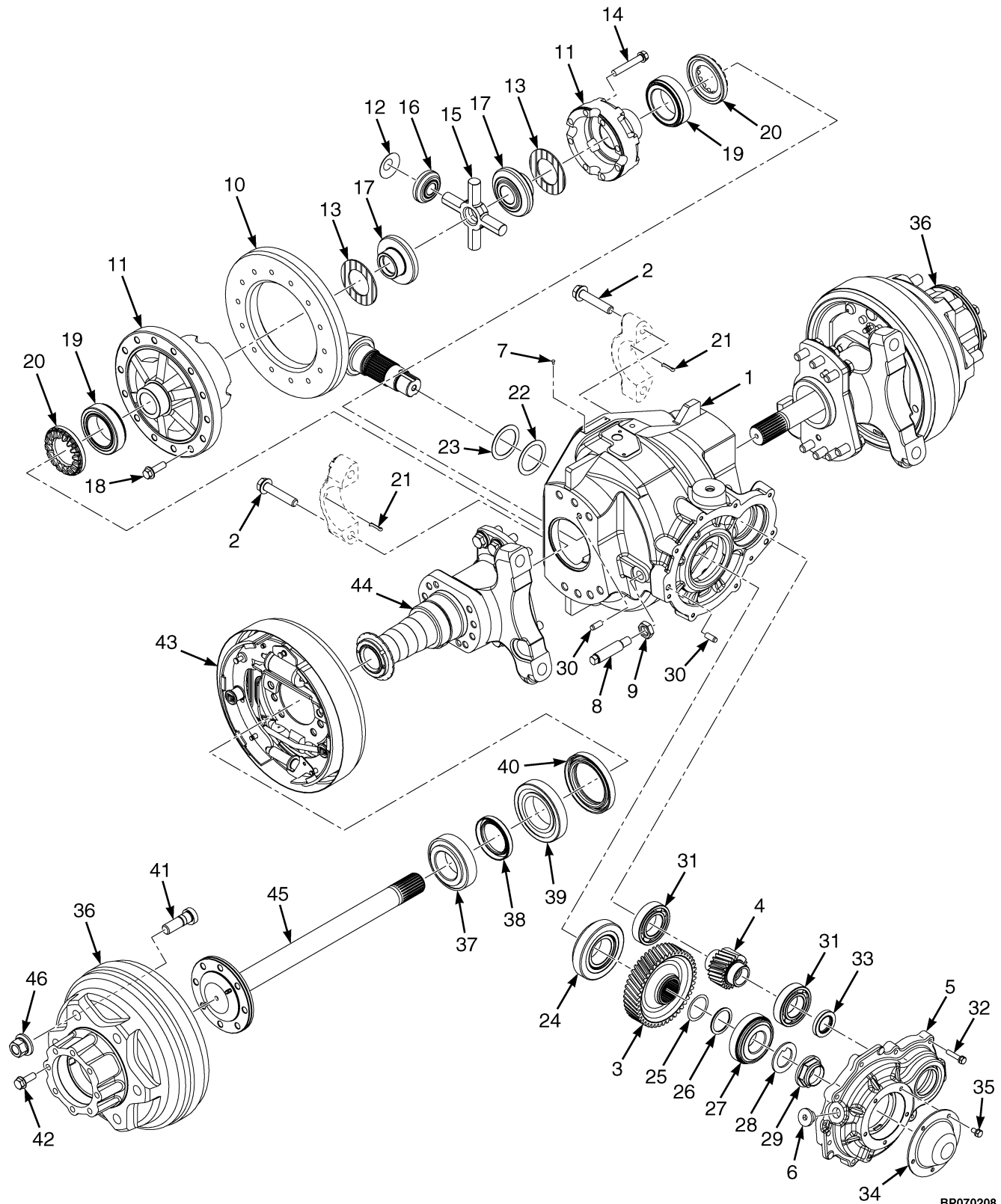
| ITEM | PART NO. | DESCRIPTION                | QTY |
|------|----------|----------------------------|-----|
| 45   | 1693371  | Capscrew .....             | 1   |
| 46   | 4148884  | Cover .....                | 1   |
| 47   | 1613324  | Capscrew .....             | 1   |
| 48   | 1530243  | Insert .....               | 1   |
| 49   | 2314892  | Sensor , Speed (PSI) ..... | 1   |

**FOOTNOTES:****a** With Monotrol**b** Without Monotrol

## NOTES

[illegible]

## DRIVE AXLE CENTER SECTION AND HUB ASSY (FIGURE 7-4)



BP070208

**DRIVE AXLE CENTER SECTION AND HUB ASSY**

| ITEM | PART NO.        | DESCRIPTION                               | QTY |
|------|-----------------|-------------------------------------------|-----|
|      | 4162972         | Drive Axle Center Section .....           | 1   |
| 1    | 4162973         | Housing , Drive Axle Center Section ..... | 1   |
| 2    | 2079523         | Bolt .....                                | 4   |
| 3    | 2079314         | Gear .....                                | 1   |
| 4    | 2079311         | Drive Gear .....                          | 1   |
| 5    | 2108220         | Housing , Dropbox Housing .....           | 1   |
| 6    | 2023976         | Plug .....                                | 1   |
| 7    | 2023748         | Rivet .....                               | 2   |
| 8    | 2093753         | Thrust Screw .....                        | 1   |
| 9    | 296137          | Nut .....                                 | 1   |
| 10   | 2058929         | Gear And Pinion .....                     | 1   |
| 11   | 2081224         | Differential .....                        | 1   |
|      | 1565324         | Kit-Washer .....                          | 1   |
| 12   | .....           | Washer, Pinion .....                      | 4   |
| 13   | .....           | Washer, Side Gear .....                   | 2   |
| 14   | 1565327         | Bolt .....                                | 8   |
| 15   | 2029383         | Spider .....                              | 1   |
|      | 1606531         | Kit-Gear .....                            | 1   |
| 16   | .....           | Gear, Pinion .....                        | 4   |
| 17   | .....           | Gear, Side Gear .....                     | 2   |
| 18   | 2029436         | Bolt .....                                | 14  |
| 19   | 2027661         | Roller Bearing .....                      | 2   |
| 20   | 2021287         | Bearing .....                             | 2   |
| 21   | 2081542         | Cotter Pin .....                          | 2   |
| 22   | 1532715         | Shim (0.040 in.) .....                    | 1   |
| 23   | 4029943         | Shim , T = 0.8 .....                      | AR  |
| 23   | 4029944         | Shim , T = 1.2 .....                      | AR  |
| 23   | 4042928         | Shim , T = 0.9 .....                      | AR  |
| 23   | 4042929         | Shim , T = 1.1 .....                      | AR  |
| 24   | 2076153         | Bearing Set .....                         | 1   |
| 25   | 1516331         | Shim (0.004 in.) .....                    | AR  |
| 25   | 1516332         | Shim (0.005 in.) .....                    | AR  |
| 25   | 1516333         | Shim (0.007 in.) .....                    | AR  |
| 25   | 1516334         | Shim (0.009 in.) .....                    | AR  |
| 26   | 1516335         | Shim (0.019 in.) .....                    | 2   |
| 27   | 2022352         | Tapered Roller Bearing .....              | 1   |
| 28   | 1530588         | Washer .....                              | 1   |
| 29   | 2026861         | Nut .....                                 | 1   |
| 30   | 2099571         | Metric Pin , 10x25 (Dowel) .....          | 4   |
| 30   | <b>a</b> 302385 | Dowel (Optional) .....                    | 4   |
| 31   | 1523479         | Ball Bearing .....                        | 2   |
| 32   | 2079537         | Capscrew , M8x1.25x40 .....               | 9   |
| 33   | 1522377         | Oil Seal .....                            | 1   |
| 34   | 1516536         | Cover (Pinion) .....                      | 1   |
| 35   | 2079533         | Capscrew , M8x1.25x16 .....               | 5   |
| 36   | 2082641         | Hub (Applies to L or R side) .....        | 1   |
| 37   | 2027663         | Bearing Set (Tapered) .....               | 1   |
| 38   | 4615139         | Oil Seal .....                            | 1   |
| 39   | 1375492         |                                           |     |
|      | 2027662         | Bearing Set (Tapered) .....               | 1   |
| 40   | 2027817         | Oil Seal .....                            | 1   |

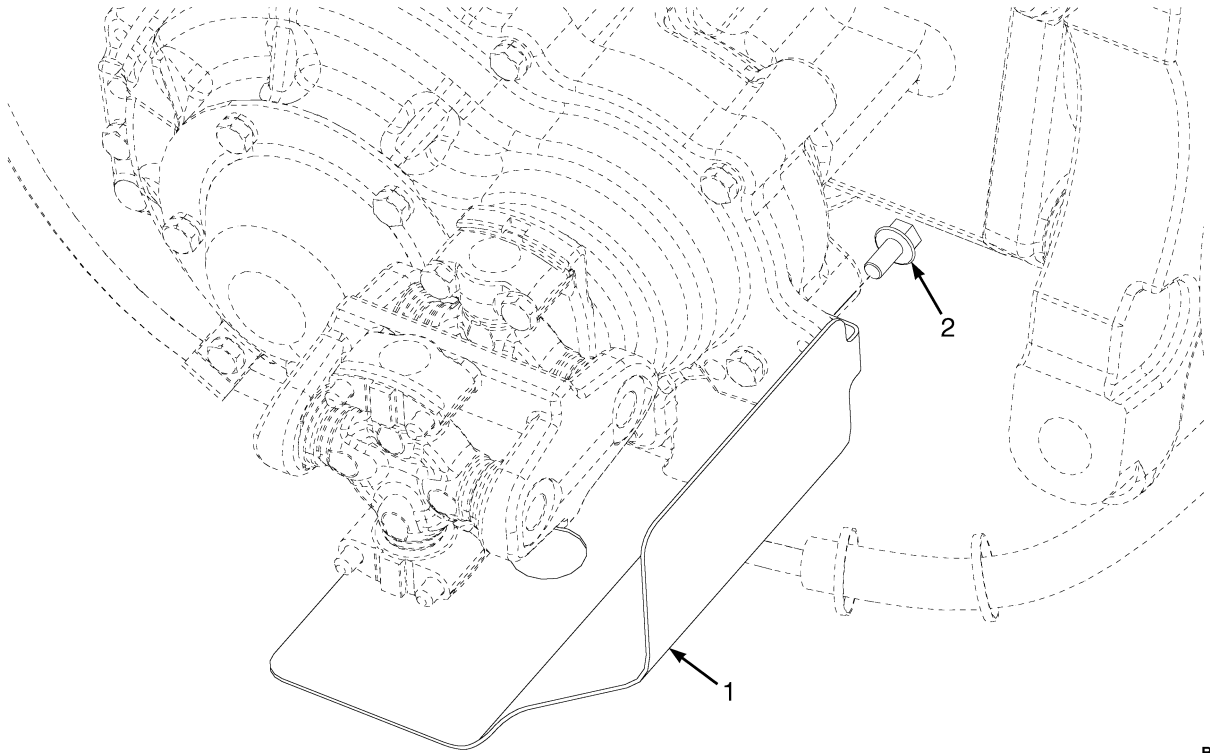
**DRIVE AXLE CENTER SECTION AND HUB ASSY**

| ITEM | PART NO.  | DESCRIPTION                         | QTY |
|------|-----------|-------------------------------------|-----|
| 41   | 1532337   | Wheel Stud .....                    | 6   |
| 42   | 2079518   | Bolt .....                          | 8   |
| 43   | .....     | Brake Assembly (☞ Figure 7-1).....  | 1   |
| 44   | .....     | Hanger Assembly (☞ Figure 7-1)..... | 1   |
| 45   | 2029499   | Drive Shaft Axle .....              | 2   |
| 46   | 580063944 | Wheel Nut .....                     | 12  |

**FOOTNOTES:**

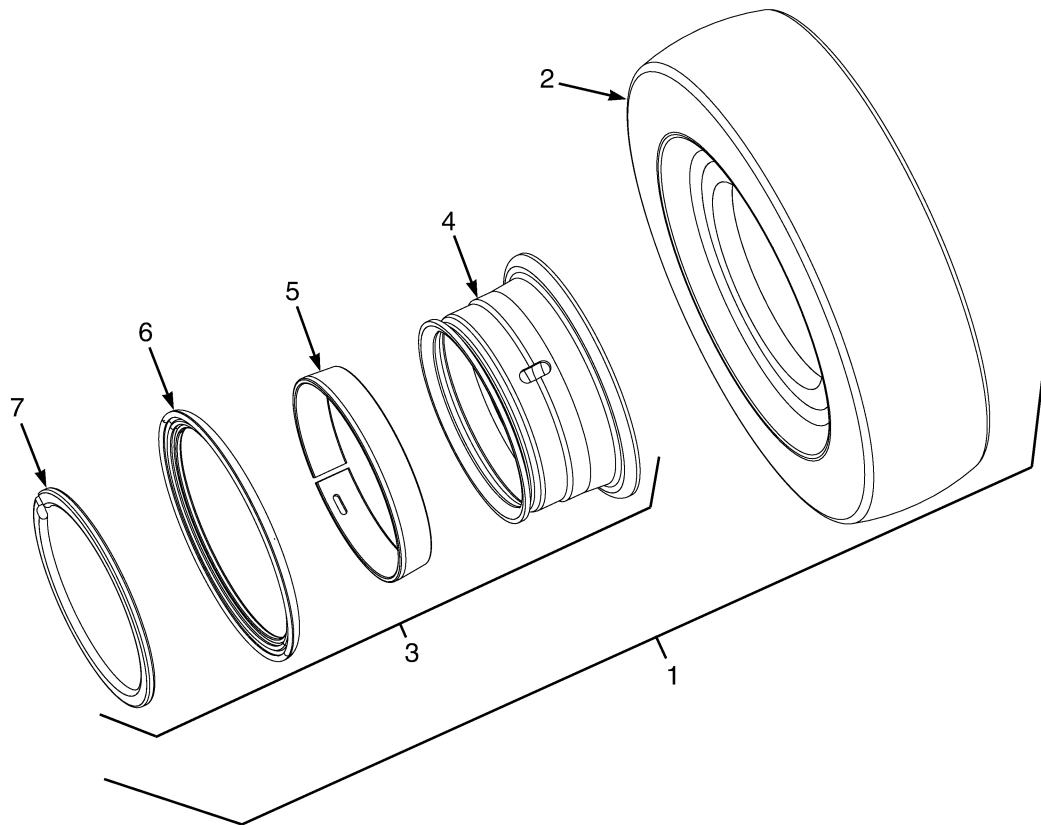
**a** Optional



**UNIVERSAL JOINT COVER (FIGURE 7-5)**

BP070245

| ITEM | PART NO. | DESCRIPTION    | QTY |
|------|----------|----------------|-----|
| 1    | 2092591  | Cover .....    | 1   |
| 2    | 4109993  |                |     |
|      | 1527879  | Capscrew ..... | 1   |

**DRIVE TIRES AND WHEELS (FIGURE 7-6)**  
**SOLID TIRE**

BP220220

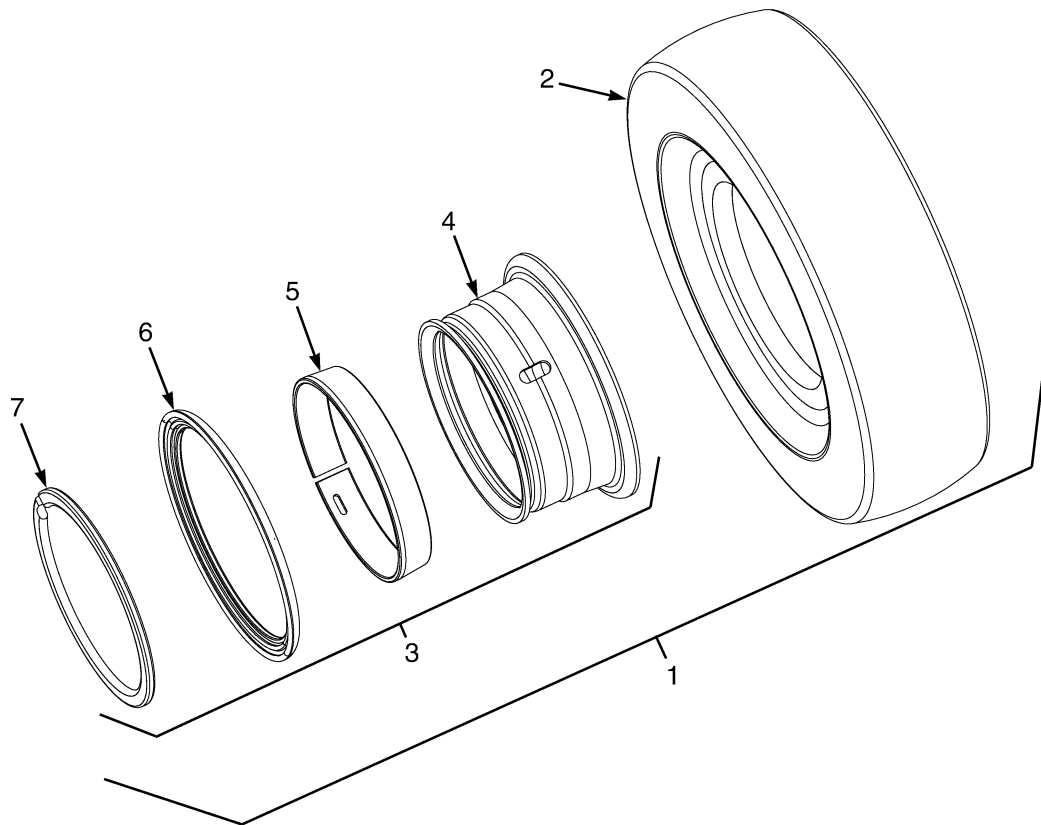
**KEY:**

- A:** H40-50XT 7.00 x 12 Standard Compound  
**B:** H40-50XT 7.00 x 12 Non Marking Compound  
**C:** H40-60XT 28 x 9-15 Standard Compound  
**D:** H40-60XT 28 x 9-15 Non Marking Compound

| ITEM | PART NO. | DESCRIPTION                                                 | QTY |    |    |    |
|------|----------|-------------------------------------------------------------|-----|----|----|----|
|      |          |                                                             | A   | B  | C  | D  |
| 1    | 1544980  | Wheel And Tire , 7.00 x 12 Solid Pneu (Standard Comp) ..... | 2   | .. | .. | .. |
| 1    | 1603455  | Wheel And Tire , 7.00 x 12 Solid Pneu (Non-Mark Comp) ..... | ..  | 2  | .. | .. |
| 1    | 1544983  | Wheel And Tire 28 x 9-15 Solid Pneu (Standard Comp) .....   | ..  | .. | 2  | .. |
| 1    | 1603456  | Wheel And Tire 28 x 9-15 Solid Pneu (Non-Mark Comp) .....   | ..  | .. | .. | 2  |
| 2    | 1654009  | Tire .....                                                  | 1   | .. | .. | .. |
| 2    | 4622860  | Tire (Alt Part) .....                                       | 1   | .. | .. | .. |
| 2    | 1603485  | Tire .....                                                  | ..  | 1  | .. | .. |
| 2    | 4206294  | Solid Pneumatic Tire (Alt Part) .....                       | ..  | 1  | .. | .. |
| 2    | 1543071  | Tire .....                                                  | ..  | .. | 1  | .. |
| 2    | 2107158  | Tire (Alt Part) .....                                       | ..  | .. | 1  | .. |
| 2    | 1603486  | Tire .....                                                  | ..  | .. | .. | 1  |
| 2    | 4206295  | Solid Pneumatic Tire (Alt Part) .....                       | ..  | .. | .. | 1  |
| 3    | 2070073  | Wheel Assy (5.00 x 12) .....                                | 1   | 1  | .. | .. |
| 3    | 2070074  | Wheel Assy (7.00 x 15) .....                                | ..  | .. | 1  | 1  |
| 4    | 2070080  | Rim .....                                                   | 1   | 1  | .. | .. |
| 4    | 2070079  | Rim .....                                                   | ..  | .. | 1  | 1  |

**KEY:****A: H40-50XT 7.00 x 12 Standard Compound****B: H40-50XT 7.00 x 12 Non Marking Compound****C: H40-60XT 28 x 9-15 Standard Compound****D: H40-60XT 28 x 9-15 Non Marking Compound**

| ITEM | PART NO. | DESCRIPTION           | QTY |    |    |    |
|------|----------|-----------------------|-----|----|----|----|
|      |          |                       | A   | B  | C  | D  |
| 5    | 1584694  | Wedge Band .....      | 1   | 1  | .. | .. |
| 5    | 1584695  | Wedge Band .....      | ..  | .. | 1  | 1  |
| 6    | 161890   | Wheel Side Ring ..... | 1   | 1  | .. | .. |
| 6    | 160653   | Wheel Side Ring ..... | ..  | .. | 1  | 1  |
| 7    | 161889   | Wheel Lock Ring ..... | 1   | 1  | .. | .. |
| 7    | 980542   | Wheel Lock Ring ..... | ..  | .. | 1  | 1  |

**DRIVE TIRES AND WHEELS (FIGURE 7-7)**  
**SOLID — WIDE OPTION**

BP220220

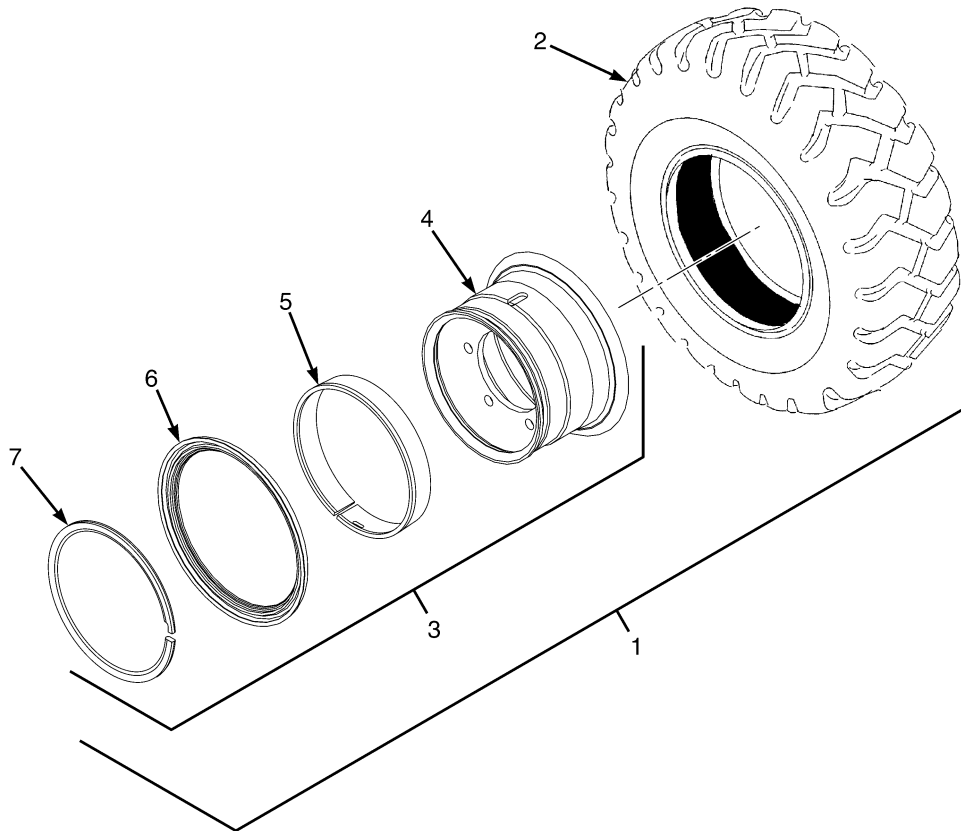
**KEY:****A:** H40-50XT 7.00 x 12 Non Marking Compound**B:** H40-50XT 7.00 x 12 Standard Compound**C:** H40-60XT 28 x 9-15 Non Marking Compound**D:** H40-60XT 28 x 9-15 Standard Compound

| ITEM | PART NO. | DESCRIPTION                                 | QTY |    |    |    |
|------|----------|---------------------------------------------|-----|----|----|----|
|      |          |                                             | A   | B  | C  | D  |
| 1    | 1603457  | Wheel And Tire (Non-Marking Compound) ..... | 2   | .. | .. | .. |
| 1    | 1544986  | Wheel And Tire (Standard Compound) .....    | ..  | 2  | .. | .. |
| 1    | 1603458  | Wheel And Tire (Non-Marking Compound) ..... | ..  | .. | 2  | .. |
| 1    | 1544989  | Wheel And Tire (Standard Compound) .....    | ..  | .. | .. | 2  |
| 2    | 1603485  | Tire .....                                  | 1   | .. | .. | .. |
| 2    | 4206294  | Solid Pneumatic Tire (Alt Parts) .....      | 1   | .. | .. | .. |
| 2    | 1654009  | Tire .....                                  | ..  | 1  | .. | .. |
| 2    | 4622860  | Tire (Alt Part) .....                       | ..  | 1  | .. | .. |
| 2    | 1603486  | Tire .....                                  | ..  | .. | 1  | .. |
| 2    | 4206295  | Solid Pneumatic Tire (Alt Part) .....       | ..  | .. | 1  | .. |
| 2    | 1543071  | Tire .....                                  | ..  | .. | .. | 1  |
| 2    | 2107158  | Tire (Alt Part) .....                       | ..  | .. | .. | 1  |
| 3    | 2070075  | Wheel Assy (5.00 x 12) .....                | 1   | 1  | .. | .. |
| 3    | 2070076  | Wheel Assy (7.00 x 15) .....                | ..  | .. | 1  | 1  |
| 4    | 2070078  | Rim .....                                   | 1   | 1  | .. | .. |
| 4    | 2070077  | Rim .....                                   | ..  | .. | 1  | 1  |

**KEY:****A: H40-50XT 7.00 x 12 Non Marking Compound****B: H40-50XT 7.00 x 12 Standard Compound****C: H40-60XT 28 x 9-15 Non Marking Compound****D: H40-60XT 28 x 9-15 Standard Compound**

| ITEM | PART NO. | DESCRIPTION           | QTY |    |    |    |
|------|----------|-----------------------|-----|----|----|----|
|      |          |                       | A   | B  | C  | D  |
| 5    | 1584694  | Wedge Band .....      | 1   | 1  | .. | .. |
| 5    | 1584695  | Wedge Band .....      | ..  | .. | 1  | 1  |
| 6    | 161890   | Wheel Side Ring ..... | 1   | 1  | .. | .. |
| 6    | 160653   | Wheel Side Ring ..... | ..  | .. | 1  | 1  |
| 7    | 161889   | Wheel Lock Ring ..... | 1   | 1  | .. | .. |
| 7    | 980542   | Wheel Lock Ring ..... | ..  | .. | 1  | 1  |

## DRIVE TIRES AND WHEELS (FIGURE 7-8) PNEUMATIC

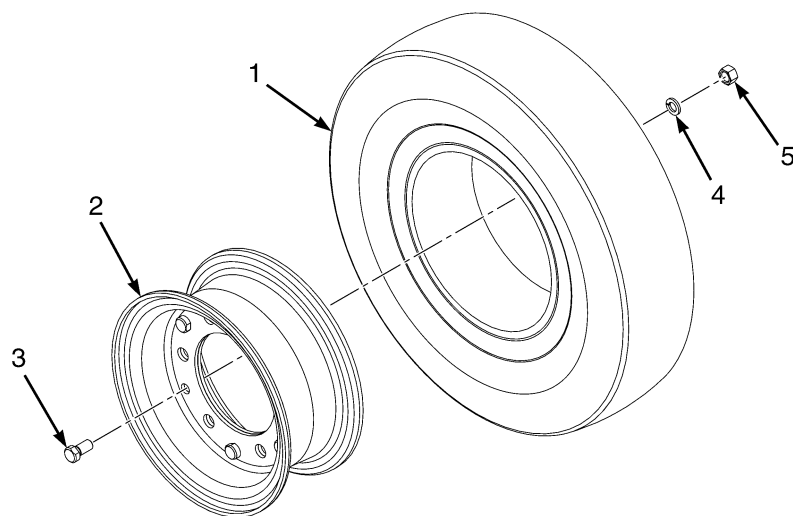


BP070185

### KEY:

- A:** 28 x 9-15 Single (H40-60XT)  
**B:** 28 x 9-15 Wide (H40-60XT)  
**C:** 7 x 12 - 14 Single (H40-50XT)

| ITEM | PART NO. | DESCRIPTION                                 | QTY |    |    |
|------|----------|---------------------------------------------|-----|----|----|
|      |          |                                             | A   | B  | C  |
| 1    | 1544982  | Wheel And Tire (28 x 9-15 Pneu) .....       | 2   | .. | .. |
| 1    | 1544988  | Wheel And Tire (28 x 9-15 Pneu) .....       | ..  | 2  | .. |
| 1    | 1544979  | Wheel And Tire (7.00 x 12 Pneu Tires) ..... | ..  | .. | 2  |
| 2    | 1543061  | Tire .....                                  | 1   | 1  | .. |
| 2    | 1543060  | Tire .....                                  | ..  | .. | 1  |
| 3    | 2070074  | Wheel Assy (7.00 x 15) .....                | 1   | .. | .. |
| 3    | 2070076  | Wheel Assy (7.00 x 15) .....                | ..  | 1  | .. |
| 3    | 2070073  | Wheel Assy (5.00 x 12) .....                | ..  | .. | 1  |
| 4    | 2070079  | Rim .....                                   | 1   | .. | .. |
| 4    | 2070077  | Rim .....                                   | ..  | 1  | .. |
| 4    | 2070080  | Rim .....                                   | ..  | .. | 1  |
| 5    | 1584695  | Wedge Band .....                            | 1   | 1  | .. |
| 5    | 1584694  | Wedge Band .....                            | ..  | .. | 1  |
| 6    | 160653   | Wheel Side Ring .....                       | 1   | 1  | .. |
| 6    | 161890   | Wheel Side Ring .....                       | ..  | .. | 1  |
| 7    | 980542   | Wheel Lock Ring .....                       | 1   | 1  | .. |
| 7    | 161889   | Wheel Lock Ring .....                       | ..  | .. | 1  |

**DRIVE TIRES AND WHEELS (FIGURE 7-9)**  
**DIVIDED SOLID TIRE**

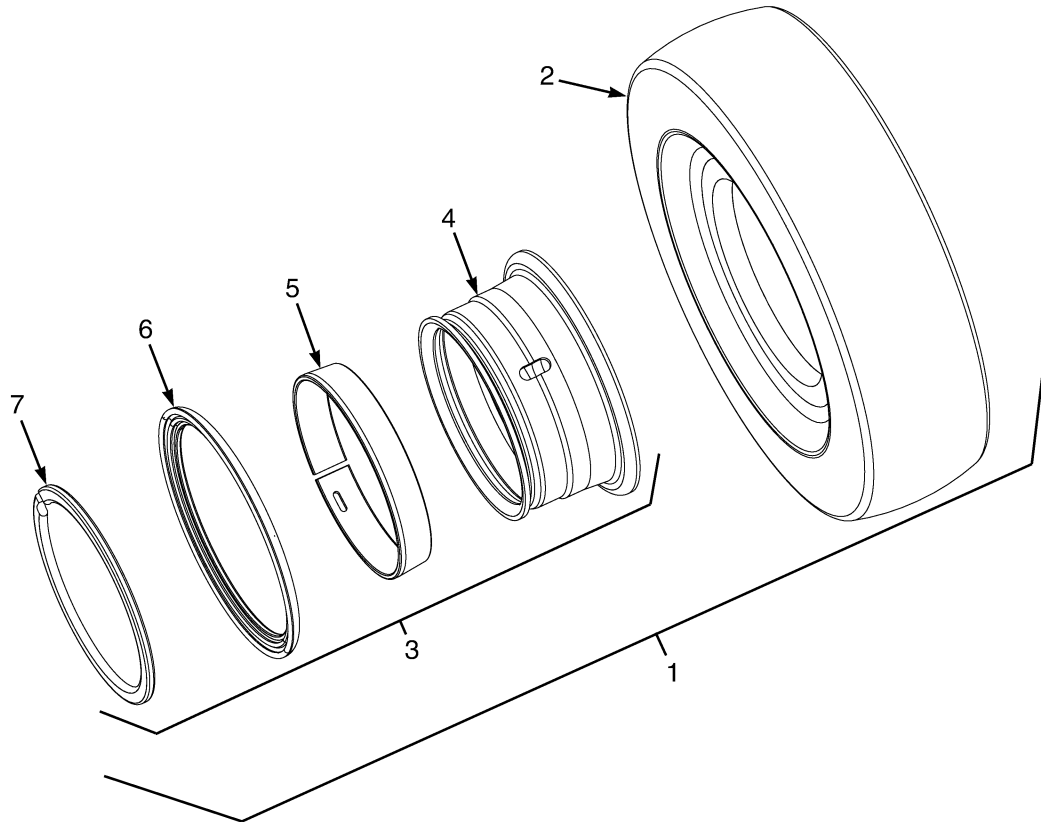
BP070204

| ITEM | PART NO.         | DESCRIPTION                                                                     | QTY |
|------|------------------|---------------------------------------------------------------------------------|-----|
|      | 4132029          | Wheel And Tire (CB/WH) (Standard Compound) (7.00 X 12 Solid Pneu Orca) .....    | 2   |
|      | 4132280          | Wheel And Tire (CB/WH) (Non-Marking Compound) (7.00 X 12 Solid Pneu Orca) ..... | 2   |
| 1    | 4132272          | Solid Pneumatic Tire (Standard Compound) .....                                  | 1   |
| 1    | 4132274          | Solid Pneumatic Tire (Non-Marking Compound) .....                               | 1   |
| 2    | 4644725          | Wheel Assy .....                                                                | 1   |
| 3    | 2027618          | Wheel Stud .....                                                                | 6   |
| 4    | 292685           | Lockwasher .....                                                                | 6   |
| 5    | 292600           | Nut .....                                                                       | 6   |
|      | <b>a</b> 1391295 | Label (Warning) (Two-Piece Wheel) .....                                         | 2   |

**FOOTNOTES:****a** Not Illustrated

## DRIVE TIRES AND WHEELS (FIGURE 7-10)

### SOLID PNEUMATIC — 7.00 X 15 RIM



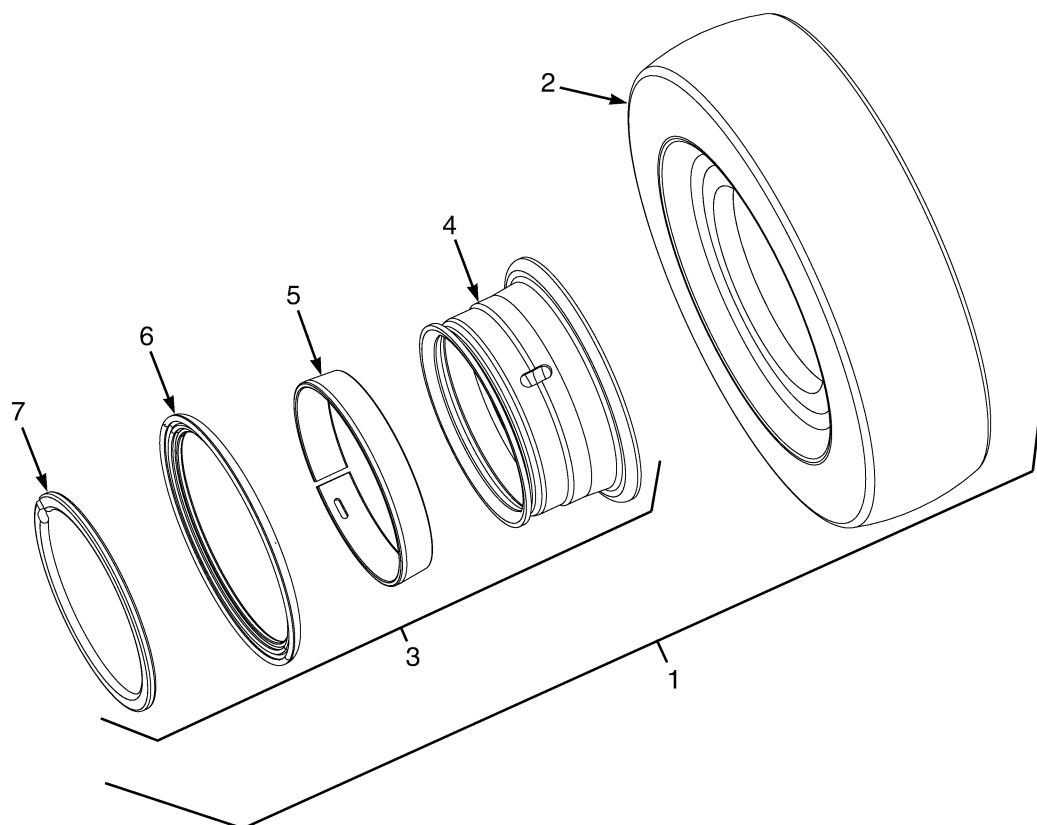
BP220220

#### KEY:

- A:** 28x9-15 Standard  
**B:** 28x9-15 Non Marking  
**C:** 28x9-15 Standard Wide Tread  
**D:** 28x9-15 Non Marking Wide Tread

| ITEM | PART NO. | DESCRIPTION                                                  | QTY |    |    |    |
|------|----------|--------------------------------------------------------------|-----|----|----|----|
|      |          |                                                              | A   | B  | C  | D  |
| 1    | 4132278  | Wheel Assy 28 x 9-15 Solid Pneu (Standard Compound) .....    | 2   | .. | .. | .. |
| 1    | 4132279  | Wheel Assy 28 x 9-15 Solid Pneu (Non-Marking Compound) ..... | ..  | 2  | .. | .. |
| 1    | 4155138  | Wheel Assy 28 x 9-15 Solid Pneu (Standard Compound) .....    | ..  | .. | 2  | .. |
| 1    | 4155139  | Wheel Assy 28 x 9-15 Solid Pneu (Non-Marking Compound) ..... | ..  | .. | .. | 2  |
| 2    | 4132273  | Solid Pneumatic Tire (Standard Compound) .....               | 1   | .. | 1  | .. |
| 2    | 4132277  | Solid Pneumatic Tire (Non-Marking Compound) .....            | ..  | 1  | .. | 1  |
| 3    | 2070074  | Wheel Assy (7.00 x 15) .....                                 | 1   | 1  | .. | .. |
| 3    | 2070076  | Wheel Assy (7.00 x 15) .....                                 | ..  | .. | 1  | 1  |
| 4    | 2070079  | Rim .....                                                    | 1   | 1  | .. | .. |
| 4    | 2070077  | Rim .....                                                    | ..  | .. | 1  | 1  |
| 5    | 1584695  | Wedge Band .....                                             | 1   | 1  | 1  | 1  |
| 6    | 160653   | Wheel Side Ring .....                                        | 1   | 1  | 1  | 1  |
| 7    | 980542   | Wheel Lock Ring .....                                        | 1   | 1  | 1  | 1  |



**DRIVE TIRES AND WHEELS (FIGURE 7-11)**  
**SOLID PNEUMATIC — 5.00 X 12 RIM**

BP220220

**KEY:****A: 7.00-12/5 Standard****B: 7.00-12/5 Non Marking**

| ITEM | PART NO. | DESCRIPTION                           | QTY |    |
|------|----------|---------------------------------------|-----|----|
|      |          |                                       | A   | B  |
| 1    | 4155200  | Wheel Assy 7.00-12/5 Solid Pneu ..... | 2   | .. |
| 1    | 4155201  | Wheel Assy 7.00-12/5 Solid Pneu ..... | ..  | 2  |
| 2    | 4132272  | Solid Pneumatic Tire .....            | 1   | .. |
| 2    | 4132274  | Solid Pneumatic Tire .....            | ..  | 1  |
| 3    | 2070075  | Wheel Assy (5.00 x 12) .....          | 1   | 1  |
| 4    | 2070078  | Rim .....                             | 1   | 1  |
| 5    | 1584694  | Wedge Band .....                      | 1   | 1  |
| 6    | 161890   | Wheel Side Ring .....                 | 1   | 1  |
| 7    | 161889   | Wheel Lock Ring .....                 | 1   | 1  |

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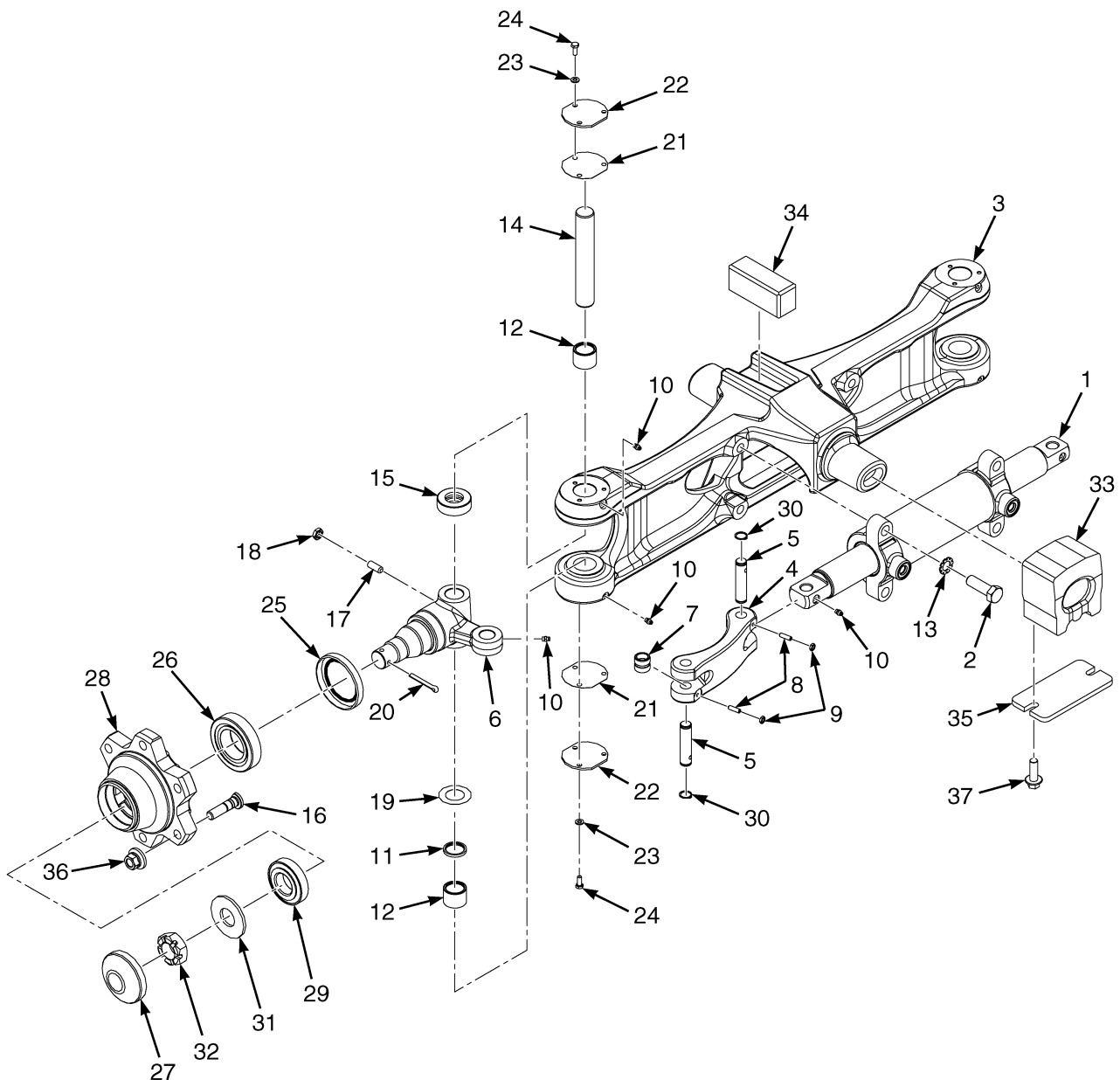




**SECTION 8**  
**STEERING SYSTEM**

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## STEER AXLE (FIGURE 8-1)

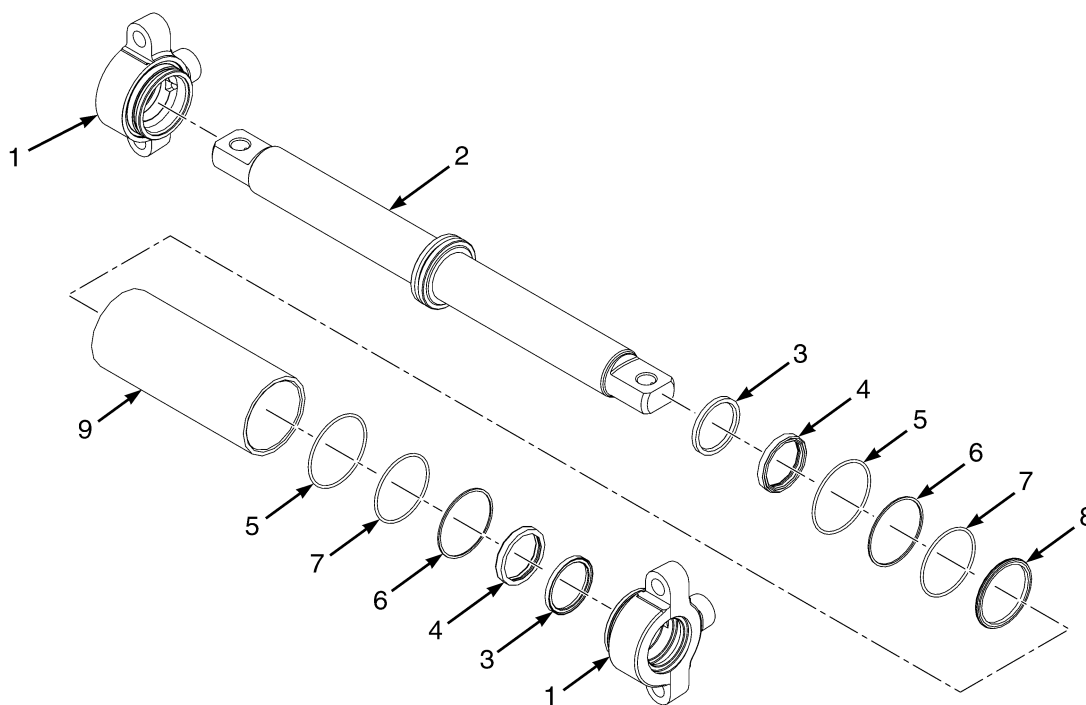


BP220478

**STEER AXLE**

| ITEM | PART NO. | DESCRIPTION                           | QTY |
|------|----------|---------------------------------------|-----|
|      | 4141680  | Steering Axle Assembly .....          | 1   |
| 1    | 4640746  | Steering Cylinder (☞ Figure 8-2)..... | 1   |
| 2    | 293686   | Capscrew .....                        | 4   |
| 3    | 4141681  | Steering Axle .....                   | 1   |
| 4    | 4119892  | Tie Rod .....                         | 2   |
| 5    | 4119893  |                                       |     |
|      | 4175766  | Pin .....                             | 4   |
| 6    | 4119894  | Spindle .....                         | 2   |
| 7    | 4119895  | Bushing .....                         | 2   |
| 8    | 302146   | Setscrew .....                        | 4   |
| 9    | 1593334  | Nut .....                             | 4   |
| 10   | 13957    | Grease Fitting .....                  | 8   |
| 11   | 4119899  | Oil Seal .....                        | 2   |
| 12   | 2027664  | Needle Bearing .....                  | 4   |
| 12   | 4126732  | Needle Bearing (Optional) .....       | 4   |
| 13   | 296384   | Washer .....                          | 4   |
| 14   | 4119901  | King Pin .....                        | 2   |
| 15   | 2027660  | Thrust Bearing .....                  | 2   |
| 15   | 4126734  | Thrust Bearing (Optional) .....       | 2   |
| 16   | 4132994  | Bolt .....                            | 12  |
| 17   | 302158   | Setscrew .....                        | 2   |
| 18   | 1593336  | Nut .....                             | 2   |
| 19   | 4119905  | Shim .....                            | 2   |
| 20   | 15254    | Cotter Pin .....                      | 2   |
| 21   | 4119907  | Gasket .....                          | 4   |
| 22   | 4119908  | Plate .....                           | 4   |
| 23   | 320156   | Washer .....                          | 12  |
| 24   | 292500   | Capscrew .....                        | 12  |
| 25   | 2305658  | Oil Seal .....                        | 2   |
| 26   | 2027665  | Bearing .....                         | 2   |
| 26   | 4132613  | Bearing Set (Optional) .....          | 2   |
| 27   | 4119917  | Cap .....                             | 2   |
| 28   | 4132993  | Wheel Hub .....                       | 2   |
| 29   | 4631148  | Bearing .....                         | 2   |
| 29   | 4132612  | Bearing Set (Optional) .....          | 2   |
| 30   | 54123    | Snap Ring .....                       | 8   |
| 31   | 4119914  | Washer .....                          | 2   |
| 32   | 4119915  | Nut .....                             | 2   |
| 33   | 2060696  | Rubber Mount .....                    | 2   |
| 34   | 1388838  | Rubber Mount .....                    | 1   |
| 35   | 4119900  | Plate .....                           | 2   |
| 36   | 1517836  | Wheel Nut .....                       | 12  |
| 37   | 1527888  | Capscrew .....                        | 4   |

## STEER CYLINDER (FIGURE 8-2)



BP220419

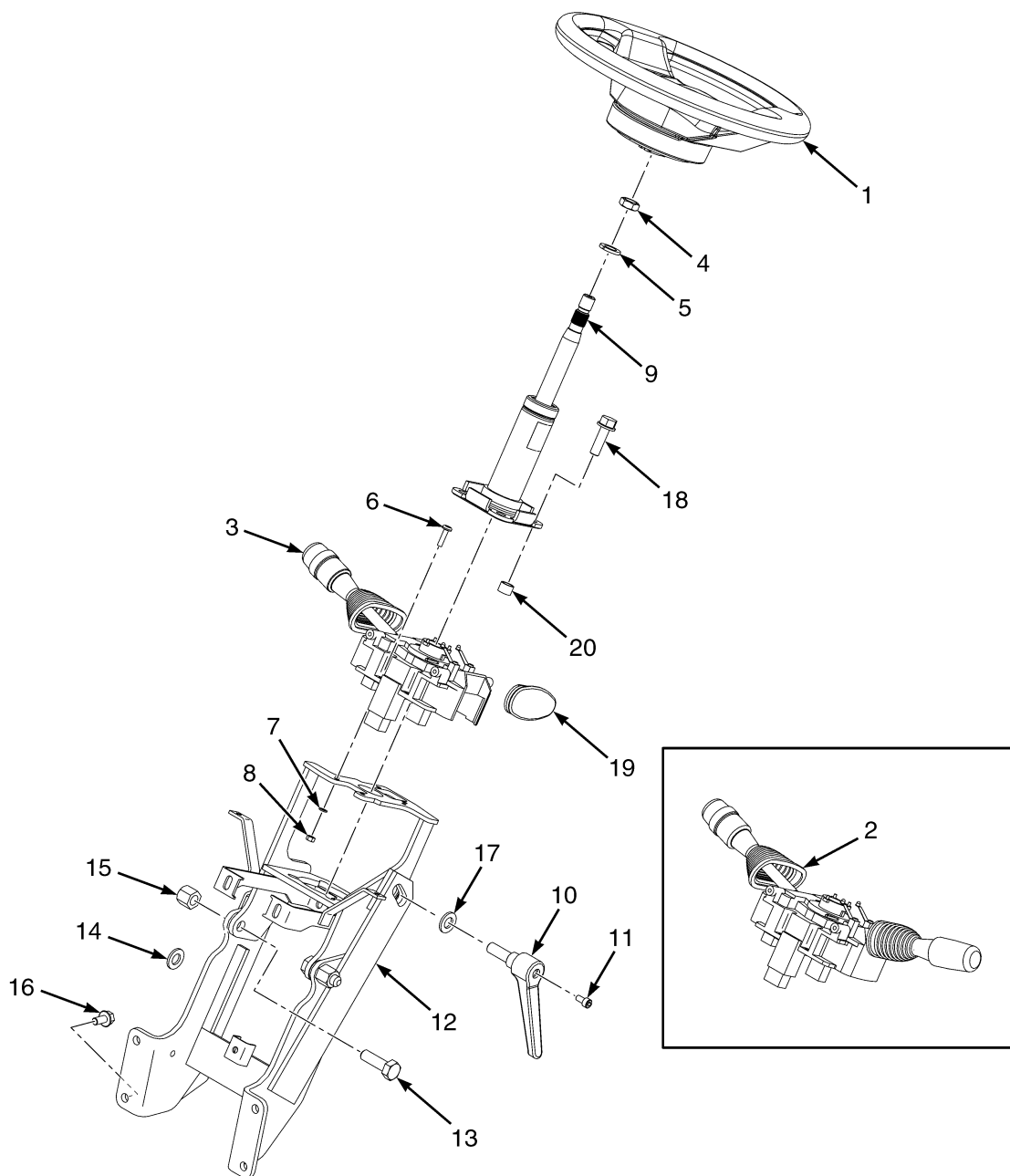
| ITEM | PART NO. | DESCRIPTION                                   | QTY |
|------|----------|-----------------------------------------------|-----|
|      | 4640746  | Steering Cylinder .....                       | 1   |
| 1    | 4114429  | End Cap .....                                 | 2   |
| 2    | 4114426  | Piston Rod .....                              | 1   |
| 3    | 1381115  | Rod Wiper .....                               | 2   |
| 4    | 1381114  | Rod Seal .....                                | 2   |
| 5    | 14191    | O-Ring .....                                  | 2   |
| 6    | 1310391  | Back-Up Ring .....                            | 2   |
| 7    | 1310389  | O-Ring .....                                  | 2   |
| 8    | 2044370  | Piston Seal .....                             | 1   |
| 9    | 4114425  | Tube .....                                    | 1   |
|      | 4119913  | Kit-Seal (Installation Sleeve Included) ..... | 1   |



## NOTES

[illegible]

## STEERING COLUMN AND ATTACHING PARTS (FIGURE 8-3)



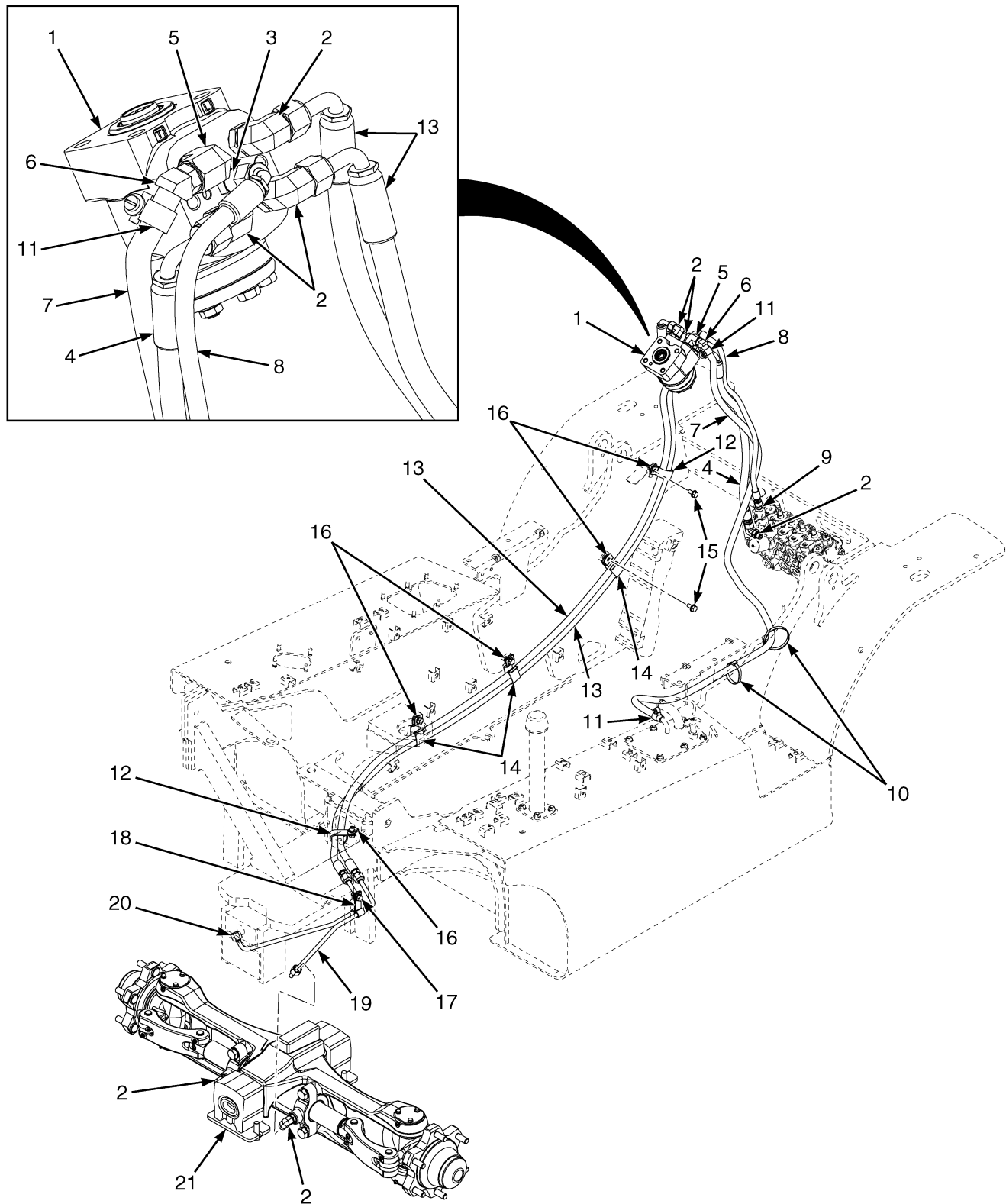
BP220411

**STEERING COLUMN AND ATTACHING PARTS****KEY:****A: Forward/Reverse Lever with Turn Indicator****B: Monotrol with Turn Indicator**

| ITEM | PART NO.         | DESCRIPTION                               | QTY |    |
|------|------------------|-------------------------------------------|-----|----|
|      |                  |                                           | A   | B  |
| 1    | 4140386          | Steering Wheel (Without Knob) .....       | 1   | 1  |
| 1    | 2055155          | Pad , Horn (Horn) .....                   | 1   | 1  |
| 1    | 2055157          | Kit-Switch .....                          | 1   | 1  |
| 1    | 2055047          | Steering Wheel (With Knob) .....          | 1   | 1  |
| 1    | 2055156          | Knob (Spinner) .....                      | 1   | 1  |
| 1    | 2055155          | Pad , Horn (Horn) .....                   | 1   | 1  |
| 1    | 2055157          | Kit-Switch .....                          | 1   | 1  |
| 2    | 2095599          | Lever (Combi Assy F/R) .....              | 1   | .. |
| 2    | 2101680          | Switch (FNR) .....                        | 1   | 1  |
| 2    | 2101681          | Switch (Light and Turn) .....             | 1   | 1  |
| 2    | 2101683          | Contact (Horn) .....                      | 1   | 1  |
| 2    | 2101684          | Sensor (Steer Angle) .....                | 1   | 1  |
| 3    | 2098541          | Lever (Combi Assy Monotrol) .....         | ..  | 1  |
| 3    | 2101681          | Switch (Light and Turn) .....             | 1   | 1  |
| 3    | 2101683          | Contact (Horn) .....                      | 2   | 2  |
| 3    | 2101684          | Sensor (Steer Angle) .....                | 1   | 1  |
| 4    | 2082131          | Nut .....                                 | 1   | 1  |
| 5    | 292684           | Lockwasher .....                          | 1   | 1  |
| 6    | 302036           | Screw .....                               | 4   | 4  |
| 7    | 292679           | Washer .....                              | 4   | 4  |
| 8    | 292668           | Nut .....                                 | 4   | 4  |
| 9    | 4132676          | Steering Column Assembly .....            | 1   | 1  |
| 10   | 2110269          | Lever Assembly .....                      | 1   | 1  |
| 11   | 293762           | Capscrew .....                            | 1   | 1  |
| 12   | 4639308          | Steering Column Support Assembly .....    | 1   | 1  |
| 13   | 2027984          | Bolt .....                                | 2   | 2  |
| 14   | 320161           | Washer .....                              | 1   | 1  |
| 15   | 2021237          | Nut .....                                 | 2   | 2  |
| 16   | 4109993          |                                           |     |    |
|      | 1527879          | Capscrew .....                            | 4   | 4  |
| 17   | 320161           | Washer .....                              | 1   | 1  |
| 18   | 1586629          | Capscrew .....                            | 4   | 4  |
| 19   | 2083984          | Cap .....                                 | ..  | 1  |
| 20   | 4165546          | Spacer .....                              | 4   | 4  |
|      | <b>a</b> 4252821 | Grease (Red Bentone) .....                | AR  | AR |
|      | 4239717          | Kit-Horn (Jumper Horn and Contacts) ..... | 1   | 1  |
|      | 4252824          | Kit-Horn (Contacts and grease) .....      | 1   | 1  |

**FOOTNOTES:****a** Not illustrated

## STEER CONTROL UNIT AND ATTACHING STEER HOSES (FIGURE 8-4)

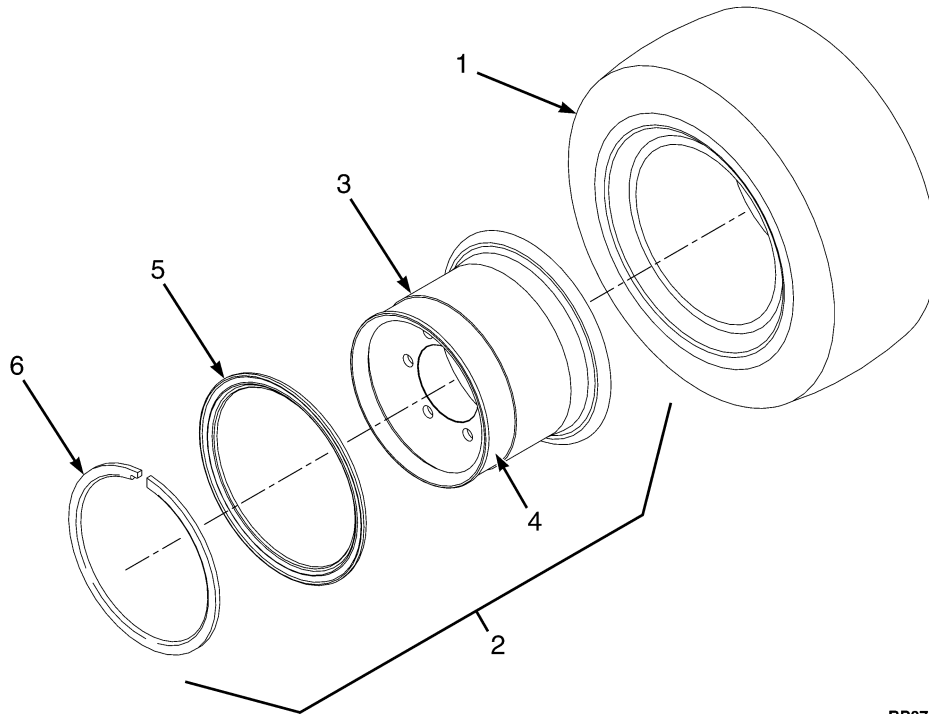


BP150814

**STEER CONTROL UNIT AND ATTACHING STEER HOSES****KEY:****A: Short Wheel Base****B: Long Wheel Base**

| ITEM | PART NO. | DESCRIPTION                                | QTY |    |
|------|----------|--------------------------------------------|-----|----|
|      |          |                                            | A   | B  |
| 1    | 4645088  | Steering Control Unit .....                | 1   | 1  |
| 2    | 1487063  | Fitting .....                              | 6   | 6  |
| 3    | 4139602  | Fitting .....                              | 1   | 1  |
| 4    | 4655171  | Hose Assy (E-Hyd) .....                    | 1   | 1  |
| 4    | 4649495  | Hose Assy (M-Hyd) .....                    | 1   | 1  |
| 5    | 4118727  | Fitting .....                              | 1   | 1  |
| 6    | 222501   | Fitting .....                              | 1   | 1  |
| 7    | 4649497  | Hose .....                                 | 1   | 1  |
| 8    | 4649493  | Hose Assy .....                            | 1   | 1  |
| 9    | 1486737  | Fitting .....                              | 1   | 1  |
| 10   | 129563   | Strap Clamp .....                          | 2   | 2  |
| 11   | 166857   | Clamp .....                                | 2   | 2  |
| 12   | 110322   | Clamp .....                                | 2   | 2  |
| 13   | 4645851  | Hose Assy .....                            | 2   | 2  |
| 14   | 1544157  | Clip .....                                 | 3   | 3  |
| 15   | 4109993  |                                            |     |    |
|      | 1527879  | Capscrew .....                             | 5   | 5  |
| 16   | 1480237  | Nut (Fold Over) .....                      | 6   | 6  |
| 17   | 1527880  | Capscrew .....                             | 1   | 1  |
| 18   | 188631   | Clamp .....                                | 2   | 2  |
| 19   | 4649080  | Tube Assy (To Steer Axle) .....            | 1   | .. |
| 19   | 4649082  | Tube Assy (To Steer Axle) .....            | ..  | 1  |
| 20   | 4649081  | Tube Assy (To Steer Axle) .....            | 1   | .. |
| 20   | 4649083  | Tube Assy (To Steer Axle) .....            | ..  | 1  |
| 21   | 4141680  | Steering Axle Assembly (☞ Figure 8-1)..... | 1   | 1  |

## STEER TIRES AND WHEELS (FIGURE 8-5)



BP070182

### KEY:

A: 6.00 x 9 (H40-50XT)

B: 6.50 x 10 (H40-60XT)

| ITEM | PART NO. | DESCRIPTION                                                  | QTY |    |
|------|----------|--------------------------------------------------------------|-----|----|
|      |          |                                                              | A   | B  |
|      | 1544996  | Wheel And Tire (Standard Compound) .....                     | 2   | .. |
|      | 1603465  | Wheel And Tire (Non-Marking Compound) .....                  | 2   | .. |
|      | 1544999  | Wheel And Tire (Standard Compound) .....                     | ..  | 2  |
|      | 1603466  | Wheel And Tire (Non-Marking Compound) .....                  | ..  | 2  |
| 1    | 1688697  | Solid Pneumatic Tire (Standard Compound) .....               | 1   | .. |
| 1    | 1543068  | Tire (Alt Part) .....                                        | 1   | .. |
| 1    | 1603489  | Tire (Non-Marking) (Non-Marking Compound) .....              | 1   | .. |
| 1    | 4149592  | Solid Pneumatic Tire (Alt Part) .....                        | 1   | .. |
| 1    | 1544234  | Solid Pneumatic Tire (6.50x10/5.0) (Standard Compound) ..... | ..  | 1  |
| 1    | 1539635  | Tire (Alt Part) .....                                        | ..  | 1  |
| 1    | 1603490  | Tire (Non-Marking 6.50x10/5.0) (Non-Marking Compound) .....  | ..  | 1  |
| 1    | 4139732  | Solid Pneumatic Tire (Alt Part) .....                        | ..  | 1  |
| 2    | 2070081  | Rim (4.00 x 9) .....                                         | 1   | .. |
| 2    | 2067044  | Wheel Assy (5.00 x 10) .....                                 | ..  | 1  |
| 3    | 2070083  | Rim .....                                                    | 1   | .. |
| 3    | 2067045  | Rim .....                                                    | ..  | 1  |
| 4    | 1584693  | Wedge Band .....                                             | 1   | .. |
| 4    | 1580427  | Wedge Band .....                                             | ..  | 1  |
| 5    | 161885   | Wheel Side Ring .....                                        | 1   | .. |
| 5    | 1580426  | Wheel Side Ring .....                                        | ..  | 1  |
| 6    | 161884   | Wheel Lock Ring .....                                        | 1   | .. |
| 6    | 161894   | Wheel Lock Ring .....                                        | ..  | 1  |



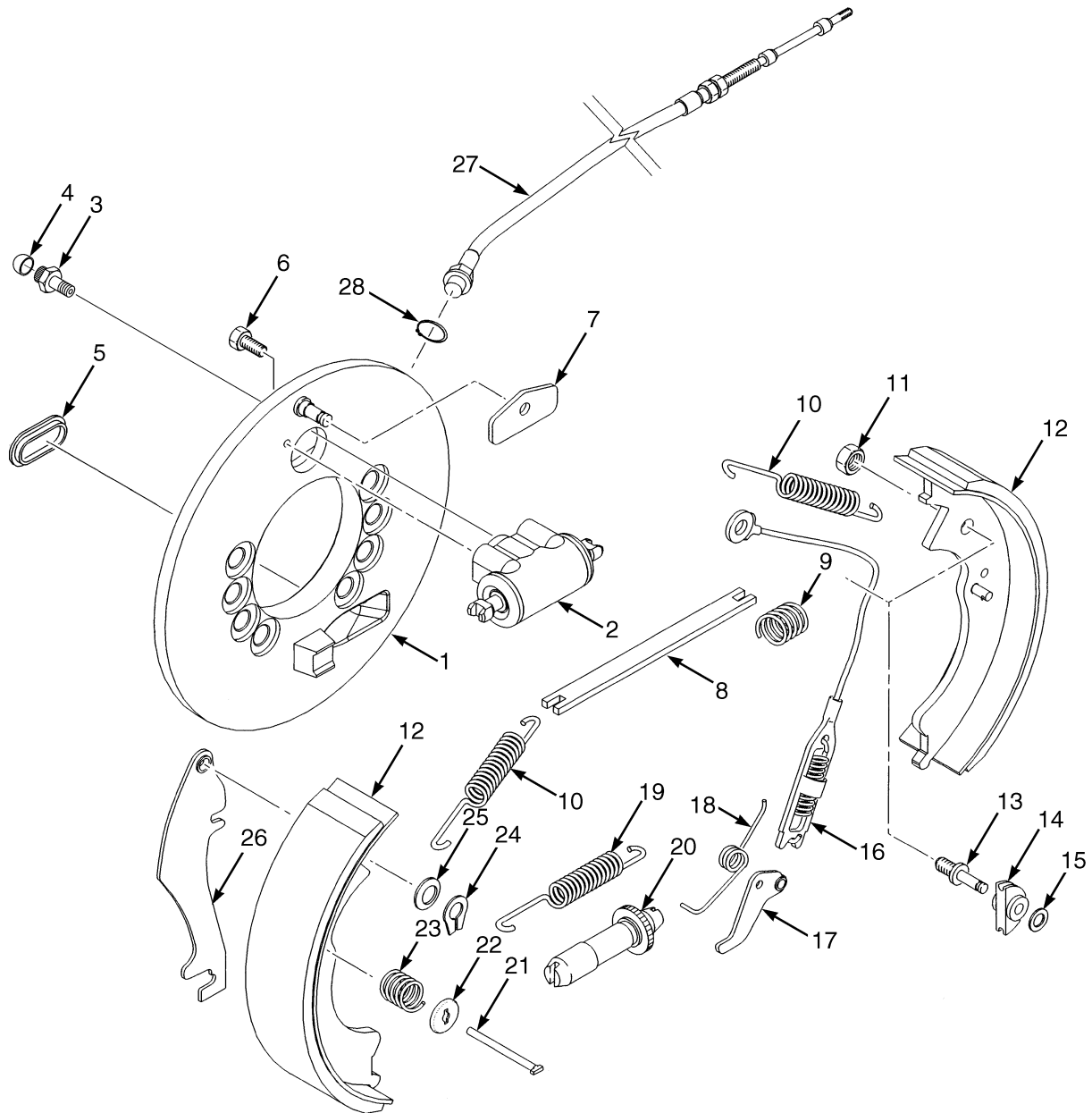




**SECTION 9  
BRAKE SYSTEM**

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## BRAKE ASSEMBLY (FIGURE 9-1) H40-50XT



BP040047

**BRAKE ASSEMBLY**  
**H40-50XT****KEY:****A: Right Hand****B: Left Hand**

| ITEM | PART NO.           | DESCRIPTION                                   | QTY |    |
|------|--------------------|-----------------------------------------------|-----|----|
|      |                    |                                               | A   | B  |
|      | 4154243            | Brake Assy (RH) (With Cable and Shield) ..... | 1   | .. |
|      | 4154242            | Brake Assy (LH) (With Cable and Shield) ..... | ..  | 1  |
|      | 1606086            | Brake Assembly .....                          | 1   | .. |
|      | 1606085            | Brake Assembly .....                          | ..  | 1  |
| 1    | 1606088            | Backplate .....                               | 1   | .. |
| 1    | 1606087            | Backplate .....                               | ..  | 1  |
| 2    | 1565290            | Wheel Cylinder .....                          | 1   | 1  |
| 2    | 1334647            | Kit-Repair Wheel Cylinder .....               | 1   | 1  |
| 3    | <del>1361503</del> |                                               |     |    |
|      | 4098513            | Bleeder Screw .....                           | 1   | 1  |
| 4    | 1361504            | Cap .....                                     | 1   | 1  |
| 5    | 1334642            | Cover .....                                   | 1   | 1  |
| 6    | 1565303            | Bolt .....                                    | 2   | 2  |
| 7    | 2037343            | Wear Plate .....                              | 1   | 1  |
| 8    | 1360796            | Strut .....                                   | 1   | .. |
| 8    | 1361507            | Strut .....                                   | ..  | 1  |
| 9    | 1360797            | Spring .....                                  | 1   | 1  |
| 10   | .....              | Spring .....                                  | 1   | 1  |
| 11   | .....              | Nut .....                                     | 1   | 1  |
| 12   | 1565314            | Kit-Brake Shoe .....                          | 1   | .. |
| 12   | 1565313            | Kit-Brake Shoe .....                          | ..  | 1  |
| 13   | .....              | Pin .....                                     | 1   | 1  |
| 14   | 1334644            | Sheave .....                                  | 1   | 1  |
| 15   | 1361500            | Washer .....                                  | 1   | 1  |
| 16   | 1565310            | Kit-Adjuster (RH) .....                       | 1   | .. |
| 16   | 1565309            | Kit-Adjuster (LH) .....                       | ..  | 1  |
| 17   | 2037518            | Lever .....                                   | 1   | .. |
| 17   | 2037517            | Lever .....                                   | ..  | 1  |
| 18   | .....              | Spring .....                                  | 1   | 1  |
| 19   | 2037340            | Spring .....                                  | 1   | 1  |
| 20   | <del>1565295</del> |                                               |     |    |
|      | 1600492            | Adjuster (RH) .....                           | 1   | .. |
| 20   | <del>1565294</del> |                                               |     |    |
|      | 1600491            | Adjuster (LH) .....                           | ..  | 1  |
| 21   | 2037323            | Pin .....                                     | 1   | 1  |
| 22   | 2037341            | Cup .....                                     | 1   | 1  |
| 23   | .....              | Spring .....                                  | 1   | 1  |
| 24   | 1338916            | Retainer .....                                | 1   | 1  |
| 25   | 1338917            | Washer .....                                  | 1   | 1  |
| 26   | .....              | Park Brake Lever .....                        | 1   | 1  |
| 27   | 2080796            | Cable Assy .....                              | 1   | .. |
| 27   | 2080795            | Cable Assy .....                              | ..  | 1  |
| 28   | 1361502            | Snap Ring .....                               | 1   | 1  |
|      | 1565316            | Kit-Spring .....                              | 1   | 1  |
|      | 1565312            | Kit-Park Brake (RH) .....                     | 1   | .. |

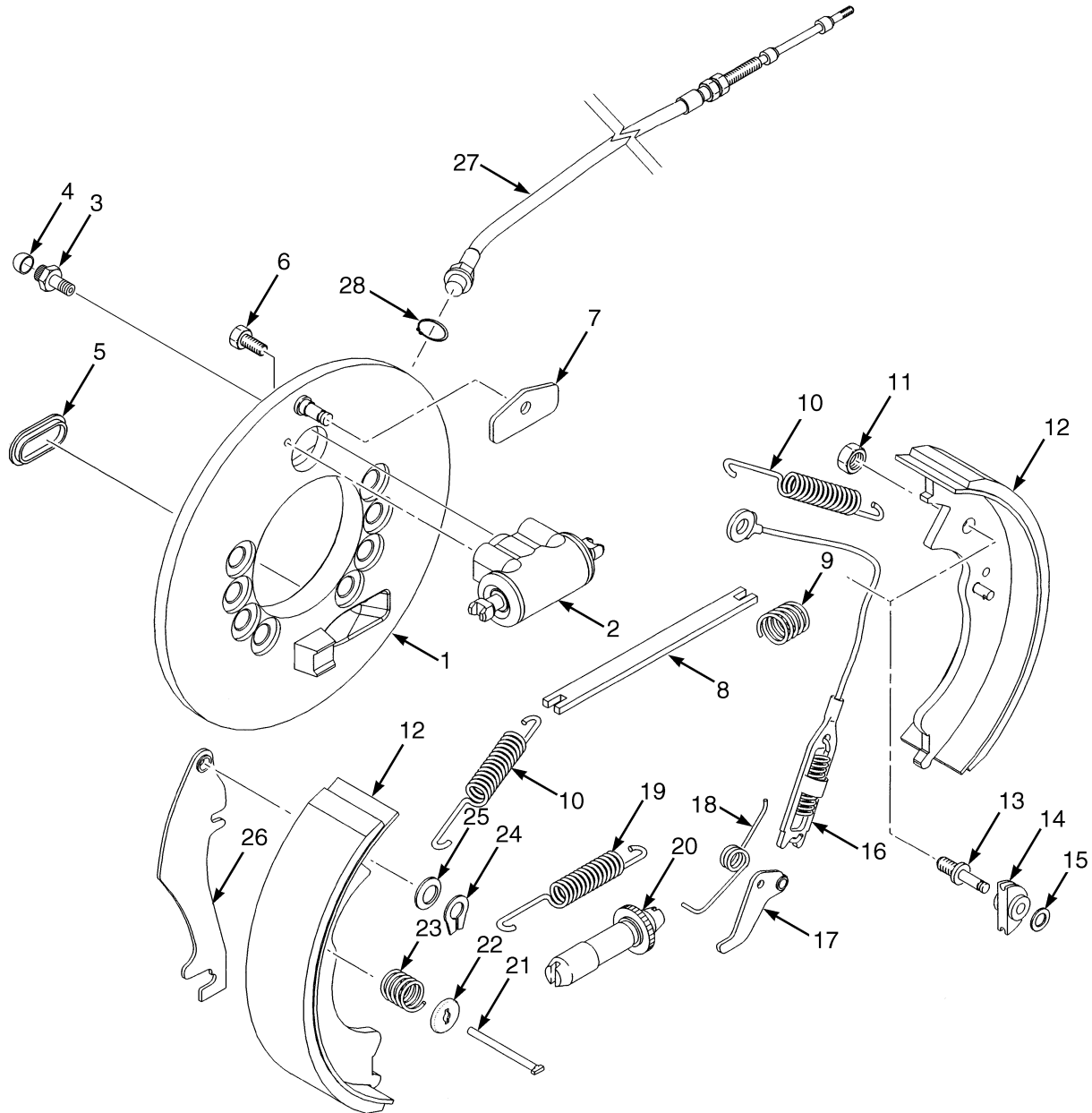
**BRAKE ASSEMBLY**  
**H40-50XT****KEY:****A:** Right Hand**B:** Left Hand

| ITEM | PART NO. | DESCRIPTION                         | QTY |   |
|------|----------|-------------------------------------|-----|---|
|      |          |                                     | A   | B |
|      | 1565311  | Kit-Repair Parking Brake (LH) ..... | ..  | 1 |

## NOTES

[illegible]

## BRAKE ASSEMBLY (FIGURE 9-2) H60XT



BP040047

**BRAKE ASSEMBLY**  
**H60XT****KEY:****A: Right Hand****B: Left Hand**

| ITEM | PART NO.           | DESCRIPTION                                   | QTY |    |
|------|--------------------|-----------------------------------------------|-----|----|
|      |                    |                                               | A   | B  |
|      | 2097070            | Brake Assy (RH) (With Cable and Shield) ..... | 1   | .. |
|      | 2097069            | Brake Assy (LH) (With Cable and Shield) ..... | ..  | 1  |
|      | 2098746            | Brake Assy .....                              | 1   | .. |
|      | 2098745            | Brake Assy .....                              | ..  | 1  |
| 1    | 2098748            | Backplate .....                               | 1   | .. |
| 1    | 2098747            | Backplate .....                               | ..  | 1  |
| 2    | 1565290            | Wheel Cylinder .....                          | 1   | 1  |
| 2    | 1334647            | Kit-Repair Wheel Cylinder .....               | 1   | 1  |
| 3    | <del>1361503</del> |                                               |     |    |
|      | 4098513            | Bleeder Screw .....                           | 1   | 1  |
| 4    | 1361504            | Cap .....                                     | 1   | 1  |
| 5    | 1334642            | Cover .....                                   | 1   | 1  |
| 6    | 1565303            | Bolt .....                                    | 2   | 2  |
| 7    | 2037343            | Wear Plate .....                              | 1   | 1  |
| 8    | 1360796            | Strut .....                                   | 1   | .. |
| 8    | 1361507            | Strut .....                                   | ..  | 1  |
| 9    | 1360797            | Spring .....                                  | 1   | 1  |
| 10   | .....              | Spring .....                                  | 1   | 1  |
| 11   | .....              | Nut .....                                     | 1   | 1  |
| 12   | 2080798            | Kit-Brake Shoe (RH) .....                     | 1   | .. |
| 12   | 2080797            | Kit-Brake Shoe (LH) .....                     | ..  | 1  |
| 13   | .....              | Pin .....                                     | 1   | 1  |
| 14   | 1334644            | Sheave .....                                  | 1   | 1  |
| 15   | 1361500            | Washer .....                                  | 1   | 1  |
| 16   | 1565310            | Kit-Adjuster (RH) .....                       | 1   | .. |
| 16   | 1565309            | Kit-Adjuster (LH) .....                       | ..  | 1  |
| 17   | 2037518            | Lever .....                                   | 1   | .. |
| 17   | 2037517            | Lever .....                                   | ..  | 1  |
| 18   | .....              | Spring .....                                  | 1   | 1  |
| 19   | 2037340            | Spring .....                                  | 1   | 1  |
| 20   | <del>1565295</del> |                                               |     |    |
|      | 1600492            | Adjuster (RH) .....                           | 1   | .. |
| 20   | <del>1565294</del> |                                               |     |    |
|      | 1600491            | Adjuster (LH) .....                           | ..  | 1  |
| 21   | 2037323            | Pin .....                                     | 1   | 1  |
| 22   | 2037341            | Cup .....                                     | 1   | 1  |
| 23   | .....              | Spring .....                                  | 1   | 1  |
| 24   | 1338916            | Retainer .....                                | 1   | 1  |
| 25   | 1338917            | Washer .....                                  | 1   | 1  |
| 26   | .....              | Park Brake Lever .....                        | 1   | 1  |
| 27   | 2080796            | Cable Assy .....                              | 1   | .. |
| 27   | 2080795            | Cable Assy .....                              | ..  | 1  |
| 28   | 1361502            | Snap Ring .....                               | 1   | 1  |
|      | 1565316            | Kit-Spring .....                              | 1   | 1  |
|      | 1565312            | Kit-Park Brake (RH) .....                     | 1   | .. |

## BRAKE ASSEMBLY H60XT

**KEY:****A:** Right Hand**B:** Left Hand

| ITEM | PART NO. | DESCRIPTION                         | QTY |   |
|------|----------|-------------------------------------|-----|---|
|      |          |                                     | A   | B |
|      | 1565311  | Kit-Repair Parking Brake (LH) ..... | ..  | 1 |

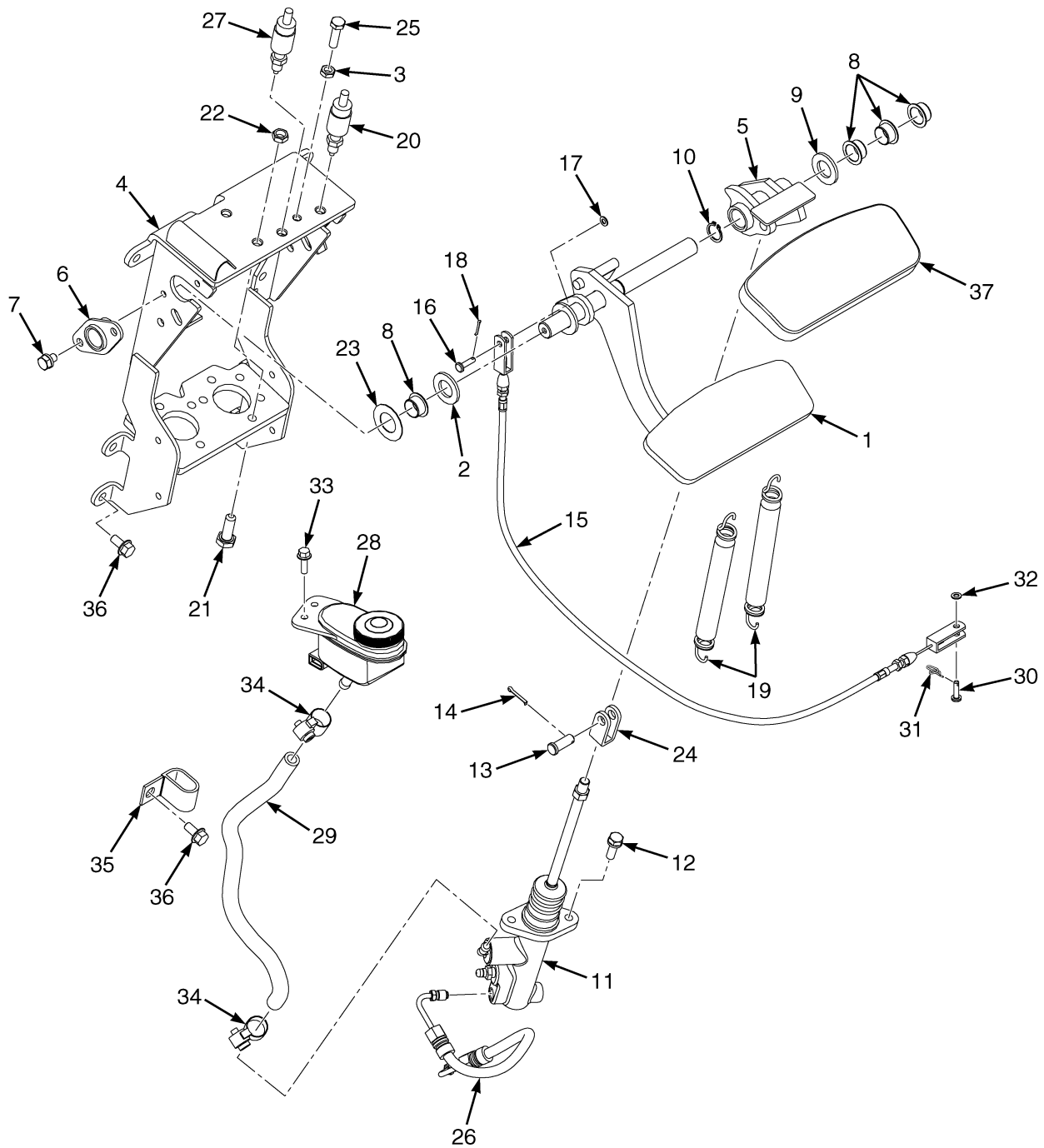


## NOTES

[illegible]

## BRAKE LINKAGE, SINGLE PEDAL (FIGURE 9-3)

(→ 12/2017)



BP040275

**BRAKE LINKAGE, SINGLE PEDAL**

(→ 12/2017)

| ITEM | PART NO.            | DESCRIPTION                          | QTY |
|------|---------------------|--------------------------------------|-----|
|      | 4164253             | Pedal Assy .....                     | 1   |
| 1    | 2081562             | Pedal .....                          | 1   |
| 2    | 320167              | Washer .....                         | 1   |
| 3    | 2304281             | Nut .....                            | 1   |
| 4    | 4631136             | Bracket Wldmt .....                  | 1   |
| 5    | 4631133             | Bellcrank .....                      | 1   |
| 6    | 2081566             | Plate .....                          | 2   |
| 7    | 2079532             | Capscrew .....                       | 4   |
| 8    | 2080633             | Bushing .....                        | 4   |
| 9    | 320167              | Washer .....                         | 2   |
| 10   | 2081640             | Snap Ring .....                      | 1   |
| 11   | 4601898             | Master Cylinder (☞ Figure 9-6) ..... | 1   |
| 11   | 2082402             | Kit-Repair Master Cylinder .....     | 1   |
| 11   | 2082407             | Push Rod .....                       | 1   |
| 11   | 1566142             | Nut .....                            | 1   |
| 11   | 1566143             | Fitting .....                        | 1   |
| 11   | 1566144             | Gasket .....                         | 1   |
| 11   | 2082405             | Bleeder Valve .....                  | 1   |
| 11   | 2082406             | Cap .....                            | 1   |
| 12   | 2079535             | Capscrew .....                       | 2   |
| 13   | 2021339             | Pin .....                            | 1   |
| 14   | 2037317             | Pin .....                            | 1   |
| 15   | 4613248             | Cable Assy .....                     | 1   |
| 16   | 2022509             | Pin .....                            | 1   |
| 17   | 320155              | Washer .....                         | 1   |
| 18   | 2027998             | Cotter Pin .....                     | 1   |
| 19   | 2080634             | Spring .....                         | 2   |
| 20   | 2021434             | Switch .....                         | 1   |
| 21   | 367323              | Capscrew .....                       | 1   |
| 22   | 2022946             | Nut .....                            | 1   |
| 23   | 2027154             | Shim .....                           | AR  |
| 24   | 2082403             | Yoke .....                           | 1   |
| 25   | 176640              | Bolt .....                           | 1   |
| 26   | 4654029             | Hose Assy .....                      | 1   |
| 27   | 2021434             | Switch (Monotrol Only) .....         | 1   |
| 28   | <b>a</b> 2081571    | Reservoir Assembly .....             | 1   |
| 28   | 2081569             | Reservoir .....                      | 1   |
| 28   | 2082412             | Kit .....                            | 1   |
| 29   | <b>d</b> 4654370    | Hose .....                           | 1   |
| 29   | <b>e</b> 2081554    | Hose .....                           | 1   |
| 29   | <b>b e</b> 4099377  | Wrap .....                           | 1   |
| 30   | 2022509             | Pin .....                            | 1   |
| 31   | 1517361             | Locking Ring Cotter Pin .....        | 1   |
| 32   | 320155              | Washer .....                         | 1   |
| 33   | 1527877             | Capscrew .....                       | 2   |
| 34   | <b>d</b> 166857     | Clamp .....                          | 2   |
| 34   | <b>e</b> 2028063    | Hose Clamp .....                     | 2   |
| 34   | <b>b c e</b> 168718 | Clamp .....                          | 1   |
| 35   | 1347314             | Clamp .....                          | 1   |
| 36   | 4109993             | Capscrew .....                       | 8   |

**BRAKE LINKAGE, SINGLE PEDAL**  
(→ 12/2017)

| ITEM | PART NO.           | DESCRIPTION | QTY |
|------|--------------------|-------------|-----|
| 37   | 1527879<br>1343624 | Pad .....   | 1   |

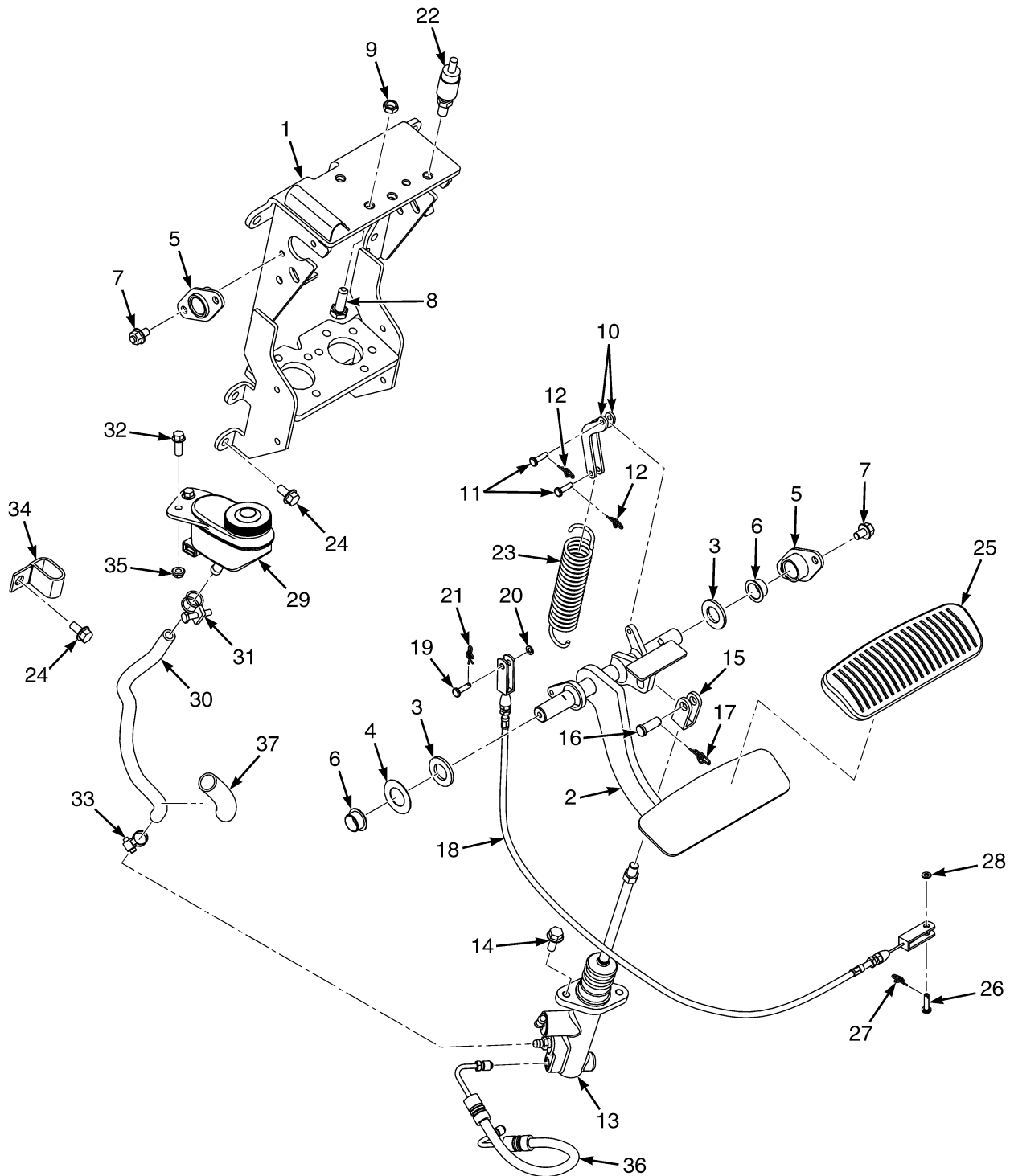
**FOOTNOTES:**

- |          |                 |          |                   |
|----------|-----------------|----------|-------------------|
| <b>a</b> | Includes hose   | <b>d</b> | → S/N A380V01507P |
| <b>b</b> | Not Illustrated | <b>e</b> | S/N A380V01508P → |
| <b>c</b> | Used with Wrap  |          |                   |

## NOTES

[illegible]

## BRAKE PEDAL (FIGURE 9-4) SINGLE PEDAL (12/2017 →)

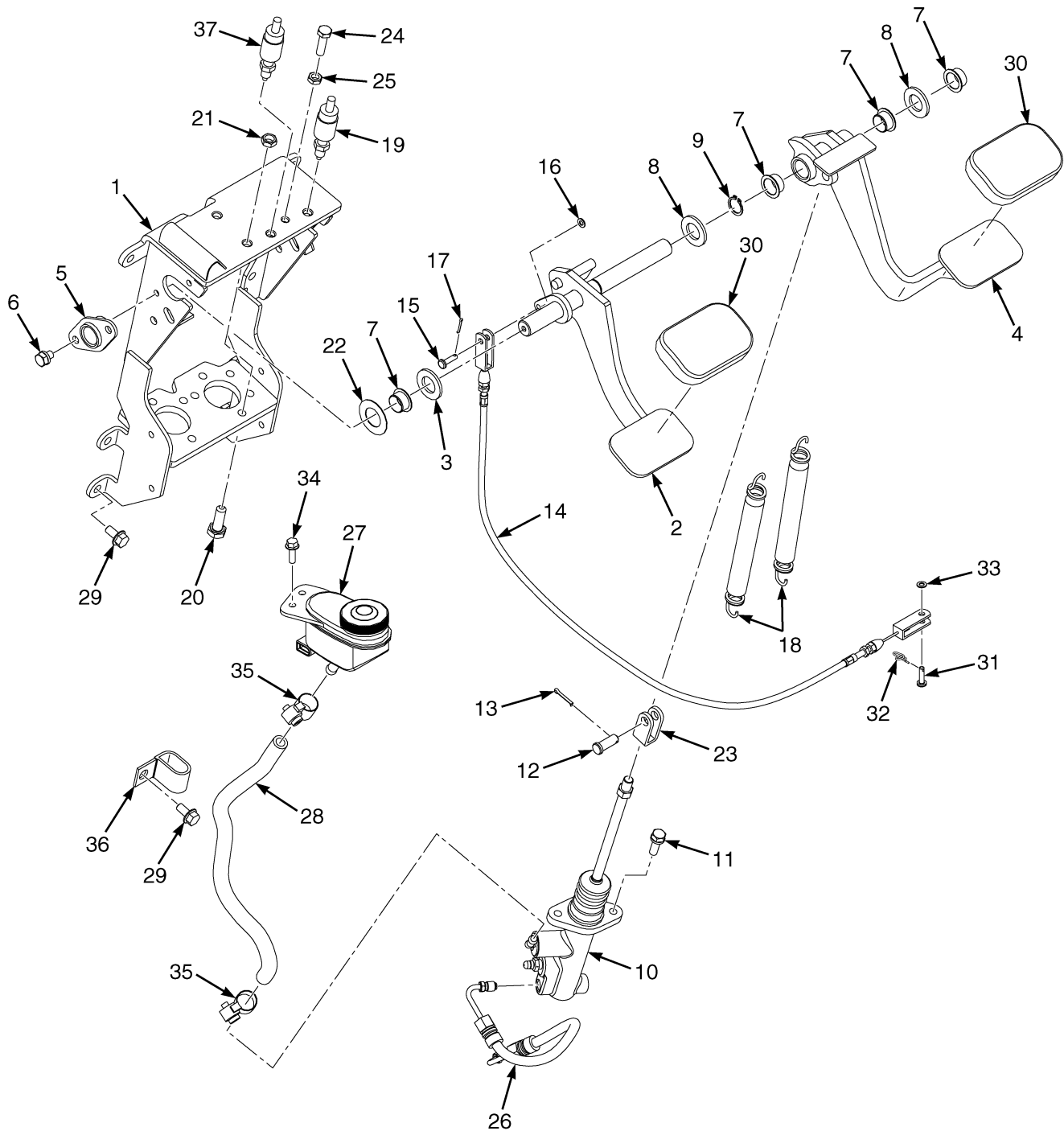


BP040288

**BRAKE PEDAL**  
**SINGLE PEDAL (12/2017 →)**

| ITEM | PART NO. | DESCRIPTION                         | QTY |
|------|----------|-------------------------------------|-----|
|      | 4190067  | Pedal Assy , Single .....           | 1   |
|      | .....    | Brake Pedal Sub Assembly .....      | 1   |
| 1    | 4190069  | Bracket Wldmt .....                 | 1   |
| 2    | 4190070  | Brake Pedal , Single .....          | 1   |
| 3    | 320167   | Washer .....                        | 2   |
| 4    | 2027154  | Shim .....                          | 1   |
| 5    | 2081566  | Plate .....                         | 2   |
| 6    | 2080633  | Bushing .....                       | 2   |
| 7    | 1529366  | Capscrew .....                      | 4   |
| 8    | 367323   | Capscrew .....                      | 1   |
| 9    | 2022946  | Nut .....                           | 1   |
| 10   | 4190076  | Plate , spring link .....           | 2   |
| 11   | 2022509  | Pin .....                           | 2   |
| 12   | 1517361  | Locking Ring Cotter Pin .....       | 2   |
| 13   | 4601898  | Master Cylinder (☞ Figure 9-6)..... | 1   |
| 13   | 2082402  | Kit-Repair Master Cylinder .....    | 1   |
| 14   | 1527880  | Capscrew .....                      | 2   |
| 15   | 2082403  | Yoke .....                          | 1   |
| 16   | 2021339  | Pin .....                           | 1   |
| 17   | 1351689  | Locking Cotter Pin .....            | 1   |
| 18   | 4613248  | Cable Assy .....                    | 1   |
| 19   | 2022509  | Pin .....                           | 1   |
| 20   | 320155   | Washer .....                        | 1   |
| 21   | 1517361  | Locking Ring Cotter Pin .....       | 1   |
| 22   | 2021434  | Switch .....                        | 1   |
| 22   | 2022946  | Nut .....                           | 1   |
| 23   | 1340998  | Spring .....                        | 1   |
| 24   | 4109993  |                                     |     |
|      | 1527879  | Capscrew .....                      | 8   |
| 25   | 1570298  | Rubber Pad .....                    | 1   |
| 26   | 2022509  | Pin .....                           | 1   |
| 27   | 1517361  | Locking Ring Cotter Pin .....       | 1   |
| 28   | 320155   | Washer .....                        | 1   |
| 29   | 4155516  | Reservoir , Assembly .....          | 1   |
| 29   | 2081569  | Reservoir .....                     | 1   |
| 30   | 4659264  | Reservoir - hose .....              | 1   |
| 31   | 2028063  | Hose Clamp .....                    | 1   |
| 32   | 1527877  | Capscrew .....                      | 2   |
| 33   | 168718   | Clamp .....                         | 1   |
| 34   | 1347314  | Clamp .....                         | 1   |
| 35   | 1307884  |                                     |     |
|      | 1514429  | Nut .....                           | 2   |
| 36   | 4654029  | Hose Assy .....                     | 1   |
| 37   | 4099377  | Wrap .....                          | 1   |

## BRAKE LINKAGE, DUAL PEDAL (FIGURE 9-5)



BP040276



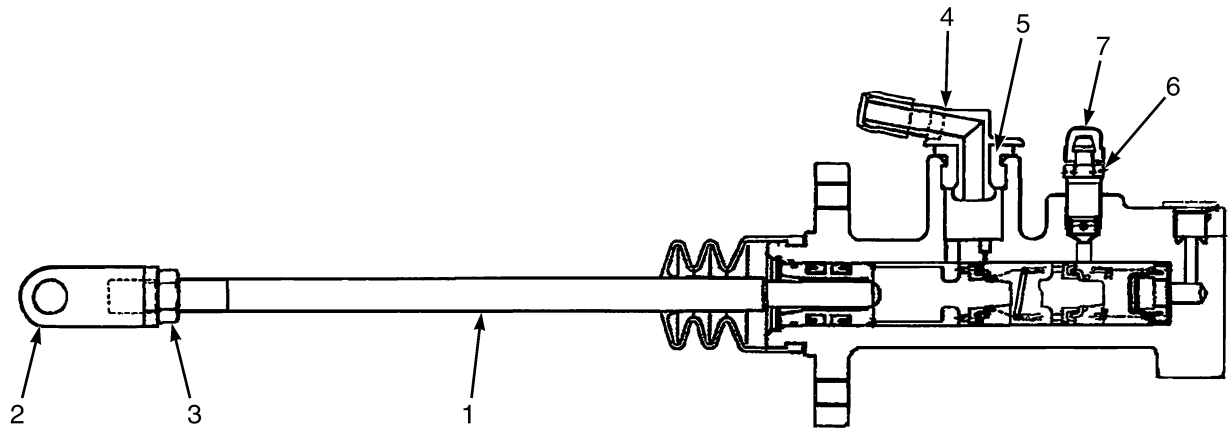
**BRAKE LINKAGE, DUAL PEDAL**

| ITEM | PART NO.          | DESCRIPTION                      | QTY |
|------|-------------------|----------------------------------|-----|
|      | 4164252           | Pedal Assy .....                 | 1   |
| 1    | 4631136           | Bracket Wldmt .....              | 1   |
| 2    | 2081563           | Pedal .....                      | 1   |
| 3    | 320167            | Washer .....                     | 1   |
| 4    | 4631138           | Pedal .....                      | 1   |
| 5    | 2081566           | Plate .....                      | 1   |
| 6    | 2079532           | Capscrew .....                   | 4   |
| 7    | 2080633           | Bushing .....                    | 4   |
| 8    | 320167            | Washer .....                     | 2   |
| 9    | 2081640           | Snap Ring .....                  | 1   |
| 10   | 4601898           | Master Cylinder .....            | 1   |
| 10   | 2082402           | Kit-Repair Master Cylinder ..... | 1   |
| 10   | 2082407           | Push Rod .....                   | 1   |
| 10   | 1566142           | Nut .....                        | 1   |
| 10   | 1566143           | Fitting .....                    | 1   |
| 10   | 1566144           | Gasket .....                     | 1   |
| 10   | 2082405           | Bleeder Valve .....              | 1   |
| 10   | 2082406           | Cap .....                        | 1   |
| 11   | 2079535           | Capscrew .....                   | 2   |
| 12   | 2021339           | Pin .....                        | 1   |
| 13   | 2037317           | Pin .....                        | 1   |
| 14   | 4613248           | Cable Assy .....                 | 1   |
| 15   | 2022509           | Pin .....                        | 1   |
| 16   | 320155            | Washer .....                     | 1   |
| 17   | 2027998           | Cotter Pin .....                 | 1   |
| 18   | 2080634           | Spring .....                     | 2   |
| 19   | 2021434           | Switch .....                     | 1   |
| 20   | 367323            | Capscrew .....                   | 1   |
| 21   | 2022946           | Nut .....                        | 1   |
| 22   | 2027154           | Shim .....                       | AR  |
| 23   | 2082403           | Yoke .....                       | 1   |
| 24   | 176640            | Bolt .....                       | 1   |
| 25   | 2304281           | Nut .....                        | 1   |
| 26   | 4654029           | Hose Assy .....                  | 1   |
| 27   | 2081571           | Reservoir Assembly .....         | 1   |
| 27   | 2081569           | Reservoir .....                  | 1   |
| 27   | 2082412           | Kit .....                        | 1   |
| 28   | 2081554           | Hose .....                       | 1   |
| 28   | <b>a</b> 4099377  | Wrap .....                       | 1   |
| 29   | 4109993           |                                  |     |
|      | 1527879           | Capscrew .....                   | 8   |
| 30   | 2028613           | Pad .....                        | 2   |
| 31   | 2022509           | Pin .....                        | 1   |
| 32   | 1517361           | Locking Ring Cotter Pin .....    | 1   |
| 33   | 320155            | Washer .....                     | 1   |
| 34   | 1527877           | Capscrew .....                   | 2   |
| 35   | 2028063           | Hose Clamp .....                 | 2   |
| 35   | <b>a b</b> 168718 | Clamp .....                      | 1   |
| 36   | 1347314           | Clamp .....                      | 1   |
| 37   | 2021434           | Switch (Monotrol Only) .....     | 1   |

## FOOTNOTES:

**a** Not Illustrated

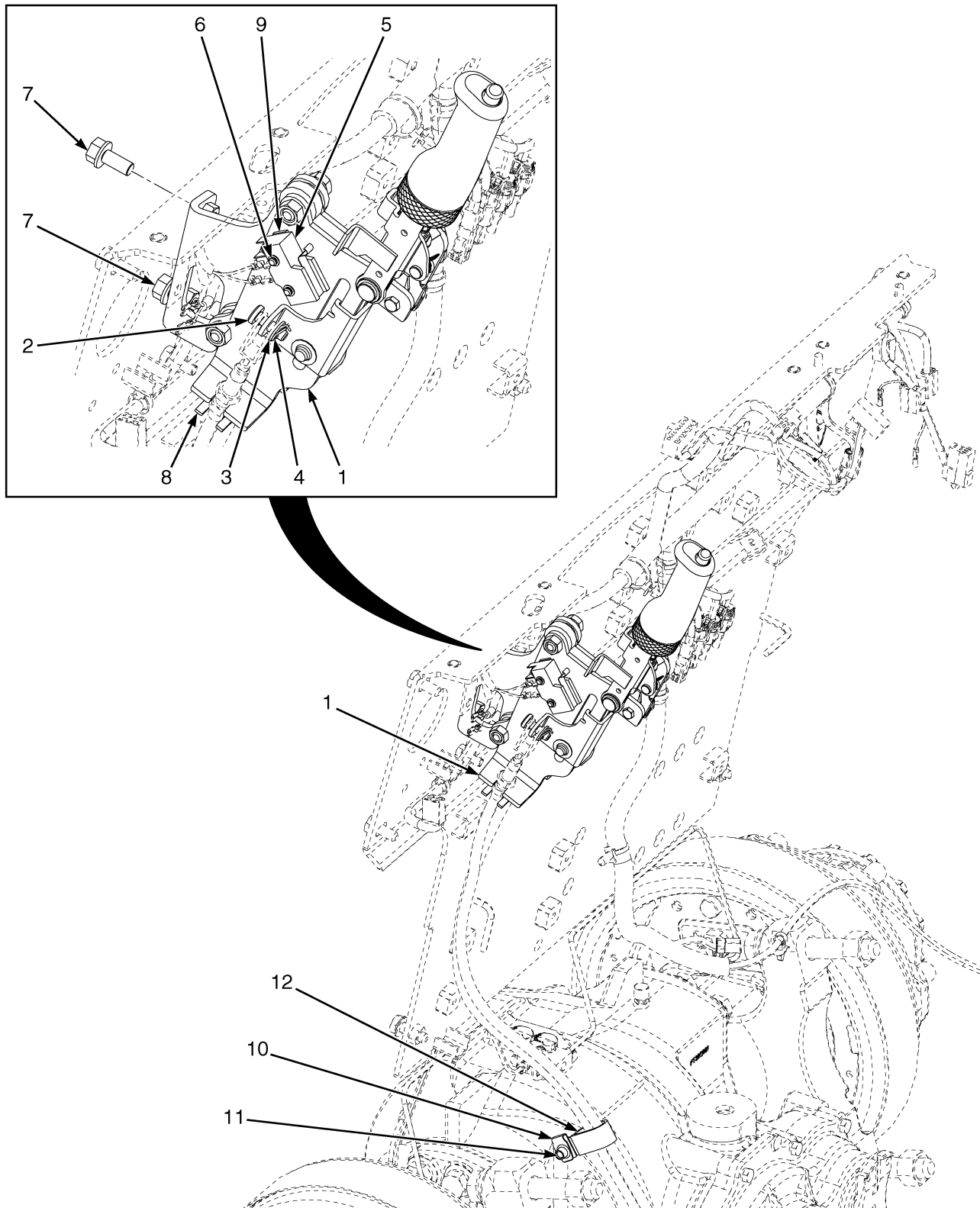
**b** Used with Wrap

**BRAKE MASTER CYLINDER (FIGURE 9-6)**

BP040289

| ITEM | PART NO. | DESCRIPTION                      | QTY |
|------|----------|----------------------------------|-----|
|      | 4601898  | Master Cylinder .....            | 1   |
| 1    | 2082407  | Push Rod .....                   | 1   |
| 2    | 2082403  | Yoke .....                       | 1   |
| 3    | 1566142  | Nut .....                        | 1   |
| 4    | 1566143  | Fitting .....                    | 1   |
| 5    | 1566144  | Gasket .....                     | 1   |
| 6    | 2082405  | Bleeder Valve .....              | 1   |
| 7    | 2082406  | Cap .....                        | 1   |
|      | 2082402  | Kit-Repair Master Cylinder ..... | 1   |

## PARK BRAKE ATTACHING PARTS (FIGURE 9-7)

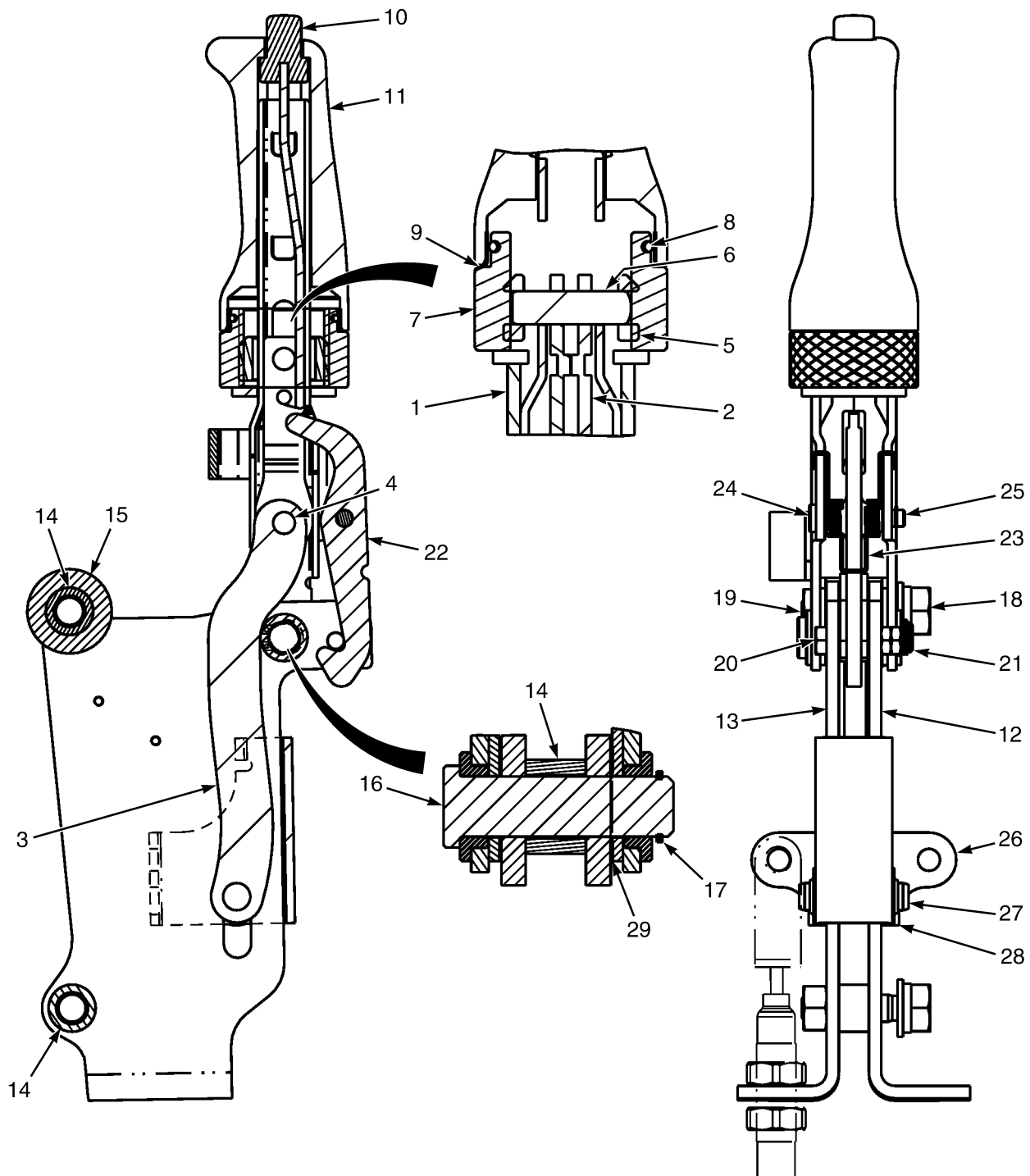


BP040264

**PARK BRAKE ATTACHING PARTS**

| ITEM | PART NO. | DESCRIPTION                      | QTY |
|------|----------|----------------------------------|-----|
| 1    | 4610038  | Parking Brake (☞Figure 9-8)..... | 1   |
| 2    | .....    | Pin .....                        | 2   |
| 3    | 320157   | Washer .....                     | 2   |
| 4    | 1530010  | Lockring (Cotter Pin) .....      | 2   |
| 5    | 370868   | Switch Micro (Park Brake) .....  | 1   |
| 6    | 2082210  | Screw .....                      | 2   |
| 7    | 1586013  | Capscrew .....                   | 2   |
| 8    | .....    | Plate .....                      | 1   |
| 9    | 2098230  | Spacer .....                     | 1   |
| 10   | 1480237  | Nut (Fold Over) .....            | 1   |
| 11   | 4109993  |                                  |     |
|      | 1527879  | Capscrew .....                   | 1   |
| 12   | 203230   | Clamp .....                      | 1   |

## PARK BRAKE ASSEMBLY (FIGURE 9-8)



BP040259

**PARK BRAKE ASSEMBLY**

| ITEM | PART NO.           | DESCRIPTION                  | QTY |
|------|--------------------|------------------------------|-----|
|      | 2094215            | Parking Brake Assembly ..... | 1   |
| 1    | 2094226            | Parking Brake Lever .....    | 1   |
| 2    | .....              | Connecting Plate .....       | 2   |
| 3    | 2082003            | Link .....                   | 1   |
| 4    | 2027744            | Pin .....                    | 1   |
| 5    | .....              | Inner Collar .....           | 1   |
| 6    | 2082673            | Dowel .....                  | 1   |
| 7    | .....              | Knob Adjust .....            | 1   |
| 8    | 2082039            | O-Ring .....                 | 1   |
| 9    | .....              | Knob Plate .....             | 1   |
| 10   | .....              | Push Rod Assy .....          | 1   |
| 11   | 2082042            | Grip .....                   | 1   |
| 12   | 2082020            | Guide .....                  | 1   |
| 13   | 2082021            | Guide .....                  | 1   |
| 14   | .....              | Spacer .....                 | 3   |
| 15   | .....              | Rubber Collar .....          | 1   |
| 16   | .....              | Pin .....                    | 1   |
| 17   | 2028152            | Snap Ring .....              | 1   |
| 18   | 2079560            | Bolt .....                   | 2   |
| 19   | <del>1586693</del> |                              |     |
|      | 136692             | Nut .....                    | 2   |
| 20   | 2082640            | Bolt .....                   | 1   |
| 21   | 2021892            | Nut .....                    | 2   |
| 22   | 2089026            | Hook .....                   | 1   |
| 23   | 2029526            | Spring .....                 | 1   |
| 24   | 2029527            | Pin .....                    | 1   |
| 25   | 2029623            | Retaining Ring .....         | 1   |
| 26   | .....              | Slider Cable .....           | 1   |
| 27   | 1633069            | Pin .....                    | 1   |
| 28   | 2082872            | Locknut .....                | 1   |
| 29   | 2311502            | Shim (0.015 in.) .....       | AR  |

[illegible]





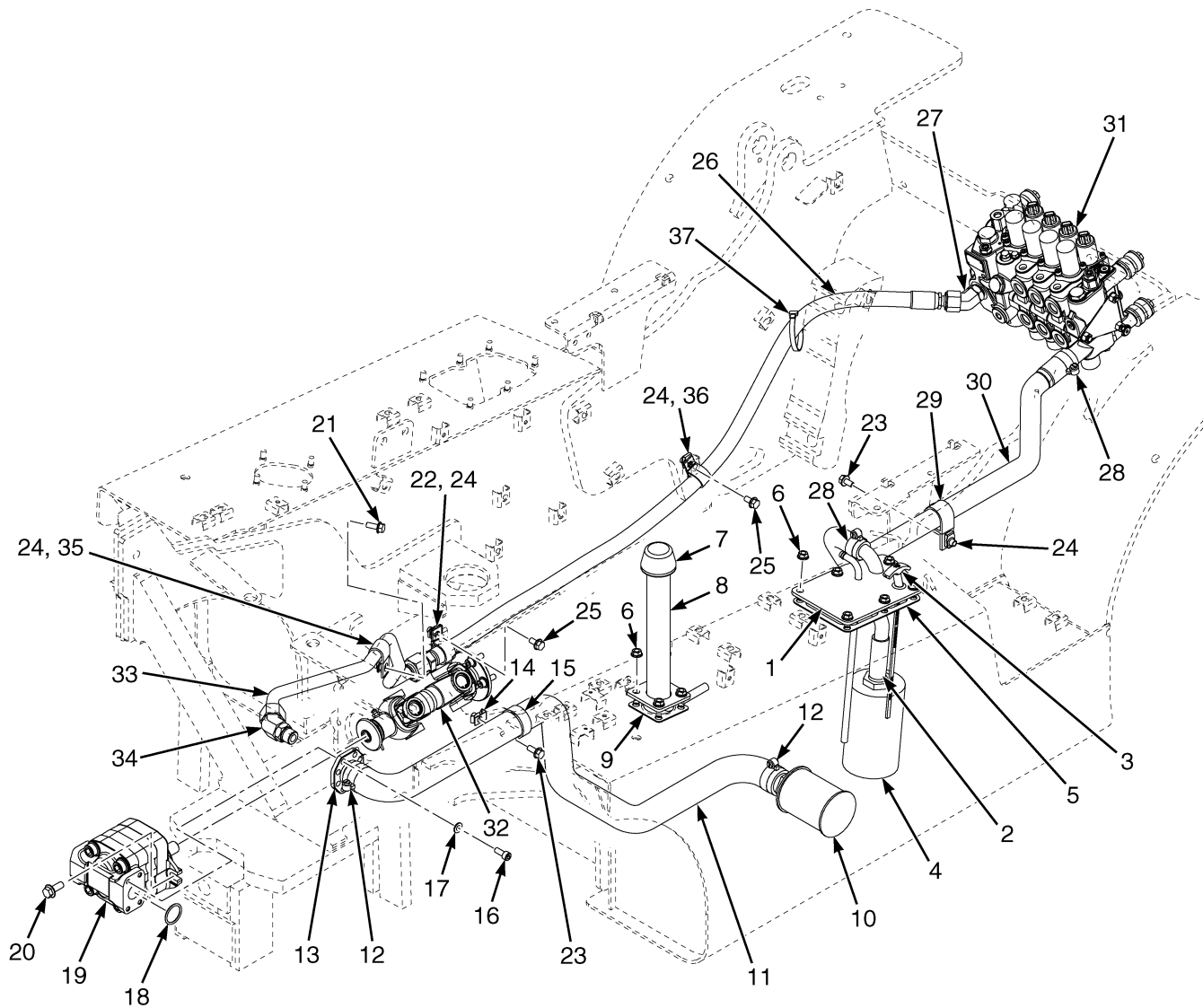


## SECTION 10

### HYDRAULIC SYSTEM

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## HYDRAULIC SUPPLY AND RETURN (FIGURE 10-1)



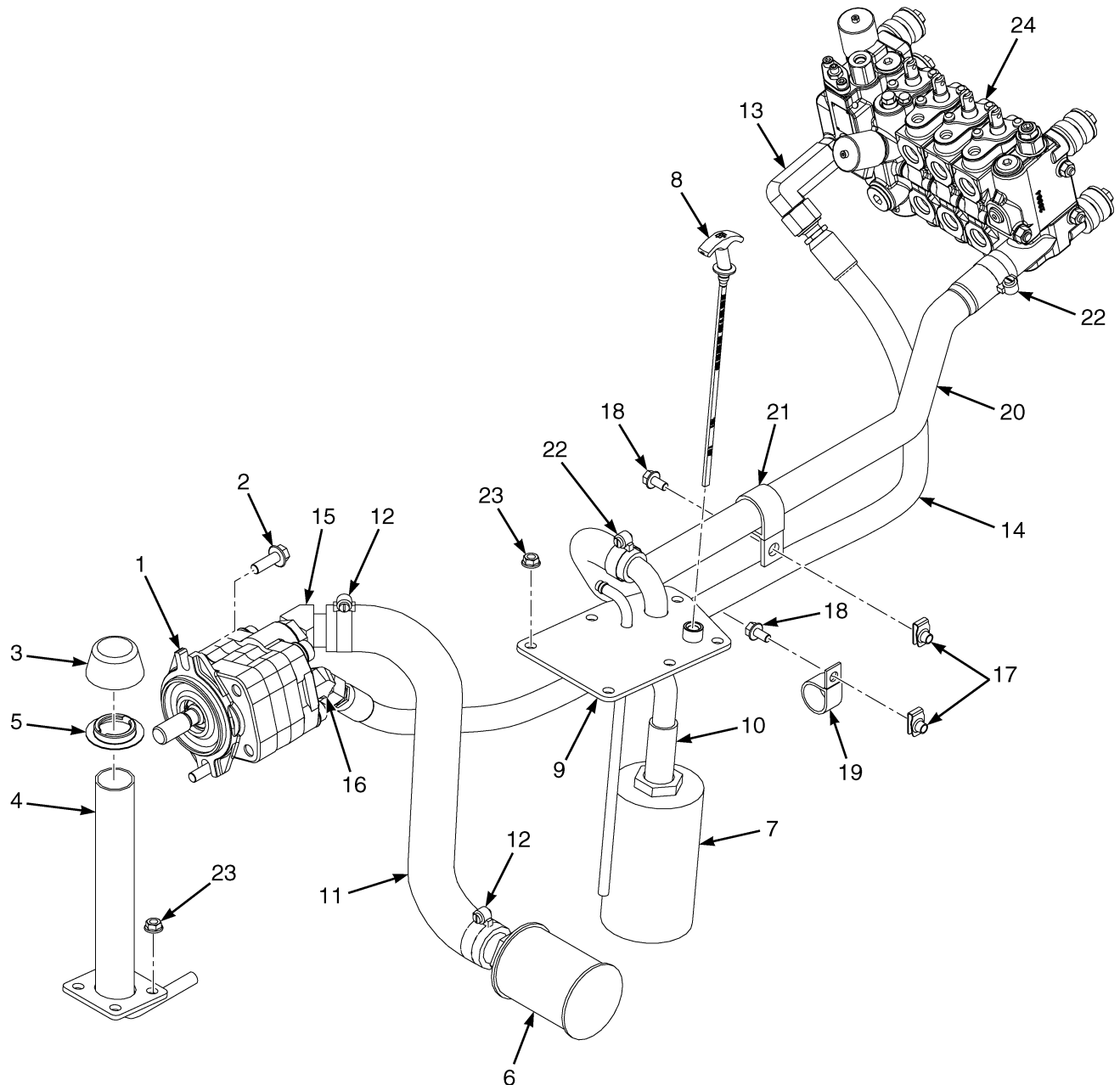
BP150790

**HYDRAULIC SUPPLY AND RETURN**

| ITEM | PART NO.           | DESCRIPTION                                                 | QTY |
|------|--------------------|-------------------------------------------------------------|-----|
| 1    | 4167739            | Cover .....                                                 | 1   |
| 2    | 4654240            | Pipe .....                                                  | 1   |
| 3    | 2060809            | Dipstick .....                                              | 1   |
| 3    | 1580682            | O-Ring .....                                                | 1   |
| 4    | 2021933            | Hydraulic Filter (Return) .....                             | 1   |
| 5    | <b>a</b> 4158779   | Gasket .....                                                | 1   |
| 5    | <b>b</b> 1651223   | Sealant .....                                               | 1   |
| 6    | <del>1382472</del> |                                                             |     |
|      | 1502543            | Nut .....                                                   | 10  |
| 7    | 2021908            | Cap .....                                                   | 1   |
| 8    | 4167741            | Filler Neck .....                                           | 1   |
| 9    | 4158780            | Gasket .....                                                | 1   |
| 10   | 2028634            | Filter .....                                                | 1   |
| 11   | 4645212            | Hose .....                                                  | 1   |
| 12   | 369804             | Clamp .....                                                 | 2   |
| 13   | 4639758            | Connector .....                                             | 1   |
| 14   | 1398062            | Nut (Fold Over) .....                                       | 1   |
| 15   | 181899             | Clamp .....                                                 | 1   |
| 16   | 296010             | Capscrew .....                                              | 2   |
| 17   | 320157             | Washer .....                                                | 2   |
| 18   | 2021909            | O-Ring .....                                                | 1   |
| 19   | 4646465            | Gear Pump (☞Figure 10-7).....                               | 1   |
| 19   | 4154609            | Kit-Seal .....                                              | 1   |
| 20   | 1510117            | Capscrew .....                                              | 2   |
| 21   | 1510113            | Capscrew .....                                              | 1   |
| 22   | 166112             | Clamp .....                                                 | 3   |
| 23   | 1527880            | Capscrew .....                                              | 1   |
| 24   | 1480237            | Nut (Fold Over) .....                                       | 4   |
| 25   | <del>4109993</del> |                                                             |     |
|      | 1527879            | Capscrew .....                                              | 2   |
| 26   | 4653251            | Hose Assy .....                                             | 1   |
| 27   | 1516205            | Fitting .....                                               | 1   |
| 28   | 2306118            | Clamp .....                                                 | 2   |
| 29   | 1320114            | Clamp .....                                                 | 1   |
| 30   | 4648666            | Hose (Three Function) .....                                 | 1   |
| 30   | 4648667            | Hose (Four Function) .....                                  | 1   |
| 30   | 4648665            | Hose (Two Function) .....                                   | 1   |
| 31   | .....              | Hydraulic Control Valve (☞Figure 10-11, ☞Figure 10-17)..... | 1   |
| 32   | 4113562            | Drive Shaft (☞Figure 10-6).....                             | 1   |
| 33   | 4653178            | Tube Assy - pressure .....                                  | 1   |
| 34   | 1516209            | Fitting .....                                               | 1   |
| 35   | 298132             | Clamp .....                                                 | 1   |
| 36   | 178119             | Clamp .....                                                 | 1   |
| 37   | 129563             | Strap Clamp .....                                           | 1   |

**FOOTNOTES:****a** replaced by sealant**b** replaces gasket

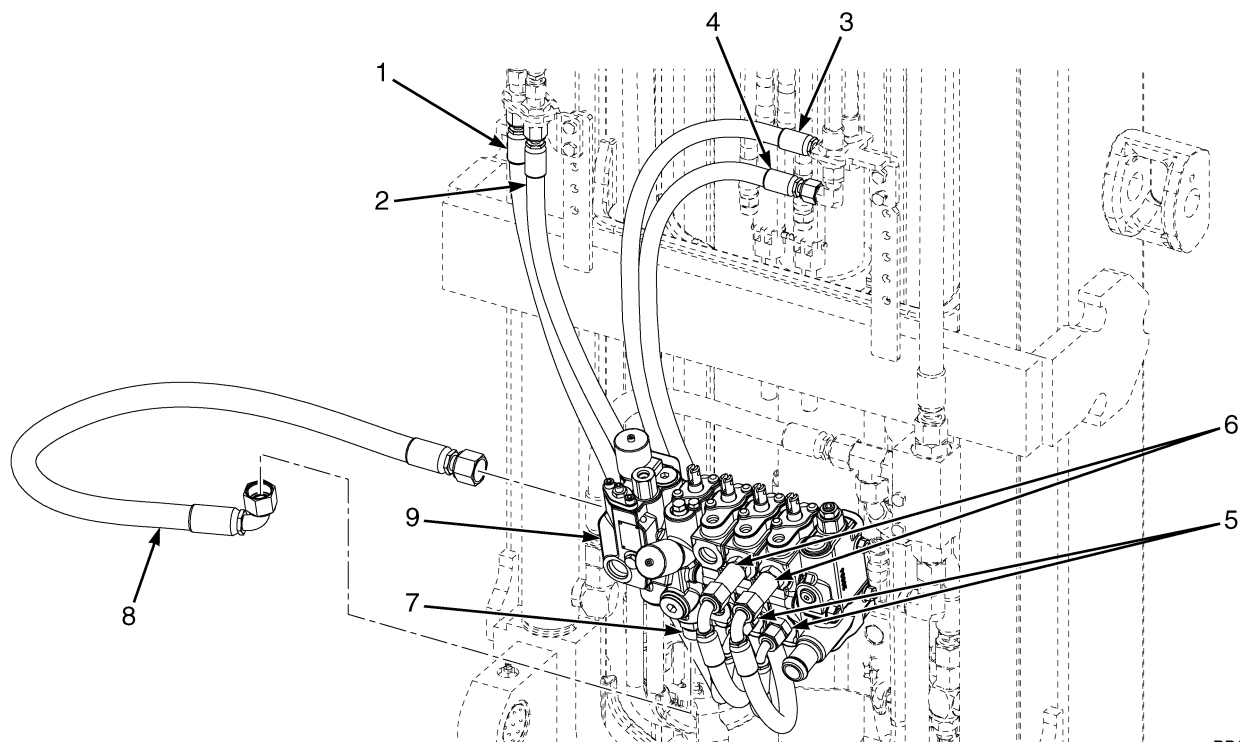
## HYDRAULIC SUPPLY AND RETURN (FIGURE 10-2) DIESEL, 24CC



BP150835

**HYDRAULIC SUPPLY AND RETURN  
DIESEL, 24CC**

| ITEM | PART NO. | DESCRIPTION                                                 | QTY |
|------|----------|-------------------------------------------------------------|-----|
| 1    | 4644977  | Gear Pump (☞Figure 10-7).....                               | 1   |
| 1    | 4154609  | Kit-Seal .....                                              | 1   |
| 2    | 1527884  | Capscrew .....                                              | 2   |
| 3    | 2021908  | Cap .....                                                   | 1   |
| 4    | 4167741  | Filler Neck .....                                           | 1   |
| 5    | .....    | Mouth Piece, Filler Neck .....                              | 1   |
| 6    | 2028634  | Filter .....                                                | 1   |
| 7    | 2021933  | Hydraulic Filter (Return) .....                             | 1   |
| 8    | 2060809  | Dipstick .....                                              | 1   |
| 9    | 4167739  | Cover .....                                                 | 1   |
| 10   | 4654240  | Pipe .....                                                  | 1   |
| 11   | 2082189  | Hose .....                                                  | 1   |
| 12   | 369804   | Clamp .....                                                 | 2   |
| 13   | 1486555  | Fitting .....                                               | 1   |
| 14   | 4649496  | Hose Assy .....                                             | 1   |
| 15   | 134173   | Fitting .....                                               | 1   |
| 16   | 1516205  | Fitting .....                                               | 1   |
| 17   | 1480237  | Nut (Fold Over) .....                                       | 2   |
| 18   | 4109993  |                                                             |     |
|      | 1527879  | Capscrew .....                                              | 2   |
| 19   | 166112   | Clamp .....                                                 | 1   |
| 20   | 4648667  | Hose .....                                                  | 1   |
| 21   | 1320114  | Clamp .....                                                 | 1   |
| 22   | 2306118  | Clamp .....                                                 | 1   |
| 23   | 1382472  |                                                             |     |
|      | 1502543  | Nut .....                                                   | 10  |
| 24   | .....    | Hydraulic Control Valve (☞Figure 10-11, ☞Figure 10-17)..... | 1   |

**HYDRAULIC HOSES (FIGURE 10-3)**  
**3 AND 4 FUNCTION (→ 5/2017)**

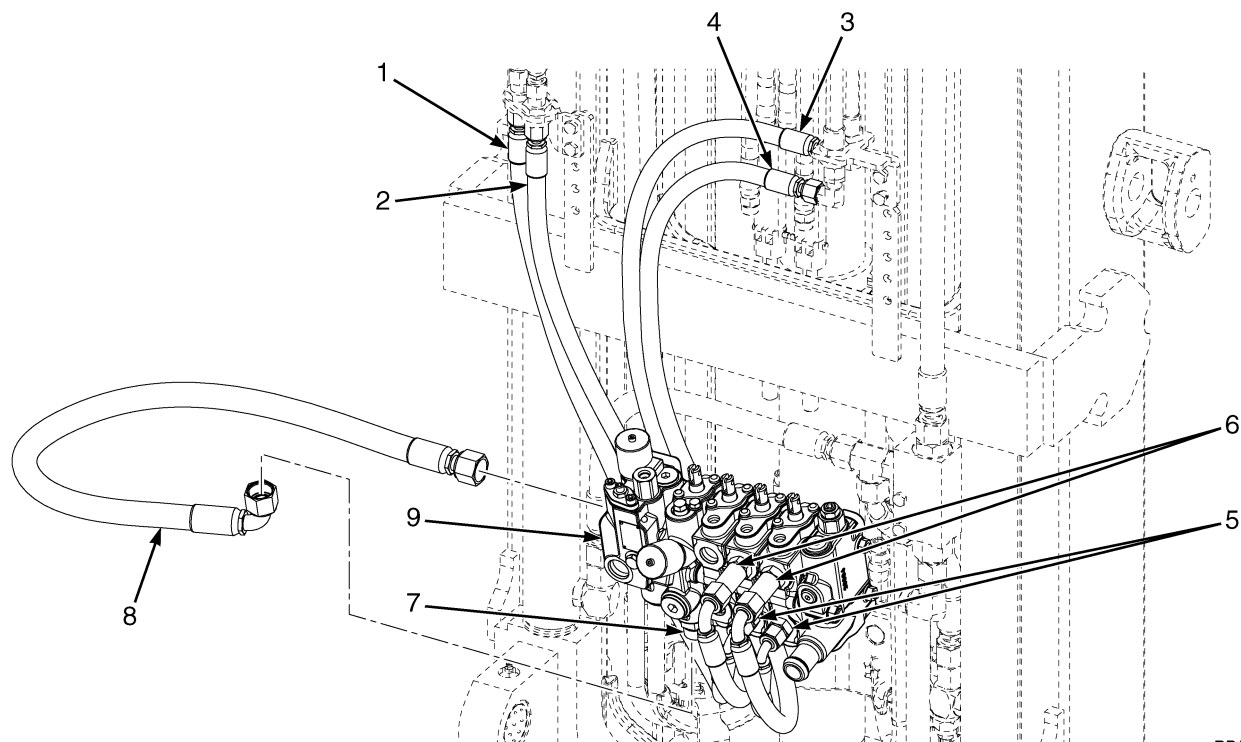
BP150813

**KEY:****A: 3 Function****B: 4 Function**

| ITEM | PART NO.  | DESCRIPTION                                       | QTY |    |
|------|-----------|---------------------------------------------------|-----|----|
|      |           |                                                   | A   | B  |
| 1    | 4638546   | Hose Assy (Manual Hydraulic Control Valve) .....  | 1   | .. |
| 1    | 4652942   | Hose Assy (Electro-Hydraulic Control Valve) ..... | 1   | .. |
| 2    | 4638547   | Hose Assy (Manual Hydraulic Control Valve) .....  | 1   | .. |
| 2    | 4652943   | Hose Assy (Electro-Hydraulic Control Valve) ..... | 1   | .. |
| 3    | 4640866   | Hose Assy (Manual Hydraulic Control Valve) .....  | 1   | 1  |
| 3    | 4652944   | Hose Assy (Electro-Hydraulic Control Valve) ..... | 1   | 1  |
| 4    | 4638549   | Hose Assy (Manual Hydraulic Control Valve) .....  | 1   | 1  |
| 4    | 4652945   | Hose Assy (Electro-Hydraulic Control Valve) ..... | 1   | 1  |
| 5    | 1486742   | Fitting .....                                     | 1   | 1  |
| 5    | 4159139   | Fitting (Optional) .....                          | 1   | 1  |
| 6    | 1490533   | Fitting .....                                     | 1   | 1  |
| 7    | 1486749   | Fitting .....                                     | 1   | 1  |
| 8    | 4640861   | Hose Assy (Mast Hose) .....                       | 1   | 1  |
|      | a 1529015 | Cap (Hydraulic Hoses) .....                       | 2   | 4  |
|      | a 1556898 | Plug (Mast Hose) .....                            | 1   | 1  |

**FOOTNOTES:****a** Not Illustrated



**HYDRAULIC HOSES (FIGURE 10-4)**  
**3 AND 4 FUNCTION — WITH MAN-HYD (5/2017 →)**

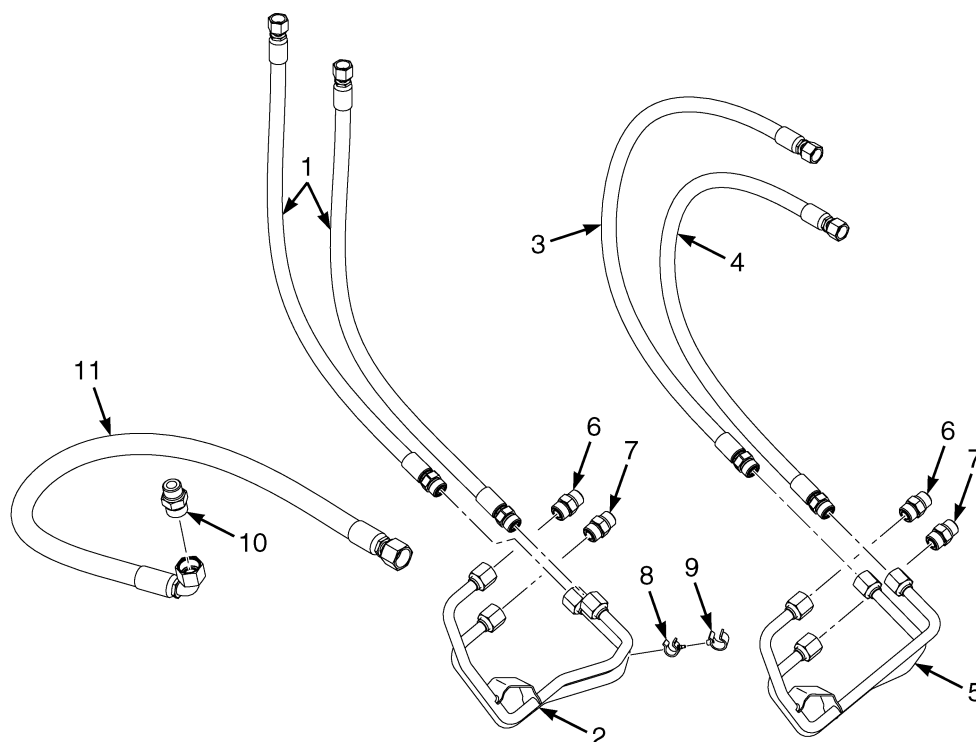
BP150813

**KEY:****A: 3 Function****B: 4 Function**

| ITEM | PART NO. | DESCRIPTION                                      | QTY |    |
|------|----------|--------------------------------------------------|-----|----|
|      |          |                                                  | A   | B  |
| 1    | 4638546  | Hose Assy (Manual Hydraulic Control Valve) ..... | 1   | 1  |
| 2    | 4638547  | Hose Assy (Manual Hydraulic Control Valve) ..... | 1   | 1  |
| 3    | 4640866  | Hose Assy (Manual Hydraulic Control Valve) ..... | 1   | .. |
| 4    | 4638549  | Hose Assy (Manual Hydraulic Control Valve) ..... | 1   | .. |
| 5    | 4159139  | Fitting .....                                    | 1   | 1  |
| 5    | 1486742  | Fitting (Optional) .....                         | 1   | 1  |
| 6    | 1490533  | Fitting .....                                    | 1   | 1  |
| 7    | 1486749  | Fitting .....                                    | 1   | 1  |
| 8    | 4655800  | Hose Assy (Mast Hose) .....                      | 1   | 1  |

### HYDRAULIC HOSES (FIGURE 10-5)

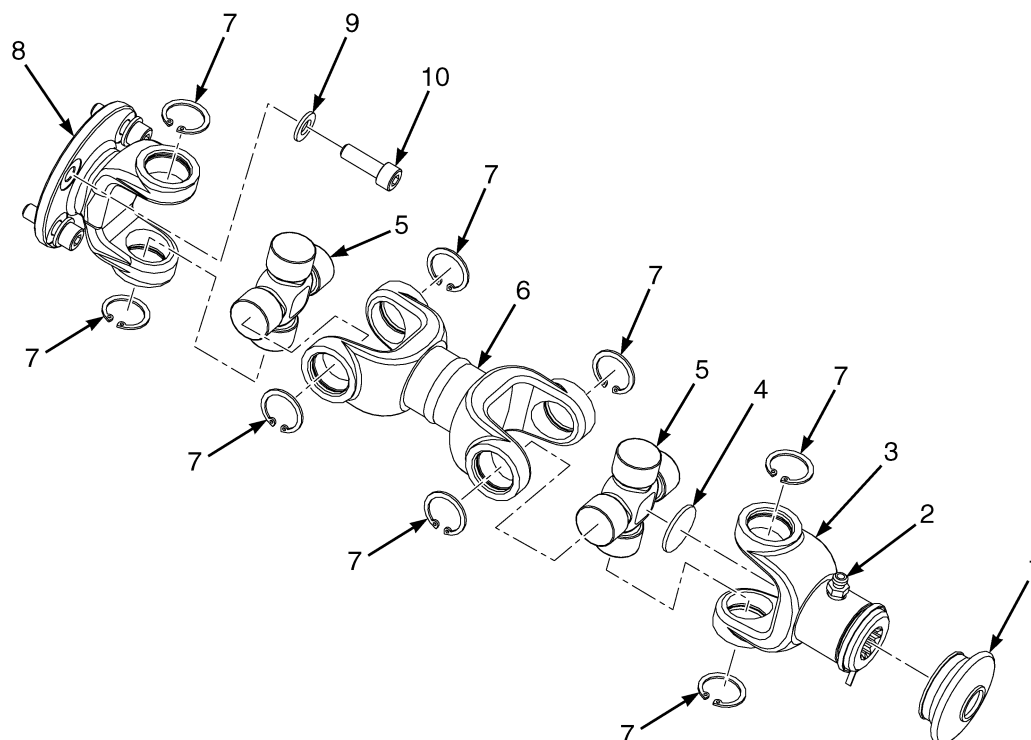
#### THREE AND FOUR FUNCTION — WITH E-HYD (5/2017 →)



BP150867

**KEY:****A:** 3rd Function**B:** 4th Function

| ITEM | PART NO. | DESCRIPTION                     | QTY |    |
|------|----------|---------------------------------|-----|----|
|      |          |                                 | A   | B  |
| 1    | 4662031  | Hose Assy (Aux 3a and 3b) ..... | 2   | .. |
| 2    | 4662025  | Tube (Aux 1) .....              | 1   | .. |
| 3    | 4662032  | Hose Assy (Aux 4a) .....        | ..  | 1  |
| 4    | 4662033  | Hose Assy (Aux 4b) .....        | ..  | 1  |
| 5    | 4662026  | Tube (Aux 2) .....              | ..  | 1  |
| 6    | 6996684  | .....                           | ..  | 1  |
|      | 1473887  | Fitting .....                   | 1   | 1  |
| 7    | 4168243  | Fitting (Optional) .....        | 1   | 1  |
| 8    | 1502055  | Clamp (Swivel) .....            | 1   | .. |
| 9    | 1606544  | Clamp (Swivel) .....            | 1   | .. |
| 10   | 1486749  | Fitting (Mast Hose) .....       | 1   | 1  |
| 11   | 4655800  | Hose Assy (Mast Hose) .....     | 1   | 1  |

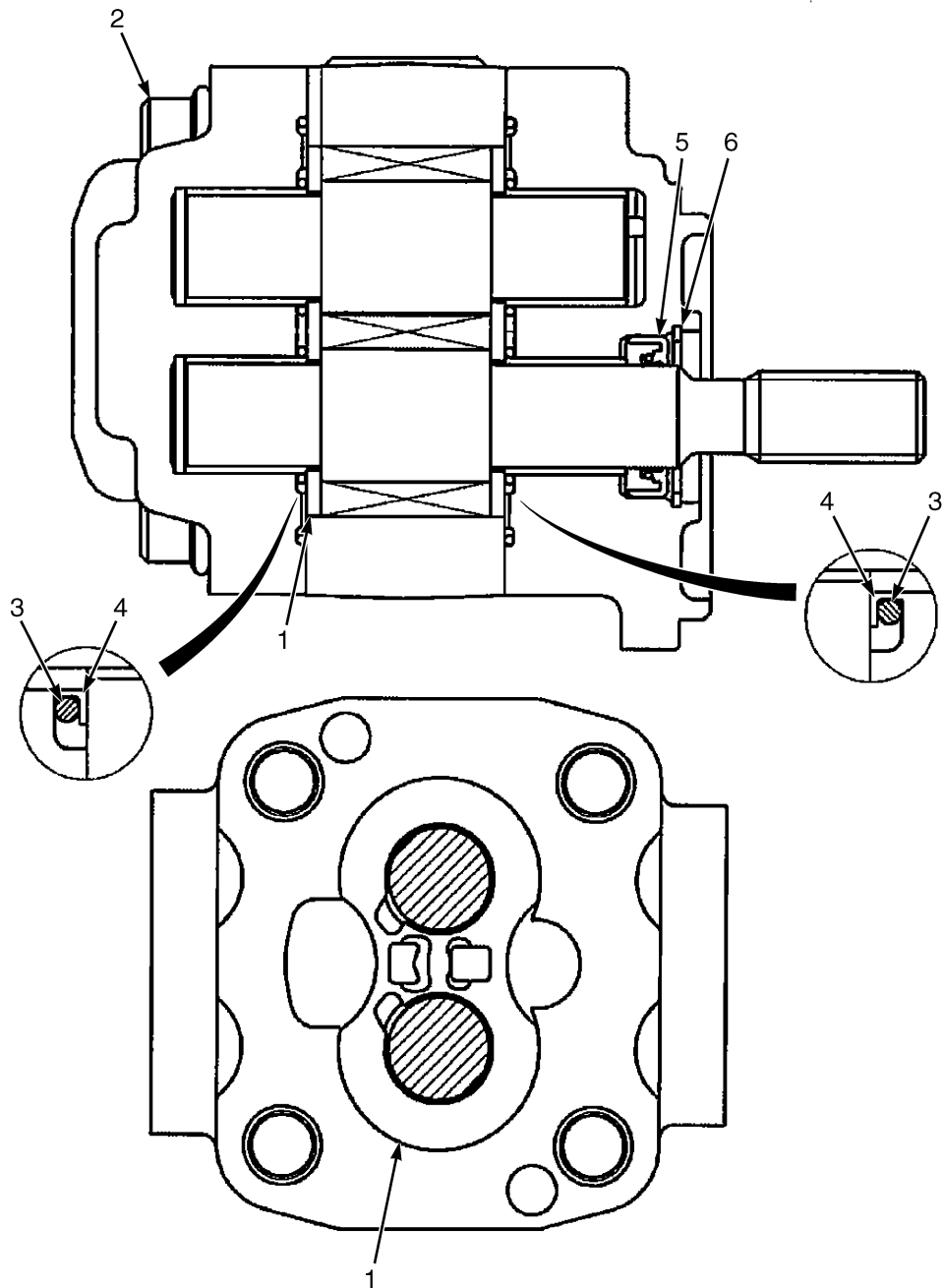
**PUMP DRIVE ASSEMBLY (FIGURE 10-6)**  
**PSI ENGINE**

BP150833

| ITEM | PART NO.           | DESCRIPTION           | QTY |
|------|--------------------|-----------------------|-----|
|      | 4113562            | Drive Shaft .....     | 1   |
| 1    | 4142629            | Boot .....            | 1   |
| 2    | 4142628            | Grease Fitting .....  | 1   |
| 3    | 4142626            | Yoke End .....        | 1   |
| 4    | <b>a</b> . . . . . | Dust Cover .....      | 1   |
| 5    | 4142624            | Universal Joint ..... | 2   |
| 6    | 4142625            | Yoke .....            | 1   |
| 7    | 4142623            | Snap Ring .....       | 8   |
| 8    | 4142622            | Yoke .....            | 1   |
| 9    | 296418             | Washer .....          | 4   |
| 10   | 4147873            | Capscrew .....        | 4   |

**FOOTNOTES:****a** Service with 4142626

**GEAR PUMP (FIGURE 10-7)**

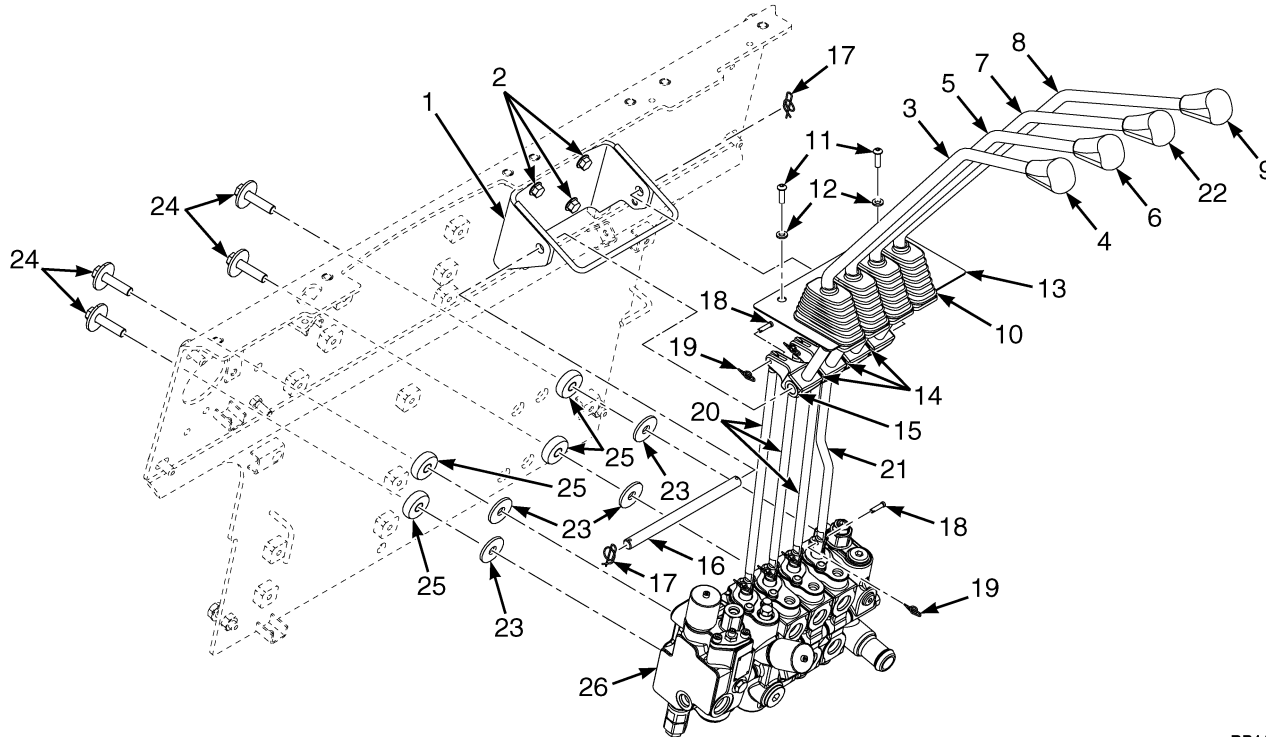


BP150999

| ITEM | PART NO. | DESCRIPTION | QTY |
|------|----------|-------------|-----|
|------|----------|-------------|-----|

| ITEM | PART NO. | DESCRIPTION              | QTY |
|------|----------|--------------------------|-----|
|      | 4644977  | Gear Pump (24cc) .....   | 1   |
|      | 4646465  | Gear Pump (27.8cc) ..... | 1   |
| 1    | 4101928  | Plate , Side .....       | 1   |
| 2    | 4154611  | Screw (24cc) .....       | 4   |
| 2    | 4154608  | Screw (27.8cc) .....     | 4   |
| 3    | .....    | Plate Seal .....         | 2   |
| 4    | .....    | Back-up Seal .....       | 2   |
| 5    | .....    | Oil Seal .....           | 1   |
| 6    | .....    | Snap Ring .....          | 1   |
|      | 4154609  | Kit-Seal .....           | 1   |

## HAND LEVERS (FIGURE 10-8) THREE AND FOUR FUNCTION



BP140274

### KEY:

A: Three Function

B: Four Function

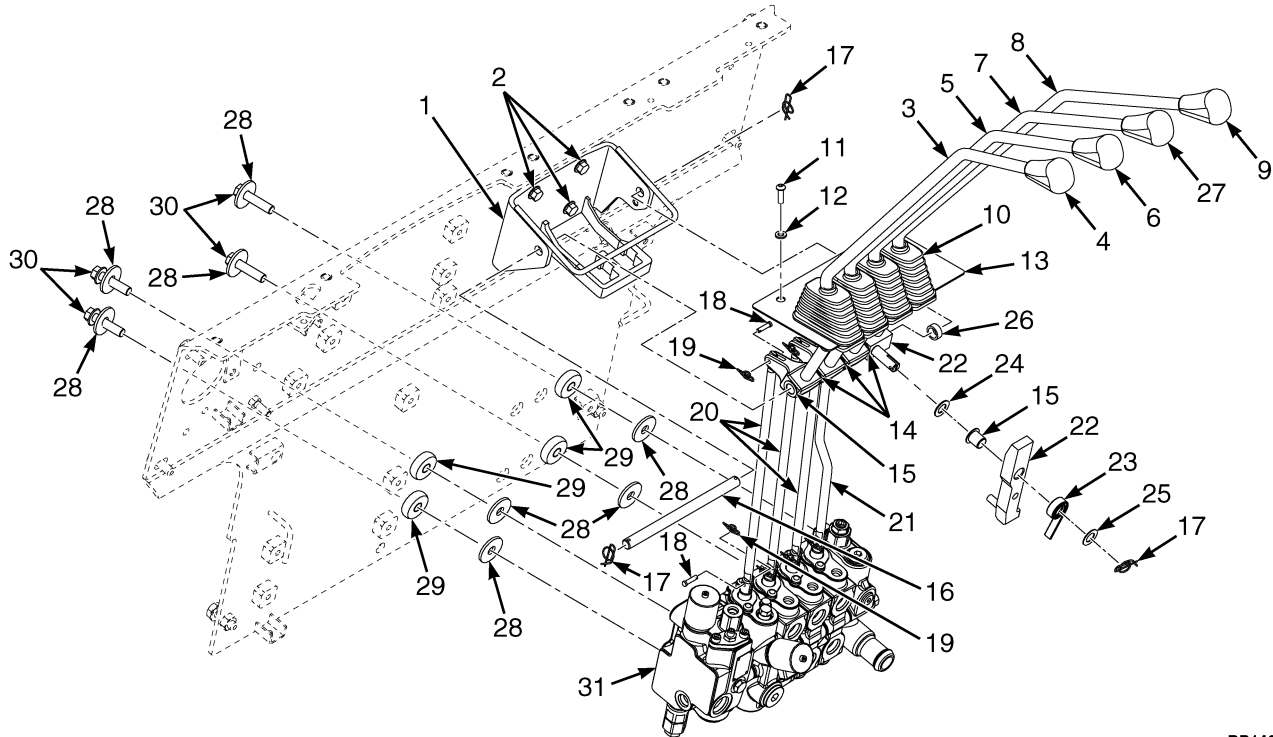
| ITEM | PART NO. | DESCRIPTION          | QTY |    |
|------|----------|----------------------|-----|----|
|      |          |                      | A   | B  |
| 1    | 2099872  | Bracket Wldmt .....  | 1   | 1  |
| 2    | 4109993  | 1527879              |     |    |
|      |          | Capscrew .....       | 4   | 4  |
| 3    | 2087129  | Lever (Lift) .....   | 1   | 1  |
| 4    | 2055050  | Knob .....           | 1   | 1  |
| 5    | 2087130  | Lever (Tilt) .....   | 1   | 1  |
| 6    | 2055051  | Knob .....           | 1   | 1  |
| 7    | 2087131  | Lever (Third) .....  | 1   | 1  |
| 8    | 2090706  | Lever (Fourth) ..... | ..  | 1  |
| 9    | 2059511  | Knob .....           | ..  | 1  |
| 10   | 2081863  | Boot .....           | 3   | 4  |
| 11   | 4044966  | Capscrew .....       | 2   | 2  |
| 12   | 4211852  | Washer .....         | 2   | 2  |
| 13   | 4149814  | 4178100              |     |    |
|      |          | Plate .....          | 1   | .. |
| 13   | 4149813  | 4178099              |     |    |
|      |          | Plate .....          | ..  | 1  |
| 14   | 2079337  | Retaining Ring ..... | 2   | 3  |
| 15   | 2021810  | Bushing .....        | 6   | 8  |
| 16   | 2081886  | Pin .....            | 1   | 1  |
| 17   | 1530011  | Pin , Cotter .....   | 2   | 2  |

**KEY:****A: Three Function****B: Four Function**

| ITEM | PART NO.         | DESCRIPTION                                   | QTY |    |
|------|------------------|-----------------------------------------------|-----|----|
|      |                  |                                               | A   | B  |
| 18   | 2021817          | Pin .....                                     | 6   | 8  |
| 19   | 1517361          | Locking Ring Cotter Pin .....                 | 6   | 8  |
| 20   | 2081859          | Rod .....                                     | 3   | 3  |
| 21   | 2081860          | Rod .....                                     | ..  | 1  |
| 22   | 2059511          | Knob (Without Side-Shift) .....               | 1   | 1  |
| 22   | 2065919          | Knob (With Side-Shift) .....                  | 1   | 1  |
| 23   | 1669680          | Washer .....                                  | 8   | 8  |
| 24   | 4073087          | Capscrew .....                                | 4   | 4  |
|      | 4094634          |                                               |     |    |
| 25   | 4652658          | Isolator .....                                | 4   | 4  |
| 26   | .....            | Hydraulic Control Valve (☞ Figure 10-11)..... | 1   | 1  |
|      | <b>a</b> 2042745 | Spacer .....                                  | 1   | .. |

**FOOTNOTES:****a** Not Illustrated

## HAND LEVERS (FIGURE 10-9) THREE AND FOUR FUNCTION WITH DETENT



BP140275

**KEY:**  
**A:** Three Function  
**B:** Four Function

| ITEM | PART NO.             | DESCRIPTION                             | QTY |    |
|------|----------------------|-----------------------------------------|-----|----|
|      |                      |                                         | A   | B  |
| 1    | <b>c</b> 4124523     | Bracket Wldmt .....                     | 1   | 1  |
| 1    | <b>d</b> 4212024     | Bracket Wldmt - lever with detent ..... | 1   | 1  |
| 2    | 4109993              | 1527879 Capscrew .....                  | 4   | 4  |
| 3    | 2087129              | Lever (Lift) .....                      | 1   | 1  |
| 4    | 2055050              | Knob .....                              | 1   | 1  |
| 5    | 2087130              | Lever (Tilt) .....                      | 1   | 1  |
| 6    | 2055051              | Knob .....                              | 1   | 1  |
| 7    | <b>c</b> 4124725     | Lever (Third) .....                     | 1   | 1  |
| 7    | <b>a b d</b> 4212027 | Lever - 3rd wldmt w/ detent .....       | 1   | 1  |
| 8    | <b>c</b> 4124723     | Lever (Fourth) .....                    | ..  | 1  |
| 8    | <b>a d</b> 4212028   | Lever - 4th wldmt w/ detent .....       | ..  | 1  |
| 9    | 2059511              | Knob .....                              | ..  | 1  |
| 10   | 2081863              | Boot .....                              | 3   | 4  |
| 11   | 4044966              | Capscrew .....                          | 2   | 2  |
| 12   | 4211852              | Washer .....                            | 2   | 2  |
| 13   | 4149814              | Plate .....                             | 1   | .. |
| 13   | 4149813              | Plate .....                             | ..  | 1  |
| 14   | 2079337              | Retaining Ring .....                    | 2   | 3  |

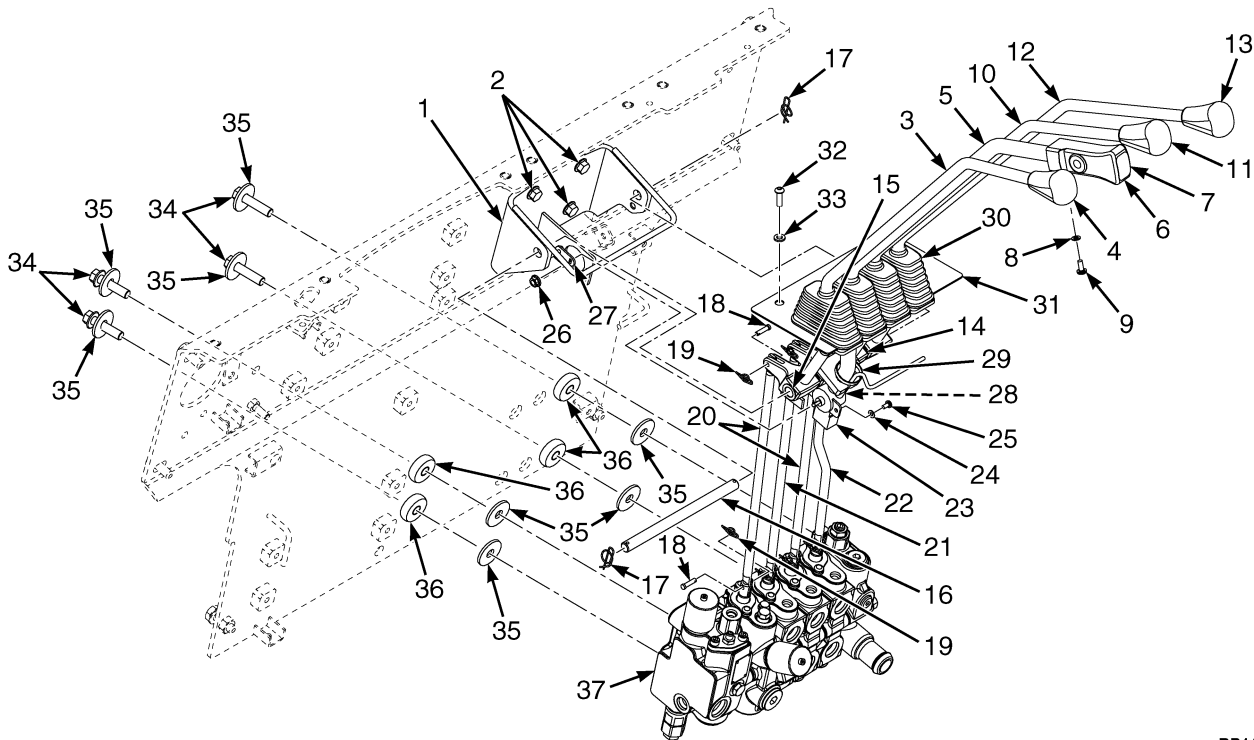


**KEY:****A: Three Function****B: Four Function**

| ITEM | PART NO.         | DESCRIPTION                                                      | QTY |    |
|------|------------------|------------------------------------------------------------------|-----|----|
|      |                  |                                                                  | A   | B  |
| 15   | 2021810          | Bushing .....                                                    | 7   | 9  |
| 16   | 4124884          | Pin .....                                                        | 1   | 1  |
| 17   | 1530011          | Pin , Cotter .....                                               | 3   | 3  |
| 18   | 2021817          | Pin .....                                                        | 6   | 8  |
| 19   | 1517361          | Locking Ring Cotter Pin .....                                    | 6   | 8  |
| 20   | 2081859          | Rod .....                                                        | 3   | 3  |
| 21   | 2081860          | Rod .....                                                        | ..  | 1  |
| 22   | 4124718          | Yoke .....                                                       | 1   | 1  |
| 23   | 175861           | Spring .....                                                     | 1   | 1  |
| 24   | 2302887          | Shim (0.047 in.) .....                                           | 1   | 1  |
| 25   | 2305581          | Shim (0.030 in.) .....                                           | 1   | 1  |
| 26   | 4124886          | Spacer .....                                                     | 1   | .. |
| 26   | 4124885          | Spacer .....                                                     | ..  | 1  |
| 27   | 2059511          | Knob (Without Side-shift) .....                                  | 1   | 1  |
| 27   | 2065919          | Knob (With Side-shift) .....                                     | 1   | 1  |
| 28   | 1669680          | Washer .....                                                     | 8   | 8  |
| 29   | 4652658          | Isolator .....                                                   | 4   | 4  |
| 30   | 4073087          |                                                                  |     |    |
|      | 4094634          | Capscrew .....                                                   | 4   | 4  |
| 31   | .....            | Hydraulic Control Valve (Manual Hydraulic) (☞ Figure 10-11)..... | ..  | .. |
|      | <b>b</b> 4124886 | Spacer .....                                                     | 1   | .. |

**FOOTNOTES:****a** can only be used with 4212024**b** Not Illustrated**c** → S/N A380V07826T**d** S/N A380V07827T →

# **HAND LEVERS (FIGURE 10-10)** **THREE AND FOUR FUNCTION WITH RTST**



BP140276

**KEY:****A: Three Function****B: Four Function**

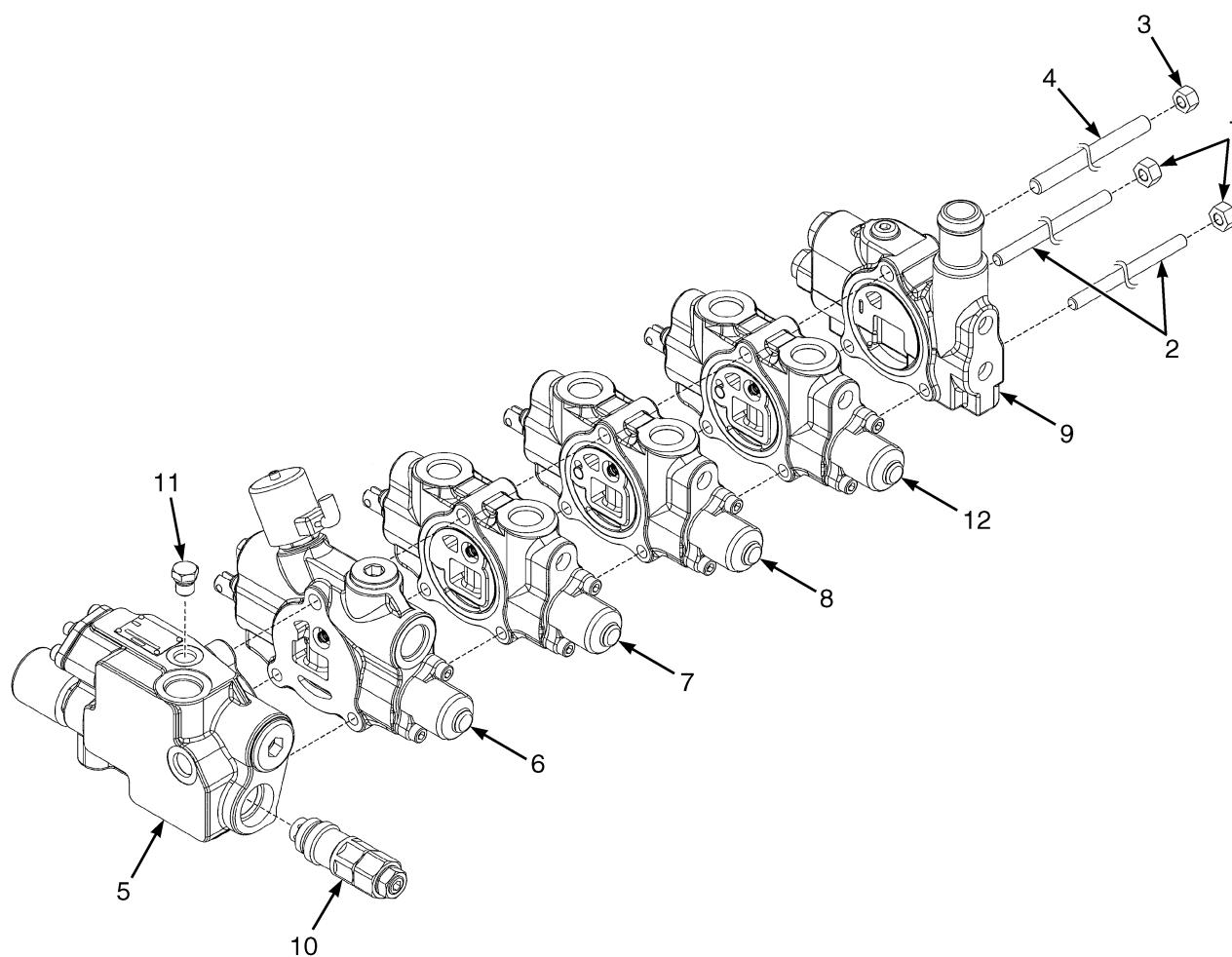
| ITEM | PART NO. | DESCRIPTION                     | QTY |   |
|------|----------|---------------------------------|-----|---|
|      |          |                                 | A   | B |
| 1    | 2100133  | Bracket Wldmt .....             | 1   | 1 |
| 2    | 4109993  | 1527879                         |     |   |
|      |          | Capscrew .....                  | 4   | 4 |
| 3    | 2087129  | Lever (Lift) .....              | 1   | 1 |
| 4    | 2055050  | Knob .....                      | 1   | 1 |
| 5    | 2092241  | Lever .....                     | 1   | 1 |
| 6    | 2091458  | Switch .....                    | 1   | 1 |
| 7    | 2093098  | Label .....                     | 1   | 1 |
| 8    | 320155   | Washer .....                    | 1   | 1 |
| 9    | 302033   | Screw .....                     | 1   | 1 |
| 10   | 2087131  | Lever (Third) .....             | 1   | 1 |
| 11   | 2059511  | Knob (Without Side-shift) ..... | 1   | 1 |
| 11   | 2065919  | Knob (With Side-shift) .....    | 1   | 1 |
| 12   | 2090706  | Lever .....                     | ..  | 1 |
| 13   | 2059511  | Knob .....                      | ..  | 1 |
| 14   | 2079337  | Retaining Ring .....            | 2   | 3 |
| 15   | 2021810  | Bushing .....                   | 6   | 8 |
| 16   | 2081886  | Pin .....                       | 1   | 1 |
| 17   | 1530011  | Pin , Cotter .....              | 2   | 2 |
| 18   | 2021817  | Pin .....                       | 6   | 8 |
| 19   | 1517361  | Locking Ring Cotter Pin .....   | 6   | 8 |

**KEY:****A: Three Function****B: Four Function**

| ITEM | PART NO.         | DESCRIPTION                                                      | QTY |    |
|------|------------------|------------------------------------------------------------------|-----|----|
|      |                  |                                                                  | A   | B  |
| 20   | 2081859          | Rod .....                                                        | 2   | 2  |
| 21   | 2092926          | Rod .....                                                        | 1   | 1  |
| 22   | 2081860          | Rod .....                                                        | ..  | 1  |
| 23   | 2055131          | Sensor .....                                                     | 1   | 1  |
| 24   | 320154           | Washer .....                                                     | 2   | 2  |
| 25   | 302019           | Screw .....                                                      | 2   | 2  |
| 26   | 4307884          |                                                                  |     |    |
|      | 1514429          | Nut .....                                                        | 1   | 1  |
| 27   | 2092925          | Plate Wldmt .....                                                | 1   | 1  |
| 28   | 1356354          | Bushing .....                                                    | 1   | 1  |
| 29   | 137852           | Strap Clamp .....                                                | 1   | 1  |
| 30   | 2081863          | Boot .....                                                       | 3   | 4  |
| 31   | 4149814          |                                                                  |     |    |
|      | 4178100          | Plate .....                                                      | 1   | .. |
| 31   | 4149813          |                                                                  |     |    |
|      | 4178099          | Plate .....                                                      | ..  | 1  |
| 32   | 4044966          | Capscrew .....                                                   | 2   | 2  |
| 33   | 4211852          | Washer .....                                                     | 2   | 2  |
| 34   | 4073087          |                                                                  |     |    |
|      | 4094634          | Capscrew .....                                                   | 4   | 4  |
| 35   | 1669680          | Washer .....                                                     | 8   | 8  |
| 36   | 4652658          | Isolator .....                                                   | 4   | 4  |
| 37   | .....            | Hydraulic Control Valve (Manual Hydraulic) (☞ Figure 10-11)..... | ..  | .. |
|      | <b>a</b> 2042745 | Spacer .....                                                     | 1   | .. |

**FOOTNOTES:****a** Not Illustrated

## HYDRAULIC CONTROL VALVE (FIGURE 10-11) MANUAL CONTROLS — THREE AND FOUR FUNCTION



BP140262

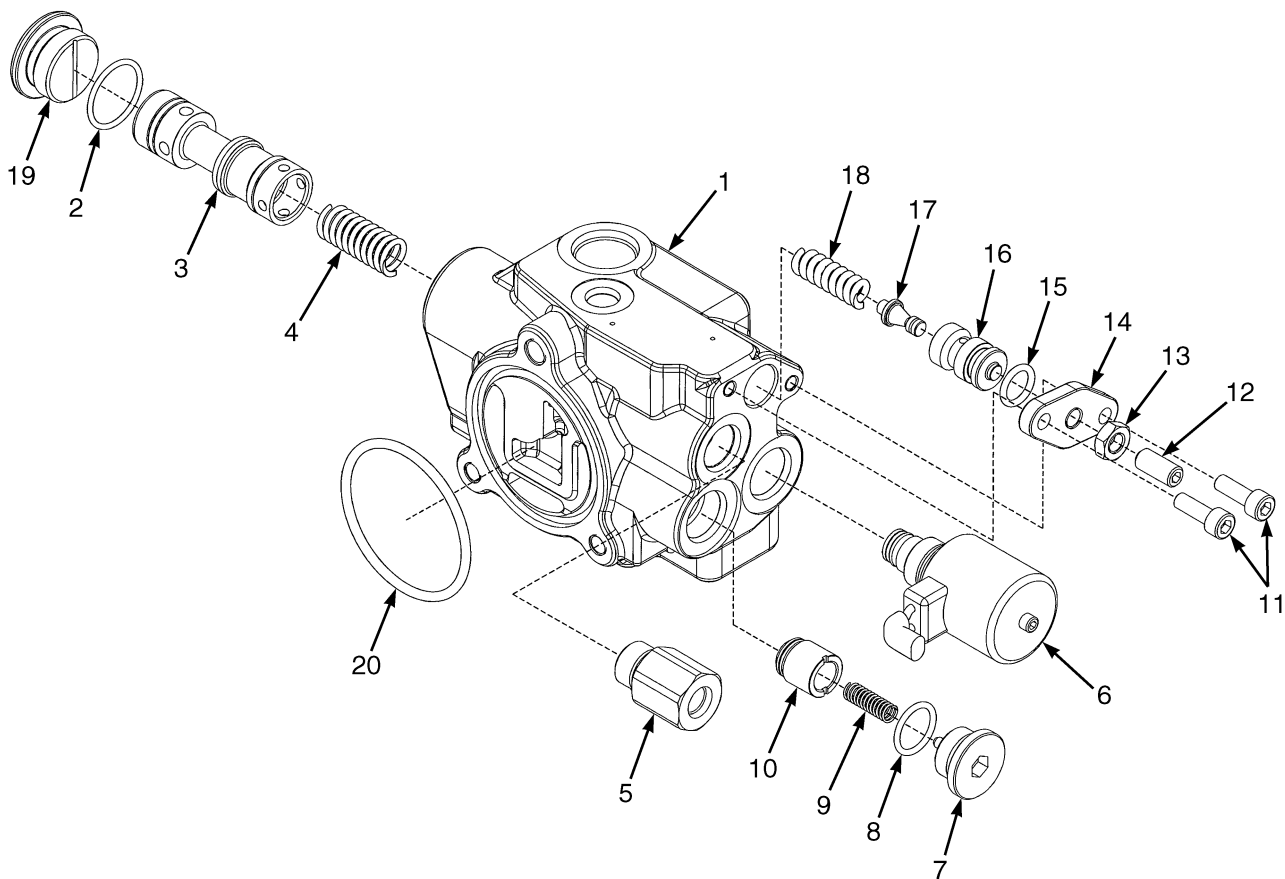
## HYDRAULIC CONTROL VALVE

### MANUAL CONTROLS – THREE AND FOUR FUNCTION

**KEY:****A: 3 Function****B: 4 Function**

| ITEM | PART NO. | DESCRIPTION                              | QTY |    |
|------|----------|------------------------------------------|-----|----|
|      |          |                                          | A   | B  |
|      | 4649087  |                                          |     |    |
|      | 4662359  | Hyd Control Valve (Three Function) ..... | 1   | .. |
|      | 4649088  |                                          |     |    |
|      | 4662360  | Hyd Control Valve (Four Function) .....  | ..  | 1  |
| 1    | 2054988  | Nut .....                                | 2   | 2  |
| 2    | 2087450  | Tie Rod .....                            | 2   | .. |
| 2    | 4154619  | Tie Rod .....                            | ..  | 2  |
| 3    | 2054990  | Nut .....                                | 3   | 3  |
| 4    | 2087455  | Tie Rod .....                            | 1   | .. |
| 4    | 4154620  | Tie Rod .....                            | ..  | 1  |
| 5    | 4154666  | Housing (☞ Figure 10-12).....            | 1   | 1  |
| 6    | 4154624  |                                          |     |    |
|      | 4662628  | Spool (Lift) (☞ Figure 10-13).....       | 1   | 1  |
| 7    | 4154622  |                                          |     |    |
|      | 4662629  | Spool (Tilt) (☞ Figure 10-14).....       | 1   | 1  |
| 8    | 4154623  |                                          |     |    |
|      | 4662630  | Spool (Aux Section) .....                | 1   | 1  |
| 9    | 4154667  |                                          |     |    |
|      | 4662627  |                                          |     |    |
|      | 4662631  | Spool Outlet (☞ Figure 10-16).....       | 1   | 1  |
| 10   | 2096490  | Relief Valve .....                       | 1   | 1  |
| 11   | .....    | Plug .....                               | 1   | 1  |
| 12   | 4154623  |                                          |     |    |
|      | 4662630  | Spool (Aux Section) .....                | ..  | 1  |

## HYDRAULIC CONTROL VALVE (FIGURE 10-12) INLET SECTION — MANUAL CONTROLS

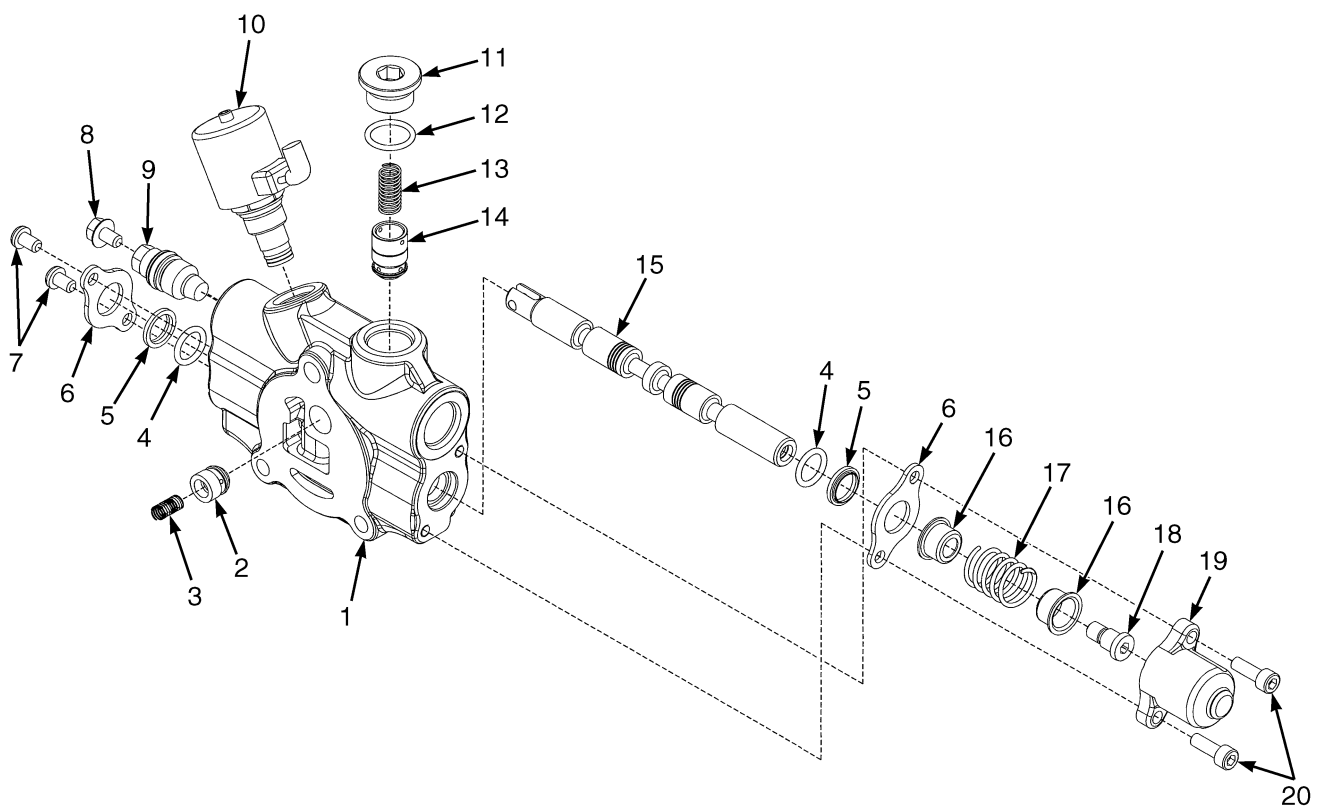


BP140263

**HYDRAULIC CONTROL VALVE  
INLET SECTION – MANUAL CONTROLS**

| ITEM | PART NO. | DESCRIPTION           | QTY |
|------|----------|-----------------------|-----|
| 1    | 4154666  | Housing (Inlet) ..... | 1   |
| 2    | .....    | O-Ring .....          | 1   |
| 3    | .....    | Spool .....           | 1   |
| 4    | 4154626  | Spring .....          | 1   |
| 5    | 4154634  | Plug .....            | 1   |
| 6    | 2087834  | Solenoid Valve .....  | 1   |
| 7    | 2087845  | Plug .....            | 1   |
| 8    | 16484    | O-Ring .....          | 1   |
| 9    | 2087849  | Spring .....          | 1   |
| 10   | 2087846  | Valve-Poppet .....    | 1   |
| 11   | 2055004  | Capscrew .....        | 2   |
| 12   | 1367397  | Setscrew .....        | 1   |
| 13   | 4154655  | Nut .....             | 1   |
| 14   | 2087841  | Plate .....           | 1   |
| 15   | .....    | O-Ring .....          | 1   |
| 16   | .....    | Housing .....         | 1   |
| 17   | .....    | Poppet .....          | 1   |
| 18   | 1377257  | Spring .....          | 1   |
| 19   | 2096414  | Plug .....            | 1   |
| 20   | 2055002  | O-Ring .....          | 1   |
|      | 4652802  | Kit-Seal Master ..... | 1   |

## HYDRAULIC CONTROL VALVE (FIGURE 10-13) LIFT SECTION — MANUAL CONTROLS



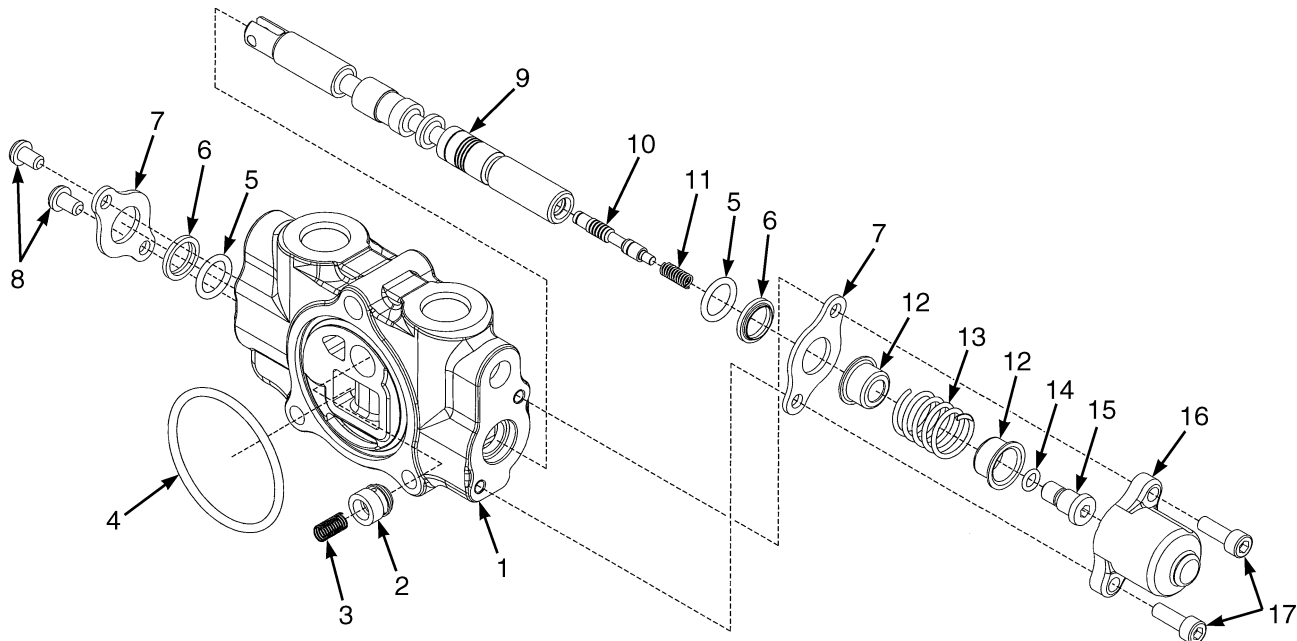
BP140264



**HYDRAULIC CONTROL VALVE  
LIFT SECTION – MANUAL CONTROLS**

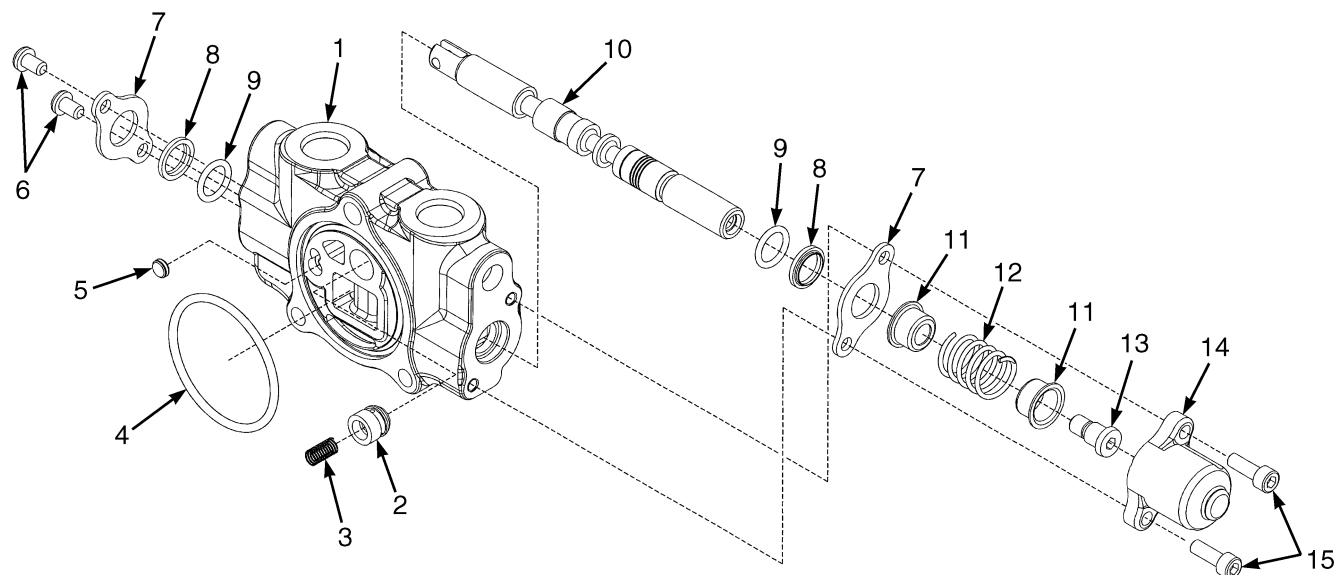
| ITEM | PART NO. | DESCRIPTION                | QTY |
|------|----------|----------------------------|-----|
| 1    | 4154624  |                            |     |
|      | 4662628  | Spool (Tilt Section) ..... | 1   |
| 2    | 4154659  | Valve-Poppet .....         | 1   |
| 3    | 2055001  | Spring .....               | 1   |
| 4    | 4614505  | O-Ring .....               | 2   |
| 5    | 4614506  | Wiper .....                | 2   |
| 6    | 2054995  | Plate .....                | 2   |
| 7    | 2055003  | Screw .....                | 2   |
| 8    | 4154660  | Bolt .....                 | 1   |
| 9    | 4154658  | Shutoff Valve .....        | 1   |
| 10   | 4154656  | Solenoid .....             | 1   |
| 11   | 2087828  | Plug .....                 | 1   |
| 12   | .....    | O-Ring .....               | 1   |
| 13   | 2087844  | Spring .....               | 1   |
| 14   | 4154657  | Valve-Poppet .....         | 1   |
| 15   | .....    | Spool .....                | 1   |
| 16   | 2054997  | Spring Seat .....          | 2   |
| 17   | 2087826  | Spring .....               | 1   |
| 18   | 2054998  | Capscrew .....             | 1   |
| 19   | 2054996  | Cap .....                  | 1   |
| 20   | 2055004  | Capscrew .....             | 2   |

## HYDRAULIC CONTROL VALVE (FIGURE 10-14) TILT SECTION — MANUAL CONTROLS



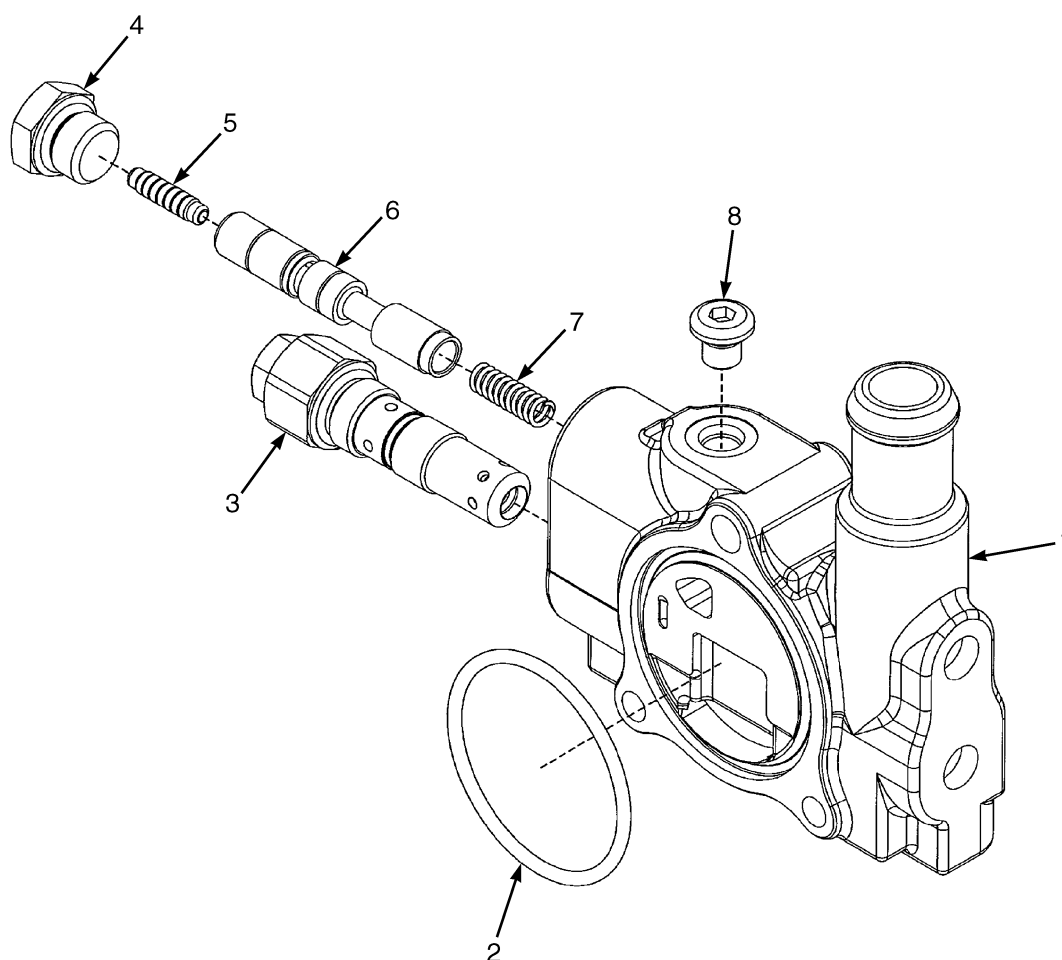
BP140265

| ITEM | PART NO. | DESCRIPTION                | QTY |
|------|----------|----------------------------|-----|
| 1    | 4154622  | Spool (Tilt Section) ..... | 1   |
| 2    | 4662629  | Valve-Poppet .....         | 1   |
| 3    | 4154659  | Spring .....               | 1   |
| 4    | 2055001  | Spring .....               | 1   |
| 5    | 2055002  | O-Ring .....               | 1   |
| 6    | 4614505  | O-Ring .....               | 2   |
| 7    | 4614506  | Wiper .....                | 2   |
| 8    | 2054995  | Plate .....                | 2   |
| 9    | 2055003  | Screw .....                | 2   |
| 10   | .....    | Spool .....                | 1   |
| 11   | 4154662  | Valve .....                | 1   |
| 12   | 2087851  | Spring .....               | 1   |
| 13   | 2054997  | Spring Seat .....          | 2   |
| 14   | 2087826  | Spring .....               | 1   |
| 15   | 4614507  | O-Ring .....               | 1   |
| 16   | 2087850  | Capscrew .....             | 1   |
| 17   | 2054996  | Cap .....                  | 1   |
|      | 2055004  | Capscrew .....             | 2   |
|      | 4652802  | Kit-Seal Master .....      | 1   |

**HYDRAULIC CONTROL VALVE (FIGURE 10-15)**  
**AUXILIARY SECTION — MANUAL CONTROLS**

BP140266

| ITEM | PART NO. | DESCRIPTION                                | QTY |
|------|----------|--------------------------------------------|-----|
| 1    | 4154623  |                                            |     |
|      | 4662630  | Spool (Aux Section) (Aux.1), (Aux.2) ..... | 1   |
| 2    | 4154659  | Valve-Poppet .....                         | 1   |
| 3    | 2055001  | Spring .....                               | 1   |
| 4    | 2055002  | O-Ring .....                               | 1   |
| 5    | .....    | Plug .....                                 | 1   |
| 6    | 2055003  | Screw .....                                | 2   |
| 7    | 2054995  | Plate .....                                | 2   |
| 8    | 4614506  | Wiper .....                                | 2   |
| 9    | 4614505  | O-Ring .....                               | 2   |
| 10   | .....    | Spool .....                                | 1   |
| 11   | 2054997  | Spring Seat .....                          | 2   |
| 12   | 2087826  | Spring .....                               | 1   |
| 13   | 2054998  | Capscrew .....                             | 1   |
| 14   | 2054996  | Cap .....                                  | 1   |
| 15   | 2055004  | Capscrew .....                             | 2   |
|      | 4652802  | Kit-Seal Master .....                      | 1   |

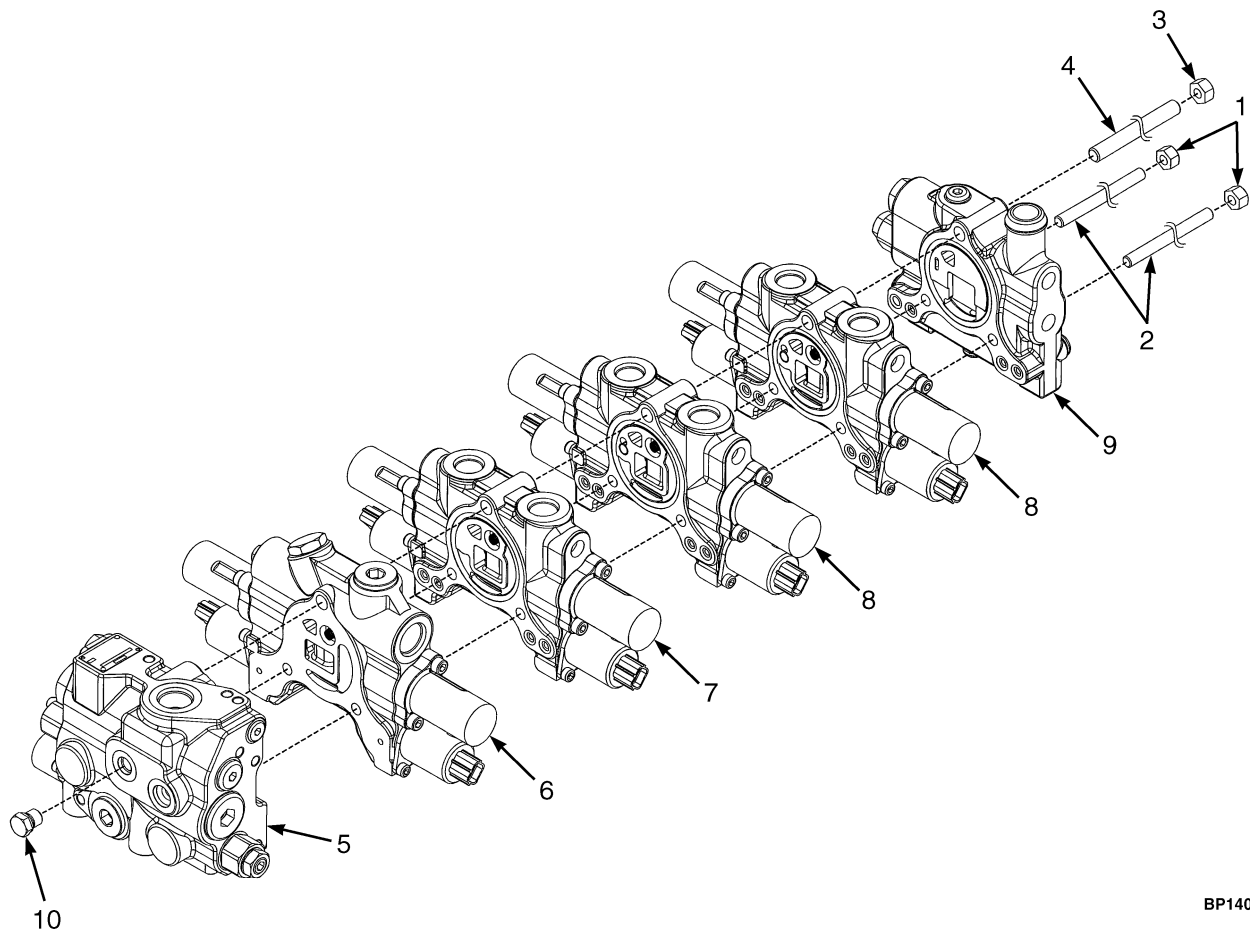
**HYDRAULIC CONTROL VALVE (FIGURE 10-16)**  
**OUTLET SECTION — MANUAL CONTROLS**

BP140267

**HYDRAULIC CONTROL VALVE  
OUTLET SECTION – MANUAL CONTROLS**

| ITEM | PART NO.                                            | DESCRIPTION            | QTY |
|------|-----------------------------------------------------|------------------------|-----|
| 1    | <del>4154667</del><br><del>4662627</del><br>4662631 | Spool Outlet .....     | 1   |
| 2    | 2055002                                             | O-Ring .....           | 1   |
| 3    | 4154665                                             | Relief Valve .....     | 1   |
| 4    | 4154664                                             | Plug .....             | 1   |
| 5    | .....                                               | Piston .....           | 1   |
| 6    | .....                                               | Spool .....            | 1   |
| 7    | 4154663                                             | Spring .....           | 1   |
| 8    | 2087836                                             | Plug .....             | 1   |
|      | 4168171                                             | Kit-Relief Valve ..... | 1   |
|      | 4652802                                             | Kit-Seal Master .....  | 1   |
|      | <del>4154667</del><br><del>4662627</del><br>4662631 | Spool Outlet .....     | 1   |

## HYDRAULIC CONTROL VALVE (FIGURE 10-17) E-HYDRAULIC CONTROLS — THREE AND FOUR FUNCTION



BP140268

## HYDRAULIC CONTROL VALVE

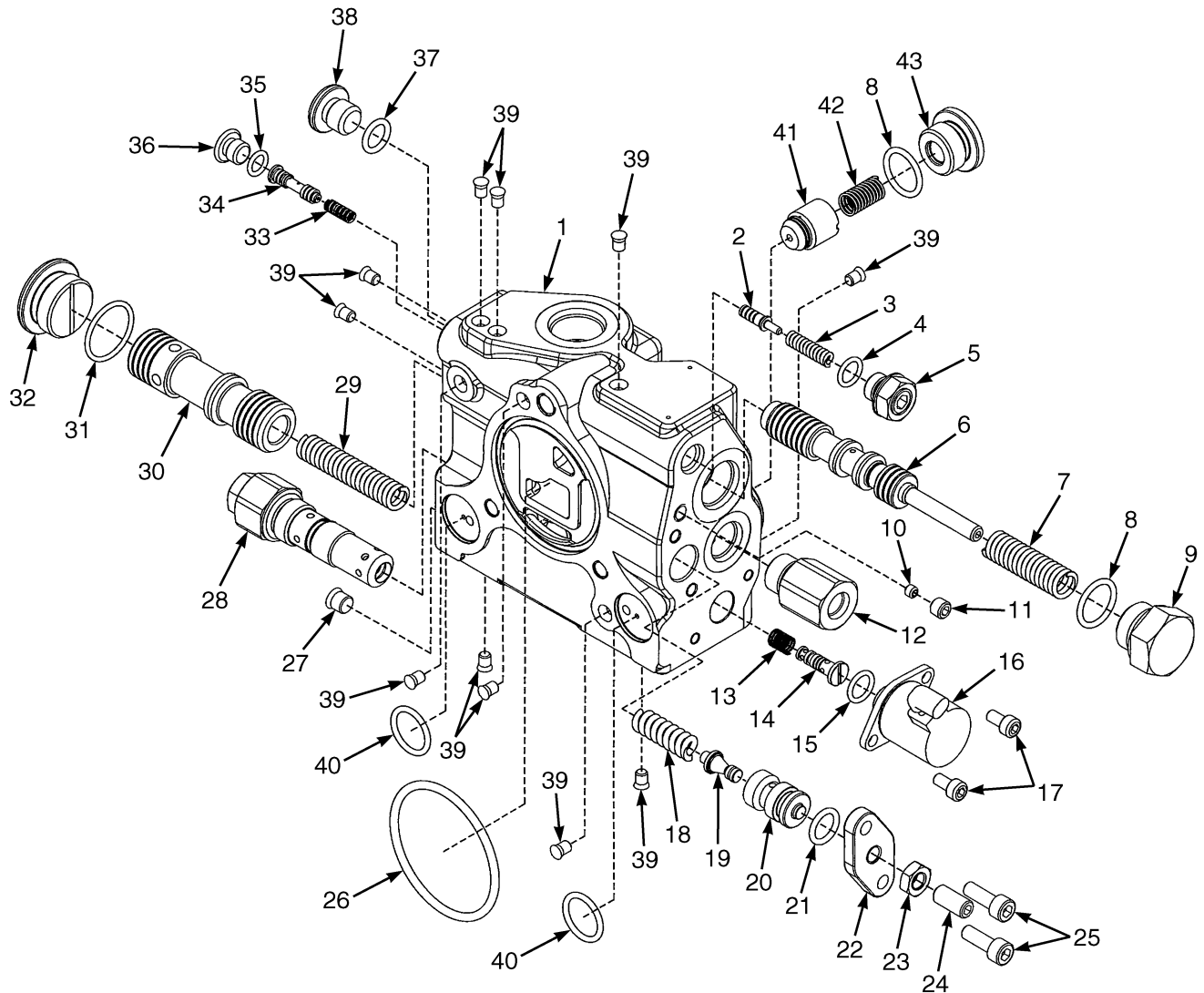
### E-HYDRAULIC CONTROLS – THREE AND FOUR FUNCTION

**KEY:****A: 3 Function****B: 4 Function**

| ITEM | PART NO.         | DESCRIPTION                                    | QTY |    |
|------|------------------|------------------------------------------------|-----|----|
|      |                  |                                                | A   | B  |
|      | 4649089          | Hyd Control Valve .....                        | 1   | .. |
|      | 4649090          | Hyd Control Valve .....                        | ..  | 1  |
| 1    | 2054988          | Nut .....                                      | 2   | 2  |
| 2    | 2087450          | Tie Rod .....                                  | 2   | .. |
| 2    | 4172957          | Tie Rod .....                                  | ..  | 2  |
| 3    | 2054990          | Nut .....                                      | 1   | 1  |
| 4    | 2087455          | Tie Rod .....                                  | 1   | .. |
| 4    | 4172958          | Tie Rod .....                                  | ..  | 1  |
| 5    | 4173042          | Housing Inlet Section (☞Figure 10-18).....     | 1   | 1  |
| 6    | 4173043          | Housing Lift Section (☞Figure 10-19).....      | 1   | 1  |
| 7    | 4173044          | Housing Tilt Section (☞Figure 10-20).....      | 1   | 1  |
| 8    | 4173045          | Housing Auxiliary Section (☞Figure 10-21)..... | 1   | 2  |
| 9    | 4173046          | Housing Outlet Section (☞Figure 10-22).....    | 1   | 1  |
| 10   | .....            | Plug .....                                     | 1   | 1  |
|      | <b>a</b> 4652803 | Kit-Seal .....                                 | 1   | 1  |

**FOOTNOTES:****a** Not Illustrated

## HYDRAULIC CONTROL VALVE (FIGURE 10-18) INLET SECTION — E-HYDRAULIC CONTROLS



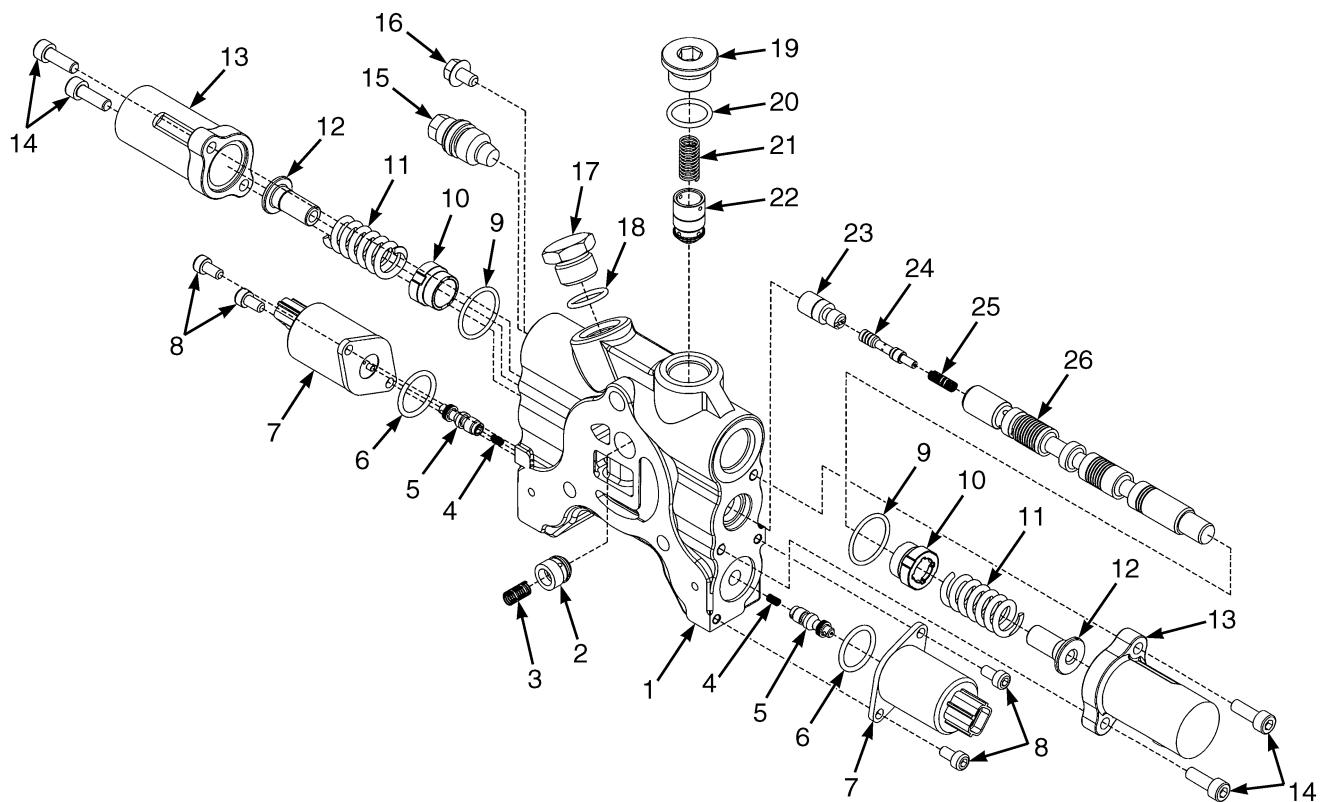
BP140269



**HYDRAULIC CONTROL VALVE  
INLET SECTION – E-HYDRAULIC CONTROLS**

| ITEM | PART NO. | DESCRIPTION                 | QTY |
|------|----------|-----------------------------|-----|
| 1    | 4173042  | Housing Inlet Section ..... | 1   |
| 2    | .....    | Piston .....                | 1   |
| 3    | 2096425  | Spring .....                | 1   |
| 4    | 1377259  | O-Ring .....                | 1   |
| 5    | 1377256  | Kit-Adjuster .....          | 1   |
| 6    | .....    | Spool .....                 | 1   |
| 7    | 2096413  | Spring .....                | 1   |
| 8    | 1328829  | O-Ring .....                | 2   |
| 9    | 2096416  | Plug .....                  | 1   |
| 10   | .....    | Plug .....                  | 1   |
| 11   | 4087835  | Plug .....                  | 1   |
| 12   | 4154634  | Plug .....                  | 1   |
| 13   | 2096433  | Spring .....                | 1   |
| 14   | .....    | Shuttle .....               | 1   |
| 15   | .....    | O-Ring .....                | 1   |
| 16   | 4173000  | Solenoid .....              | 1   |
| 17   | 2096435  | Bolt .....                  | 2   |
| 18   | 1377257  | Spring .....                | 1   |
| 19   | 1377263  | Valve-Poppet .....          | 1   |
| 20   | 1377262  | Housing .....               | 1   |
| 21   | 1377260  | O-Ring .....                | 1   |
| 22   | 2087841  | Plate .....                 | 1   |
| 23   | 2087842  | Nut .....                   | 1   |
| 24   | 1367397  | Setscrew .....              | 1   |
| 25   | 2055004  | Capscrew .....              | 2   |
| 26   | 2055002  | O-Ring .....                | 1   |
| 27   | .....    | Plug .....                  | 1   |
| 28   | 4168171  | Kit-Relief Valve .....      | 1   |
| 29   | 2096412  | Spring .....                | 1   |
| 30   | .....    | Spool .....                 | 1   |
| 31   | .....    | O-Ring .....                | 1   |
| 32   | 2096414  | Plug .....                  | 1   |
| 33   | 4172959  | Spring .....                | 1   |
| 34   | .....    | Valve .....                 | 1   |
| 35   | .....    | O-Ring .....                | 1   |
| 36   | 4172960  | Plug .....                  | 1   |
| 37   | .....    | O-Ring .....                | 1   |
| 38   | 2096419  | Plug .....                  | 1   |
| 39   | .....    | Plug .....                  | 11  |
| 40   | 4154733  | O-Ring .....                | 1   |
| 41   | 2096429  | Valve-Poppet .....          | 1   |
| 42   | 2087844  | Spring .....                | 1   |
| 43   | 2087828  | Plug .....                  | 1   |
|      | 4652803  | Kit-Seal .....              | 1   |

## HYDRAULIC CONTROL VALVE (FIGURE 10-19) LIFT SECTION — E-HYDRAULIC CONTROLS

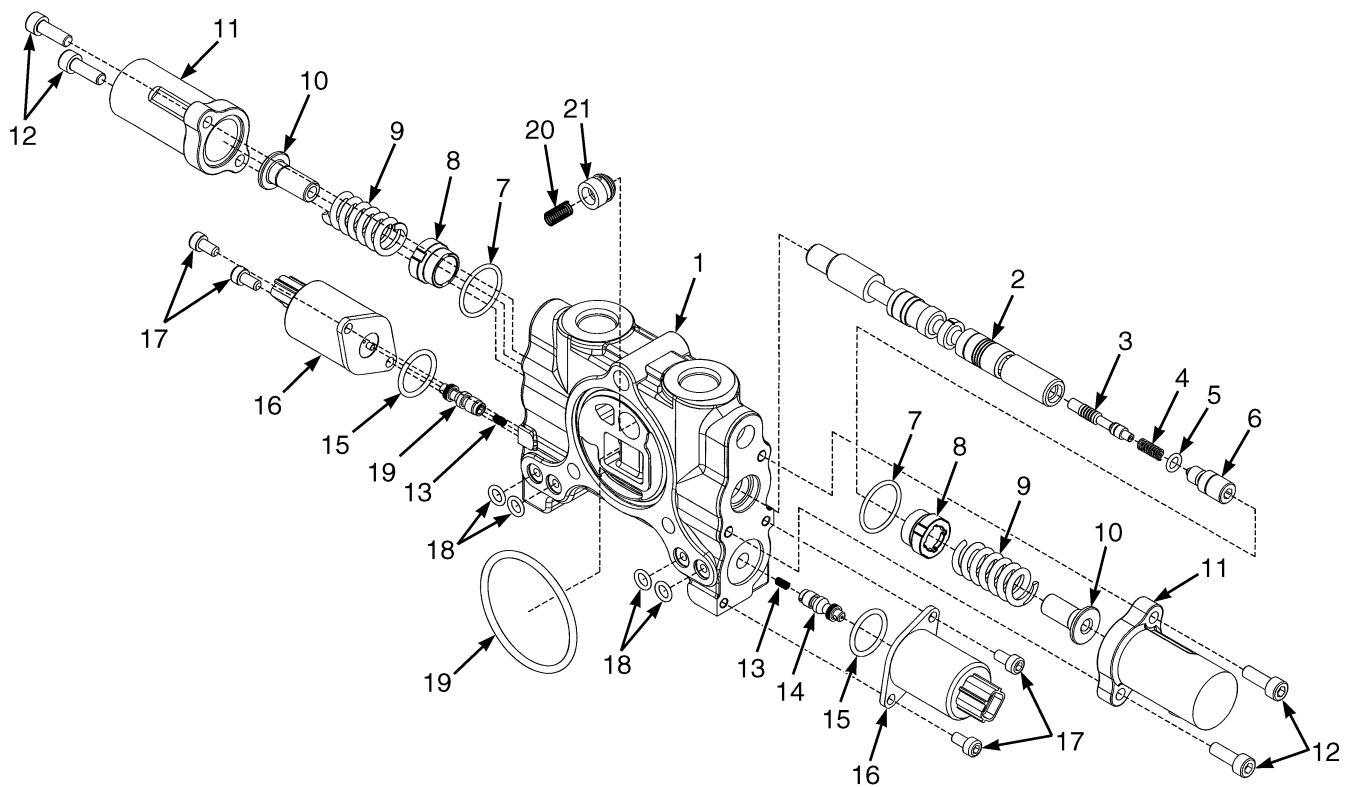


BP140270

**HYDRAULIC CONTROL VALVE  
LIFT SECTION – E-HYDRAULIC CONTROLS**

| ITEM | PART NO. | DESCRIPTION                | QTY |
|------|----------|----------------------------|-----|
| 1    | 4173043  | Housing Lift Section ..... | 1   |
| 2    | 4154659  | Valve-Poppet .....         | 1   |
| 3    | 2055001  | Spring .....               | 1   |
| 4    | 4172990  | Spring .....               | 2   |
| 5    | 4172991  | Spool .....                | 2   |
| 6    | 4154722  | O-Ring .....               | 2   |
| 7    | 4172992  | Solenoid .....             | 2   |
| 8    | 2096435  | Bolt .....                 | 4   |
| 9    | .....    | O-Ring .....               | 2   |
| 10   | 4172962  | Spring Seat .....          | 2   |
| 11   | 4154718  | Spring .....               | 2   |
| 12   | 4154716  | Spring Seat .....          | 2   |
| 13   | 4172961  | Cap .....                  | 2   |
| 14   | 2055004  | Capscrew .....             | 4   |
| 15   | 4154658  | Shutoff Valve .....        | 1   |
| 16   | 4154660  | Bolt .....                 | 1   |
| 17   | 342703   | Plug .....                 | 1   |
| 18   | 16484    | O-Ring .....               | 1   |
| 19   | 2087828  | Plug .....                 | 1   |
| 20   | 1328829  | O-Ring .....               | 1   |
| 21   | 2087844  | Spring .....               | 1   |
| 22   | 4154657  | Valve-Poppet .....         | 1   |
| 23   | 4172963  | Spool .....                | 1   |
| 24   | .....    | Valve .....                | 1   |
| 25   | 2096453  | Spring .....               | 1   |
| 26   | .....    | Spool .....                | 1   |

## HYDRAULIC CONTROL VALVE (FIGURE 10-20) TILT SECTION — E-HYDRAULIC CONTROLS

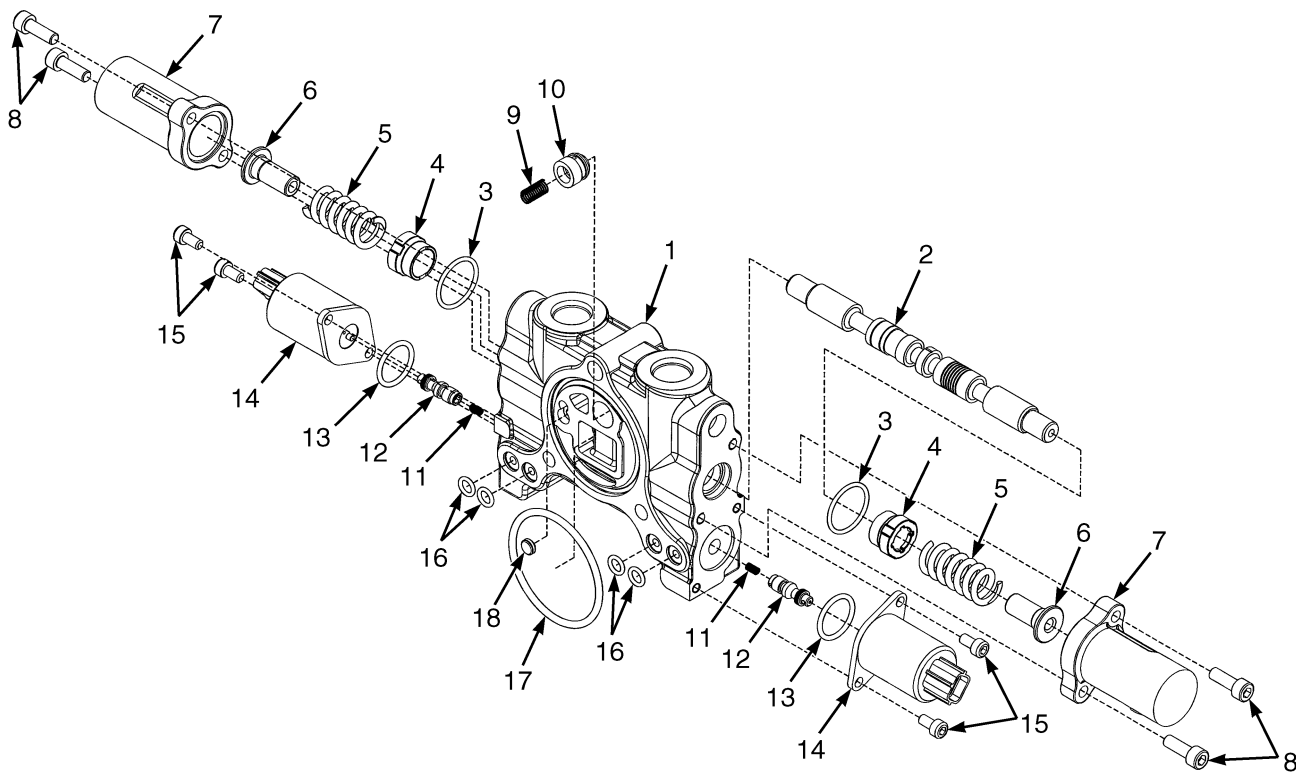


BP140271

**HYDRAULIC CONTROL VALVE  
TILT SECTION – E-HYDRAULIC CONTROLS**

| ITEM | PART NO. | DESCRIPTION                | QTY |
|------|----------|----------------------------|-----|
| 1    | 4173044  | Housing Tilt Section ..... | 1   |
| 2    | .....    | Spool .....                | 1   |
| 3    | .....    | Valve .....                | 1   |
| 4    | 4172996  | Spring .....               | 1   |
| 5    | 4614507  | O-Ring .....               | 1   |
| 6    | 4172995  | Spool .....                | 1   |
| 7    | 2096443  | O-Ring .....               | 2   |
| 8    | 4172962  | Spring Seat .....          | 2   |
| 9    | 4154718  | Spring .....               | 2   |
| 10   | 4154716  | Spring Seat .....          | 2   |
| 11   | 4172993  | Cap .....                  | 2   |
| 12   | 2055004  | Capscrew .....             | 4   |
| 13   | 4172990  | Spring .....               | 2   |
| 14   | 4172991  | Spool .....                | 2   |
| 15   | 4154722  | O-Ring .....               | 2   |
| 16   | 4172992  | Solenoid .....             | 2   |
| 17   | 2096435  | Bolt .....                 | 4   |
| 18   | 4154728  | O-Ring .....               | 4   |
| 19   | 2055002  | O-Ring .....               | 1   |
| 20   | 2055001  | Spring .....               | 1   |
| 21   | 4154659  | Valve-Poppet .....         | 1   |
|      | 4652803  | Kit-Seal .....             | 1   |

## HYDRAULIC CONTROL VALVE (FIGURE 10-21) AUXILIARY SECTION — E-HYDRAULIC CONTROLS

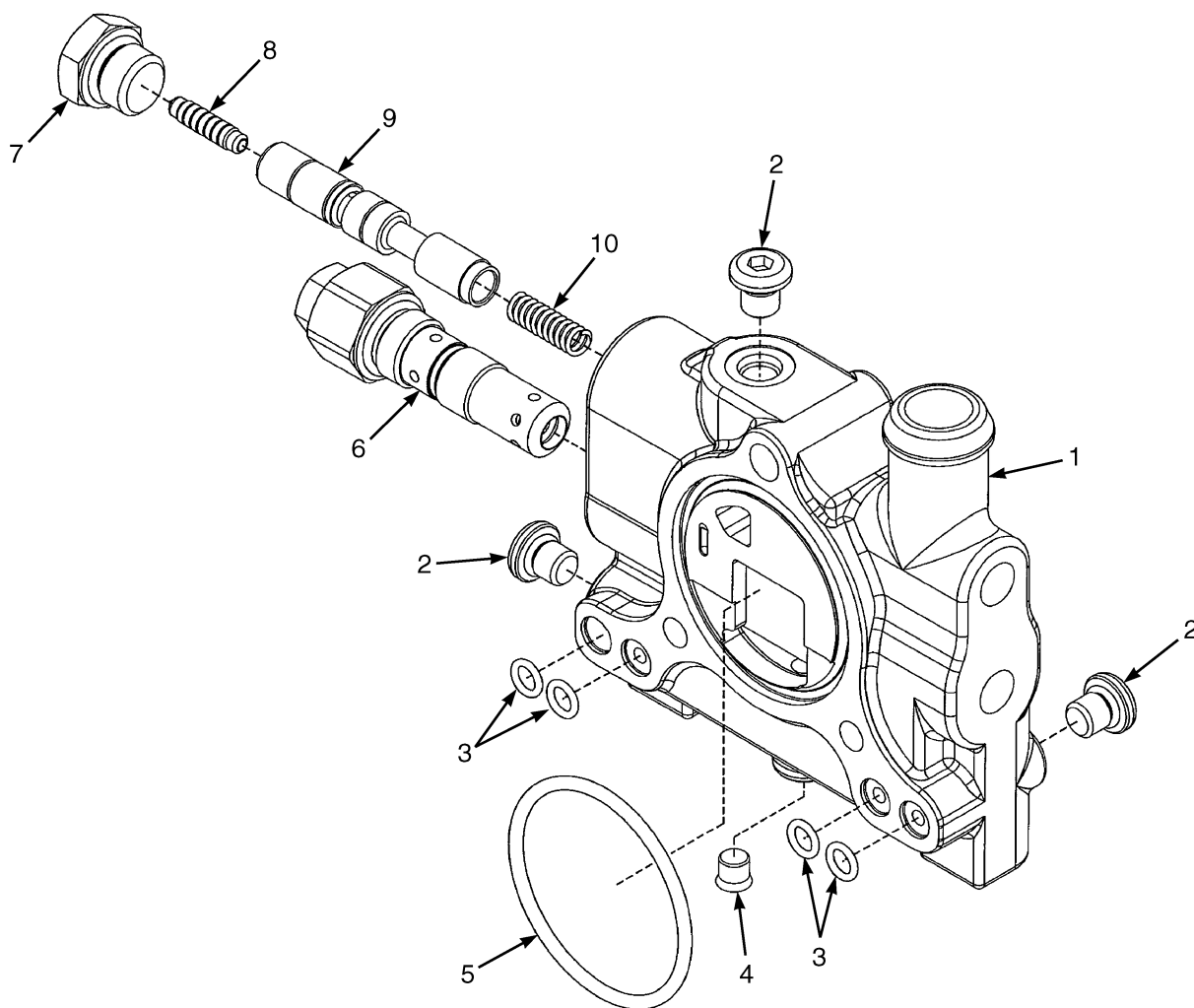


BP140272

### HYDRAULIC CONTROL VALVE AUXILIARY SECTION – E-HYDRAULIC CONTROLS

| ITEM | PART NO. | DESCRIPTION                     | QTY |
|------|----------|---------------------------------|-----|
| 1    | 4173045  | Housing Auxiliary Section ..... | 1   |
| 2    | .....    | Spool .....                     | 1   |
| 3    | .....    | O-Ring .....                    | 2   |
| 4    | 4172962  | Spring Seat .....               | 2   |
| 5    | 4154718  | Spring .....                    | 2   |
| 6    | 4154716  | Spring Seat .....               | 2   |
| 7    | 4172961  | Cap .....                       | 2   |
| 8    | 2055004  | Capscrew .....                  | 4   |
| 9    | 2055001  | Spring .....                    | 1   |
| 10   | 4154659  | Valve-Poppet .....              | 1   |
| 11   | 4172990  | Spring .....                    | 2   |
| 12   | 4172991  | Spool .....                     | 2   |
| 13   | 4154722  | O-Ring .....                    | 2   |
| 14   | 4172992  | Solenoid .....                  | 2   |
| 15   | 2096435  | Bolt .....                      | 4   |
| 16   | 4154728  | O-Ring .....                    | 4   |
| 17   | 2055002  | O-Ring .....                    | 1   |
| 18   | .....    | Plate .....                     | 1   |
|      | 4652803  | Kit-Seal .....                  | 1   |

## HYDRAULIC CONTROL VALVE (FIGURE 10-22) OUTLET SECTION — E-HYDRAULIC CONTROLS



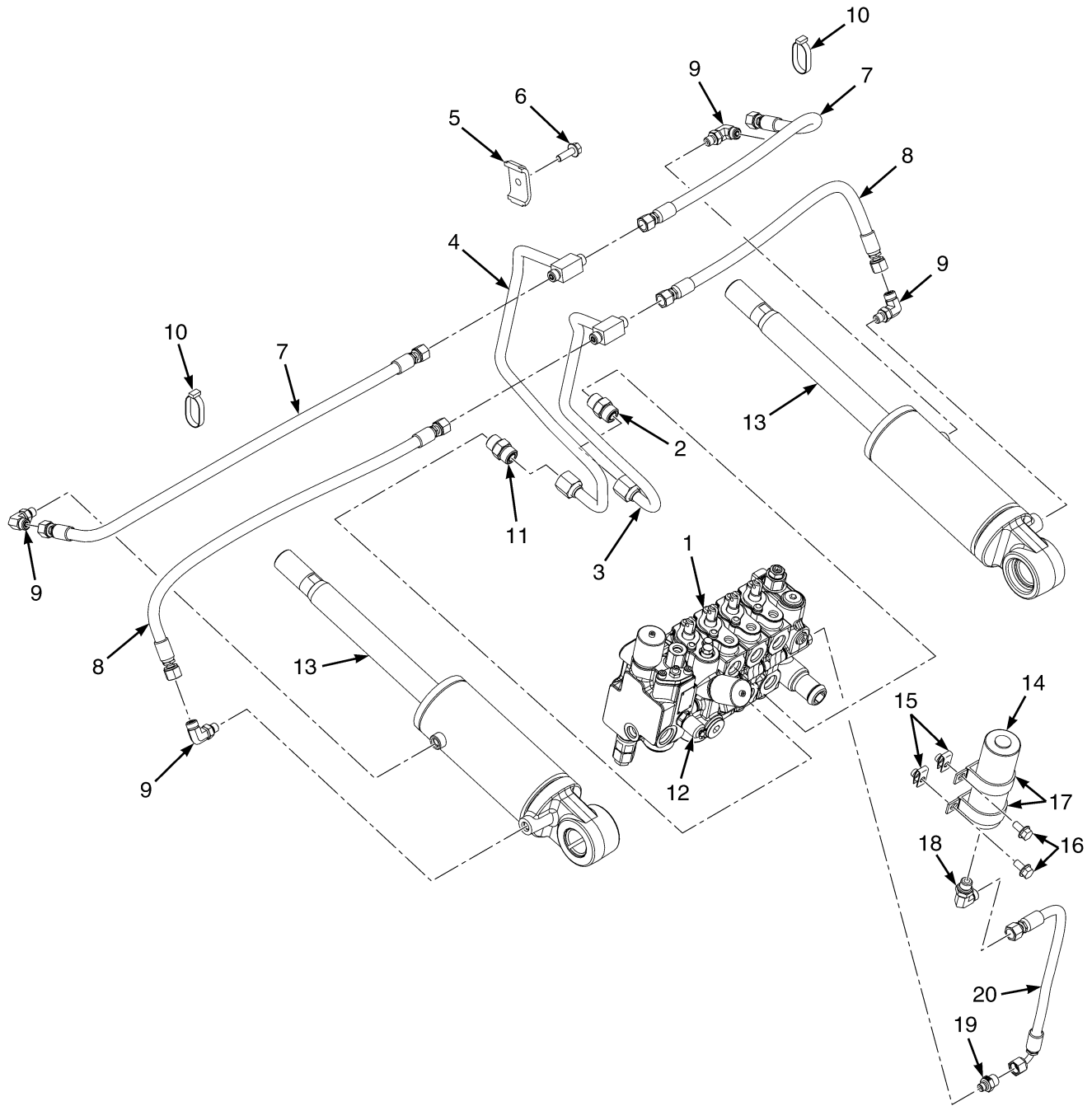
BP140273



**HYDRAULIC CONTROL VALVE  
OUTLET SECTION – E-HYDRAULIC CONTROLS**

| ITEM | PART NO. | DESCRIPTION                  | QTY |
|------|----------|------------------------------|-----|
| 1    | 4173046  | Housing Outlet Section ..... | 1   |
| 2    | 4172960  | Plug .....                   | 3   |
| 3    | 4154728  | O-Ring .....                 | 4   |
| 4    | .....    | Plug .....                   | 1   |
| 5    | 2055002  | O-Ring .....                 | 1   |
| 6    | 4168171  | Kit-Relief Valve .....       | 1   |
| 7    | 4172997  | Plug .....                   | 1   |
| 8    | .....    | Piston .....                 | 1   |
| 9    | .....    | Spool .....                  | 1   |
| 10   | 4154663  | Spring .....                 | 1   |
|      | 4652803  | Kit-Seal .....               | 1   |

## TILT HYDRAULICS AND ACCUMULATOR (FIGURE 10-23)

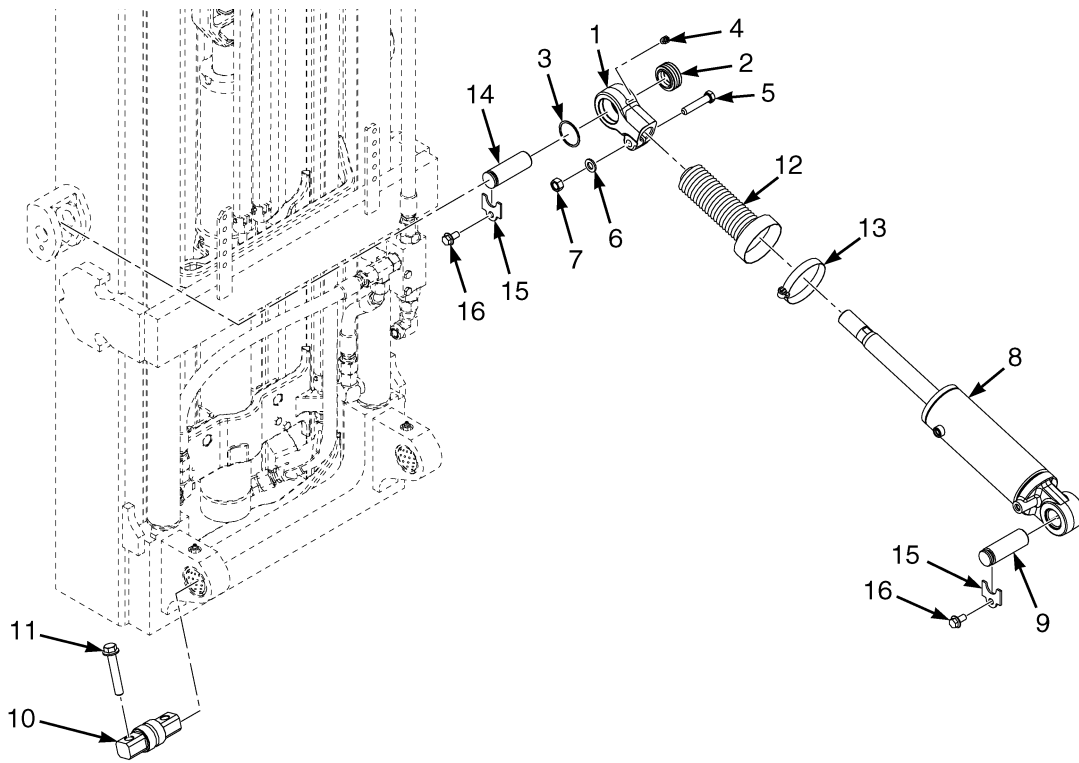


BP150825

**TILT HYDRAULICS AND ACCUMULATOR****KEY:****A: Manual Hydraulics****B: E-Hydraulics**

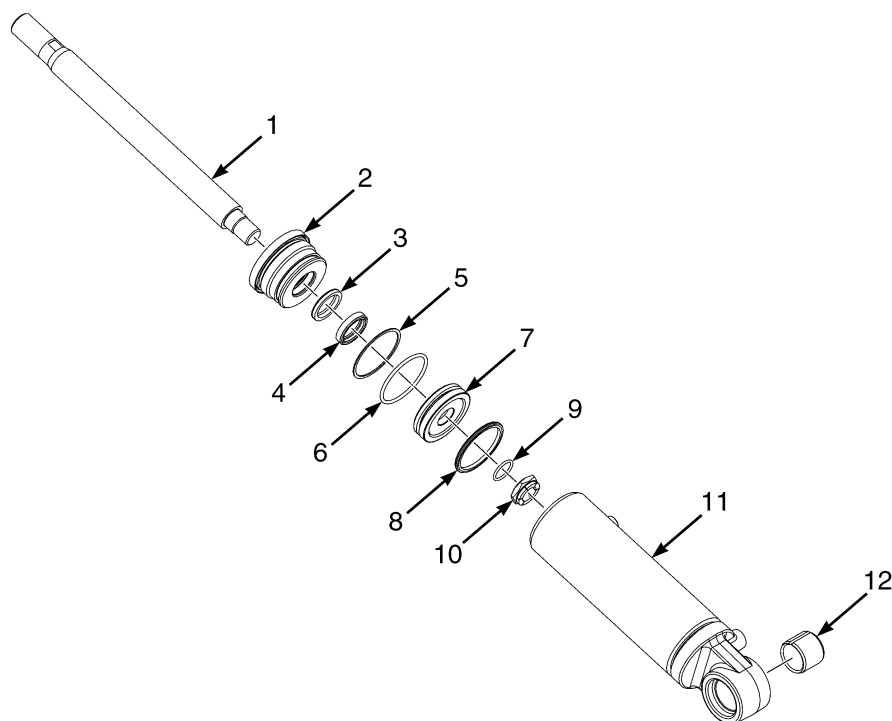
| ITEM | PART NO.           | DESCRIPTION                                                 | QTY |    |
|------|--------------------|-------------------------------------------------------------|-----|----|
|      |                    |                                                             | A   | B  |
| 1    | .....              | Hydraulic Control Valve (☞Figure 10-11, ☞Figure 10-17)..... | 1   | 1  |
| 2    | 6996684            |                                                             |     |    |
|      | 1473887            | Fitting .....                                               | 1   | 1  |
| 3    | 4652947            | Tube Assy .....                                             | 1   | .. |
| 3    | 4652913            | Tube Assy .....                                             | ..  | 1  |
| 4    | 4652912            | Tube Assy .....                                             | 1   | .. |
| 4    | 4652914            | Tube Assy .....                                             | ..  | 1  |
| 5    | 2021896            | Hose Clamp .....                                            | 1   | 1  |
| 6    | 1510113            | Capscrew .....                                              | 1   | 1  |
| 7    | <del>4650440</del> |                                                             |     |    |
|      | 4654501            | Hose Assy .....                                             | 2   | 2  |
| 8    | <del>4650405</del> |                                                             |     |    |
|      | 4654500            | Hose Assy .....                                             | 2   | 2  |
| 9    | 1487058            | Fitting .....                                               | 4   | 4  |
| 10   | 129563             | Strap Clamp .....                                           | 2   | 2  |
| 11   | 4159138            | Fitting .....                                               | 1   | 1  |
| 12   | 2061646            | Fitting (Diagnostic) .....                                  | 1   | 1  |
| 13   | .....              | Tilt Cylinders (☞Figure 10-24).....                         | 1   | 1  |
| 14   | 4609405            | Accumulator .....                                           | ..  | 1  |
| 15   | 1480237            | Nut (Fold Over) .....                                       | ..  | 2  |
| 16   | <del>4109993</del> |                                                             |     |    |
|      | 1527879            | Capscrew .....                                              | ..  | 2  |
| 17   | 181899             | Clamp .....                                                 | ..  | 2  |
| 18   | 1487059            | Fitting .....                                               | ..  | 1  |
| 19   | 4157723            | Fitting .....                                               | ..  | 1  |
| 20   | 4651845            | Hose Assy .....                                             | ..  | 1  |
|      | <b>a</b> 1545546   | Fitting .....                                               | ..  | 1  |

**FOOTNOTES:****a** Not Illustrated

**TILT CYLINDER AND MAST INSTALLATION (FIGURE 10-24)**

BP230019

| ITEM | PART NO. | DESCRIPTION                         | QTY |
|------|----------|-------------------------------------|-----|
| 1    | 4124990  | Rod End .....                       | 2   |
| 2    | 356035   | Bushing .....                       | 1   |
| 3    | 4125004  | Snap Ring .....                     | 1   |
| 4    | 16001    | Grease Fitting .....                | 1   |
| 5    | 1597381  | Capscrew .....                      | 2   |
| 6    | 1581852  | Washer .....                        | 2   |
| 7    | 1581848  | Nut .....                           | 2   |
| 8    | .....    | Tilt Cylinder (☞ Figure 10-25)..... | 2   |
| 9    | 4118530  | Pin .....                           | 2   |
| 10   | 4118529  | Pin .....                           | 2   |
| 11   | 4152751  | Capscrew .....                      | 4   |
| 12   | 2087502  | Boot .....                          | 2   |
| 13   | 115696   | Hose Clamp .....                    | 2   |
| 14   | 4124995  | Pin .....                           | 2   |
| 15   | 2026926  | Retaining Plate .....               | 4   |
| 16   | 1527883  | Capscrew .....                      | 4   |

**TILT CYLINDERS (FIGURE 10-25)**

BP230020

| ITEM | PART NO.           | DESCRIPTION                                     | QTY |
|------|--------------------|-------------------------------------------------|-----|
|      | <b>b</b> 4638321   | Tilt Cylinder-Mast .....                        | 2   |
|      | <b>c</b> 4638319   | Tilt Cylinder-Mast .....                        | 2   |
|      | <b>a</b> 4638320   | Tilt Cylinder-Mast .....                        | 2   |
| 1    | <b>b</b> 4639347   | Cylinder Rod .....                              | 1   |
| 1    | <b>a c</b> 4639346 | Cylinder Rod .....                              | 1   |
| 2    | 1338744            | Gland .....                                     | 1   |
| 3    | 1383062            | Rod Wiper .....                                 | 1   |
| 4    | 1381082            | Rod Seal .....                                  | 1   |
| 5    | 154375             | Back-Up Ring .....                              | 1   |
| 6    | 46388              | O-Ring .....                                    | 1   |
| 7    | 1338741            | Piston .....                                    | 1   |
| 8    | 2044370            | Piston Seal .....                               | 1   |
| 9    | 39374              | O-Ring .....                                    | 1   |
| 10   | 2302899            | Locknut .....                                   | 1   |
| 11   | <b>a b</b> 4639345 | Tube Wldmt-Cylinder .....                       | 1   |
| 11   | <b>c</b> 4639344   | Tube Wldmt-Cylinder .....                       | 1   |
| 12   | 4118635            | Bushing .....                                   | 1   |
|      | 1492644            | Kit-Seal (Tilt Cylinder) (Service Option) ..... | 1   |

**FOOTNOTES:**

**a** 10° Forward/6° Back  
**b** 6° Forward/10° Back

**c** 6° Forward/6° Back

[illegible]



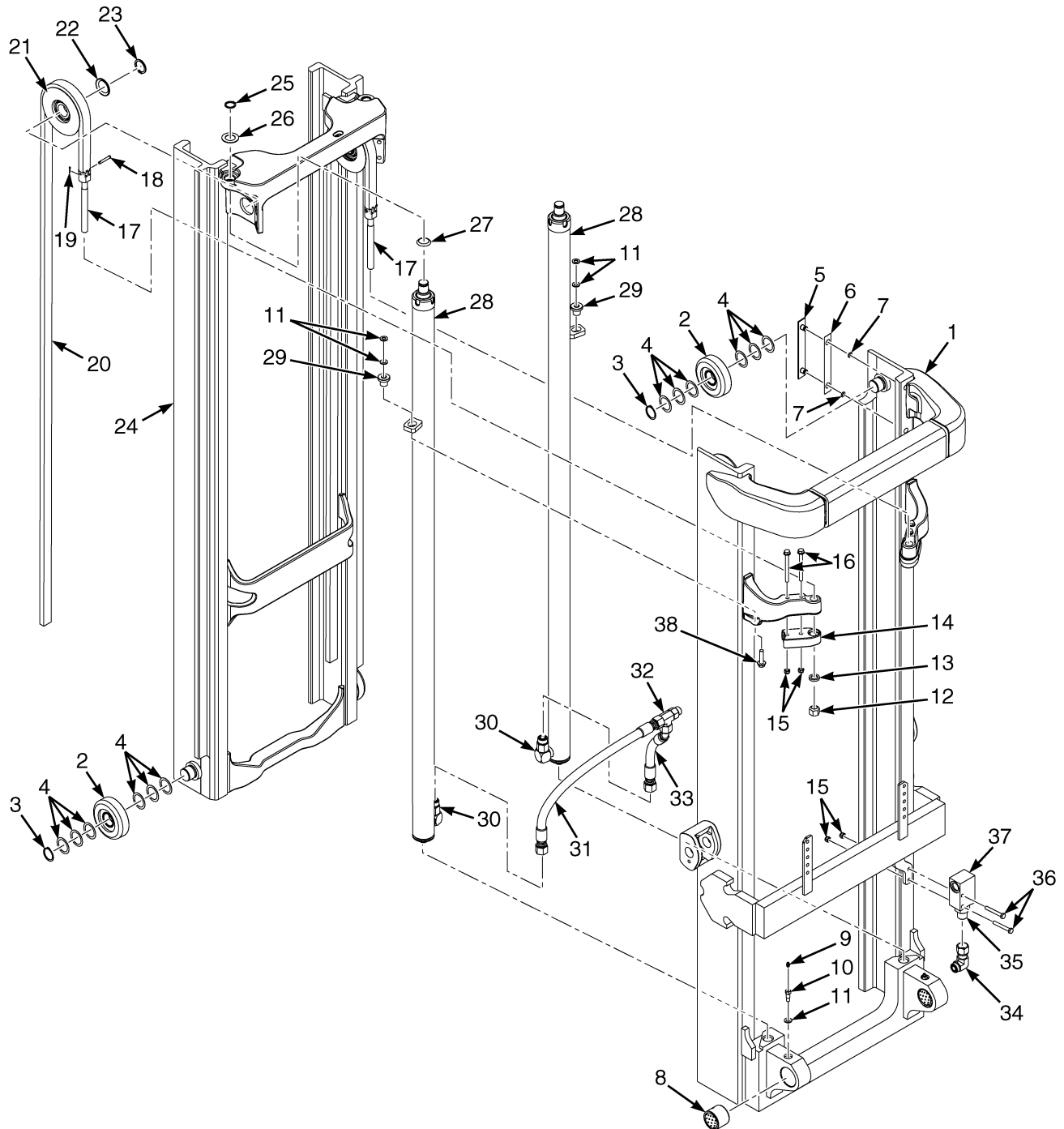




**SECTION 11**  
**MAST-TWO STAGE LIMITED FREE-LIFT**

| <b>DESCRIPTION</b>                       | <b>PAGE</b> |
|------------------------------------------|-------------|
| CARRIAGE                                 |             |
| TWO STAGE LIMITED FREE-LIFT .....        | 11-18       |
| HEADER HOSES AND ATTACHING PARTS .....   | 11-14       |
| MAIN LIFT CYLINDER                       |             |
| TWO STAGE LIMITED FREE LIFT - A389 ..... | 11-6        |
| TWO STAGE LIMITED FREE LIFT - A399 ..... | 11-12       |
| MAST ASSEMBLY                            |             |
| A389 .....                               | 11-2        |
| A399 .....                               | 11-8        |

## MAST ASSEMBLY (FIGURE 11-1) A389



BP170802

**MAST ASSEMBLY****A389****H40-50XT**

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                        | 3252 mm<br>(128.0 in.)         | 3752 mm<br>(147.7 in.) | 4292 mm<br>(169.0 in.) | 4792 mm<br>(188.7 in.) |
|      | Mast<br>Group Number   | A389<br>3252                   | A389<br>3752           | A389<br>4292           | A389<br>4792           |
|      | Mast Assy              | 4640625                        | 4640630                | 4640635                | 4640640                |
| 1    | Outer Mast             | 4107510                        | 4107515                | 4107521                | 4107526                |
| 20   | Chain                  | 129361                         | 180176                 | 197327                 | 1342081                |
| 24   | Inner Mast             | 4054062                        | 4054067                | 4054072                | 4054076                |
| 28   | Lift Cylinder          | 4625308                        | 4625313                | 4625318                | 4625330                |

| ITEM | PART NO.           | DESCRIPTION                                            | QTY |
|------|--------------------|--------------------------------------------------------|-----|
|      | <b>a . . . . .</b> | Mast Assy . . . . .                                    | 1   |
| 1    | <b>a . . . . .</b> | Outer Mast . . . . .                                   | 1   |
| 2    | 1333396            | Load Roller ("B") (111.48/111.22) . . . . .            | 4   |
| 2    | 1395168            | Load Roller ("A") (111.10/110.84) (Optional) . . . . . | 4   |
| 2    | 1333397            | Load Roller ("C") (112.62/112.36) (Optional) . . . . . | 4   |
| 3    | 58901              | Snap Ring . . . . .                                    | 4   |
| 3    | 1374797            | Snap Ring (Optional) . . . . .                         | 4   |
| 4    | 129387             | Shim (0.020 in.) . . . . .                             | 24  |
| 5    | 215211             | Wear Strip . . . . .                                   | 2   |
| 6    | 131716             | Shim (0.020 in.) . . . . .                             | 2   |
| 6    | 131715             | Shim (0.007 in.) (Optional) . . . . .                  | 2   |
| 7    | 104506             | O-Ring . . . . .                                       | 4   |
| 8    | 4033414            | Bushing . . . . .                                      | 2   |
| 9    | 13957              | Grease Fitting . . . . .                               | 2   |
| 9    | 16041              | Grease Fitting (Optional) . . . . .                    | 2   |
| 10   | 4033412            | Capscrew , Lubed . . . . .                             | 2   |
| 11   | 1581557            | Washer . . . . .                                       | 6   |
| 12   | 4031973            | Nut . . . . .                                          | 2   |
| 13   | 297649             | Ring . . . . .                                         | 2   |
| 14   | 4051079            | Restraint . . . . .                                    | 2   |
| 15   | 1581566            | Nut . . . . .                                          | 6   |
| 16   | 4082846            | Capscrew . . . . .                                     | 4   |
| 17   | 4072717            | Chain Anchor . . . . .                                 | 2   |
| 18   | 1514866            | Pin . . . . .                                          | 2   |
| 19   | 15211              | Cotter Pin . . . . .                                   | 2   |
| 20   | <b>a . . . . .</b> | Chain . . . . .                                        | 2   |
| 21   | 4054944            | Chain Sheave Assembly . . . . .                        | 2   |
| 21   | 1378699            | Ball Bearing . . . . .                                 | 1   |
| 21   | 37752              | Snap Ring . . . . .                                    | 1   |
| 22   | 335661             | Spacer . . . . .                                       | 2   |
| 23   | 304526             | Snap Ring . . . . .                                    | 2   |
| 24   | <b>a . . . . .</b> | Inner Mast . . . . .                                   | 1   |
| 25   | 131358             | Snap Ring . . . . .                                    | 2   |
| 26   | 1333382            | Washer (0.060 in.) . . . . .                           | 2   |

**MAST ASSEMBLY**  
**A389**

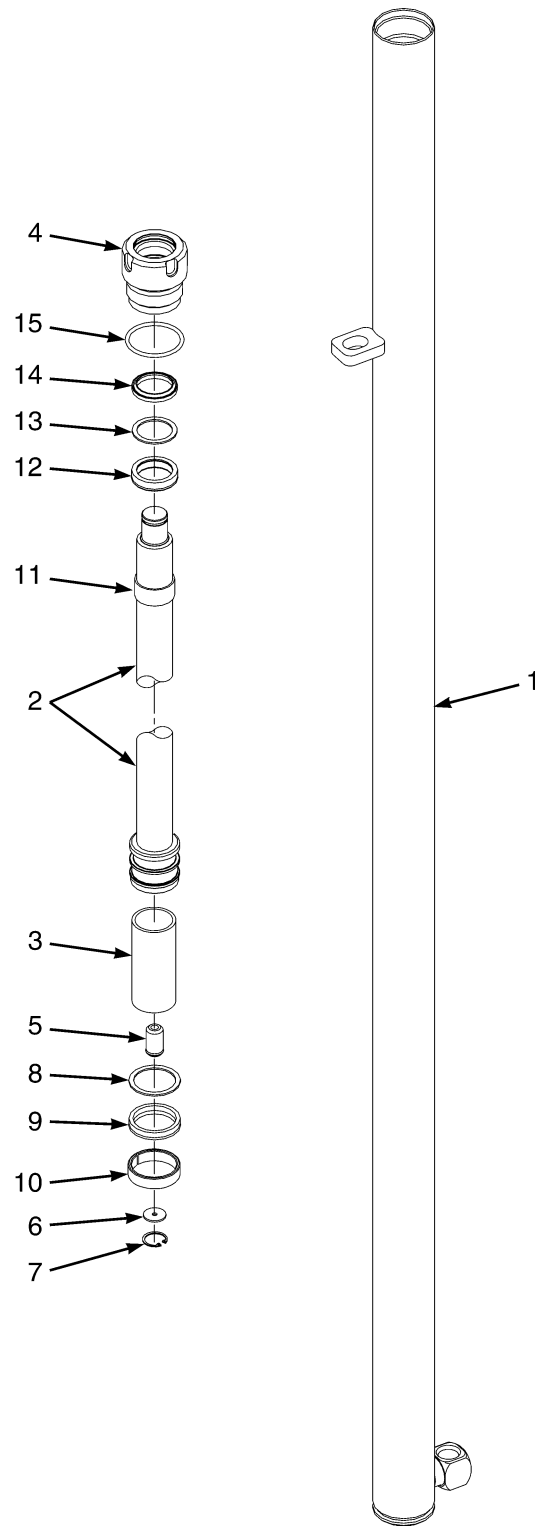
| ITEM | PART NO.           | DESCRIPTION                       | QTY |
|------|--------------------|-----------------------------------|-----|
| 27   | 1354915            | Washer (0.010 in.) .....          | 2   |
| 27   | 1354916            | Washer (0.030 in.) .....          | 2   |
| 27   | 1354917            | Washer (0.060 in.) .....          | 2   |
| 28   | <b>a</b> . . . . . | Lift Cylinder (☞Figure 11-2)..... | 2   |
| 29   | 4054558            | Isolator .....                    | 2   |
| 30   | 2062686            | Hyd Velocity Fuse .....           | 2   |
| 31   | 4620151            | Hose Assy .....                   | 1   |
| 32   | 1592853            | Fitting .....                     | 1   |
| 33   | 4620152            | Hose Assy .....                   | 1   |
| 34   | 1486773            | Fitting .....                     | 1   |
| 35   | 2062651            | Lowering Control Valve .....      | 1   |
| 36   | 1581836            | Capscrew .....                    | 2   |
| 37   | 4058916            | Housing (Lowering Control) .....  | 1   |
| 38   | 4029051            | Capscrew .....                    | 2   |

**FOOTNOTES:****a** Refer to Table

## NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## MAIN LIFT CYLINDER (FIGURE 11-2) TWO STAGE LIMITED FREE LIFT — A389



BP170645

**MAIN LIFT CYLINDER  
TWO STAGE LIMITED FREE LIFT – A389****H40-50XT**

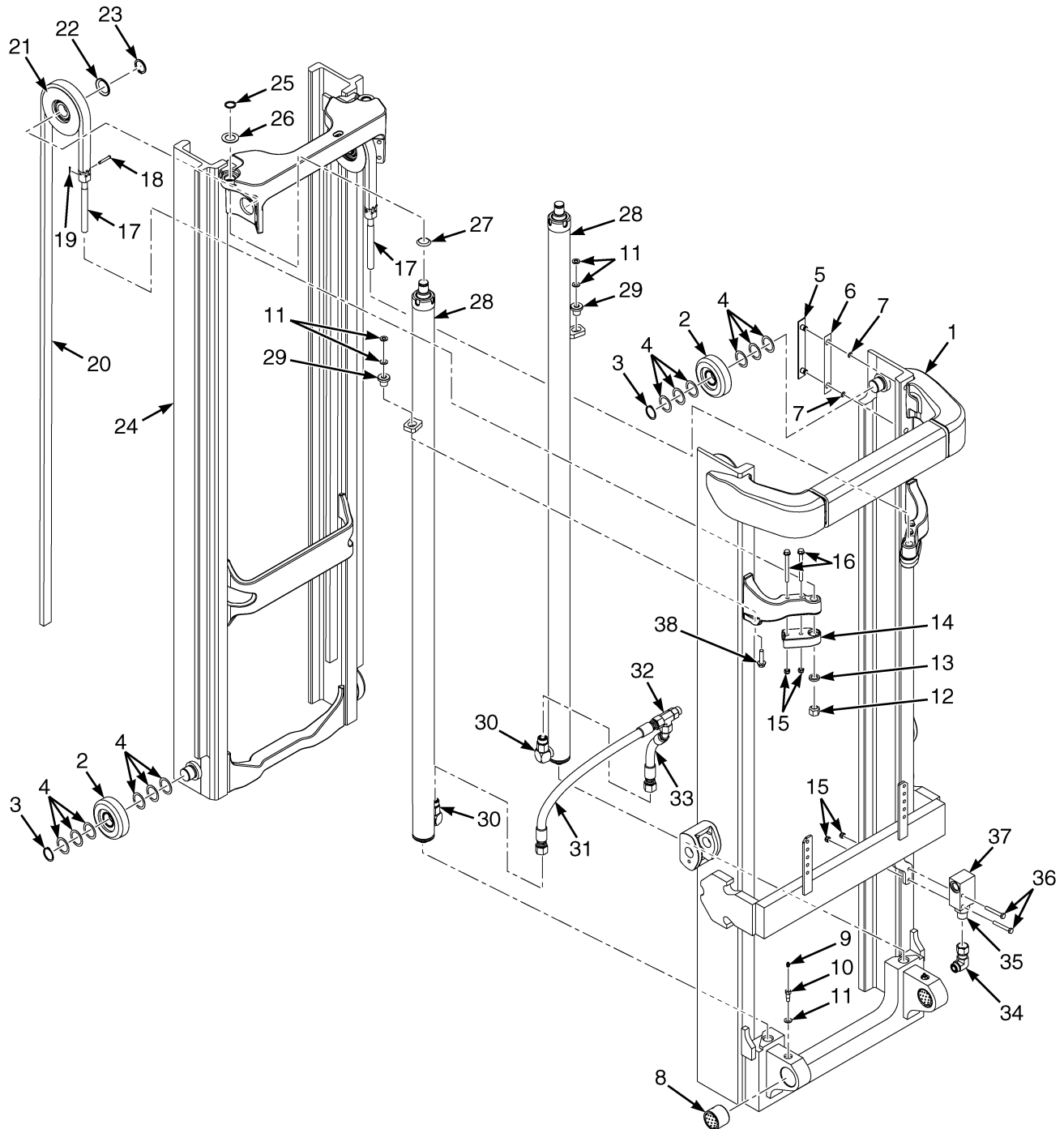
| ITEM | DESCRIPTION<br>1 2 3 4   | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|--------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                          | 3252 mm<br>(128.0 in.)         | 3752 mm<br>(147.7 in.) | 4292 mm<br>(169.0 in.) | 4792 mm<br>(188.7 in.) |
|      | Mast<br>Group Number     | A389<br>3252                   | A389<br>3752           | A389<br>4292           | A389<br>4792           |
|      | Cylinder<br>Group Number | 8607406                        | 8607411                | 8607416                | 8607451                |
|      | Lift Cylinder            | 4625308                        | 4625313                | 4625318                | 4625330                |
| 1    | Tube Wldmt-<br>Cylinder  | 4064606                        | 4064611                | 4064616                | 4064621                |
| 2    | Cylinder Rod             | 1355158                        | 1355178                | 1355199                | 1355217                |
| 3    | Spacer                   | ----                           | ----                   | 2045872                | 1355221                |

| ITEM | PART NO.    | DESCRIPTION               | QTY |
|------|-------------|---------------------------|-----|
|      | a . . . . . | Lift Cylinder .....       | 2   |
| 1    | a . . . . . | Tube Wldmt-Cylinder ..... | 1   |
| 2    | a . . . . . | Cylinder Rod .....        | 1   |
| 3    | a . . . . . | Spacer .....              | 1   |
| 4    | 4615847     | Gland .....               | 1   |
| 5    | 257913      | Check Valve .....         | 1   |
| 6    | 297531      | Washer .....              | 1   |
| 6    | 637635      | Washer (Optional) .....   | 1   |
| 7    | 187388      | Snap Ring .....           | 1   |
| 8    | 638246      | Back-Up Ring .....        | 1   |
| 9    | 1381064     | Piston Seal .....         | 1   |
| 10   | 1356750     | Wear Ring .....           | 1   |
| 11   | 322902      | Wear Ring .....           | 1   |
| 12   | 1356749     | Rod Seal .....            | 1   |
| 13   | 322824      | Back-Up Ring .....        | 1   |
| 14   | 1383063     | Rod Wiper .....           | 1   |
| 15   | 4028986     |                           |     |
|      | 92861       | O-Ring .....              | 1   |
|      | 4623973     | Kit-Seal .....            | 1   |

**FOOTNOTES:**

a Refer to Table

## MAST ASSEMBLY (FIGURE 11-3) A399



BP170802



**MAST ASSEMBLY****A399****H60XT**

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                        | 3059 mm<br>(120.4 in.)         | 3159 mm<br>(124.4 in.) | 4059 mm<br>(159.8 in.) | 4559 mm<br>(179.5 in.) |
|      | Mast<br>Group Number   | A399<br>3059                   | A399<br>3159           | A399<br>4059           | A399<br>4559           |
|      | Mast Assy              | 4640661                        | 4640662                | 4640671                | 4640676                |
| 1    | Outer Mast             | 4107510                        | 4107511                | 4107521                | 4107526                |
| 20   | Chain                  | 1342384                        | 1342126                | 1342136                | 1342394                |
| 24   | Inner Mast             | 4054062                        | 4054063                | 4054072                | 4054076                |
| 28   | Lift Cylinder          | 4625339                        | 4625340                | 4625349                | 4625354                |

| ITEM | PART NO.           | DESCRIPTION                                        | QTY |
|------|--------------------|----------------------------------------------------|-----|
|      | <b>a . . . . .</b> | Mast Assy .....                                    | 1   |
| 1    | <b>a . . . . .</b> | Outer Mast .....                                   | 1   |
| 2    | 1333396            | Load Roller ("B") (111.48/111.22) .....            | 4   |
| 2    | 1395168            | Load Roller ("A") (111.10/110.84) (Optional) ..... | 4   |
| 2    | 1333397            | Load Roller ("C") (112.62/112.36) (Optional) ..... | 4   |
| 3    | 58901              | Snap Ring .....                                    | 4   |
| 3    | 1374797            | Snap Ring (Optional) .....                         | 4   |
| 4    | 129387             | Shim (0.020 in.) .....                             | 24  |
| 5    | 215211             | Wear Strip .....                                   | 2   |
| 6    | 131716             | Shim (0.020 in.) .....                             | 2   |
| 6    | 131715             | Shim (0.007 in.) (Optional) .....                  | 2   |
| 7    | 104506             | O-Ring .....                                       | 4   |
| 8    | 4033414            | Bushing .....                                      | 2   |
| 9    | 13957              | Grease Fitting .....                               | 2   |
| 9    | 16041              | Grease Fitting (Optional) .....                    | 2   |
| 10   | 4033412            | Capscrew , Lubed .....                             | 2   |
| 11   | 1581557            | Washer .....                                       | 6   |
| 12   | 4031973            | Nut .....                                          | 2   |
| 13   | 297649             | Ring .....                                         | 2   |
| 14   | 4051079            | Restraint .....                                    | 2   |
| 15   | 1581566            | Nut .....                                          | 6   |
| 16   | 4082846            | Capscrew .....                                     | 4   |
| 17   | 4072704            | Chain Anchor .....                                 | 2   |
| 18   | 1514866            | Pin .....                                          | 2   |
| 19   | 15211              | Cotter Pin .....                                   | 2   |
| 20   | <b>a . . . . .</b> | Chain .....                                        | 2   |
| 21   | 4048508            | Chain Sheave Assembly .....                        | 2   |
| 21   | 1378699            | Ball Bearing .....                                 | 1   |
| 21   | 37752              | Snap Ring .....                                    | 1   |
| 22   | 335661             | Spacer .....                                       | 2   |
| 23   | 304526             | Snap Ring .....                                    | 2   |
| 24   | <b>a . . . . .</b> | Inner Mast .....                                   | 1   |
| 25   | 131358             | Snap Ring .....                                    | 2   |
| 26   | 1333382            | Washer (0.060 in.) .....                           | 2   |

**MAST ASSEMBLY  
A399**

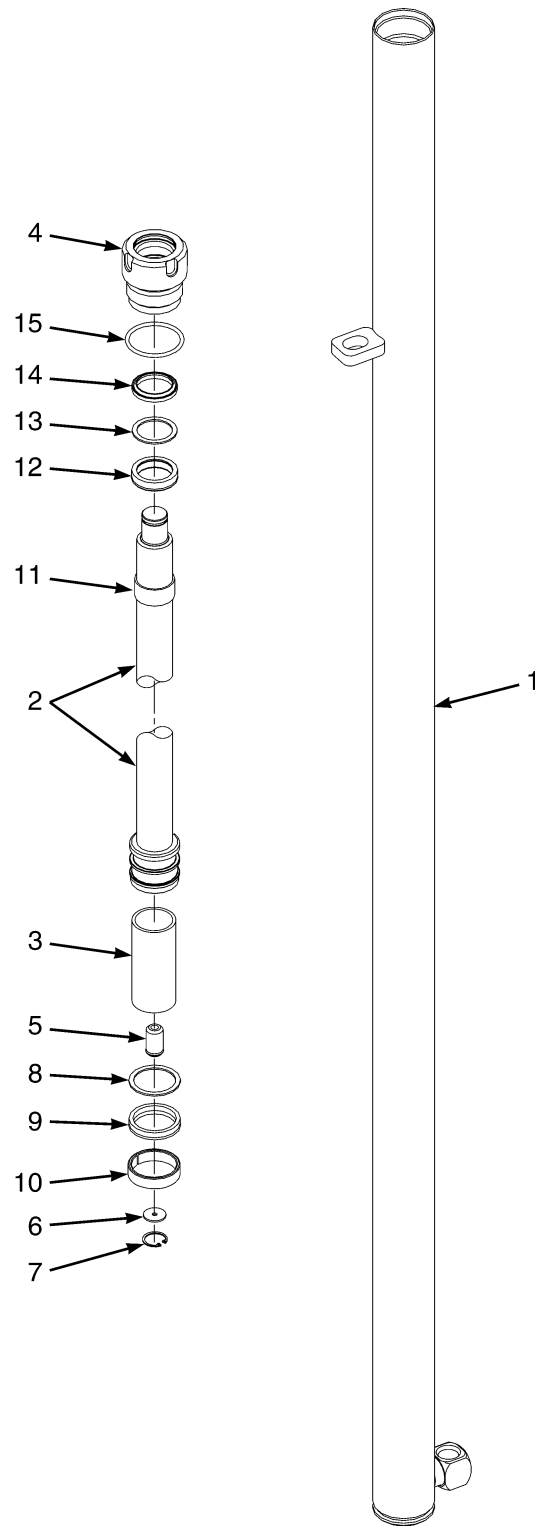
| ITEM | PART NO.           | DESCRIPTION                       | QTY |
|------|--------------------|-----------------------------------|-----|
| 27   | 1354915            | Washer (0.010 in.) .....          | 2   |
| 27   | 1354916            | Washer (0.030 in.) .....          | 2   |
| 27   | 1354917            | Washer (0.060 in.) .....          | 2   |
| 28   | <b>a</b> . . . . . | Lift Cylinder (☞Figure 11-4)..... | 2   |
| 29   | 4054558            | Isolator .....                    | 2   |
| 30   | 2062687            | Hyd Velocity Fuse .....           | 2   |
| 31   | 4620151            | Hose Assy .....                   | 1   |
| 32   | 1592853            | Fitting .....                     | 1   |
| 33   | 4620152            | Hose Assy .....                   | 1   |
| 34   | 1486773            | Fitting .....                     | 1   |
| 35   | 2062652            | Lowering Control Valve .....      | 1   |
| 36   | 1581836            | Capscrew .....                    | 2   |
| 37   | 4058916            | Housing (Lowering Control) .....  | 1   |
| 38   | 4029051            | Capscrew .....                    | 2   |

**FOOTNOTES:****a** Refer to Table

## NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## MAIN LIFT CYLINDER (FIGURE 11-4) TWO STAGE LIMITED FREE LIFT — A399



BP170645

**MAIN LIFT CYLINDER  
TWO STAGE LIMITED FREE LIFT – A399****H60XT**

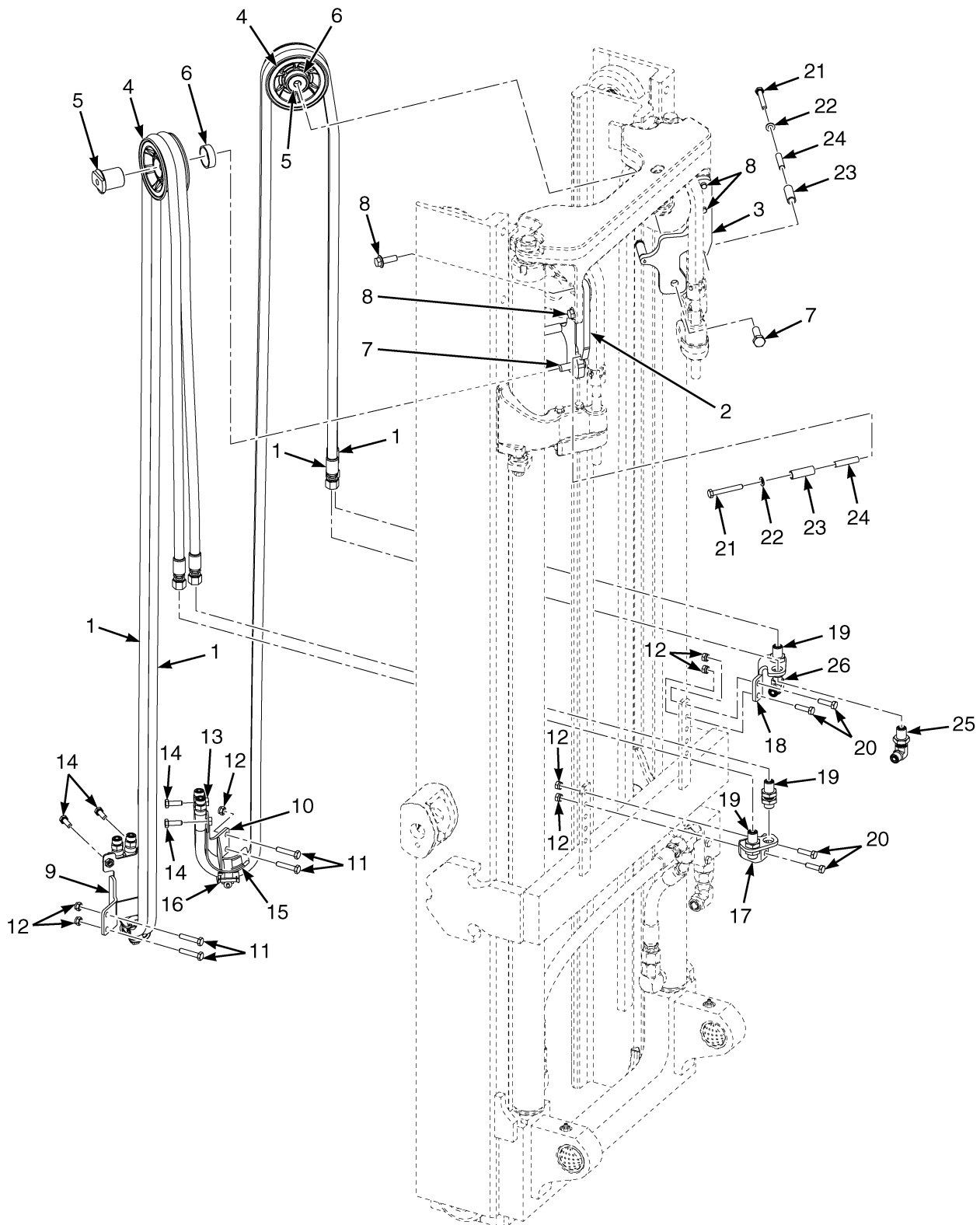
| ITEM | DESCRIPTION<br>1 2 3 4   | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|--------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                          | 3059 mm<br>(120.4 in.)         | 3159 mm<br>(124.4 in.) | 4059 mm<br>(159.8 in.) | 4559 mm<br>(179.5 in.) |
|      | Mast<br>Group Number     | A399<br>3059                   | A399<br>3159           | A399<br>4059           | A399<br>4559           |
|      | Cylinder<br>Group Number | 8607505                        | 8607506                | 8607552                | 8607557                |
|      | Lift Cylinder            | 4625339                        | 4625340                | 4625349                | 4625354                |
| 1    | Tube Wldmt-<br>Cylinder  | 4064635                        | 4064636                | 4064645                | 4064650                |
| 2    | Cylinder Rod             | 1355367                        | 1355371                | 1355414                | 1355434                |
| 3    | Spacer                   | 1355711                        | 1355711                | 2088124                | 2088124                |

| ITEM | PART NO.    | DESCRIPTION                   | QTY |
|------|-------------|-------------------------------|-----|
|      | a . . . . . | Lift Cylinder . . . . .       | 2   |
| 1    | a . . . . . | Tube Wldmt-Cylinder . . . . . | 1   |
| 2    | a . . . . . | Cylinder Rod . . . . .        | 1   |
| 3    | a . . . . . | Spacer . . . . .              | 1   |
| 4    | 4615848     | Gland . . . . .               | 1   |
| 5    | 257913      | Check Valve . . . . .         | 1   |
| 6    | 297531      | Washer . . . . .              | 1   |
| 6    | 637635      | Washer (Optional) . . . . .   | 1   |
| 7    | 187388      | Snap Ring . . . . .           | 1   |
| 8    | 335012      | Back-Up Ring . . . . .        | 1   |
| 9    | 1381063     | Piston Seal . . . . .         | 1   |
| 10   | 1356751     | Wear Ring . . . . .           | 1   |
| 11   | 322902      | Wear Ring . . . . .           | 1   |
| 12   | 1356749     | Rod Seal . . . . .            | 1   |
| 13   | 322824      | Back-Up Ring . . . . .        | 1   |
| 14   | 1383063     | Rod Wiper . . . . .           | 1   |
| 15   | 59229       | O-Ring . . . . .              | 1   |
|      | 4623974     | Kit-Seal . . . . .            | 1   |

**FOOTNOTES:**

a Refer to Table

## HEADER HOSES AND ATTACHING PARTS (FIGURE 11-5)



BP170803

**HEADER HOSES AND ATTACHING PARTS****H40-50XT**

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                        | 3252 mm<br>(128.0 in.)         | 3752 mm<br>(147.7 in.) | 4292 mm<br>(169.0 in.) | 4792 mm<br>(188.7 in.) |
|      | Mast<br>Group Number   | A389<br>3252                   | A389<br>3752           | A389<br>4292           | A389<br>4792           |
| 1    | Header Hose            | 4636859                        | 4636864                | 4636869                | 4636874                |

**H60XT**

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                        | 3059 mm<br>(120.4 in.)         | 3159 mm<br>(124.4 in.) | 4059 mm<br>(159.8 in.) | 4559 mm<br>(179.5 in.) |
|      | Mast<br>Group Number   | A399<br>3059                   | A399<br>3159           | A399<br>4059           | A399<br>4559           |
| 1    | Header Hose            | 4636859                        | 4636860                | 4636869                | 4636874                |

**KEY:****A: 3 Function****B: 4 Function**

| ITEM | PART NO.           | DESCRIPTION         | QTY |   |
|------|--------------------|---------------------|-----|---|
|      |                    |                     | A   | B |
| 1    | <b>b</b> . . . . . | Header Hose .....   | 2   | 4 |
| 2    | 4132420            | Bracket .....       | 1   | 1 |
| 3    | 4132421            | Bracket .....       | ..  | 1 |
| 4    | 4048781            | Hose Sheave .....   | 1   | 2 |
| 4    | 4050091            | Bushing .....       | 1   | 1 |
| 5    | 4013268            | Stubshaft .....     | 1   | 2 |
| 6    | 4051293            | Spacer .....        | 1   | 2 |
| 7    | 1581591            | Capscrew .....      | 1   | 2 |
| 8    | 4051501            | Capscrew .....      | 2   | 4 |
| 9    | 4058930            | Bracket Wldmt ..... | 1   | 1 |
| 10   | 4058935            | Bracket Wldmt ..... | ..  | 1 |
| 11   | 1581582            | Capscrew .....      | 2   | 4 |
| 12   | 1581566            | Nut .....           | 4   | 8 |
| 13   | 4059830            | Clamp .....         | 1   | 2 |
| 14   | 1581581            | Capscrew .....      | 2   | 4 |
| 15   | 369804             | Clamp .....         | 1   | 2 |
| 16   | 1477996            | Hose Clamp .....    | 1   | 2 |
| 17   | 4122876            | Bracket .....       | 1   | 1 |
| 18   | 4122875            | Bracket .....       | ..  | 1 |
| 19   | 1528573            | Fitting .....       | 2   | 3 |
| 20   | 1696161            | Capscrew .....      | 2   | 4 |
| 21   | 1581836            | Capscrew .....      | 2   | 4 |
| 22   | 4166624            |                     |     |   |
|      | 1581556            | Washer .....        | 2   | 4 |
| 23   | 4138115            | Roller .....        | 2   | 4 |
| 24   | 4138114            | Roller .....        | 2   | 4 |
| 25   | 1528579            | Fitting .....       | ..  | 1 |

## HEADER HOSES AND ATTACHING PARTS

## KEY:

A: 3 Function

B: 4 Function

| ITEM | PART NO.         | DESCRIPTION                         | QTY |   |
|------|------------------|-------------------------------------|-----|---|
|      |                  |                                     | A   | B |
| 26   | 1473895          | Fitting .....                       | ..  | 1 |
|      | <b>a</b> 1529015 | Cap (Without auxiliary hoses) ..... | 2   | 4 |

## FOOTNOTES:

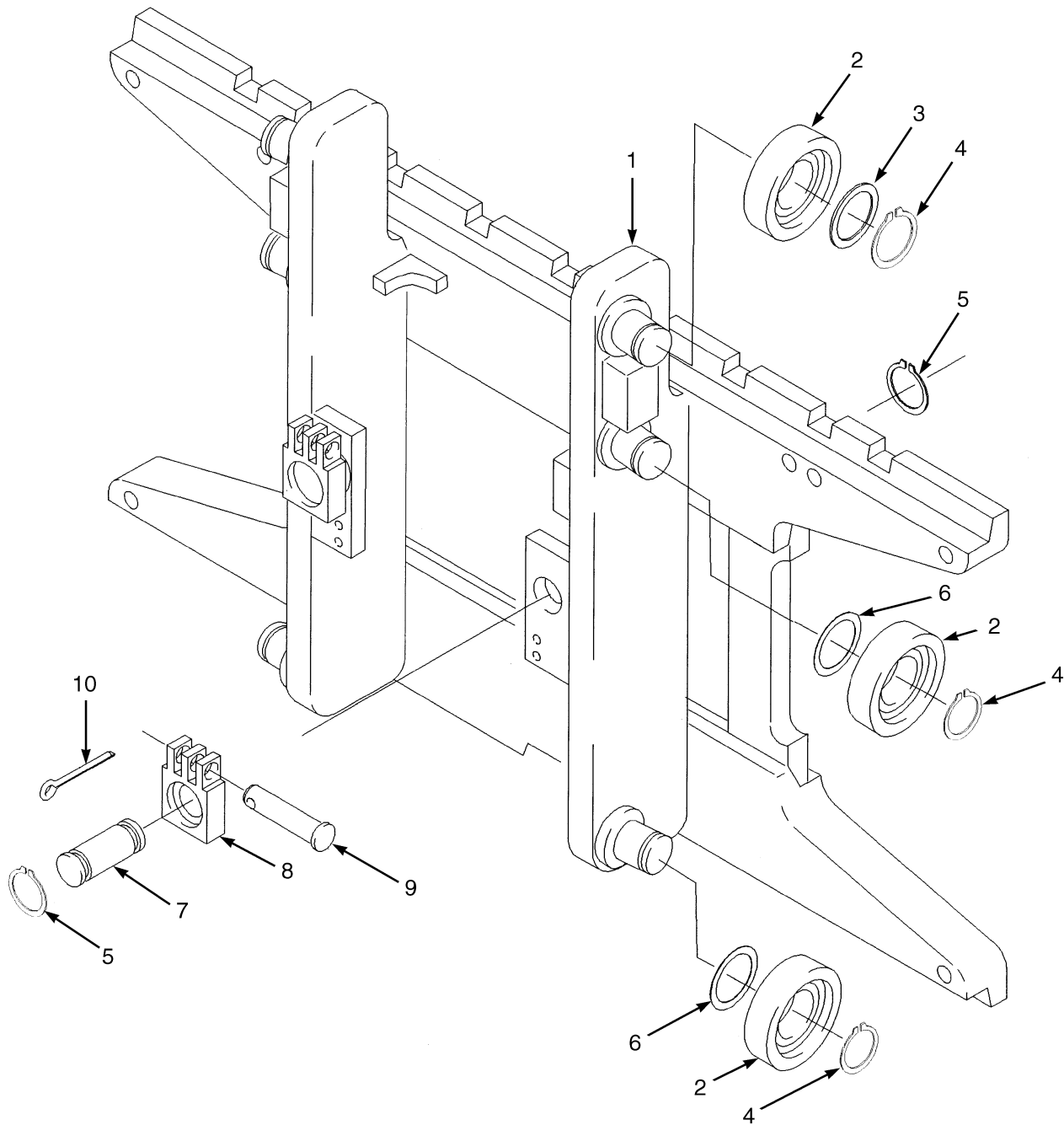
**a** Not Illustrated**b** Refer to Table



## NOTES

[illegible]

## CARRIAGE (FIGURE 11-6) TWO STAGE LIMITED FREE-LIFT



HP290013

**CARRIAGE**  
**TWO STAGE LIMITED FREE-LIFT****KEY:****A: H40-50XT****B: H60XT**

| ITEM | PART NO. | DESCRIPTION                                 | QTY |    |
|------|----------|---------------------------------------------|-----|----|
|      |          |                                             | A   | B  |
|      | 4625586  | Carriage (42 in.) .....                     | 1   | .. |
|      | 4625588  | Carriage (48 in.) .....                     | 1   | .. |
|      | 4625594  | Carriage (42 in.) .....                     | ..  | 1  |
|      | 4625596  | Carriage (48 in.) .....                     | ..  | 1  |
| 1    | 4065173  | Carriage Wldmt (42 in.) .....               | 1   | .. |
| 1    | 4065175  | Carriage Wldmt (48 in.) .....               | 1   | .. |
| 1    | 4065200  | Carriage Wldmt (42 in.) .....               | ..  | 1  |
| 1    | 4065202  | Carriage Wldmt (48 in.) .....               | ..  | 1  |
| 1    | 1345264  | Stubshaft .....                             | 6   | 6  |
| 2    | 1345219  | Load Roller ("B") (111.48/111.22) .....     | 6   | 6  |
| 2    | 1395172  | Load Roller ("A") (111.10/110.84) .....     | 6   | 6  |
| 3    | 366116   | Spacer .....                                | 2   | 2  |
| 4    | 12891    | Snap Ring .....                             | 6   | 6  |
| 4    | 386422   | Snap Ring (Optional) .....                  | 6   | 6  |
| 5    | 131358   | Snap Ring .....                             | 4   | 4  |
| 6    | 1345263  | Shim (0.020 in.) .....                      | 28  | 28 |
| 7    | 1353408  | Pin .....                                   | 2   | 2  |
| 8    | 1369345  | Chain Anchor (Dual Hole) .....              | 2   | .. |
| 8    | 1504010  | Chain Anchor (Single Hole) (Optional) ..... | 2   | .. |
| 8    | 1369344  | Chain Anchor (Dual Hole) .....              | ..  | 2  |
| 8    | 1504012  | Chain Anchor (Single Hole) (Optional) ..... | ..  | 2  |
| 9    | 1514866  | Pin .....                                   | 2   | 2  |
| 10   | 15211    | Cotter Pin .....                            | 2   | 2  |

[illegible]



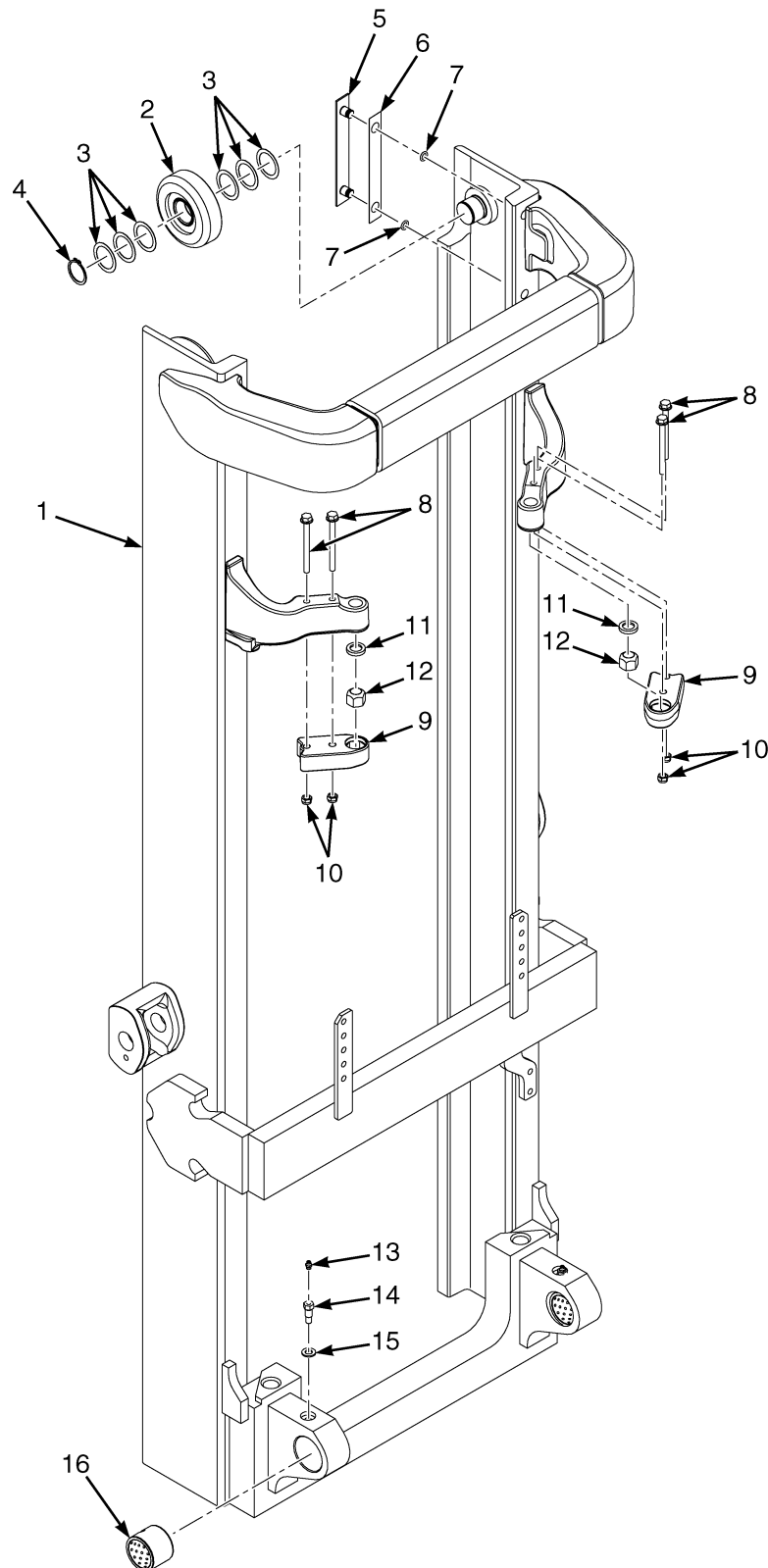


## SECTION 12

### MAST-THREE STAGE FULL FREE-LIFT

| DESCRIPTION                                                         | PAGE  |
|---------------------------------------------------------------------|-------|
| CARRIAGE                                                            |       |
| THREE STAGE FULL FREE-LIFT .....                                    | 12-56 |
| FREE-LIFT CYLINDER                                                  |       |
| THREE STAGE FULL FREE-LIFT - A387 MAST SERIES .....                 | 12-24 |
| THREE STAGE FULL FREE-LIFT - A397 MAST SERIES .....                 | 12-48 |
| FREELIFT TUBE GROUP                                                 |       |
| 3 AND 4 FUNCTION .....                                              | 12-54 |
| HEADER HOSE AND ATTACHING PARTS .....                               | 12-50 |
| MAIN LIFT CYLINDER                                                  |       |
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| OUTER MAST - A387 MAST SERIES (8/2017 →) .....                      | 12-4  |
| OUTER MAST - A397 MAST SERIES (→ 8/2017) .....                      | 12-26 |
| OUTER MAST - A397 MAST SERIES (8/2017 →) .....                      | 12-28 |

## MAST ASSEMBLY (FIGURE 12-1) OUTER MAST — A387 MAST SERIES (→ 8/2017)



BP170799



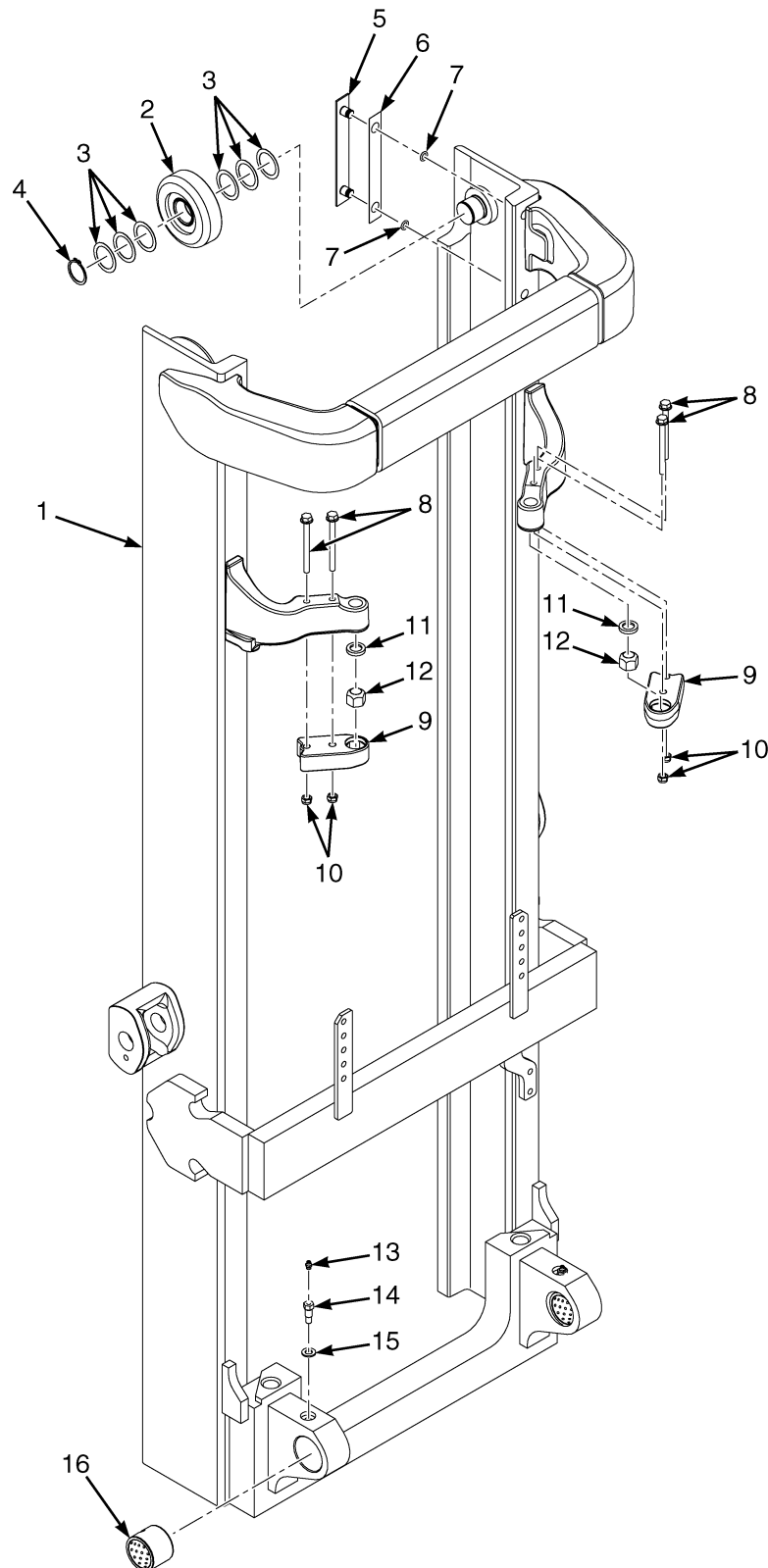
**MAST ASSEMBLY**  
**OUTER MAST – A387 MAST SERIES (→ 8/2017)****H40-50XT**

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
|      |                        | 4310 mm<br>(169.7 in.)         | 4760 mm<br>(187.4 in.) | 4910 mm<br>(193.3 in.) | 5060 mm<br>(199.2 in.) | 5510 mm<br>(216.9 in.) |
|      | Mast<br>Group Number   | A387<br>4310                   | A387<br>4760           | A387<br>4910           | A387<br>5060           | A387<br>5510           |
|      | Mast Assy              | 4640879                        | 4640882                | 4640883                | 4640884                | 4640887                |
| 1    | Outer Mast             | 4107507                        | 4107509                | 4107510                | 4107512                | 4107515                |

| ITEM | PART NO.           | DESCRIPTION                                 | QTY |
|------|--------------------|---------------------------------------------|-----|
|      | <b>a</b> . . . . . | Mast Assy . . . . .                         | 1   |
| 1    | <b>a</b> . . . . . | Outer Mast . . . . .                        | 1   |
| 2    | 1333396            | Load Roller ("B") (111.48/111.22) . . . . . | 2   |
| 2    | 1395168            | Load Roller ("A") (111.10/110.84) . . . . . | 2   |
| 2    | 1333397            | Load Roller ("C") (112.62/112.36) . . . . . | 2   |
| 3    | 129387             | Shim (0.020 in.) . . . . .                  | 12  |
| 4    | 58901              | Snap Ring . . . . .                         | 2   |
| 4    | 1374797            | Snap Ring (Optional) . . . . .              | 2   |
| 5    | 215211             | Wear Strip . . . . .                        | 2   |
| 6    | 131716             | Shim (0.020 in.) . . . . .                  | 2   |
| 6    | 131715             | Shim (0.007 in.) (Optional) . . . . .       | 2   |
| 7    | 104506             | O-Ring . . . . .                            | 4   |
| 8    | 4082846            | Capscrew . . . . .                          | 4   |
| 9    | 4051079            | Restraint . . . . .                         | 2   |
| 10   | 1581566            | Nut . . . . .                               | 4   |
| 11   | 297649             | Ring . . . . .                              | 2   |
| 12   | 4031973            | Nut . . . . .                               | 2   |
| 13   | 13957              | Grease Fitting . . . . .                    | 2   |
| 13   | 16041              | Grease Fitting (Optional) . . . . .         | 2   |
| 14   | 4033412            | Capscrew , Lubed . . . . .                  | 2   |
| 15   | 1581557            | Washer . . . . .                            | 2   |
| 16   | 4033414            | Bushing . . . . .                           | 2   |

**FOOTNOTES:****a** Refer to Table

## MAST ASSEMBLY (FIGURE 12-2) OUTER MAST — A387 MAST SERIES (8/2017 →)



BP170799

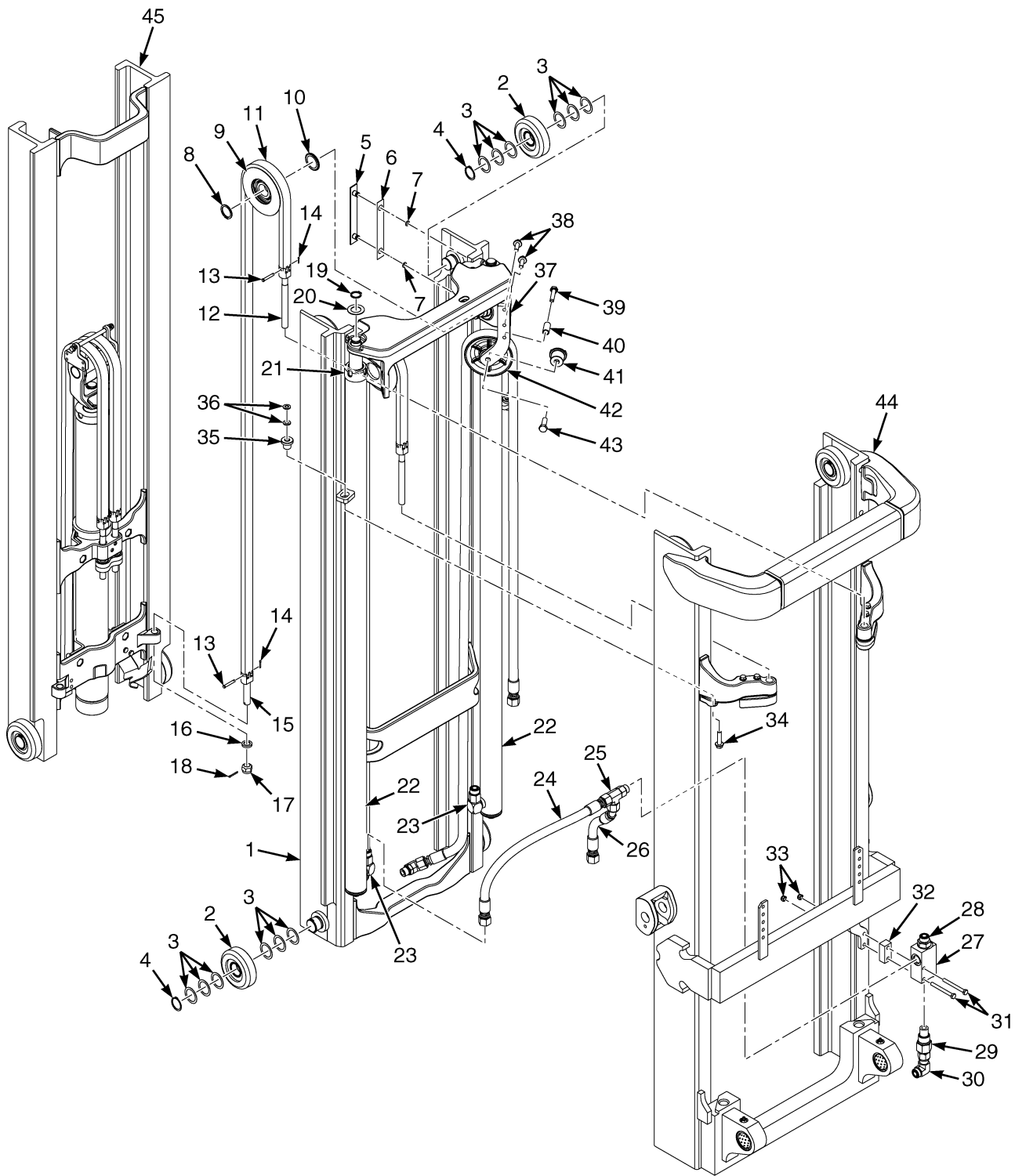
**MAST ASSEMBLY**  
**OUTER MAST – A387 MAST SERIES (8/2017 →)****H40-50XT**

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
|      |                        | 4310 mm<br>(169.7 in.)         | 4760 mm<br>(187.4 in.) | 4910 mm<br>(193.3 in.) | 5060 mm<br>(199.2 in.) | 5510 mm<br>(216.9 in.) |
|      | Mast<br>Group Number   | A387<br>4310                   | A387<br>4760           | A387<br>4910           | A387<br>5060           | A387<br>5510           |
|      | Mast Assy              | 4640879                        | 4640882                | 4640883                | 4640884                | 4640887                |
| 1    | Outer Mast             | 4107507                        | 4107509                | 4107510                | 4107512                | 4107515                |

| ITEM | PART NO.           | DESCRIPTION                                 | QTY |
|------|--------------------|---------------------------------------------|-----|
|      | <b>a</b> . . . . . | Mast Assy . . . . .                         | 1   |
| 1    | <b>a</b> . . . . . | Outer Mast . . . . .                        | 1   |
| 2    | 1333396            | Load Roller ("B") (111.48/111.22) . . . . . | 2   |
| 2    | 1395168            | Load Roller ("A") (111.10/110.84) . . . . . | 2   |
| 2    | 1333397            | Load Roller ("C") (112.62/112.36) . . . . . | 2   |
| 3    | 129387             | Shim (0.020 in.) . . . . .                  | 12  |
| 4    | 58901              | Snap Ring . . . . .                         | 2   |
| 4    | 1374797            | Snap Ring (Optional) . . . . .              | 2   |
| 5    | 215211             | Wear Strip . . . . .                        | 2   |
| 6    | 131716             | Shim (0.020 in.) . . . . .                  | 2   |
| 6    | 131715             | Shim (0.007 in.) (Optional) . . . . .       | 2   |
| 7    | 104506             | O-Ring . . . . .                            | 4   |
| 8    | 4082846            | Capscrew . . . . .                          | 4   |
| 9    | 4051079            | Restraint . . . . .                         | 2   |
| 10   | 1581566            | Nut . . . . .                               | 4   |
| 11   | 297649             | Ring . . . . .                              | 2   |
| 12   | 4031973            | Nut . . . . .                               | 2   |
| 13   | 13957              | Grease Fitting . . . . .                    | 2   |
| 13   | 16041              | Grease Fitting (Optional) . . . . .         | 2   |
| 14   | 4033412            | Capscrew , Lubed . . . . .                  | 2   |
| 15   | 1581557            | Washer . . . . .                            | 2   |
| 16   | 4033414            | Bushing . . . . .                           | 2   |

**FOOTNOTES:****a** Refer to Table

## MAST ASSEMBLY (FIGURE 12-3) INTERMEDIATE MAST AND MAIN-LIFT — A387 MAST SERIES (→ 8/2017)



BP170800

## MAST ASSEMBLY

### INTERMEDIATE MAST AND MAIN-LIFT – A387 MAST SERIES (→ 8/2017)

#### H40-50XT

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
|      |                        | 4310 mm<br>(169.7 in.)         | 4760 mm<br>(187.4 in.) | 4910 mm<br>(193.3 in.) | 5060 mm<br>(199.2 in.) | 5510 mm<br>(216.9 in.) |
|      |                        | A387<br>4310                   | A387<br>4760           | A387<br>4910           | A387<br>5060           | A387<br>5510           |
|      | Mast Assy              | 4640879                        | 4640882                | 4640883                | 4640884                | 4640887                |
| 1    | Intermediate Mast      | 4053806                        | 4053808                | 4053809                | 4053810                | 4053813                |
| 11   | Chain                  | 88441                          | 180137                 | 129361                 | 88446                  | 180176                 |
| 22   | Lift Cylinder          | 4630373                        | 4616167                | 4615883                | 4615884                | 4615886                |

| ITEM | PART NO.           | DESCRIPTION                             | QTY |
|------|--------------------|-----------------------------------------|-----|
|      | <b>b</b> . . . . . | Mast Assy .....                         | 1   |
| 1    | <b>b</b> . . . . . | Intermediate Mast .....                 | 1   |
| 2    | 1333396            | Load Roller ("B") (111.48/111.22) ..... | 4   |
| 2    | <b>a</b> 1395168   | Load Roller ("A") (111.10/110.84) ..... | 4   |
| 2    | <b>a</b> 1333397   | Load Roller ("C") (112.62/112.36) ..... | 4   |
| 3    | 129387             | Shim (0.020 in.) .....                  | 24  |
| 4    | 58901              | Snap Ring .....                         | 2   |
| 4    | <b>a</b> 1374797   | Snap Ring .....                         | 2   |
| 5    | 215211             | Wear Strip .....                        | 2   |
| 6    | 131716             | Shim (0.020 in.) .....                  | 2   |
| 6    | <b>a</b> 131715    | Shim (0.007 in.) .....                  | 2   |
| 7    | 104506             | O-Ring .....                            | 4   |
| 8    | 304526             | Snap Ring .....                         | 2   |
| 9    | 4054944            | Chain Sheave Assembly .....             | 2   |
| 9    | 1378699            | Ball Bearing .....                      | 1   |
| 9    | 37752              | Snap Ring .....                         | 1   |
| 10   | 335661             | Spacer .....                            | 2   |
| 11   | <b>b</b> . . . . . | Chain .....                             | 2   |
| 12   | 4072717            | Chain Anchor .....                      | 2   |
| 13   | 1514866            | Pin .....                               | 2   |
| 14   | 15211              | Cotter Pin .....                        | 4   |
| 15   | 1365140            | Chain Anchor .....                      | 2   |
| 16   | 297649             | Ring .....                              | 2   |
| 17   | 161003             | Nut .....                               | 2   |
| 18   | 15223              | Cotter Pin .....                        | 2   |
| 19   | 131358             | Snap Ring .....                         | 2   |
| 20   | 1333382            | Washer (0.060 in.) .....                | 2   |
| 21   | 1354915            | Washer (0.010 in.) .....                | 2   |
| 21   | <b>a</b> 1354916   | Washer (0.030 in.) .....                | 2   |
| 21   | <b>a</b> 1354917   | Washer (0.060 in.) .....                | 2   |
| 22   | <b>b</b> . . . . . | Lift Cylinder (☞ Figure 12-7) .....     | 2   |
| 23   | 2062686            | Hyd Velocity Fuse .....                 | 2   |
| 24   | 4620151            | Hose Assy .....                         | 1   |
| 25   | 1592853            | Fitting .....                           | 1   |
| 26   | 4620152            | Hose Assy .....                         | 1   |
| 27   | 4055582            | Housing .....                           | 1   |

### MAST ASSEMBLY

#### INTERMEDIATE MAST AND MAIN-LIFT – A387 MAST SERIES (→ 8/2017)

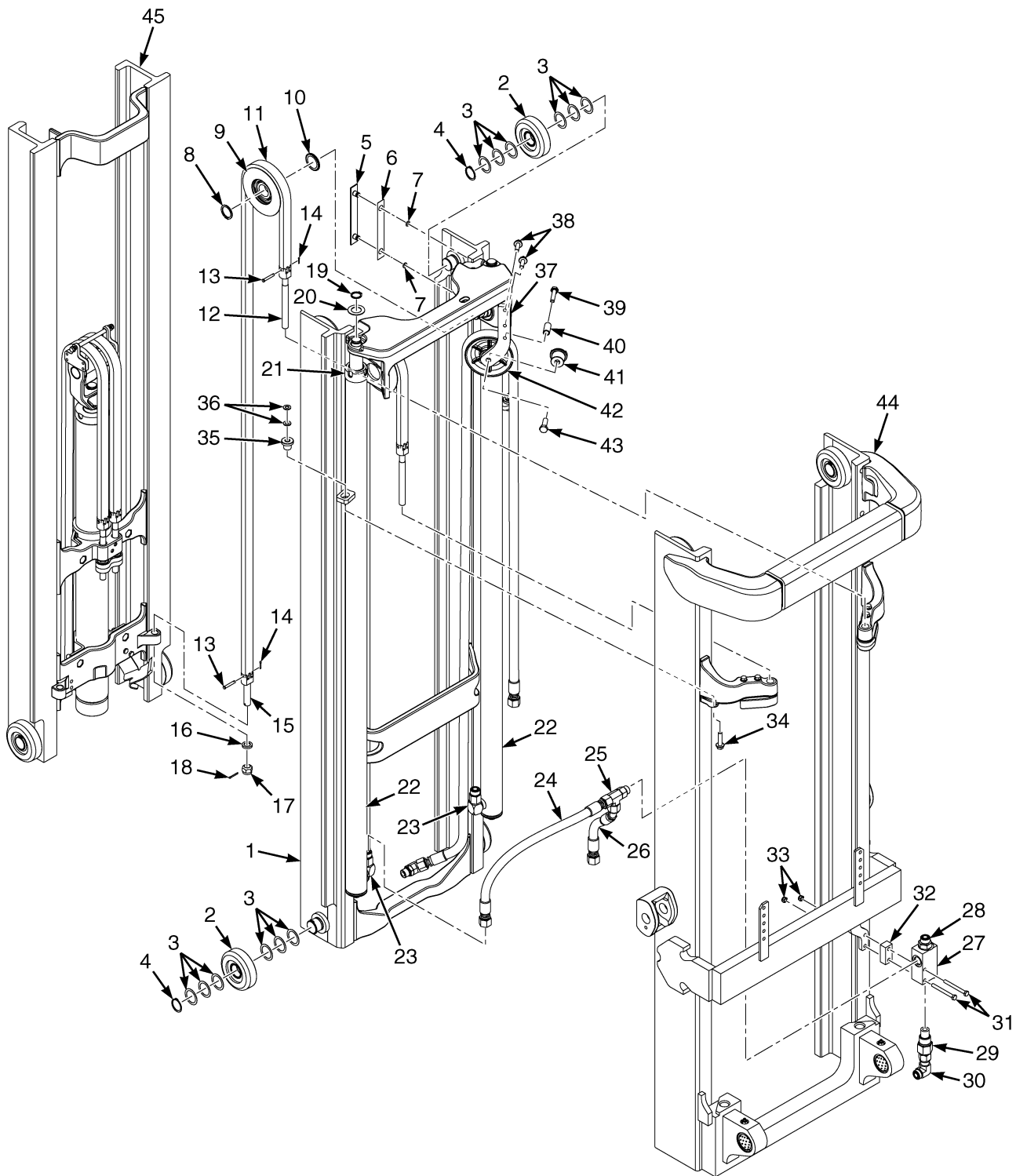
| ITEM | PART NO. | DESCRIPTION                                   | QTY |
|------|----------|-----------------------------------------------|-----|
| 28   | 6996684  |                                               |     |
|      | 1486751  | Fitting .....                                 | 1   |
| 29   | 2062651  | Lowering Control Valve .....                  | 1   |
| 30   | 1486773  | Fitting .....                                 | 1   |
| 31   | 4065168  | Capscrew .....                                | 2   |
| 32   | 4065167  | Spacer .....                                  | 1   |
| 33   | 1581566  | Nut .....                                     | 2   |
| 34   | 4029051  | Capscrew .....                                | 2   |
| 35   | 4054558  | Isolator .....                                | 2   |
| 36   | 1581557  | Washer .....                                  | 4   |
| 37   | 4049173  | Plate .....                                   | 1   |
| 38   | 4051501  | Capscrew .....                                | 2   |
| 39   | 1598660  | Capscrew .....                                | 1   |
| 40   | 1660415  | Spacer (Thin Wall) .....                      | 1   |
| 41   | 4013267  | Stubshaft .....                               | 1   |
| 42   | 4048782  | Hose Sheave .....                             | 1   |
| 43   | 1581591  | Capscrew .....                                | 1   |
| 44   | .....    | Outer Mast (☞ Figure 12-1).....               | ..  |
| 45   | .....    | Inner Mast and Free-Lift (☞ Figure 12-5)..... | ..  |

**FOOTNOTES:****a** Optional**b** Refer to Table

## NOTES

[illegible]

## MAST ASSEMBLY (FIGURE 12-4) INTERMEDIATE MAST AND MAIN-LIFT — A387 MAST SERIES (8/2017 →)



BP170800



## MAST ASSEMBLY

### INTERMEDIATE MAST AND MAIN-LIFT – A387 MAST SERIES (8/2017 →)

#### H40-50XT

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
|      |                        | 4310 mm<br>(169.7 in.)         | 4760 mm<br>(187.4 in.) | 4910 mm<br>(193.3 in.) | 5060 mm<br>(199.2 in.) | 5510 mm<br>(216.9 in.) |
|      |                        | A387<br>4310                   | A387<br>4760           | A387<br>4910           | A387<br>5060           | A387<br>5510           |
|      | Mast Assy              | 4640879                        | 4640882                | 4640883                | 4640884                | 4640887                |
| 1    | Intermediate Mast      | 4053806                        | 4053808                | 4053809                | 4053810                | 4053813                |
| 11   | Chain                  | 88441                          | 180137                 | 129361                 | 88446                  | 180176                 |

| ITEM | PART NO.           | DESCRIPTION                             | QTY |
|------|--------------------|-----------------------------------------|-----|
|      | <b>b</b> . . . . . | Mast Assy .....                         | 1   |
| 1    | <b>b</b> . . . . . | Intermediate Mast .....                 | 1   |
| 2    | 1333396            | Load Roller ("B") (111.48/111.22) ..... | 4   |
| 2    | <b>a</b> 1395168   | Load Roller ("A") (111.10/110.84) ..... | 4   |
| 2    | <b>a</b> 1333397   | Load Roller ("C") (112.62/112.36) ..... | 4   |
| 3    | 129387             | Shim (0.020 in.) .....                  | 24  |
| 4    | 58901              | Snap Ring .....                         | 2   |
| 4    | <b>a</b> 1374797   | Snap Ring .....                         | 2   |
| 5    | 215211             | Wear Strip .....                        | 2   |
| 6    | 131716             | Shim (0.020 in.) .....                  | 2   |
| 6    | <b>a</b> 131715    | Shim (0.007 in.) .....                  | 2   |
| 7    | 104506             | O-Ring .....                            | 4   |
| 8    | 304526             | Snap Ring .....                         | 2   |
| 9    | 4054944            | Chain Sheave Assembly .....             | 2   |
| 9    | 1378699            | Ball Bearing .....                      | 1   |
| 9    | 37752              | Snap Ring .....                         | 1   |
| 10   | 335661             | Spacer .....                            | 2   |
| 11   | <b>b</b> . . . . . | Chain .....                             | 2   |
| 12   | 4184156            | Chain Anchor .....                      | 2   |
| 13   | 1514866            | Pin .....                               | 2   |
| 14   | 15211              | Cotter Pin .....                        | 4   |
| 15   | 1365140            | Chain Anchor .....                      | 2   |
| 16   | 297649             | Ring .....                              | 2   |
| 17   | 161003             | Nut .....                               | 2   |
| 18   | 15223              | Cotter Pin .....                        | 2   |
| 19   | 131358             | Snap Ring .....                         | 2   |
| 20   | 1333382            | Washer (0.060 in.) .....                | 2   |
| 21   | 1354915            | Washer (0.010 in.) .....                | 2   |
| 21   | <b>a</b> 1354916   | Washer (0.030 in.) .....                | 2   |
| 21   | <b>a</b> 1354917   | Washer (0.060 in.) .....                | 2   |
| 22   | . . . . .          | Main Lift Cylinder (☞ Figure 12-7)..... | 2   |
| 23   | 2062686            | Hyd Velocity Fuse .....                 | 2   |
| 24   | 4620151            | Hose Assy .....                         | 1   |
| 25   | 1592853            | Fitting .....                           | 1   |
| 26   | 4620152            | Hose Assy .....                         | 1   |
| 27   | 4055582            | Housing .....                           | 1   |
| 28   | 6996684            | Fitting .....                           | 1   |

## MAST ASSEMBLY

### INTERMEDIATE MAST AND MAIN-LIFT – A387 MAST SERIES (8/2017 →)

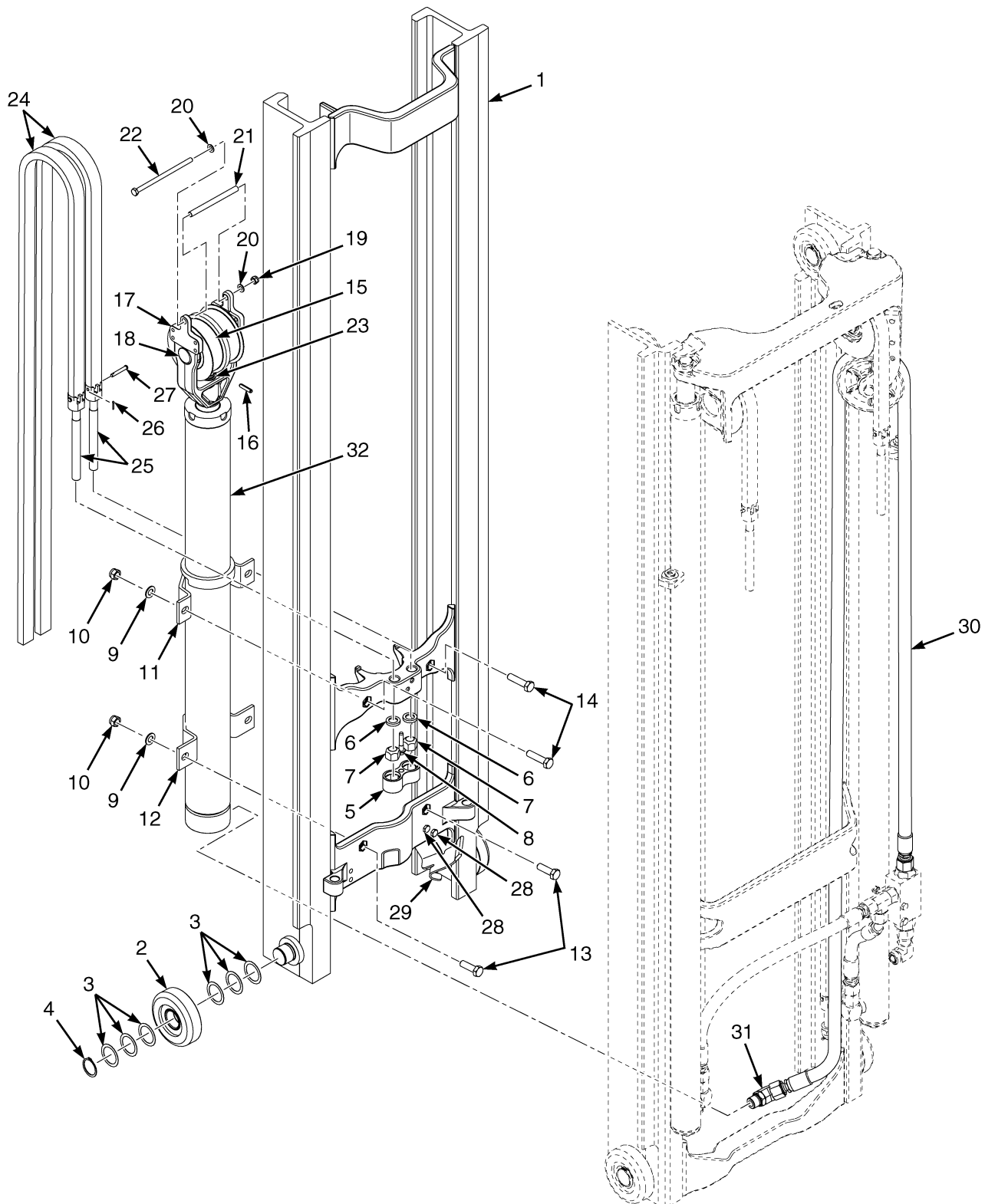
| ITEM | PART NO. | DESCRIPTION                                                  | QTY |
|------|----------|--------------------------------------------------------------|-----|
|      | 1486751  |                                                              |     |
| 29   | 2062651  | Lowering Control Valve .....                                 | 1   |
| 30   | 1486773  | Fitting .....                                                | 1   |
| 31   | 4065168  | Capscrew .....                                               | 2   |
| 32   | 4065167  | Spacer .....                                                 | 1   |
| 33   | 1581566  | Nut .....                                                    | 2   |
| 34   | 4029051  | Capscrew .....                                               | 2   |
| 35   | 4054558  | Isolator .....                                               | 2   |
| 36   | 1581557  | Washer .....                                                 | 4   |
| 37   | 4049173  | Plate .....                                                  | 1   |
| 38   | 4051501  | Capscrew .....                                               | 2   |
| 39   | 1598660  | Capscrew .....                                               | 1   |
| 40   | 1660415  | Spacer (Thin Wall) .....                                     | 1   |
| 41   | 4013267  | Stubshaft .....                                              | 1   |
| 42   | 4048782  | Hose Sheave .....                                            | 1   |
| 43   | 1581591  | Capscrew .....                                               | 1   |
| 44   | .....    | Outer Mast (☞ Figure 12-1, ☞ Figure 12-2).....               | ..  |
| 45   | .....    | Inner Mast and Free-Lift (☞ Figure 12-5, ☞ Figure 12-6)..... | ..  |

**FOOTNOTES:****a** Optional**b** Refer to Table

## NOTES

[illegible]

## MAST ASSEMBLY (FIGURE 12-5) INNER MAST AND FREE-LIFT — A387 MAST SERIES (→ 8/2017)



BP170801

## MAST ASSEMBLY

### INNER MAST AND FREE-LIFT – A387 MAST SERIES (→ 8/2017)

#### H40-50XT

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
|      |                        | 4310 mm<br>(169.7 in.)         | 4760 mm<br>(187.4 in.) | 4910 mm<br>(193.3 in.) | 5060 mm<br>(199.2 in.) | 5510 mm<br>(216.9 in.) |
|      |                        | A387<br>4310                   | A387<br>4760           | A387<br>4910           | A387<br>5060           | A387<br>5510           |
|      | Mast Assy              | 4640879                        | 4640882                | 4640883                | 4640884                | 4640887                |
| 1    | Inner Mast             | 4053838                        | 4053840                | 4053841                | 4053842                | 4053845                |
| 24   | Chain                  | 180217                         | 164474                 | 986559                 | 337174                 | 320076                 |
| 30   | Hose Assy              | 4623611                        | 4623613                | 4623614                | 4623615                | 4623618                |
| 32   | Free Lift Cylinder     | 4617958                        | 4617961                | 4617962                | 4617964                | 4617967                |

| ITEM | PART NO.           | DESCRIPTION                             | QTY |
|------|--------------------|-----------------------------------------|-----|
|      | <b>b</b> . . . . . | Mast Assy .....                         | 1   |
| 1    | <b>b</b> . . . . . | Inner Mast .....                        | 1   |
| 2    | 1333396            | Load Roller ("B") (111.48/111.22) ..... | 2   |
| 2    | <b>a</b> 1395168   | Load Roller ("A") (111.10/110.84) ..... | 2   |
| 2    | <b>a</b> 1333397   | Load Roller ("C") (112.62/112.36) ..... | 2   |
| 3    | 129387             | Shim (0.020 in.) .....                  | 12  |
| 4    | 58901              | Snap Ring .....                         | 2   |
| 4    | <b>a</b> 1374797   | Snap Ring .....                         | 2   |
| 5    | 4052568            | Restraint .....                         | 1   |
| 6    | 297649             | Ring .....                              | 2   |
| 7    | 4031973            | Nut .....                               | 2   |
| 8    | 4133281            | Capscrew .....                          | 1   |
| 9    | 1581559            | Washer .....                            | 4   |
| 10   | 1581849            | Nut .....                               | 4   |
| 11   | 4057313            | Clamp .....                             | 1   |
| 12   | 4057611            | Clamp .....                             | 1   |
| 13   | 1581591            | Capscrew .....                          | 2   |
| 14   | 1581827            | Capscrew .....                          | 2   |
| 15   | 4052261            | Chain Sheave .....                      | 1   |
| 15   | 1378699            | Ball Bearing .....                      | 1   |
| 16   | 302465             | Roll Pin .....                          | 1   |
| 17   | 4131005            | Crosshead .....                         | 1   |
| 18   | 4046548            | Pin .....                               | 1   |
| 19   | 1581566            | Nut .....                               | 1   |
| 20   | 4081768            | Washer .....                            | 2   |
| 21   | 4056718            | Roller Spacer .....                     | 1   |
| 22   | 4061309            | Capscrew .....                          | 1   |
| 23   | 131358             | Snap Ring .....                         | 1   |
| 24   | <b>b</b> . . . . . | Chain .....                             | 2   |
| 25   | 4072717            | Chain Anchor .....                      | 2   |
| 26   | 15211              | Cotter Pin .....                        | 2   |
| 27   | 1514866            | Pin .....                               | 2   |
| 28   | 1696161            | Capscrew .....                          | 2   |
| 29   | 4054074            | Bracket Wldmt .....                     | 1   |

**MAST ASSEMBLY**  
**INNER MAST AND FREE-LIFT – A387 MAST SERIES (→ 8/2017)**

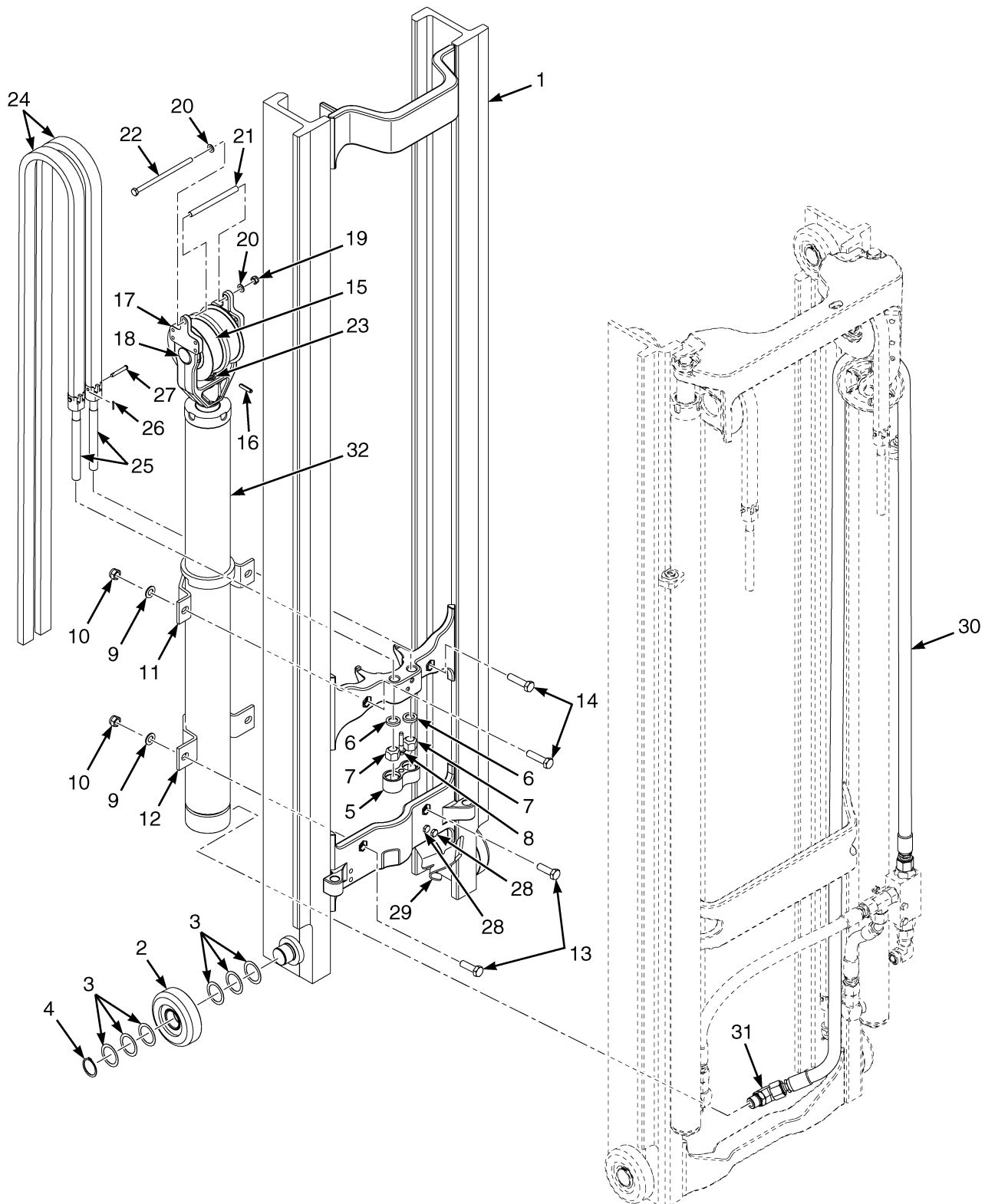
| ITEM | PART NO.           | DESCRIPTION                             | QTY |
|------|--------------------|-----------------------------------------|-----|
|      | 4126698            |                                         |     |
| 30   | <b>b</b> . . . . . | Hose Assy .....                         | 1   |
| 31   | 1516205            | Fitting .....                           | 1   |
| 32   | <b>b</b> . . . . . | Free Lift Cylinder (☞ Figure 12-8)..... | 1   |

**FOOTNOTES:****a** Optional**b** Refer to Table

## NOTES

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, leaving small margins at the top and bottom. There is no handwriting or other markings on the paper.

## MAST ASSEMBLY (FIGURE 12-6) INNER MAST AND FREE-LIFT — A387 MAST SERIES (8/2017 →)



BP170801



## MAST ASSEMBLY

### INNER MAST AND FREE-LIFT – A387 MAST SERIES (8/2017 →)

#### H40-50XT

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
|      |                        | 4310 mm<br>(169.7 in.)         | 4760 mm<br>(187.4 in.) | 4910 mm<br>(193.3 in.) | 5060 mm<br>(199.2 in.) | 5510 mm<br>(216.9 in.) |
|      |                        | A387<br>4310                   | A387<br>4760           | A387<br>4910           | A387<br>5060           | A387<br>5510           |
|      | Mast Assy              | 4640879                        | 4640882                | 4640883                | 4640884                | 4640887                |
| 1    | Inner Mast             | 4053838                        | 4053840                | 4053841                | 4053842                | 4053845                |
| 24   | Chain                  | 180029                         | 182343                 | 180057                 | 135634                 | 986599                 |
| 30   | Hose Assy              | 4623611                        | 4623613                | 4623614                | 4623615                | 4623618                |

| ITEM | PART NO.           | DESCRIPTION                             | QTY |
|------|--------------------|-----------------------------------------|-----|
|      | <b>b . . . . .</b> | Mast Assy .....                         | 1   |
| 1    | <b>b . . . . .</b> | Inner Mast .....                        | 1   |
| 2    | 1333396            | Load Roller ("B") (111.48/111.22) ..... | 2   |
| 2    | <b>a</b> 1395168   | Load Roller ("A") (111.10/110.84) ..... | 2   |
| 2    | <b>a</b> 1333397   | Load Roller ("C") (112.62/112.36) ..... | 2   |
| 3    | 129387             | Shim (0.020 in.) .....                  | 12  |
| 4    | 58901              | Snap Ring .....                         | 2   |
| 4    | <b>a</b> 1374797   | Snap Ring .....                         | 2   |
| 5    | 4052568            | Restraint .....                         | 1   |
| 6    | 297649             | Ring .....                              | 2   |
| 7    | 4031973            | Nut .....                               | 2   |
| 8    | 4133281            | Capscrew .....                          | 1   |
| 9    | 1581559            | Washer .....                            | 4   |
| 10   | 1581849            | Nut .....                               | 4   |
| 11   | 4057313            | Clamp .....                             | 1   |
| 12   | 4057611            | Clamp .....                             | 1   |
| 13   | 1581591            | Capscrew .....                          | 2   |
| 14   | 1581827            | Capscrew .....                          | 2   |
| 15   | 4052261            | Chain Sheave .....                      | 1   |
| 15   | 1378699            | Ball Bearing .....                      | 1   |
| 16   | 302465             | Roll Pin .....                          | 1   |
| 17   | 4131005            | Crosshead .....                         | 1   |
| 18   | 4046548            | Pin .....                               | 1   |
| 19   | 1581566            | Nut .....                               | 1   |
| 20   | 4081768            | Washer .....                            | 2   |
| 21   | 4056718            | Roller Spacer .....                     | 1   |
| 22   | 4061309            | Capscrew .....                          | 1   |
| 23   | 131358             | Snap Ring .....                         | 1   |
| 24   | <b>b . . . . .</b> | Chain .....                             | 2   |
| 25   | 4184156            | Chain Anchor .....                      | 2   |
| 26   | 15211              | Cotter Pin .....                        | 2   |
| 27   | 1514866            | Pin .....                               | 2   |
| 28   | 1696161            | Capscrew .....                          | 2   |
| 29   | 4054074            | Bracket Wldmt .....                     | 1   |
| 30   | <b>b . . . . .</b> | Hose Assy .....                         | 1   |

**MAST ASSEMBLY****INNER MAST AND FREE-LIFT – A387 MAST SERIES (8/2017 →)**

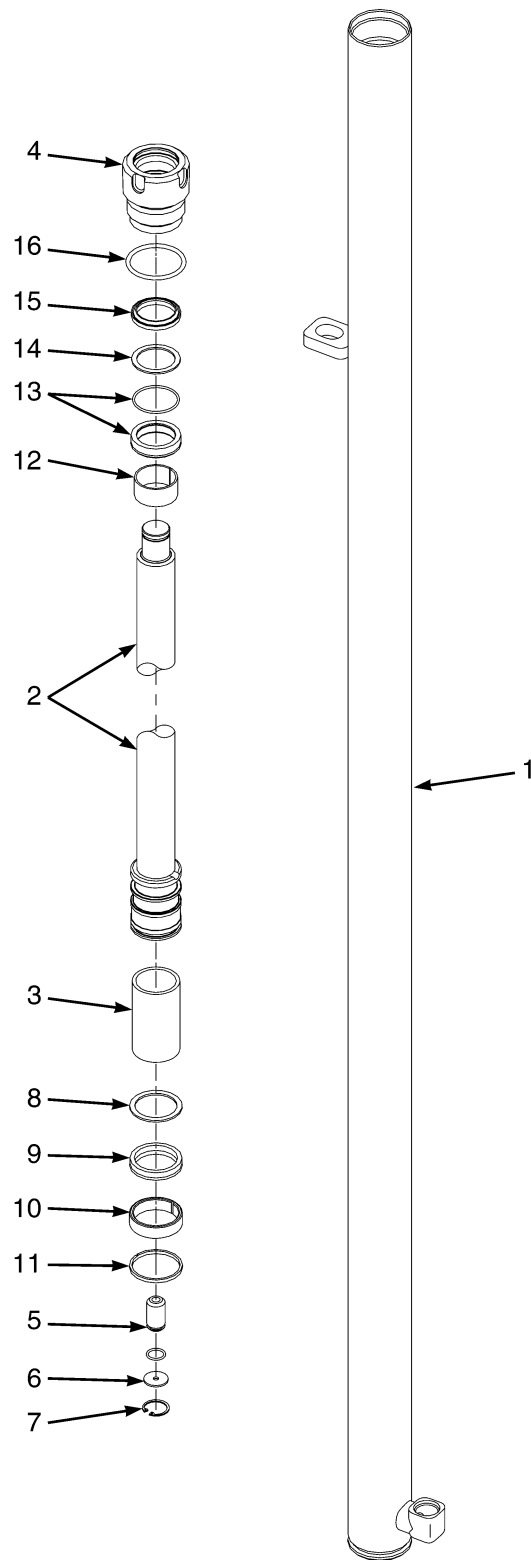
| ITEM | PART NO. | DESCRIPTION                             | QTY |
|------|----------|-----------------------------------------|-----|
| 31   | 1516205  | Fitting .....                           | 1   |
| 32   | .....    | Free-Lift Cylinder (☞ Figure 12-8)..... | 1   |

**FOOTNOTES:****a** Optional**b** Refer to Table

## NOTES

[illegible]

## MAIN LIFT CYLINDER (FIGURE 12-7) THREE STAGE FULL FREE-LIFT — A387 MAST SERIES



BP170651

**MAIN LIFT CYLINDER**  
**THREE STAGE FULL FREE-LIFT – A387 MAST SERIES**  
**H40-50XT**

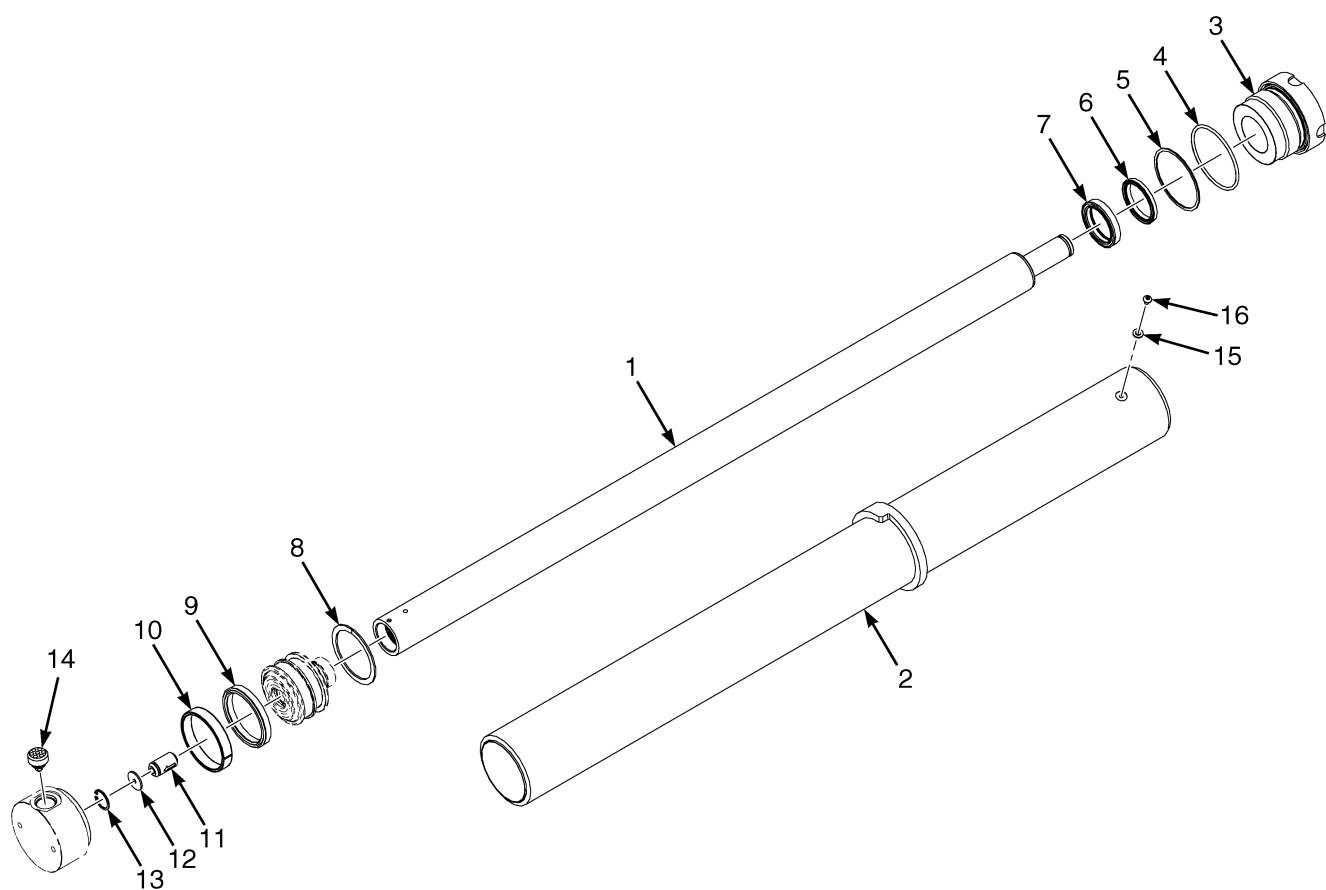
| ITEM | DESCRIPTION<br>1 2 3 4   | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |                        |
|------|--------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
|      |                          | 4310 mm<br>(169.7 in.)         | 4760 mm<br>(187.4 in.) | 4910 mm<br>(193.3 in.) | 5060 mm<br>(199.2 in.) | 5510 mm<br>(216.9 in.) |
|      | Mast<br>Group Number     | A387<br>4310                   | A387<br>4760           | A387<br>4910           | A387<br>5060           | A387<br>5510           |
|      | Cylinder<br>Group Number | 8607223                        | 8607207                | 8607208                | 8607209                | 8607212                |
|      | Lift Cylinder            | 4630373                        | 4616167                | 4615883                | 4615884                | 4615886                |
| 1    | Tube Wldmt-<br>Cylinder  | 4041105                        | 4041107                | 4041108                | 4041109                | 4041112                |
| 2    | Cylinder Rod             | 1355591                        | 1355599                | 1355603                | 1355607                | 1355620                |
| 3    | Spacer                   | ----                           | ----                   | ----                   | 1355610                | 1355610                |

| ITEM | PART NO.    | DESCRIPTION               | QTY |
|------|-------------|---------------------------|-----|
|      | a . . . . . | Lift Cylinder .....       | 2   |
| 1    | a . . . . . | Tube Wldmt-Cylinder ..... | 1   |
| 2    | a . . . . . | Cylinder Rod .....        | 1   |
| 3    | a . . . . . | Spacer .....              | 1   |
| 4    | 4615847     | Gland .....               | 1   |
| 5    | 257913      | Check Valve .....         | 1   |
| 6    | 297531      | Washer .....              | 1   |
| 6    | 637635      | Washer (Optional) .....   | 1   |
| 7    | 187388      | Snap Ring .....           | 1   |
| 8    | 638246      | Back-Up Ring .....        | 1   |
| 9    | 1381064     | Piston Seal .....         | 1   |
| 10   | 1356750     | Wear Ring .....           | 1   |
| 11   | 1360127     | Piston Ring .....         | 1   |
| 12   | 322902      | Wear Ring .....           | 1   |
| 13   | 1356749     | Rod Seal .....            | 1   |
| 14   | 322824      | Back-Up Ring .....        | 1   |
| 15   | 1383063     | Rod Wiper .....           | 1   |
| 16   | 4028986     |                           |     |
|      | 92861       | O-Ring .....              | 1   |
|      | 4623973     | Kit-Seal .....            | 1   |

**FOOTNOTES:**

a Refer to Table

## FREE-LIFT CYLINDER (FIGURE 12-8) THREE STAGE FULL FREE-LIFT — A387 MAST SERIES



BP170652

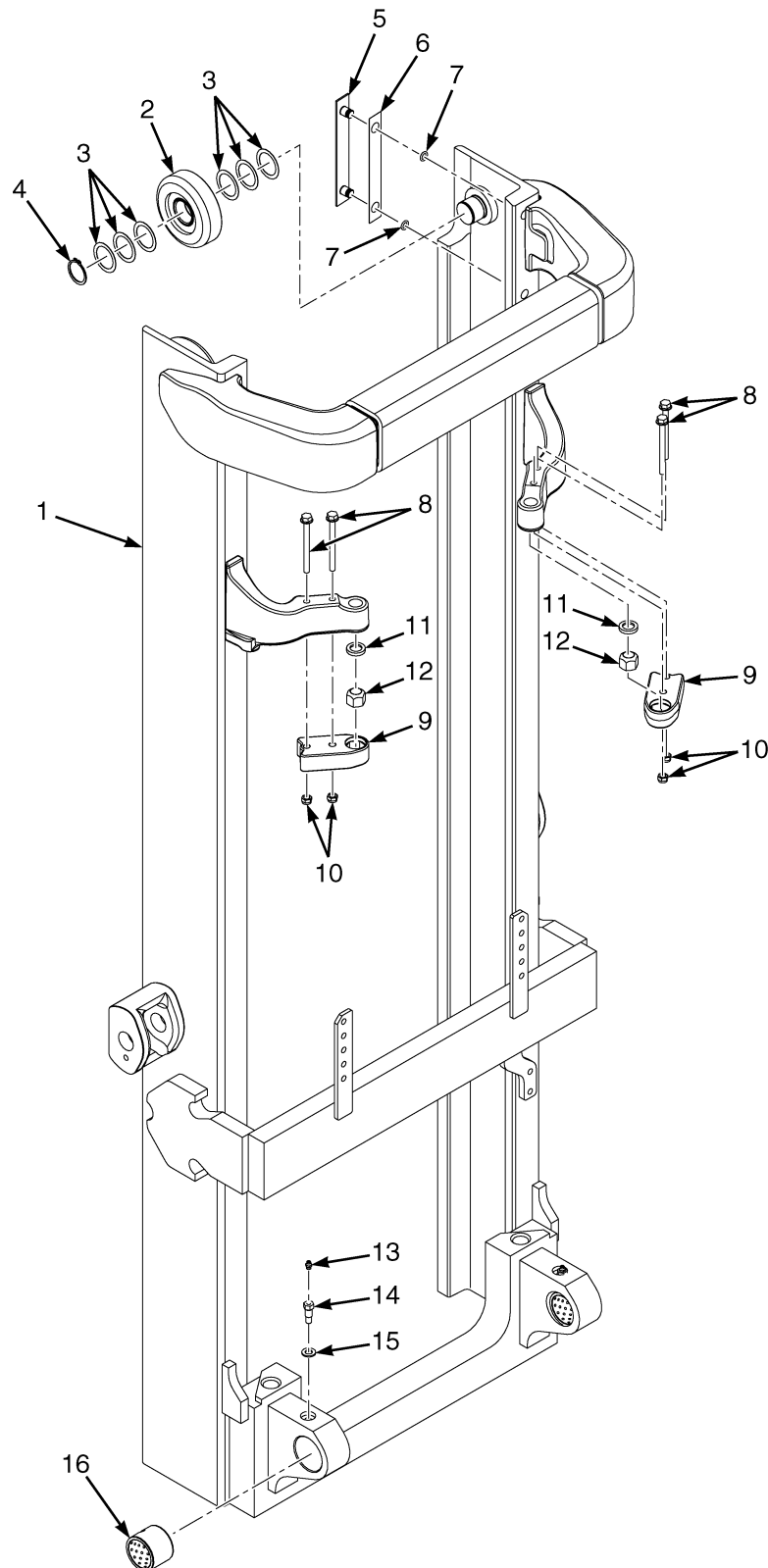
**FREE-LIFT CYLINDER**  
**THREE STAGE FULL FREE-LIFT – A387 MAST SERIES**  
**H40-50XT**

| ITEM | DESCRIPTION<br>1 2 3 4   | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |                        |
|------|--------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
|      |                          | 4310 mm<br>(169.7 in.)         | 4760 mm<br>(187.4 in.) | 4910 mm<br>(193.3 in.) | 5060 mm<br>(199.2 in.) | 5510 mm<br>(216.9 in.) |
|      | Mast<br>Group Number     | A387<br>4310                   | A387<br>4760           | A387<br>4910           | A387<br>5060           | A387<br>5510           |
|      | Cylinder<br>Group Number | 8607255                        | 8607257                | 8607258                | 8607260                | 8607263                |
|      | Free Lift Cylinder       | 4617958                        | 4617961                | 4617962                | 4617964                | 4617967                |
| 1    | Cylinder Rod             | 4046235                        | 4046237                | 4046238                | 4046240                | 4046243                |
| 2    | Tube Wldmt-<br>Cylinder  | 4046205                        | 4046207                | 4046208                | 4046210                | 4046213                |

| ITEM | PART NO.           | DESCRIPTION               | QTY |
|------|--------------------|---------------------------|-----|
|      | <b>b</b> . . . . . | Free Lift Cylinder .....  | 1   |
| 1    | <b>b</b> . . . . . | Cylinder Rod .....        | 1   |
| 2    | <b>b</b> . . . . . | Tube Wldmt-Cylinder ..... | 1   |
| 3    | 1356292            | Gland .....               | 1   |
| 4    | 90263              | O-Ring .....              | 1   |
| 5    | 147973             | Back-Up Ring .....        | 1   |
| 6    | 1463105            | Rod Wiper .....           | 1   |
| 7    | 1622946            | Rod Seal .....            | 1   |
| 8    | 2013089            | Back-Up Ring .....        | 1   |
| 9    | 2013088            | Rod Seal .....            | 1   |
| 10   | 1358972            | Wear Ring .....           | 1   |
| 11   | 297538             | Check Valve .....         | 1   |
| 12   | 297531             | Washer .....              | 1   |
| 12   | 637635             | Washer (Optional) .....   | 1   |
| 13   | 187388             | Snap Ring .....           | 1   |
| 14   | 4055505            | Flow Valve .....          | 1   |
| 15   | 190887             | Sealing Ring .....        | 1   |
| 16   | 1361302            | Screw .....               | 1   |
|      | <b>a</b> 190580    | O-Ring .....              | 1   |
|      | 1358969            | Kit-Seal .....            | 1   |

**FOOTNOTES:****a** Not Illustrated**b** Refer to Table

## MAST ASSEMBLY (FIGURE 12-9) OUTER MAST — A397 MAST SERIES (→ 8/2017)



BP170799



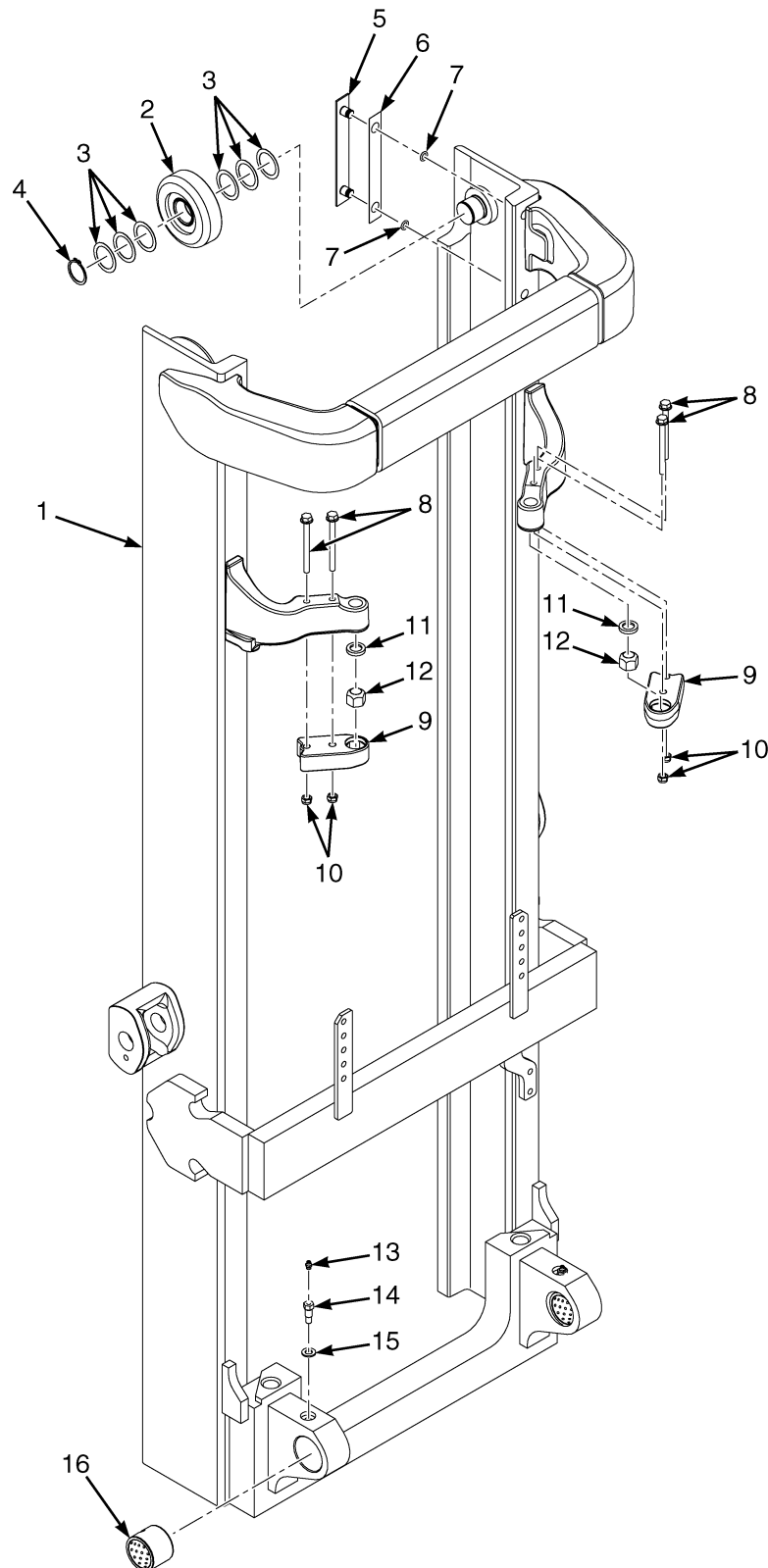
**MAST ASSEMBLY**  
**OUTER MAST – A397 MAST SERIES (→ 8/2017)****H60XT**

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                        | 3968 mm<br>(156.2 in.)         | 4718 mm<br>(185.7 in.) | 5318 mm<br>(209.4 in.) | 5768 mm<br>(227.1 in.) |
|      | Mast<br>Group Number   | A397<br>3968                   | A397<br>4718           | A397<br>5318           | A397<br>5768           |
|      | Mast Assy              | 4640923                        | 4640928                | 4640934                | 4640937                |
| 1    | Outer Mast             | 4107507                        | 4107512                | 4107516                | 4107519                |

| ITEM | PART NO.           | DESCRIPTION                                 | QTY |
|------|--------------------|---------------------------------------------|-----|
|      | <b>b</b> . . . . . | Mast Assy . . . . .                         | 1   |
| 1    | <b>b</b> . . . . . | Outer Mast . . . . .                        | 1   |
| 2    | 1333396            | Load Roller ("B") (111.48/111.22) . . . . . | 2   |
| 2    | <b>a</b> 1395168   | Load Roller ("A") (111.10/110.84) . . . . . | 2   |
| 2    | <b>a</b> 1333397   | Load Roller ("C") (112.62/112.36) . . . . . | 2   |
| 3    | 129387             | Shim (0.020 in.) . . . . .                  | 12  |
| 4    | 58901              | Snap Ring . . . . .                         | 2   |
| 4    | <b>a</b> 1374797   | Snap Ring . . . . .                         | 2   |
| 5    | 215211             | Wear Strip . . . . .                        | 2   |
| 6    | 131716             | Shim (0.020 in.) . . . . .                  | 2   |
| 6    | <b>a</b> 131715    | Shim (0.007 in.) . . . . .                  | 2   |
| 7    | 104506             | O-Ring . . . . .                            | 4   |
| 8    | 4082846            | Capscrew . . . . .                          | 4   |
| 9    | 4051079            | Restraint . . . . .                         | 2   |
| 10   | 1581566            | Nut . . . . .                               | 4   |
| 11   | 297649             | Ring . . . . .                              | 2   |
| 12   | 4031973            | Nut . . . . .                               | 2   |
| 13   | 13957              | Grease Fitting . . . . .                    | 2   |
| 13   | <b>a</b> 16041     | Grease Fitting . . . . .                    | 2   |
| 14   | 4033412            | Capscrew , Lubed . . . . .                  | 2   |
| 15   | 1581557            | Washer . . . . .                            | 2   |
| 16   | 4033414            | Bushing . . . . .                           | 2   |

**FOOTNOTES:****a** Optional**b** Refer to Table

## MAST ASSEMBLY (FIGURE 12-10) OUTER MAST — A397 MAST SERIES (8/2017 →)



BP170799

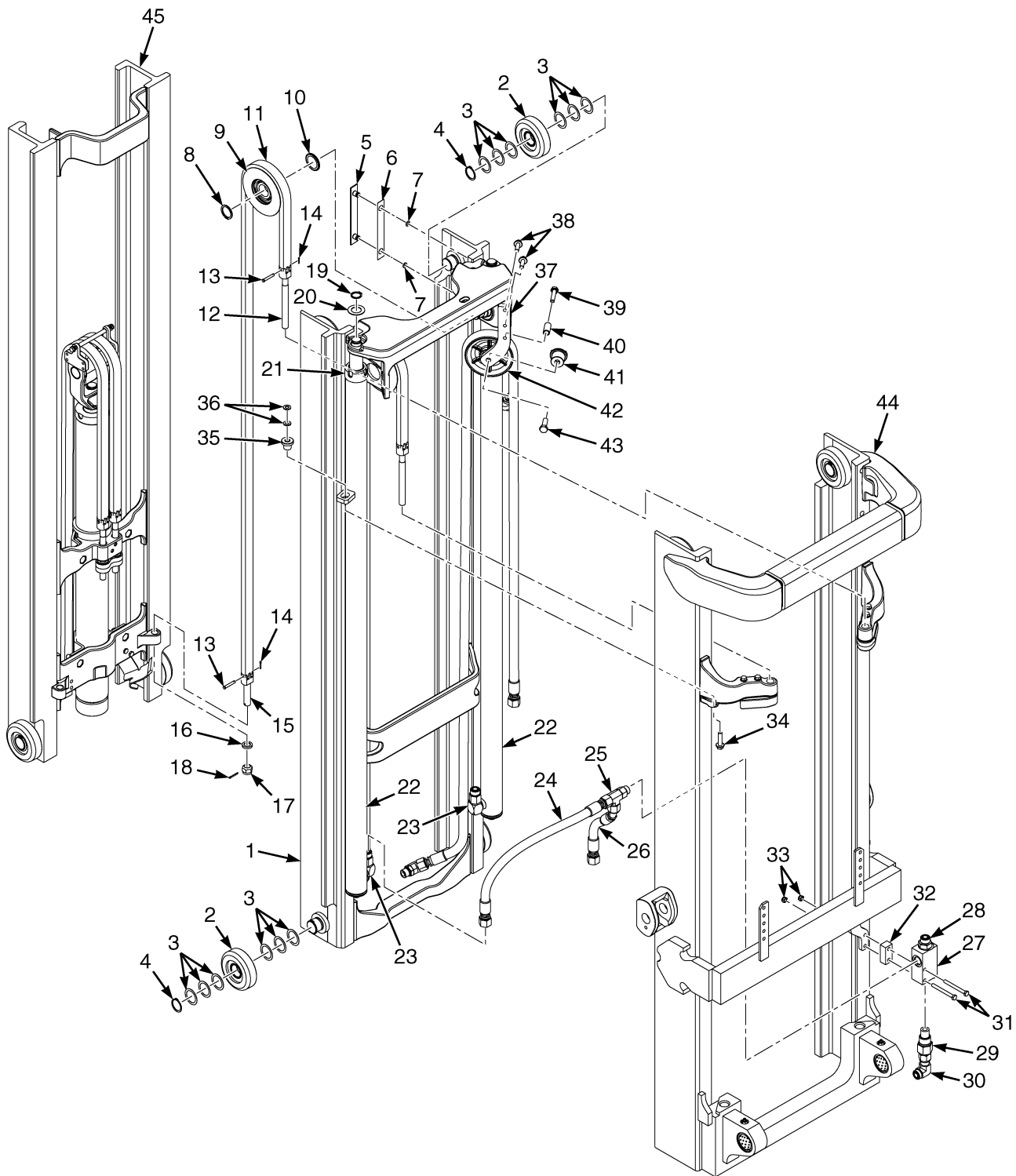
**MAST ASSEMBLY**  
**OUTER MAST – A397 MAST SERIES (8/2017 →)****H60XT**

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                        | 3968 mm<br>(156.2 in.)         | 4718 mm<br>(185.7 in.) | 5318 mm<br>(209.4 in.) | 5768 mm<br>(227.1 in.) |
|      | Mast<br>Group Number   | A397<br>3968                   | A397<br>4718           | A397<br>5318           | A397<br>5768           |
|      | Mast Assy              | 4640923                        | 4640928                | 4640934                | 4640937                |
| 1    | Outer Mast             | 4107507                        | 4107512                | 4107516                | 4107519                |

| ITEM | PART NO.           | DESCRIPTION                                 | QTY |
|------|--------------------|---------------------------------------------|-----|
|      | <b>b</b> . . . . . | Mast Assy . . . . .                         | 1   |
| 1    | <b>b</b> . . . . . | Outer Mast . . . . .                        | 1   |
| 2    | 1333396            | Load Roller ("B") (111.48/111.22) . . . . . | 2   |
| 2    | <b>a</b> 1395168   | Load Roller ("A") (111.10/110.84) . . . . . | 2   |
| 2    | <b>a</b> 1333397   | Load Roller ("C") (112.62/112.36) . . . . . | 2   |
| 3    | 129387             | Shim (0.020 in.) . . . . .                  | 12  |
| 4    | 58901              | Snap Ring . . . . .                         | 2   |
| 4    | <b>a</b> 1374797   | Snap Ring . . . . .                         | 2   |
| 5    | 215211             | Wear Strip . . . . .                        | 2   |
| 6    | 131716             | Shim (0.020 in.) . . . . .                  | 2   |
| 6    | <b>a</b> 131715    | Shim (0.007 in.) . . . . .                  | 2   |
| 7    | 104506             | O-Ring . . . . .                            | 4   |
| 8    | 4082846            | Capscrew . . . . .                          | 4   |
| 9    | 4051079            | Restraint . . . . .                         | 2   |
| 10   | 1581566            | Nut . . . . .                               | 4   |
| 11   | 297649             | Ring . . . . .                              | 2   |
| 12   | 4031973            | Nut . . . . .                               | 2   |
| 13   | 13957              | Grease Fitting . . . . .                    | 2   |
| 13   | <b>a</b> 16041     | Grease Fitting . . . . .                    | 2   |
| 14   | 4033412            | Capscrew , Lubed . . . . .                  | 2   |
| 15   | 1581557            | Washer . . . . .                            | 2   |
| 16   | 4033414            | Bushing . . . . .                           | 2   |

**FOOTNOTES:****a** Optional**b** Refer to Table

## MAST ASSEMBLY (FIGURE 12-11) INTERMEDIATE MAST AND MAIN-LIFT — A397 MAST SERIES (→ 8/2017)



BP170800

## MAST ASSEMBLY

### INTERMEDIATE MAST AND MAIN-LIFT – A397 MAST SERIES (→ 8/2017)

#### H60XT

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                        | 4568 mm<br>(179.8 in.)         | 4718 mm<br>(185.7 in.) | 5318 mm<br>(209.4 in.) | 5768 mm<br>(227.1 in.) |
|      |                        | A397<br>4568                   | A397<br>4718           | A397<br>5318           | A397<br>5768           |
|      | Mast Assy              | 4640927                        | 4640928                | 4640934                | 4640937                |
| 1    | Intermediate Mast      | 4053809                        | 4053810                | 4053814                | 4053817                |
| 11   | Chain                  | 1342384                        | 1342385                | 1342131                | 1342134                |
| 22   | Lift Cylinder          | 4615905                        | 4615906                | 4615910                | 4615913                |

| ITEM | PART NO.           | DESCRIPTION                             | QTY |
|------|--------------------|-----------------------------------------|-----|
|      | <b>b . . . . .</b> | Mast Assy .....                         | 1   |
| 1    | <b>b . . . . .</b> | Intermediate Mast .....                 | 1   |
| 2    | 1333396            | Load Roller ("B") (111.48/111.22) ..... | 4   |
| 2    | <b>a</b> 1395168   | Load Roller ("A") (111.10/110.84) ..... | 4   |
| 2    | <b>a</b> 1333397   | Load Roller ("C") (112.62/112.36) ..... | 4   |
| 3    | 129387             | Shim (0.020 in.) .....                  | 24  |
| 4    | 58901              | Snap Ring .....                         | 2   |
| 4    | <b>a</b> 1374797   | Snap Ring .....                         | 2   |
| 5    | 215211             | Wear Strip .....                        | 2   |
| 6    | 131716             | Shim (0.020 in.) .....                  | 2   |
| 6    | <b>a</b> 131715    | Shim (0.007 in.) .....                  | 2   |
| 7    | 104506             | O-Ring .....                            | 4   |
| 8    | 304526             | Snap Ring .....                         | 2   |
| 9    | 4054944            | Chain Sheave Assembly .....             | 2   |
| 9    | 1378699            | Ball Bearing .....                      | 1   |
| 9    | 37752              | Snap Ring .....                         | 1   |
| 10   | 335661             | Spacer .....                            | 2   |
| 11   | <b>b . . . . .</b> | Chain .....                             | 2   |
| 12   | 4072704            | Chain Anchor .....                      | 2   |
| 13   | 1514866            | Pin .....                               | 2   |
| 14   | 15211              | Cotter Pin .....                        | 4   |
| 15   | 1333329            | Chain Anchor .....                      | 2   |
| 16   | 297649             | Ring .....                              | 2   |
| 17   | 161003             | Nut .....                               | 2   |
| 18   | 15223              | Cotter Pin .....                        | 2   |
| 19   | 131358             | Snap Ring .....                         | 2   |
| 20   | 1333382            | Washer (0.060 in.) .....                | 2   |
| 21   | 1354915            | Washer (0.010 in.) .....                | 2   |
| 21   | <b>a</b> 1354916   | Washer (0.030 in.) .....                | 2   |
| 21   | <b>a</b> 1354917   | Washer (0.060 in.) .....                | 2   |
| 22   | <b>b . . . . .</b> | Lift Cylinder (☞ Figure 12-15).....     | 2   |
| 23   | 2062687            | Hyd Velocity Fuse .....                 | 2   |
| 24   | 4620151            | Hose Assy .....                         | 1   |
| 25   | 1592853            | Fitting .....                           | 1   |
| 26   | 4620152            | Hose Assy .....                         | 1   |
| 27   | 4055582            | Housing .....                           | 1   |

## MAST ASSEMBLY

### INTERMEDIATE MAST AND MAIN-LIFT – A397 MAST SERIES (→ 8/2017)

| ITEM | PART NO. | DESCRIPTION                                    | QTY |
|------|----------|------------------------------------------------|-----|
| 28   | 6996684  |                                                |     |
|      | 1486751  | Fitting .....                                  | 1   |
| 29   | 2062652  | Lowering Control Valve .....                   | 1   |
| 30   | 1486773  | Fitting .....                                  | 1   |
| 31   | 4065168  | Capscrew .....                                 | 2   |
| 32   | 4101579  | Spacer Block .....                             | 1   |
| 33   | 1581566  | Nut .....                                      | 2   |
| 34   | 4029051  | Capscrew .....                                 | 2   |
| 35   | 4054558  | Isolator .....                                 | 2   |
| 36   | 1581557  | Washer .....                                   | 4   |
| 37   | 4049173  | Plate .....                                    | 1   |
| 38   | 4051501  | Capscrew .....                                 | 2   |
| 39   | 1598660  | Capscrew .....                                 | 1   |
| 40   | 1660415  | Spacer (Thin Wall) .....                       | 1   |
| 41   | 4013267  | Stubshaft .....                                | 1   |
| 42   | 4048782  | Hose Sheave .....                              | 1   |
| 43   | 1581591  | Capscrew .....                                 | 1   |
| 44   | .....    | Outer Mast (☞ Figure 12-9).....                | ..  |
| 45   | .....    | Inner Mast and Free-Lift (☞ Figure 12-13)..... | ..  |

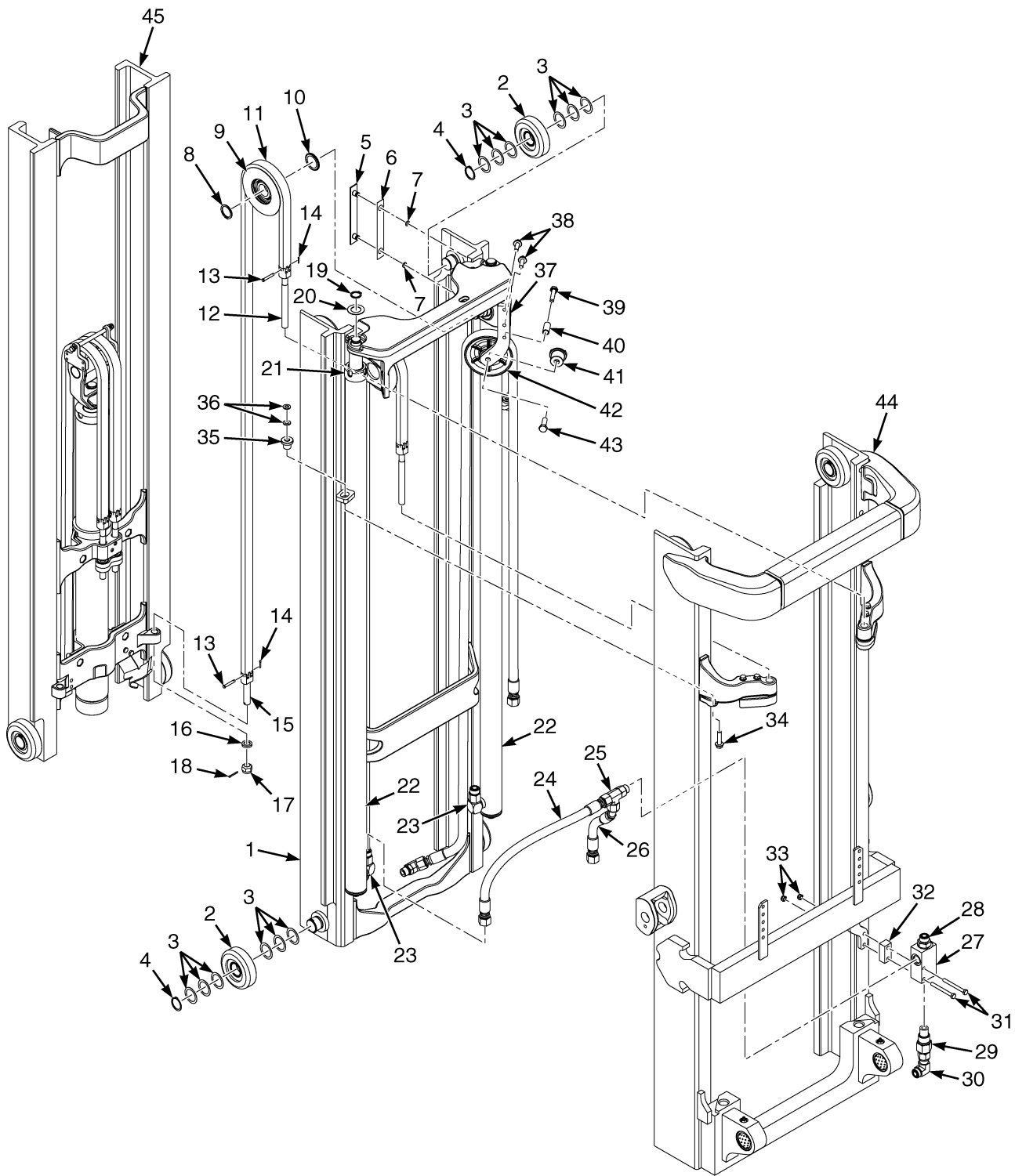
**FOOTNOTES:****a** Optional**b** Refer to Table

## NOTES

[illegible]

## MAST ASSEMBLY (FIGURE 12-12)

### INTERMEDIATE MAST AND MAIN-LIFT — A397 MAST SERIES (8/2017 →)



BP170800



## MAST ASSEMBLY

### INTERMEDIATE MAST AND MAIN-LIFT – A397 MAST SERIES (8/2017 →)

#### H60XT

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                        | 3968 mm<br>(156.2 in.)         | 4718 mm<br>(185.7 in.) | 5318 mm<br>(209.4 in.) | 5768 mm<br>(227.1 in.) |
|      |                        | A397<br>3968                   | A397<br>4718           | A397<br>5318           | A397<br>5768           |
|      | Mast Assy              | 4640923                        | 4640928                | 4640934                | 4640937                |
| 1    | Intermediate Mast      | 4053806                        | 4053810                | 4053814                | 4053817                |
| 11   | Chain                  | 1342382                        | 1342385                | 1342131                | 1342134                |

| ITEM | PART NO.           | DESCRIPTION                                   | QTY |
|------|--------------------|-----------------------------------------------|-----|
|      | <b>b</b> . . . . . | Mast Assy . . . . .                           | 1   |
| 1    | <b>b</b> . . . . . | Intermediate Mast . . . . .                   | 1   |
| 2    | 1333396            | Load Roller ("B") (111.48/111.22) . . . . .   | 4   |
| 2    | <b>a</b> 1395168   | Load Roller ("A") (111.10/110.84) . . . . .   | 4   |
| 2    | <b>a</b> 1333397   | Load Roller ("C") (112.62/112.36) . . . . .   | 4   |
| 3    | 129387             | Shim (0.020 in.) . . . . .                    | 24  |
| 4    | 58901              | Snap Ring . . . . .                           | 2   |
| 4    | <b>a</b> 1374797   | Snap Ring . . . . .                           | 2   |
| 5    | 215211             | Wear Strip . . . . .                          | 2   |
| 6    | 131716             | Shim (0.020 in.) . . . . .                    | 2   |
| 6    | <b>a</b> 131715    | Shim (0.007 in.) . . . . .                    | 2   |
| 7    | 104506             | O-Ring . . . . .                              | 4   |
| 8    | 304526             | Snap Ring . . . . .                           | 2   |
| 9    | 4054944            | Chain Sheave Assembly . . . . .               | 2   |
| 9    | 1378699            | Ball Bearing . . . . .                        | 1   |
| 9    | 37752              | Snap Ring . . . . .                           | 1   |
| 10   | 335661             | Spacer . . . . .                              | 2   |
| 11   | <b>b</b> . . . . . | Chain . . . . .                               | 2   |
| 12   | 4184157            | Chain Anchor . . . . .                        | 2   |
| 13   | 1514866            | Pin . . . . .                                 | 2   |
| 14   | 15211              | Cotter Pin . . . . .                          | 4   |
| 15   | 1333329            | Chain Anchor . . . . .                        | 2   |
| 16   | 297649             | Ring . . . . .                                | 2   |
| 17   | 161003             | Nut . . . . .                                 | 2   |
| 18   | 15223              | Cotter Pin . . . . .                          | 2   |
| 19   | 131358             | Snap Ring . . . . .                           | 2   |
| 20   | 1333382            | Washer (0.060 in.) . . . . .                  | 2   |
| 21   | 1354915            | Washer (0.010 in.) . . . . .                  | 2   |
| 21   | <b>a</b> 1354916   | Washer (0.030 in.) . . . . .                  | 2   |
| 21   | <b>a</b> 1354917   | Washer (0.060 in.) . . . . .                  | 2   |
| 22   | . . . . .          | Main Lift Cylinder (☞ Figure 12-15) . . . . . | 2   |
| 23   | 2062687            | Hyd Velocity Fuse . . . . .                   | 2   |
| 24   | 4620151            | Hose Assy . . . . .                           | 1   |
| 25   | 1592853            | Fitting . . . . .                             | 1   |
| 26   | 4620152            | Hose Assy . . . . .                           | 1   |
| 27   | 4055582            | Housing . . . . .                             | 1   |
| 28   | 6996684            | Fitting . . . . .                             | 1   |

## MAST ASSEMBLY

### INTERMEDIATE MAST AND MAIN-LIFT – A397 MAST SERIES (8/2017 →)

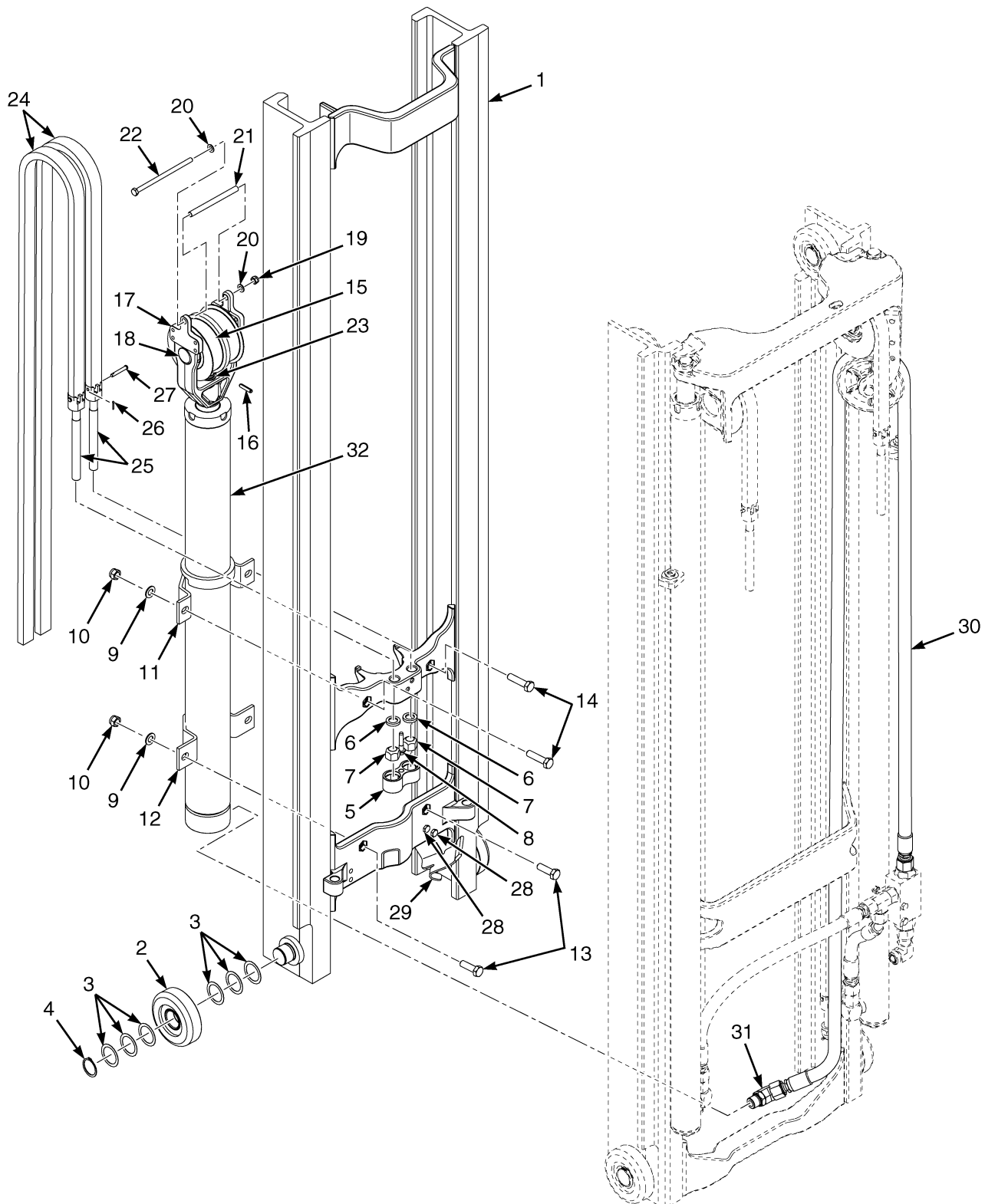
| ITEM | PART NO. | DESCRIPTION                                    | QTY |
|------|----------|------------------------------------------------|-----|
|      | 1486751  |                                                |     |
| 29   | 2062652  | Lowering Control Valve .....                   | 1   |
| 30   | 1486773  | Fitting .....                                  | 1   |
| 31   | 4065168  | Capscrew .....                                 | 2   |
| 32   | 4101579  | Spacer Block .....                             | 1   |
| 33   | 1581566  | Nut .....                                      | 2   |
| 34   | 4029051  | Capscrew .....                                 | 2   |
| 35   | 4054558  | Isolator .....                                 | 2   |
| 36   | 1581557  | Washer .....                                   | 4   |
| 37   | 4049173  | Plate .....                                    | 1   |
| 38   | 4051501  | Capscrew .....                                 | 2   |
| 39   | 1598660  | Capscrew .....                                 | 1   |
| 40   | 1660415  | Spacer (Thin Wall) .....                       | 1   |
| 41   | 4013267  | Stubshaft .....                                | 1   |
| 42   | 4048782  | Hose Sheave .....                              | 1   |
| 43   | 1581591  | Capscrew .....                                 | 1   |
| 44   | .....    | Outer Mast (☞ Figure 12-9).....                | ..  |
| 45   | .....    | Inner Mast and Free-Lift (☞ Figure 12-13)..... | ..  |

**FOOTNOTES:****a** Optional**b** Refer to Table

## NOTES

[illegible]

## MAST ASSEMBLY (FIGURE 12-13) INNER MAST AND FREE-LIFT — A397 MAST SERIES (→ 8/2017)



BP170801

## MAST ASSEMBLY

### INNER MAST AND FREE-LIFT – A397 MAST SERIES (→ 8/2017)

#### H60XT

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                        | 4568 mm<br>(179.8 in.)         | 4718 mm<br>(185.7 in.) | 5318 mm<br>(209.4 in.) | 5768 mm<br>(227.1 in.) |
|      |                        | A397<br>4568                   | A397<br>4718           | A397<br>5318           | A397<br>5768           |
|      | Mast Assy              | 4640927                        | 4640928                | 4640934                | 4640937                |
| 1    | Inner Mast             | 4053841                        | 4053842                | 4053846                | 4053849                |
| 24   | Chain                  | 1342122                        | 1342124                | 1342129                | 1342130                |
| 30   | Hose Assy              | 4637735                        | 4637736                | 4637740                | 4637743                |
| 32   | Free Lift Cylinder     | 4618057                        | 4618059                | 4618064                | 4618067                |

| ITEM | PART NO.           | DESCRIPTION                             | QTY |
|------|--------------------|-----------------------------------------|-----|
|      | <b>b</b> . . . . . | Mast Assy .....                         | 1   |
| 1    | <b>b</b> . . . . . | Inner Mast .....                        | 1   |
| 2    | 1333396            | Load Roller ("B") (111.48/111.22) ..... | 2   |
| 2    | <b>a</b> 1395168   | Load Roller ("A") (111.10/110.84) ..... | 2   |
| 2    | <b>a</b> 1333397   | Load Roller ("C") (112.62/112.36) ..... | 2   |
| 3    | 129387             | Shim (0.020 in.) .....                  | 12  |
| 4    | 58901              | Snap Ring .....                         | 2   |
| 4    | <b>a</b> 1374797   | Snap Ring .....                         | 2   |
| 5    | 4052568            | Restraint .....                         | 1   |
| 6    | 297649             | Ring .....                              | 2   |
| 7    | 4031973            | Nut .....                               | 2   |
| 8    | 4133281            | Capscrew .....                          | 1   |
| 9    | 1581559            | Washer .....                            | 4   |
| 10   | 1581849            | Nut .....                               | 4   |
| 11   | 4057313            | Clamp .....                             | 1   |
| 12   | 4057611            | Clamp .....                             | 1   |
| 13   | 1581591            | Capscrew .....                          | 2   |
| 14   | 1581827            | Capscrew .....                          | 2   |
| 15   | 4052261            | Chain Sheave .....                      | 1   |
| 15   | 1378699            | Ball Bearing .....                      | 1   |
| 16   | 302465             | Roll Pin .....                          | 1   |
| 17   | 4131005            | Crosshead .....                         | 1   |
| 18   | 4046548            | Pin .....                               | 1   |
| 19   | 1581566            | Nut .....                               | 1   |
| 20   | 4081768            | Washer .....                            | 2   |
| 21   | 4056718            | Roller Spacer .....                     | 1   |
| 22   | 4061309            | Capscrew .....                          | 1   |
| 23   | 131358             | Snap Ring .....                         | 1   |
| 24   | <b>b</b> . . . . . | Chain .....                             | 2   |
| 25   | 4072704            | Chain Anchor .....                      | 2   |
| 26   | 15211              | Cotter Pin .....                        | 2   |
| 27   | 1514866            | Pin .....                               | 2   |
| 28   | 1696161            | Capscrew .....                          | 2   |
| 29   | 4054074            | Bracket Wldmt .....                     | 1   |

**MAST ASSEMBLY**  
**INNER MAST AND FREE-LIFT – A397 MAST SERIES (→ 8/2017)**

| ITEM | PART NO.         | DESCRIPTION                              | QTY |
|------|------------------|------------------------------------------|-----|
|      | 4126698          |                                          |     |
| 30   | <b>b</b> . . . . | Hose Assy .....                          | 1   |
| 31   | 1516205          | Fitting .....                            | 1   |
| 32   | <b>b</b> . . . . | Free Lift Cylinder (☞ Figure 12-16)..... | 1   |

**FOOTNOTES:****a** Optional**b** Refer to Table

## NOTES

[illegible]

This exploded perspective view illustrates the assembly of a mechanical device. The main vertical frame (1) is shown on the right. On the left, a curved component (24) is connected to a vertical rod (20) via a bracket (17) and a pin (18). A spring (2) is attached to the bottom of the rod (20) and a base plate (3). A series of rollers (4) are positioned along the bottom of the rod (20). A bracket (16) is attached to the rod (20) and a pin (15) is inserted through it. A bracket (19) is attached to the rod (20) and a pin (21) is inserted through it. A bracket (23) is attached to the rod (20) and a pin (25) is inserted through it. A bracket (26) is attached to the rod (20) and a pin (27) is inserted through it. A bracket (28) is attached to the rod (20) and a pin (29) is inserted through it. A bracket (31) is attached to the rod (20) and a pin (32) is inserted through it. A bracket (30) is attached to the rod (20) and a pin (31) is inserted through it. A bracket (14) is attached to the rod (20) and a pin (13) is inserted through it. A bracket (11) is attached to the rod (20) and a pin (10) is inserted through it. A bracket (12) is attached to the rod (20) and a pin (9) is inserted through it. A bracket (13) is attached to the rod (20) and a pin (8) is inserted through it. A bracket (14) is attached to the rod (20) and a pin (7) is inserted through it. A bracket (15) is attached to the rod (20) and a pin (6) is inserted through it. A bracket (16) is attached to the rod (20) and a pin (5) is inserted through it. A bracket (17) is attached to the rod (20) and a pin (4) is inserted through it. A bracket (18) is attached to the rod (20) and a pin (3) is inserted through it. A bracket (19) is attached to the rod (20) and a pin (2) is inserted through it. A bracket (20) is attached to the rod (20) and a pin (1) is inserted through it. A bracket (21) is attached to the rod (20) and a pin (1) is inserted through it. A bracket (22) is attached to the rod (20) and a pin (1) is inserted through it. A bracket (23) is attached to the rod (20) and a pin (1) is inserted through it. A bracket (24) is attached to the rod (20) and a pin (1) is inserted through it. A bracket (25) is attached to the rod (20) and a pin (1) is inserted through it. A bracket (26) is attached to the rod (20) and a pin (1) is inserted through it. A bracket (27) is attached to the rod (20) and a pin (1) is inserted through it. A bracket (28) is attached to the rod (20) and a pin (1) is inserted through it. A bracket (29) is attached to the rod (20) and a pin (1) is inserted through it. A bracket (30) is attached to the rod (20) and a pin (1) is inserted through it. A bracket (31) is attached to the rod (20) and a pin (1) is inserted through it. A bracket (32) is attached to the rod (20) and a pin (1) is inserted through it.

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## MAST ASSEMBLY

### INNER MAST AND FREE-LIFT – A397 MAST SERIES (8/2017 →)

#### H60XT

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                        | 3968 mm<br>(156.2 in.)         | 4718 mm<br>(185.7 in.) | 5318 mm<br>(209.4 in.) | 5768 mm<br>(227.1 in.) |
|      |                        | A397<br>3968                   | A397<br>4718           | A397<br>5318           | A397<br>5768           |
|      | Mast Assy              | 4640923                        | 4640928                | 4640934                | 4640937                |
| 1    | Inner Mast             | 4053838                        | 4053842                | 4053846                | 4053849                |
| 24   | Chain                  | 1342380                        | 1342123                | 1342128                | 1359144                |
| 30   | Hose Assy              | 4637732                        | 4637736                | 4637740                | 4637743                |

| ITEM | PART NO.         | DESCRIPTION                             | QTY |
|------|------------------|-----------------------------------------|-----|
|      | <b>b . . . .</b> | Mast Assy .....                         | 1   |
| 1    | <b>b . . . .</b> | Inner Mast .....                        | 1   |
| 2    | 1333396          | Load Roller ("B") (111.48/111.22) ..... | 2   |
| 2    | <b>a</b> 1395168 | Load Roller ("A") (111.10/110.84) ..... | 2   |
| 2    | <b>a</b> 1333397 | Load Roller ("C") (112.62/112.36) ..... | 2   |
| 3    | 129387           | Shim (0.020 in.) .....                  | 12  |
| 4    | 58901            | Snap Ring .....                         | 2   |
| 4    | <b>a</b> 1374797 | Snap Ring .....                         | 2   |
| 5    | 4052568          | Restraint .....                         | 1   |
| 6    | 297649           | Ring .....                              | 2   |
| 7    | 4031973          | Nut .....                               | 2   |
| 8    | 4133281          | Capscrew .....                          | 1   |
| 9    | 1581559          | Washer .....                            | 4   |
| 10   | 1581849          | Nut .....                               | 4   |
| 11   | 4057313          | Clamp .....                             | 1   |
| 12   | 4057611          | Clamp .....                             | 1   |
| 13   | 1581591          | Capscrew .....                          | 2   |
| 14   | 1581827          | Capscrew .....                          | 2   |
| 15   | 4052261          | Chain Sheave .....                      | 1   |
| 15   | 1378699          | Ball Bearing .....                      | 1   |
| 16   | 302465           | Roll Pin .....                          | 1   |
| 17   | 4131005          | Crosshead .....                         | 1   |
| 18   | 4046548          | Pin .....                               | 1   |
| 19   | 1581566          | Nut .....                               | 1   |
| 20   | 4081768          | Washer .....                            | 2   |
| 21   | 4056718          | Roller Spacer .....                     | 1   |
| 22   | 4061309          | Capscrew .....                          | 1   |
| 23   | 131358           | Snap Ring .....                         | 1   |
| 24   | <b>b . . . .</b> | Chain .....                             | 2   |
| 25   | 4184157          | Chain Anchor .....                      | 2   |
| 26   | 15211            | Cotter Pin .....                        | 2   |
| 27   | 1514866          | Pin .....                               | 2   |
| 28   | 1696161          | Capscrew .....                          | 2   |
| 29   | 4054074          |                                         |     |
|      | 4126698          | Bracket Wldmt .....                     | 1   |
| 30   | <b>b . . . .</b> | Hose Assy .....                         | 1   |

**MAST ASSEMBLY****INNER MAST AND FREE-LIFT – A397 MAST SERIES (8/2017 →)**

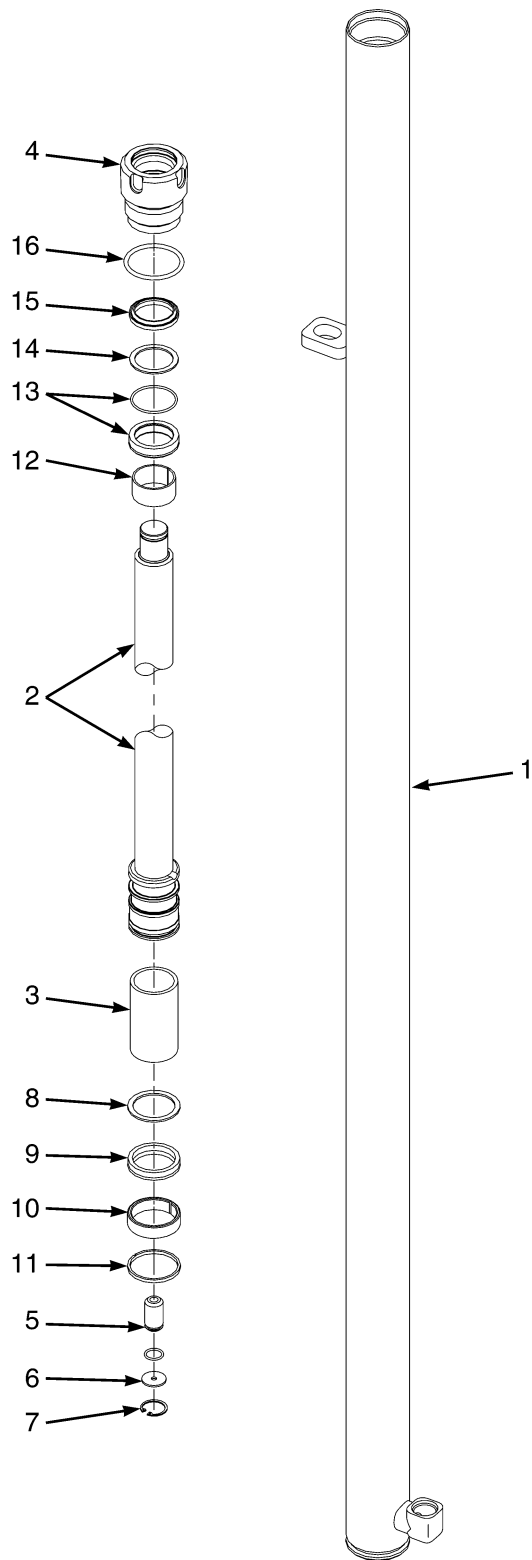
| ITEM | PART NO. | DESCRIPTION                              | QTY |
|------|----------|------------------------------------------|-----|
| 31   | 1516205  | Fitting .....                            | 1   |
| 32   | .....    | Free-Lift Cylinder (☞ Figure 12-16)..... | 1   |

**FOOTNOTES:****a** Optional**b** Refer to Table

## NOTES

[illegible]

## MAIN LIFT CYLINDER (FIGURE 12-15) THREE STAGE FULL FREE-LIFT — A397 MAST SERIES



BP170651

**MAIN LIFT CYLINDER**  
**THREE STAGE FULL FREE-LIFT – A397 MAST SERIES**  
**H60XT**

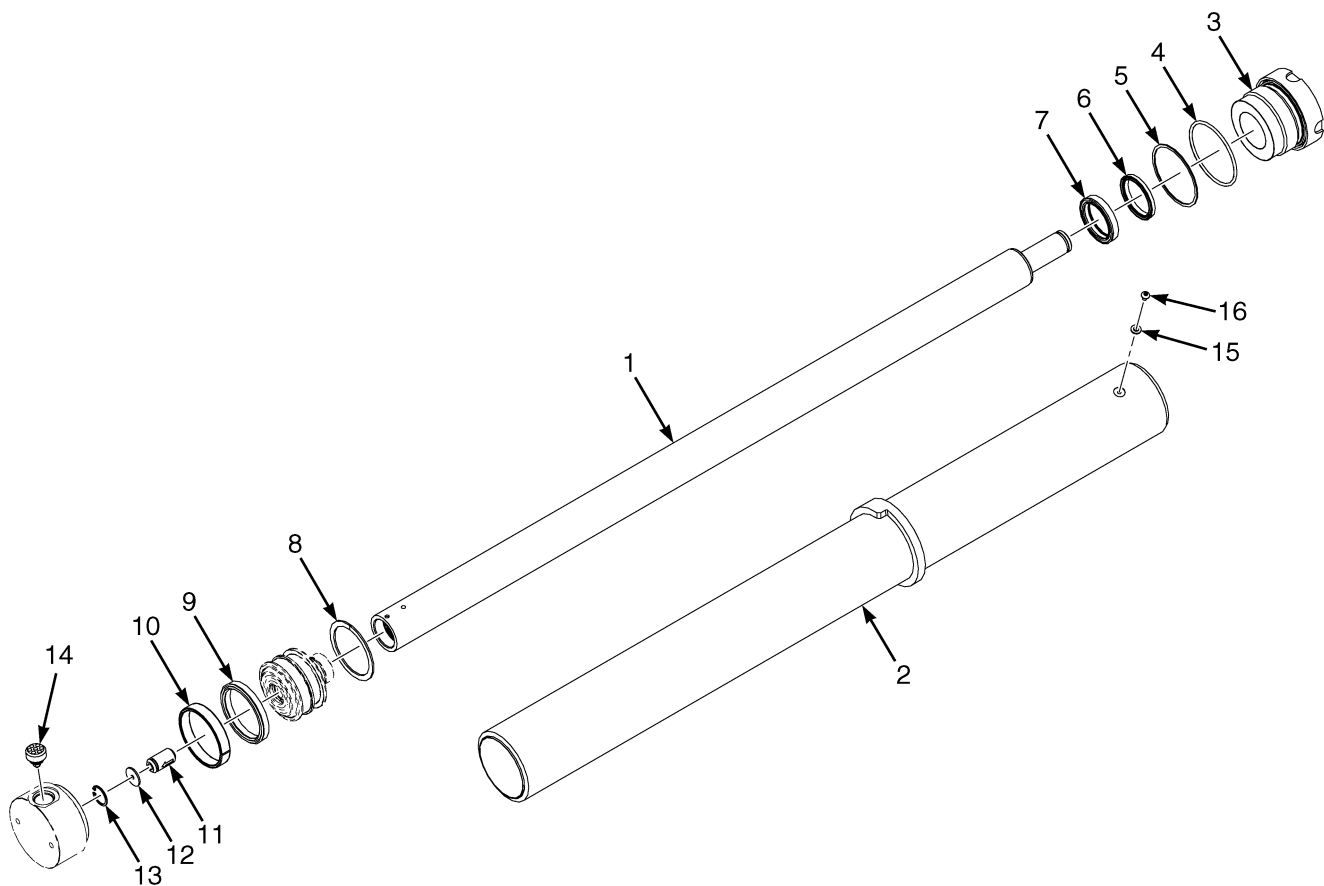
| ITEM | DESCRIPTION<br>1 2 3 4   | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|--------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                          | 4568 mm<br>(179.8 in.)         | 4718 mm<br>(185.7 in.) | 5318 mm<br>(209.4 in.) | 5768 mm<br>(227.1 in.) |
|      | Mast<br>Group Number     | A397<br>4568                   | A397<br>4718           | A397<br>5318           | A397<br>5768           |
|      | Cylinder<br>Group Number | 8607308                        | 8607309                | 8607313                | 8607316                |
|      | Lift Cylinder            | 4615905                        | 4615906                | 4615910                | 4615913                |
| 1    | Tube Wldmt-<br>Cylinder  | 4041238                        | 4041239                | 4041243                | 4041246                |
| 2    | Cylinder Rod             | 1355745                        | 1355749                | 1355762                | 1355775                |
| 3    | Spacer                   | 2046164                        | 2073087                | 2077818                | 2077818                |

| ITEM | PART NO.    | DESCRIPTION               | QTY |
|------|-------------|---------------------------|-----|
|      | a . . . . . | Lift Cylinder .....       | 2   |
| 1    | a . . . . . | Tube Wldmt-Cylinder ..... | 1   |
| 2    | a . . . . . | Cylinder Rod .....        | 1   |
| 3    | a . . . . . | Spacer .....              | 1   |
| 4    | 4615848     | Gland .....               | 1   |
| 5    | 257913      | Check Valve .....         | 1   |
| 6    | 297531      | Washer .....              | 1   |
| 6    | 637635      | Washer (Optional) .....   | 1   |
| 7    | 187388      | Snap Ring .....           | 1   |
| 8    | 335012      | Back-Up Ring .....        | 1   |
| 9    | 1381063     | Piston Seal .....         | 1   |
| 10   | 1356751     | Wear Ring .....           | 1   |
| 11   | 1356748     | Piston Ring .....         | 1   |
| 12   | 322902      | Wear Ring .....           | 1   |
| 13   | 1356749     | Rod Seal .....            | 1   |
| 14   | 322824      | Back-Up Ring .....        | 1   |
| 15   | 1383063     | Rod Wiper .....           | 1   |
| 16   | 59229       | O-Ring .....              | 1   |
|      | 4623974     | Kit-Seal .....            | 1   |

**FOOTNOTES:**

a Refer to Table

## FREE-LIFT CYLINDER (FIGURE 12-16) THREE STAGE FULL FREE-LIFT — A397 MAST SERIES



BP170652

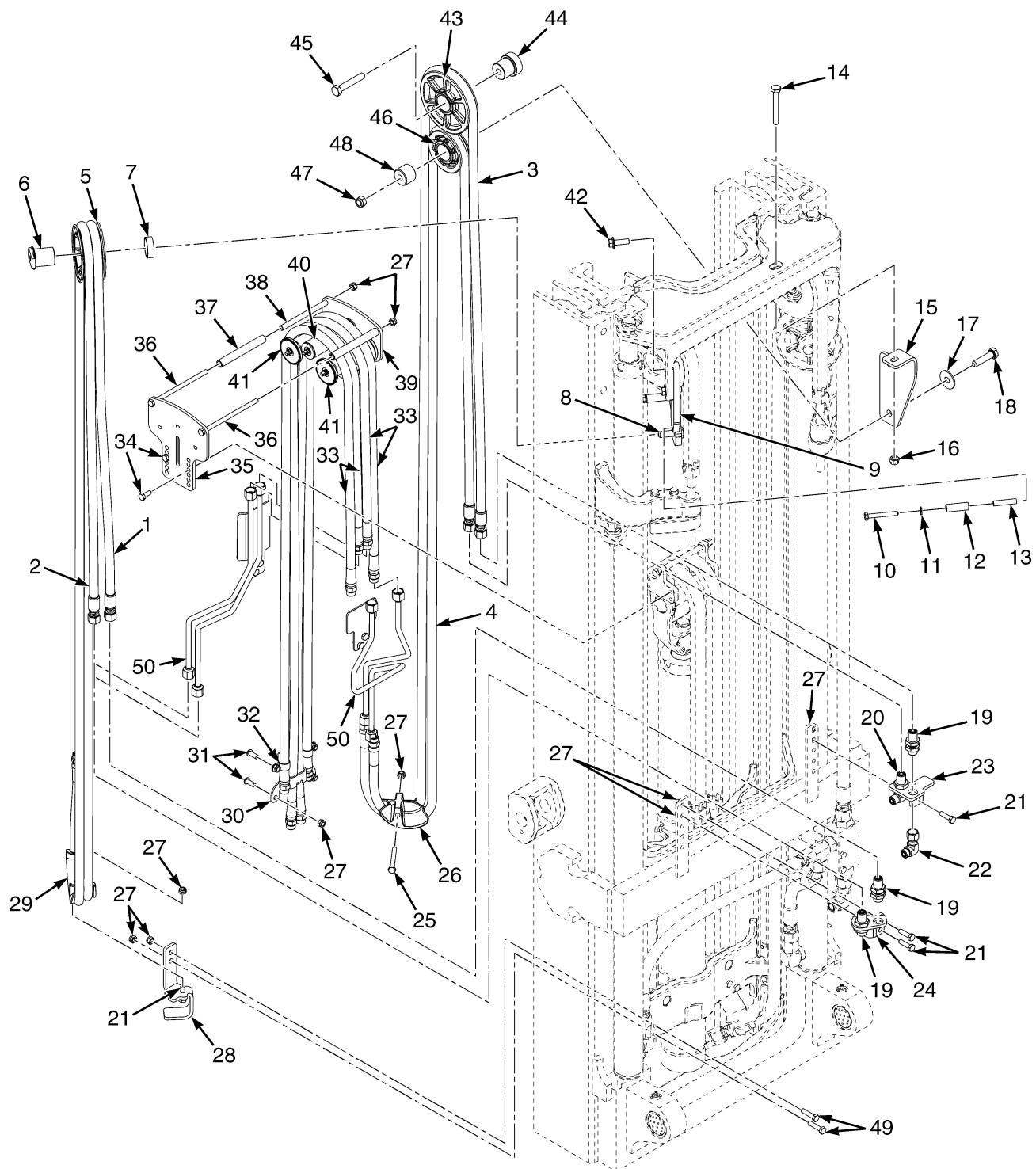
**FREE-LIFT CYLINDER**  
**THREE STAGE FULL FREE-LIFT – A397 MAST SERIES**  
**H60XT**

| ITEM | DESCRIPTION<br>1 2 3 4   | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|--------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                          | 4568 mm<br>(179.8 in.)         | 4718 mm<br>(185.7 in.) | 5318 mm<br>(209.4 in.) | 5768 mm<br>(227.1 in.) |
|      | Mast<br>Group Number     | A397<br>4568                   | A397<br>4718           | A397<br>5318           | A397<br>5768           |
|      | Cylinder<br>Group Number | 8607358                        | 8607360                | 8607365                | 8607368                |
|      | Free Lift Cylinder       | 4618057                        | 4618059                | 4618064                | 4618067                |
| 1    | Cylinder Rod             | 4046308                        | 4046310                | 4046315                | 4046318                |
| 2    | Tube Wldmt-<br>Cylinder  | 4046268                        | 4046270                | 4046275                | 4046278                |

| ITEM | PART NO.           | DESCRIPTION               | QTY |
|------|--------------------|---------------------------|-----|
|      | <b>b</b> . . . . . | Free Lift Cylinder .....  | 1   |
| 1    | <b>b</b> . . . . . | Cylinder Rod .....        | 1   |
| 2    | <b>b</b> . . . . . | Tube Wldmt-Cylinder ..... | 1   |
| 3    | 1356661            | Gland .....               | 1   |
| 4    | 15880              | O-Ring .....              | 1   |
| 5    | 164840             | Back-Up Ring .....        | 1   |
| 6    | 1463105            | Rod Wiper .....           | 1   |
| 7    | 1622946            | Rod Seal .....            | 1   |
| 8    | 637565             | Back-Up Ring .....        | 1   |
| 9    | 309062             | Rod Seal .....            | 1   |
| 10   | 636941             | Wear Ring .....           | 1   |
| 11   | 297538             | Check Valve .....         | 1   |
| 12   | 297531             | Washer .....              | 1   |
| 12   | 637635             | Washer (Optional) .....   | 1   |
| 13   | 187388             | Snap Ring .....           | 1   |
| 14   | 4055506            | Flow Valve .....          | 1   |
| 15   | 190887             | Sealing Ring .....        | 1   |
| 16   | 1361302            | Screw .....               | 1   |
|      | <b>a</b> 190580    | O-Ring .....              | 1   |
|      | 1356662            | Kit-Seal .....            | 1   |

**FOOTNOTES:****a** Not Illustrated**b** Refer to Table

## HEADER HOSE AND ATTACHING PARTS (FIGURE 12-17)



BP170907



**HEADER HOSE AND ATTACHING PARTS****H40-50XT**

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
|      |                        | 4310 mm<br>(169.7 in.)         | 4760 mm<br>(187.4 in.) | 4910 mm<br>(193.3 in.) | 5060 mm<br>(199.2 in.) | 5510 mm<br>(216.9 in.) |
|      | Mast<br>Group Number   | A387<br>4310                   | A387<br>4760           | A387<br>4910           | A387<br>5060           | A387<br>5510           |
| 1    | Header Hose            | 4636926                        | 4636928                | 4636929                | 4636930                | 4636933                |
| 2    | Header Hose            | 4636893                        | 4636895                | 4636896                | 4636897                | 4636900                |
| 3    | Header Hose            | 4636959                        | 4636961                | 4636962                | 4636963                | 4636966                |
| 4    | Header Hose            | 4636992                        | 4636994                | 4636995                | 4636996                | 4624100                |
| 33   | Header Hose            | 4624213                        | 4624215                | 4624216                | 4624217                | 4624100                |

**H60XT**

| ITEM | DESCRIPTION<br>1 2 3 4 | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------|------------------------|--------------------------------|------------------------|------------------------|------------------------|
|      |                        | 4568 mm<br>(179.8 in.)         | 4718 mm<br>(185.7 in.) | 5318 mm<br>(209.4 in.) | 5768 mm<br>(227.1 in.) |
|      | Mast<br>Group Number   | A397<br>4568                   | A397<br>4718           | A397<br>5318           | A397<br>5768           |
| 1    | Header Hose            | 4636929                        | 4636930                | 4636934                | 4636937                |
| 2    | Header Hose            | 4636896                        | 4636897                | 4636901                | 4636904                |
| 3    | Header Hose            | 4636962                        | 4636963                | 4636967                | 4636970                |
| 4    | Header Hose            | 4636995                        | 4636996                | 4637000                | 4637003                |
| 33   | Header Hose            | 4624216                        | 4624217                | 4624101                | 4624104                |

**KEY:****A: 3 Function****B: 4 Function**

| ITEM | PART NO.    | DESCRIPTION       | QTY |   |
|------|-------------|-------------------|-----|---|
|      |             |                   | A   | B |
| 1    | c . . . . . | Header Hose ..... | 1   | 1 |
| 2    | c . . . . . | Header Hose ..... | 1   | 1 |
| 3    | c . . . . . | Header Hose ..... | ..  | 1 |
| 4    | c . . . . . | Header Hose ..... | ..  | 1 |
| 5    | 4048781     | Hose Sheave ..... | 1   | 1 |
| 5    | 4050091     | Bushing .....     | 1   | 1 |
| 6    | 4013268     | Stubshaft .....   | 1   | 1 |
| 7    | 4051293     | Spacer .....      | 1   | 1 |
| 8    | 1581581     | Capscrew .....    | 1   | 1 |
| 9    | 4132420     | Bracket .....     | 1   | 1 |
| 10   | 1581836     | Capscrew .....    | 2   | 2 |
| 11   | 4166624     |                   |     |   |
|      | 1581556     | Washer .....      | 2   | 2 |
| 12   | 4138115     | Roller .....      | 2   | 2 |
| 13   | 4138114     | Roller .....      | 2   | 2 |
| 14   | 1626461     | Capscrew .....    | ..  | 1 |

## HEADER HOSE AND ATTACHING PARTS

## KEY:

A: 3 Function

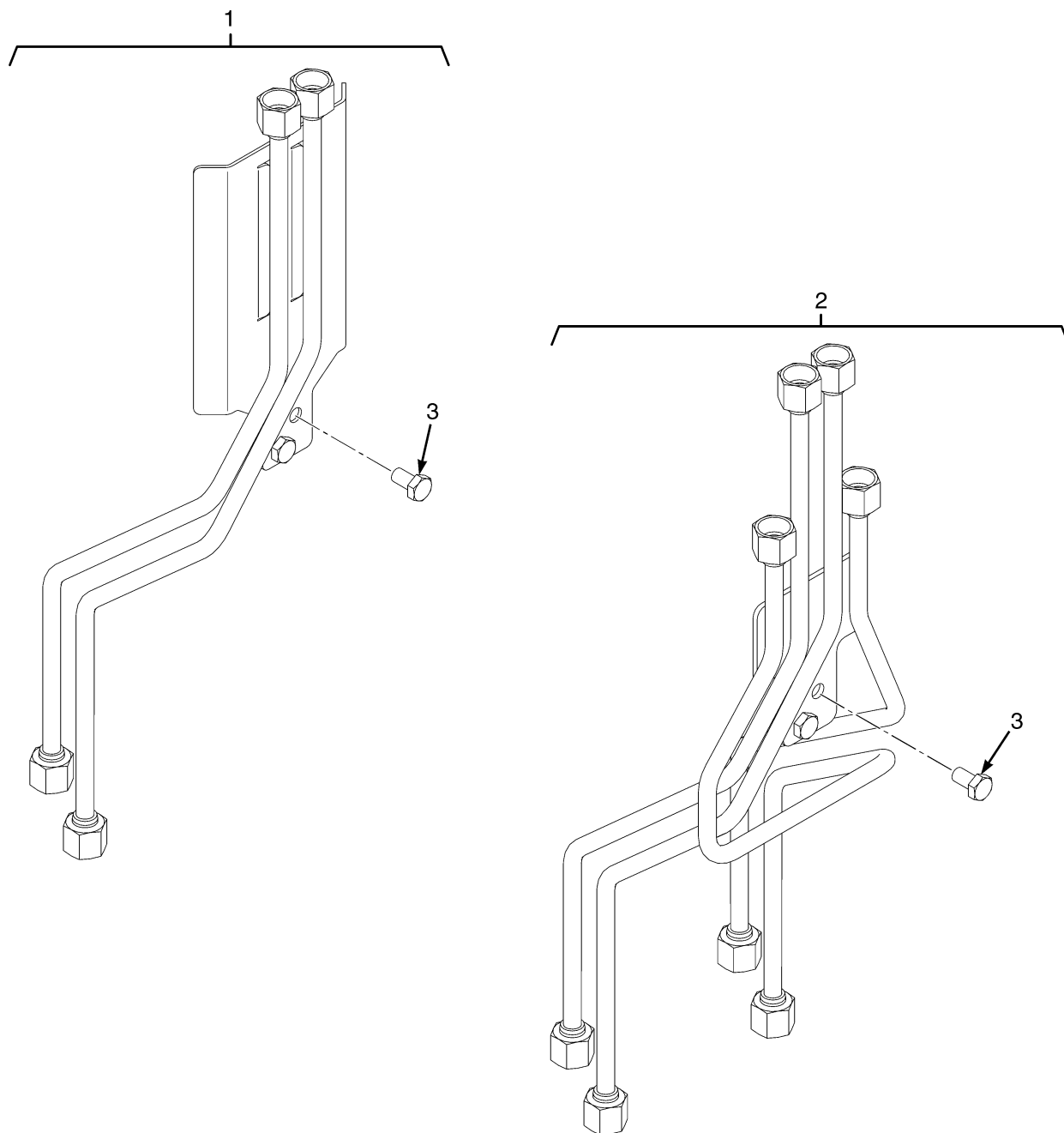
B: 4 Function

| ITEM | PART NO.                    | DESCRIPTION                                                  | QTY |    |
|------|-----------------------------|--------------------------------------------------------------|-----|----|
|      |                             |                                                              | A   | B  |
| 15   | 4049172                     | Bracket .....                                                | ..  | 1  |
| 16   | 1581567                     | Nut .....                                                    | ..  | 1  |
| 17   | 1345190                     | Washer .....                                                 | ..  | 1  |
| 18   | 1581827                     | Capscrew .....                                               | ..  | 1  |
| 19   | 1528573                     | Fitting .....                                                | 2   | 3  |
| 20   | 1528579                     | Fitting .....                                                | ..  | 1  |
| 21   | 1696161                     | Capscrew .....                                               | 3   | 5  |
| 22   | 1473895                     | Fitting .....                                                | ..  | 1  |
| 23   | 4058926                     | Bracket .....                                                | ..  | 1  |
| 24   | 4122876                     | Bracket .....                                                | 1   | 1  |
| 25   | 4016370                     | Capscrew .....                                               | ..  | 1  |
| 26   | 4057777                     | Bracket .....                                                | ..  | 1  |
| 27   | 1581566                     | Nut .....                                                    | 9   | 14 |
| 28   | <del>4104560</del>          |                                                              |     |    |
|      | 4120649                     | Bracket .....                                                | 1   | 1  |
| 29   | 4622150                     | Turnaround .....                                             | 1   | 1  |
| 30   | 4055683                     | Hose Clamp .....                                             | 1   | 1  |
| 31   | 1597448                     | Capscrew .....                                               | 2   | 4  |
| 32   | 4082001                     | Clamp .....                                                  | ..  | 2  |
| 33   | <b>c</b> . . . .            | Header Hose .....                                            | 2   | 4  |
| 34   | 1581580                     | Capscrew .....                                               | 4   | 4  |
| 35   | 4059108                     | Plate .....                                                  | 1   | 1  |
| 36   | 4061309                     | Capscrew .....                                               | 2   | 2  |
| 37   | 4049218                     | Roller Shaft .....                                           | 2   | 2  |
| 38   | 4056718                     | Roller Spacer .....                                          | 2   | 2  |
| 39   | 4059109                     | Plate .....                                                  | 1   | 1  |
| 40   | 4128358                     | Roller , Center Roller Assembly .....                        | 1   | 1  |
| 41   | 4128356                     | Roller .....                                                 | 2   | 2  |
| 42   | 4051501                     | Capscrew .....                                               | 2   | 2  |
| 43   | 4048783                     | Hose Sheave .....                                            | ..  | 1  |
| 43   | 4050091                     | Bushing .....                                                | 1   | 1  |
| 44   | 4048778                     | Stubshaft .....                                              | ..  | 1  |
| 45   | 1581830                     | Capscrew .....                                               | ..  | 1  |
| 46   | 4048784                     | Hose Sheave .....                                            | ..  | 1  |
| 46   | 4050091                     | Bushing .....                                                | 1   | 1  |
| 47   | 1581849                     | Nut .....                                                    | ..  | 1  |
| 48   | 4051885                     | Stubshaft .....                                              | ..  | 1  |
| 49   | 1596420                     | Capscrew .....                                               | 2   | 2  |
| 50   | <b>d</b> <del>4084720</del> |                                                              |     |    |
|      | 4196423                     | Tube - Assembly (3 Function) (Complete) (☞Figure 12-18)..... | 1   | .. |
| 50   | <b>d</b> 4084719            | Tube - Assembly (4 Function) (Complete) (☞Figure 12-18)..... | ..  | 1  |
| 50   | <b>a</b> 4084721            | Tube - Assembly (3 Function) .....                           | 1   | .. |
| 50   | <b>a</b> 4084722            | Tube - Assembly (4 Function) .....                           | ..  | 1  |
|      | <b>b</b> 1529015            | Cap (Without auxiliary hoses) .....                          | 2   | 4  |

**FOOTNOTES:**

- |          |                                        |          |                                |
|----------|----------------------------------------|----------|--------------------------------|
| <b>a</b> | For Lift Height 6260/5918 MM and Above | <b>c</b> | Refer to Table                 |
| <b>b</b> | Not Illustrated                        | <b>d</b> | Up to Lift Height 6110/5768 MM |

## FREELIFT TUBE GROUP (FIGURE 12-18) 3 AND 4 FUNCTION

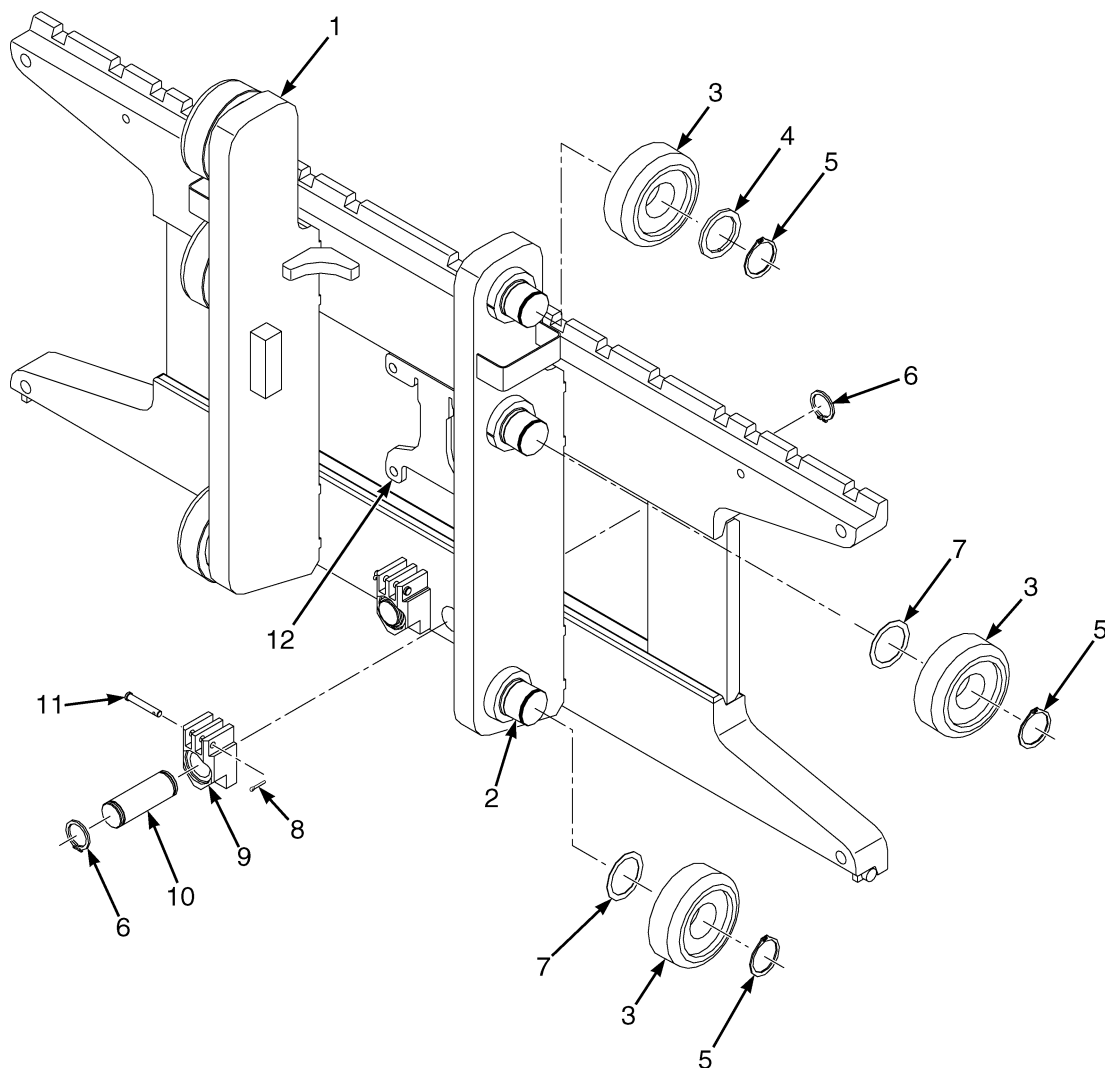


BP170908

**FREELIFT TUBE GROUP  
3 AND 4 FUNCTION**

| ITEM | PART NO. | DESCRIPTION                                                        | QTY |
|------|----------|--------------------------------------------------------------------|-----|
| 1    | 4084720  |                                                                    |     |
|      | 4196423  | Tube - Assembly (3 Function) (3rd Function only) .....             | 1   |
| 2    | 4084719  | Tube - Assembly (4 Function) (3rd and 4th Function Assembly) ..... | 1   |
| 3    | 1581579  | Capscrew .....                                                     | 2   |

## CARRIAGE (FIGURE 12-19) THREE STAGE FULL FREE-LIFT



BP170680

**CARRIAGE**  
**THREE STAGE FULL FREE-LIFT****KEY:****A: H40-50XT****B: H60XT**

| ITEM | PART NO.         | DESCRIPTION                                 | QTY |    |
|------|------------------|---------------------------------------------|-----|----|
|      |                  |                                             | A   | B  |
|      | 4621631          | Carriage Assembly (42 in.) .....            | 1   | .. |
|      | 4621632          | Carriage Assembly (48 in.) .....            | 1   | .. |
|      | 4621637          | Carriage Assembly (42 in.) .....            | ..  | 1  |
|      | 4621639          | Carriage Assembly (48 in.) .....            | ..  | 1  |
| 1    | 4055430          | Carriage Wldmt (42 in.) .....               | 1   | .. |
| 1    | 4055431          | Carriage Wldmt (48 in.) .....               | 1   | .. |
| 1    | 4055473          | Carriage Wldmt (42 in.) .....               | ..  | 1  |
| 1    | 4055479          | Carriage Wldmt (48 in.) .....               | ..  | 1  |
| 2    | 1345216          | Stubshaft .....                             | 6   | 6  |
| 3    | 1333399          | Load Roller ("B") (3.63 in./3.62 in.) ..... | 6   | 6  |
| 3    | 1395169          | Load Roller ("A") (3.61 in./3.60 in.) ..... | 6   | 6  |
| 4    | 366115           | Spacer .....                                | 2   | 2  |
| 5    | 58901            | Snap Ring .....                             | 6   | 6  |
| 5    | <b>a</b> 1374797 | Snap Ring (Optional) .....                  | 6   | 6  |
| 6    | 131358           | Snap Ring .....                             | 4   | 4  |
| 7    | 129387           | Shim (0.020 in.) .....                      | 28  | 28 |
| 8    | 15211            | Cotter Pin .....                            | 2   | 2  |
| 9    | 1369345          | Chain Anchor (Dual Hole) .....              | 2   | .. |
| 9    | 1504010          | Chain Anchor (Single Hole) (Optional) ..... | 2   | .. |
| 9    | 1369344          | Chain Anchor (Dual Hole) .....              | ..  | 2  |
| 9    | 1504012          | Chain Anchor (Single Hole) (Optional) ..... | ..  | 2  |
| 10   | 317735           | Pin .....                                   | 2   | 2  |
| 11   | 1514866          | Pin (Chain Anchor) .....                    | 2   | 2  |
| 12   | 4082003          | Plate (Hose) .....                          | 1   | .. |
| 12   | 4082005          | Plate (Hose) .....                          | ..  | 1  |

**FOOTNOTES:****a** Not Illustrated

[illegible]





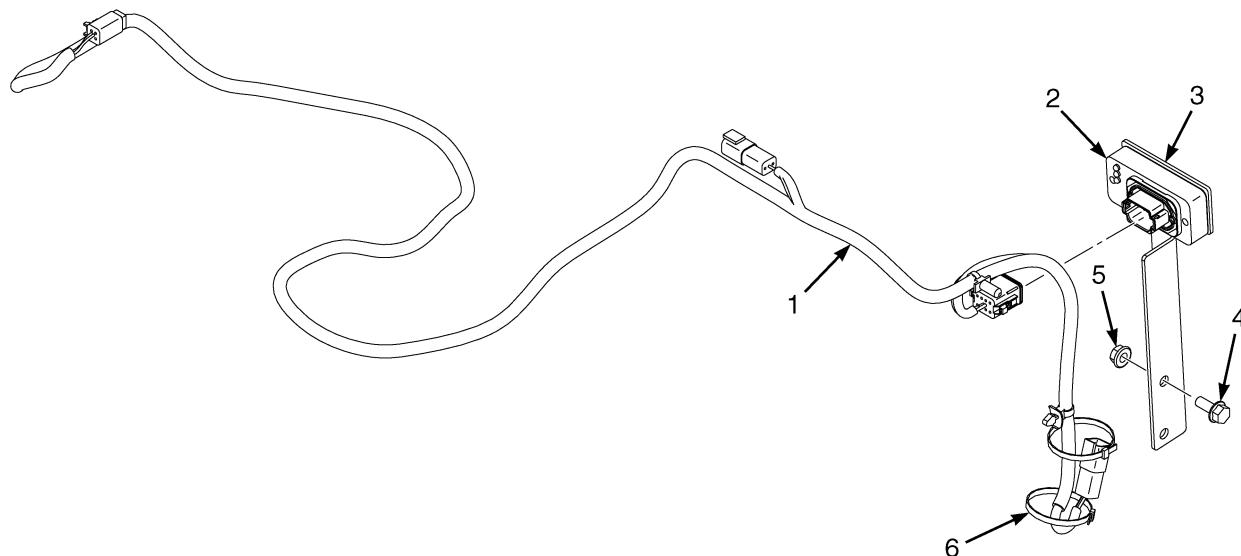


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OPTIONS**

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**SECTION 13  
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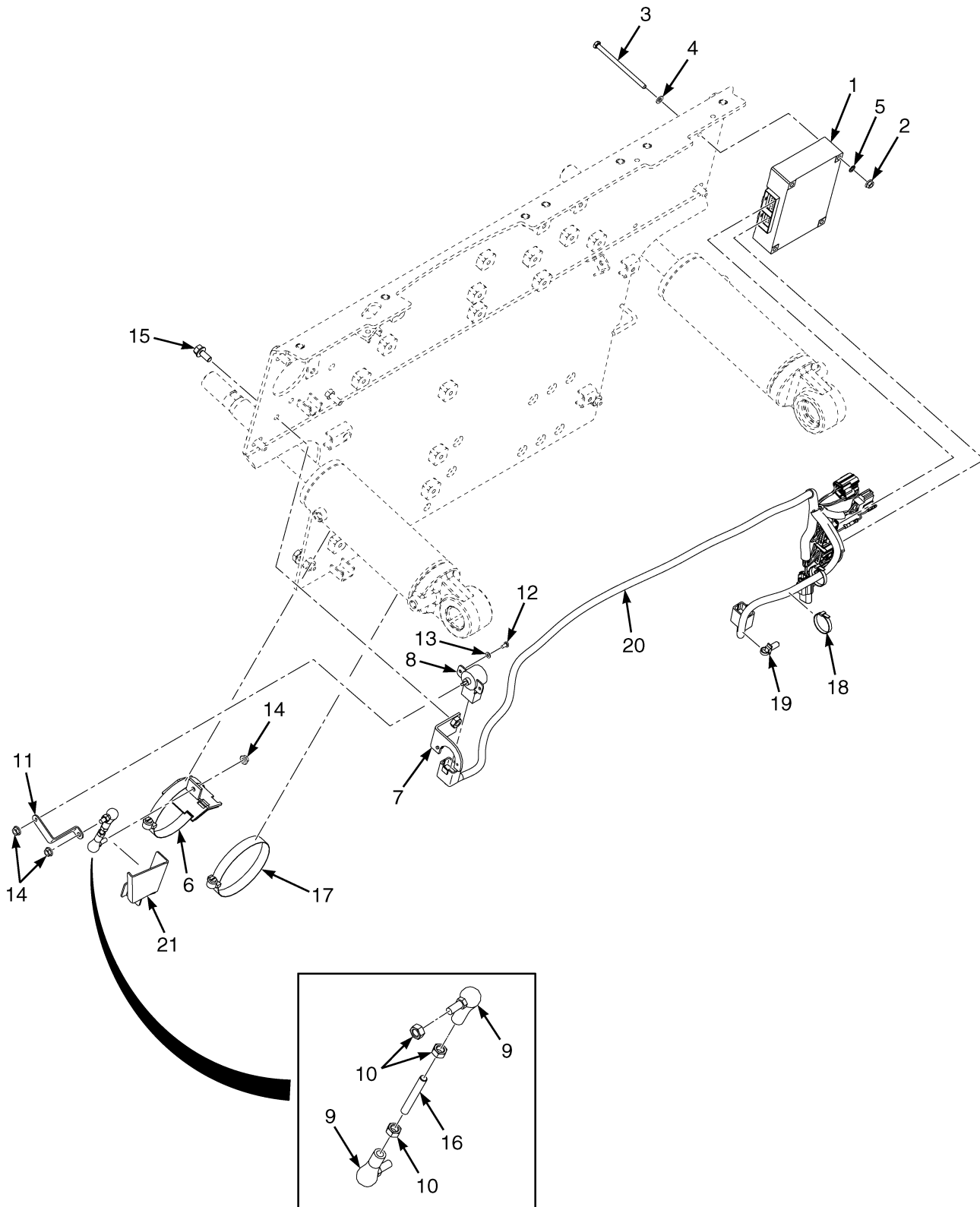
**SEAT BELT (FIGURE 13-1)  
INTERLOCK**

BP001066

| ITEM | PART NO.         | DESCRIPTION                                                    | QTY |
|------|------------------|----------------------------------------------------------------|-----|
| 1    | 4656381          | Wire Harness (Seat Belt Interlock) (☞ Figure 5-35).....        | 1   |
| 2    | 4634955          |                                                                |     |
|      | 4651927          |                                                                |     |
|      | 4655560          | Control Module (Seat Belt Sequence) (Seat Belt Sequence) ..... | 1   |
| 2    | 4673353          | Control Module (Seat Belt Sequence) (Alternate Part) .....     | 1   |
| 3    | 4644284          | Bracket (Module) .....                                         | 1   |
| 4    | 1527880          | Capscrew .....                                                 | 2   |
| 5    | 1382472          |                                                                |     |
|      | 1502543          | Nut .....                                                      | 2   |
| 6    | 2004005          | Strap Clamp .....                                              | 2   |
|      | <b>a</b> 4103377 | Tape (Module) .....                                            | 1   |

**FOOTNOTES:****a** Not illustrated

## CONTROLLER (FIGURE 13-2) RETURN TO SET TILT GROUP

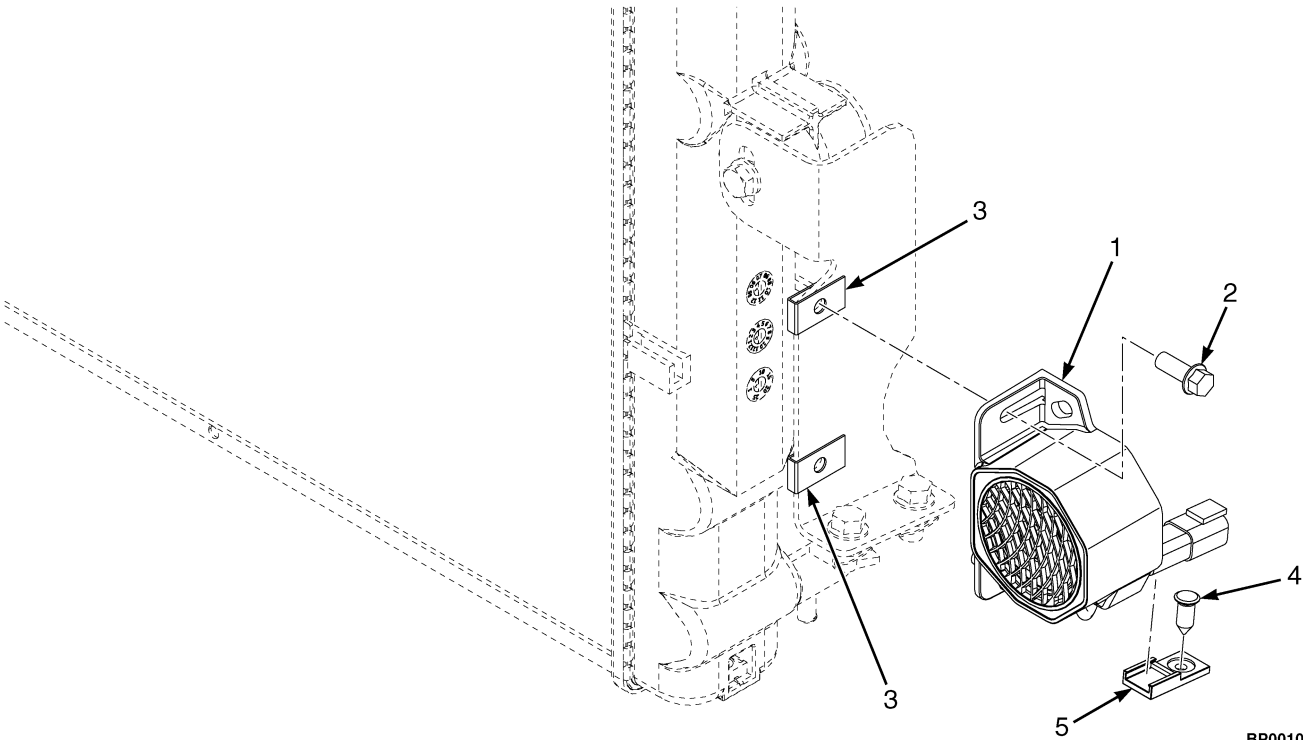


BP001050

**CONTROLLER**  
**RETURN TO SET TILT GROUP**

| ITEM | PART NO. | DESCRIPTION                                          | QTY |
|------|----------|------------------------------------------------------|-----|
| 1    | 4655759  |                                                      |     |
|      | 4666939  | Controller (RTV) .....                               | 1   |
| 2    | 1307884  |                                                      |     |
|      | 1514429  | Nut .....                                            | 3   |
| 3    | 1696233  | Capscrew .....                                       | 3   |
| 4    | 320156   | Washer .....                                         | 3   |
| 5    | 296379   | Washer .....                                         | 3   |
| 6    | 2093120  | Bracket , Rod Assy .....                             | 1   |
| 6    | 2090369  | Spacer , Rubber (Between Bracket and Cylinder) ..... | 1   |
| 7    | 2090557  | Bracket Wldmt , Sensor Weldment .....                | 1   |
| 8    | 4649900  | Potentiometer .....                                  | 1   |
| 9    | 2027949  | Ball Joint .....                                     | 2   |
| 10   | 136687   | Nut .....                                            | 3   |
| 11   | 4122251  | Arm , Sensor .....                                   | 1   |
| 12   | 302019   | Screw .....                                          | 2   |
| 13   | 320154   | Washer .....                                         | 2   |
| 14   | 1307884  |                                                      |     |
|      | 1514429  | Nut .....                                            | 3   |
| 15   | 1608654  | Capscrew .....                                       | 2   |
| 16   | 2090365  | Rod , Tilt Sensor .....                              | 1   |
| 17   | 115696   | Hose Clamp .....                                     | 2   |
| 18   | 137852   | Strap Clamp .....                                    | 2   |
| 19   | 4140361  | Cable Clip .....                                     | 1   |
| 20   | 4641377  | Wire Harness , Vertical Tilt .....                   | 1   |
| 21   | 4170276  | Hose Guard .....                                     | 1   |

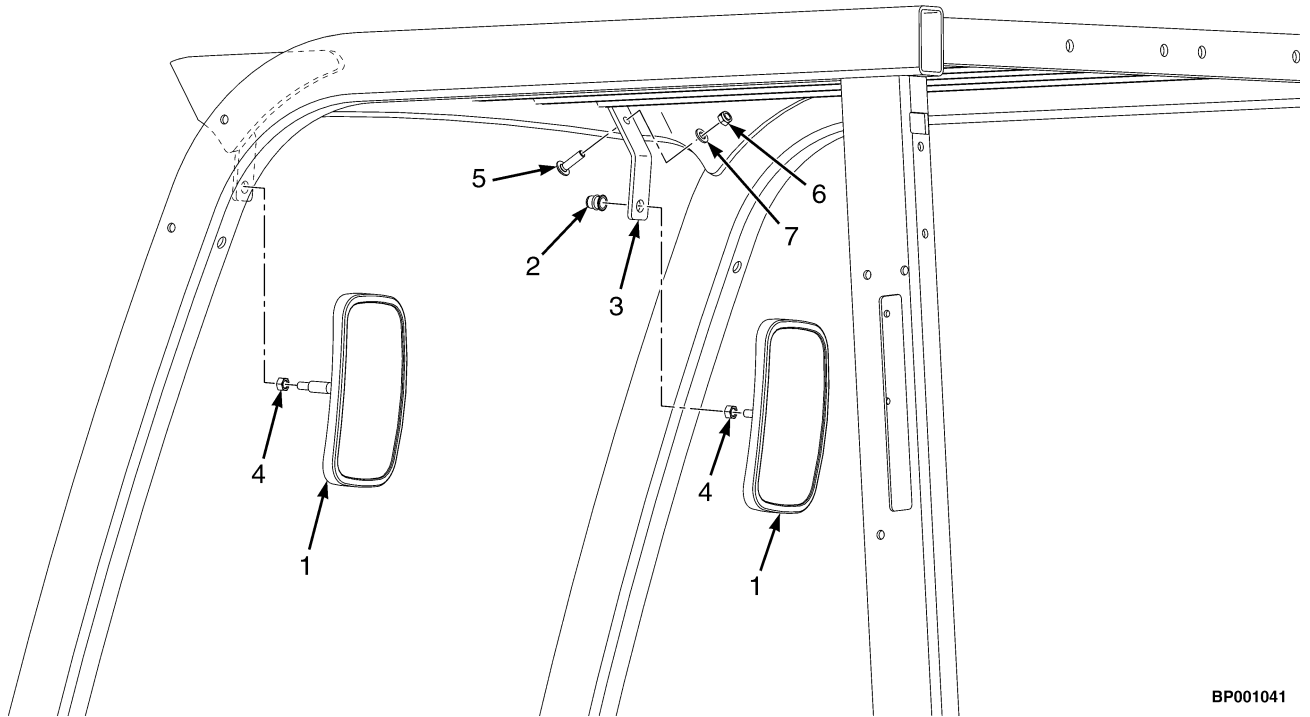
**BACKUP ALARM (FIGURE 13-3)**



BP001021

| ITEM | PART NO. | DESCRIPTION                               | QTY |
|------|----------|-------------------------------------------|-----|
| 1    | 4633862  | Alarm (12-24V Adjustable 82-102 dB) ..... | 1   |
| 2    | 1527877  | Capscrew .....                            | 2   |
| 3    | 1566420  | Nut (Foldover) .....                      | 2   |
| 4    | 1582464  | Fastener .....                            | 1   |
| 5    | 1500912  | Clip .....                                | 1   |

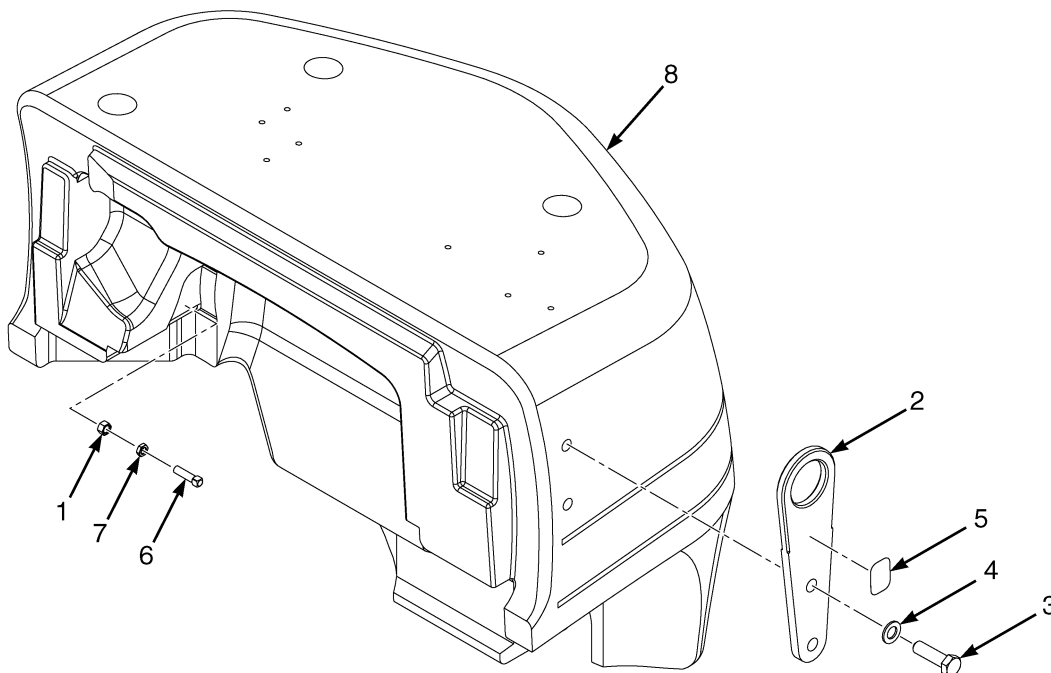


**MIRRORS (FIGURE 13-4)**

BP001041

| ITEM | PART NO. | DESCRIPTION    | QTY |
|------|----------|----------------|-----|
| 1    | 4610037  | Mirror .....   | 2   |
| 2    | 1530243  | Insert .....   | 2   |
| 3    | 4165561  | Bracket .....  | 2   |
| 4    | 2022719  | Nut .....      | 2   |
| 5    | 4645302  | Capscrew ..... | 2   |
| 6    | 1581566  | Nut .....      | 2   |
| 7    | 296418   | Washer .....   | 2   |

## ALTERED COUNTERWEIGHT WITH LIFTING EYE (FIGURE 13-5)



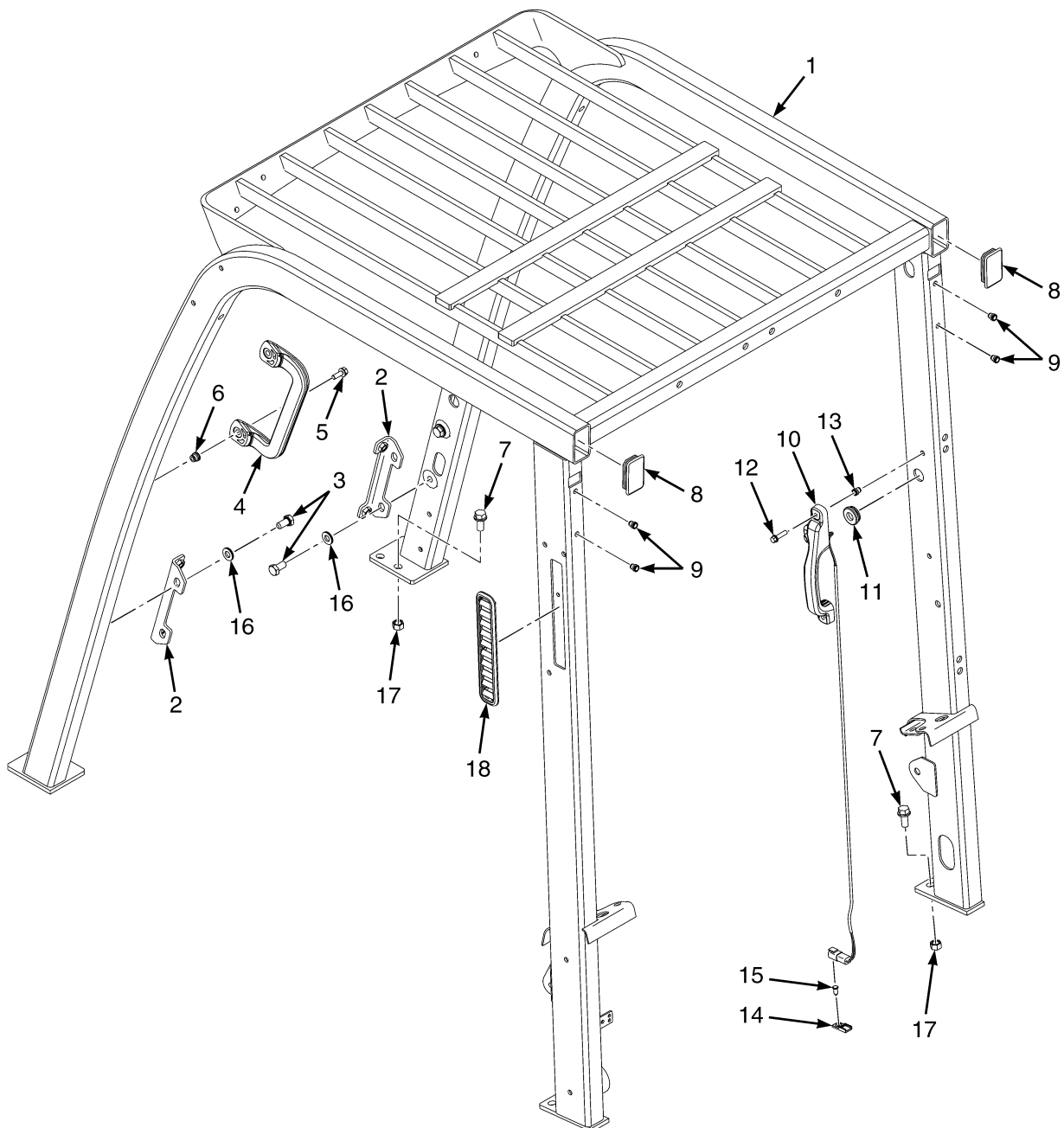
BP000947

| ITEM | PART NO. | DESCRIPTION                 | QTY |
|------|----------|-----------------------------|-----|
| 1    | 1318914  |                             |     |
|      | 216877   | Nut .....                   | 2   |
| 2    | 4124240  | Lifting Eye .....           | 2   |
| 3    | 293710   | Capscrew .....              | 4   |
| 4    | 4020900  |                             |     |
|      | 320169   | Washer .....                | 4   |
| 5    | 316448   | Label (Lifting Eye) .....   | 2   |
| 6    | 302321   | Screw .....                 | 2   |
| 7    | 296130   | Nut .....                   | 2   |
| 8    | 4124228  | Counterweight (H40XT) ..... | 1   |
| 8    | 4124229  | Counterweight (H50XT) ..... | 1   |
| 8    | 4124230  | Counterweight (H60XT) ..... | 1   |

## NOTES

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, leaving small margins at the top and bottom. There are no vertical margin lines, text, or other markings on the page.

## OVERHEAD GUARD (FIGURE 13-6) OPTIONAL



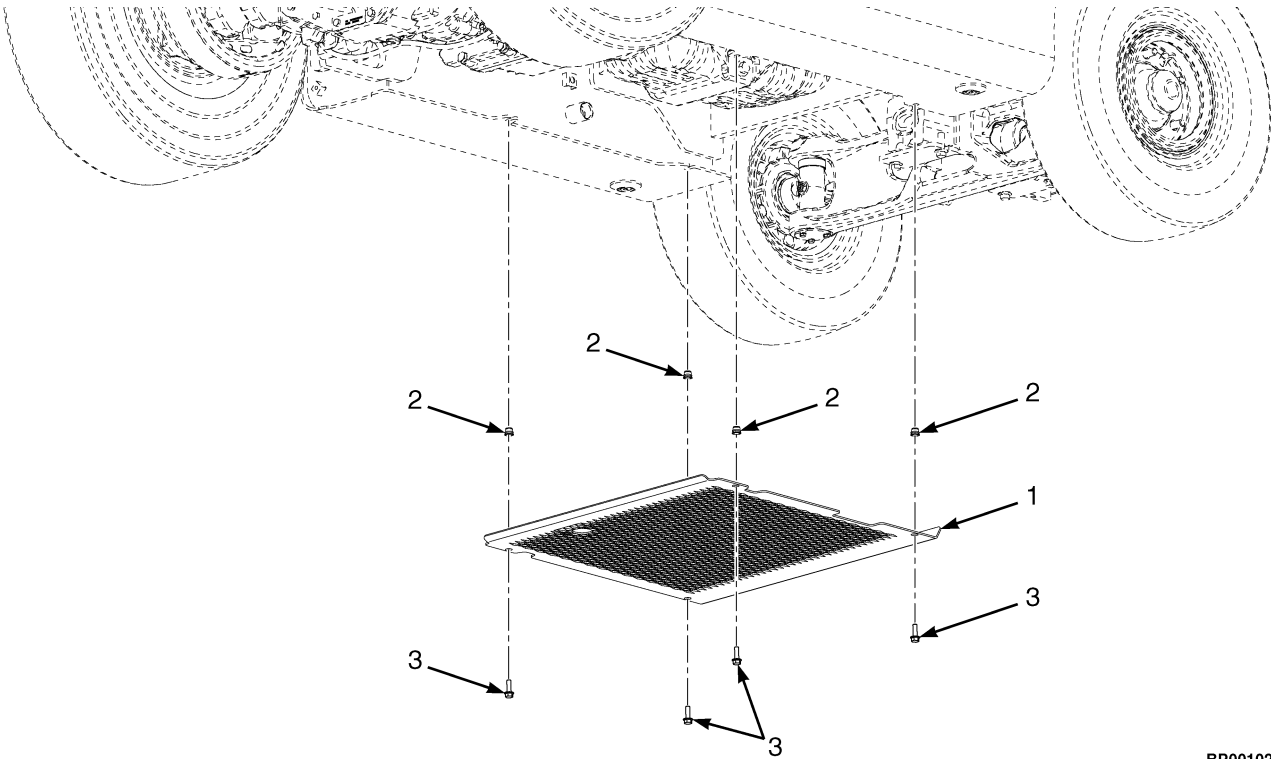
BP121514

**OVERHEAD GUARD  
OPTIONAL**

| ITEM | PART NO.           | DESCRIPTION                      | QTY |
|------|--------------------|----------------------------------|-----|
| 1    | 4143180            | Overhead Guard (SPL Low) .....   | 1   |
| 2    | 4108941            | Plate Wldmt .....                | 2   |
| 3    | 1581590            | Capscrew .....                   | 4   |
| 4    | 1536813            | Handle (Grab) .....              | 1   |
| 5    | 1583611            | Capscrew .....                   | 2   |
| 6    | 1531557            | Insert .....                     | 2   |
| 7    | 1613433            | Capscrew .....                   | 6   |
| 8    | 4649269            | Cap .....                        | 2   |
| 9    | 1531558            | Insert .....                     | 4   |
| 10   | 2070223            | Handle (Assembly) .....          | 1   |
| 10   | 2069454            | Handle .....                     | 1   |
| 10   | 1566726            | Push Button Switch .....         | 1   |
| 10   | 1493465            | Connector (2 Pin) .....          | 1   |
| 10   | 1330414            | Connector (Secondary Lock) ..... | 1   |
| 10   | 1330437            | Terminal (Pin) .....             | 2   |
| 11   | 2021719            | Grommet .....                    | 1   |
| 12   | 1586495            | Capscrew .....                   | 2   |
| 13   | 1531558            | Insert .....                     | 2   |
| 14   | 1500912            | Clip .....                       | 1   |
| 15   | 1582464            | Fastener .....                   | 1   |
| 16   | 4154502            | Lockwasher .....                 | 4   |
| 17   | <del>4318944</del> |                                  |     |
|      | 216877             | Nut .....                        | 6   |
| 18   | 4151588            | Grille , Air Intake .....        | 1   |
|      | <b>a</b> 1363916   | Plug (R-25) .....                | AR  |
|      | <b>a</b> 1558219   | Grommet (Blind with Split) ..... | AR  |
|      | <b>a</b> 1574301   | Plug (Yellow) (R-32) .....       | AR  |
|      | <b>a</b> 1363918   | Plug .....                       | AR  |
|      | <b>a</b> 4170282   | Plug .....                       | AR  |

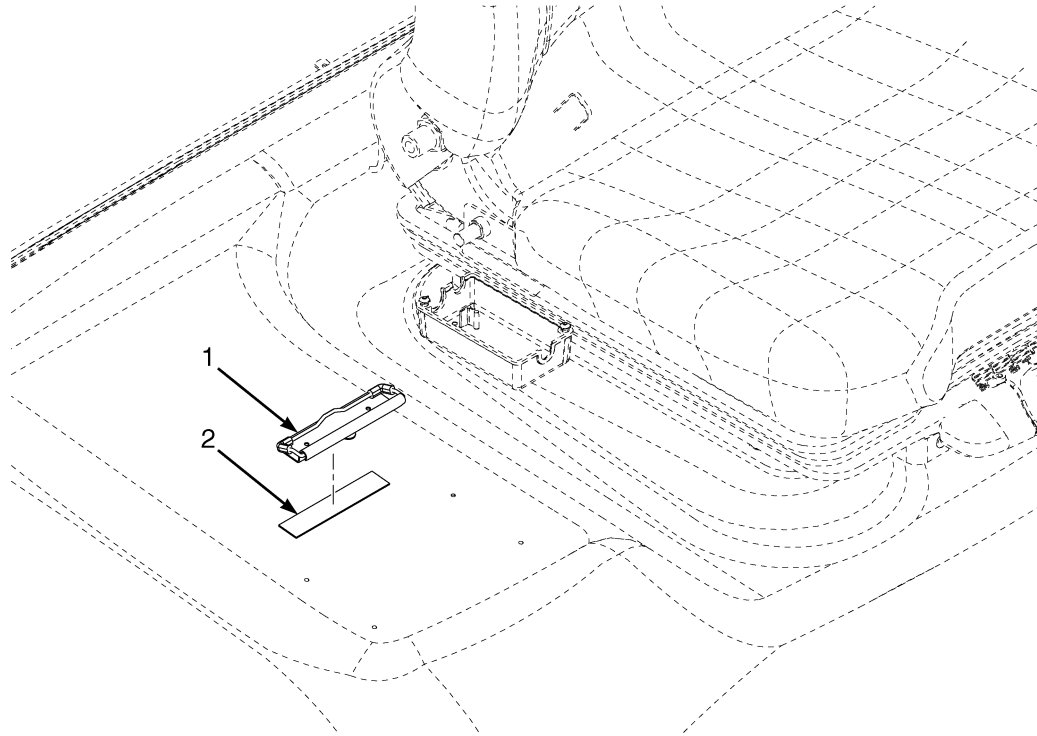
**FOOTNOTES:****a** Not Illustrated

**UNDERCARRIAGE SCREEN (FIGURE 13-7)**



BP001029

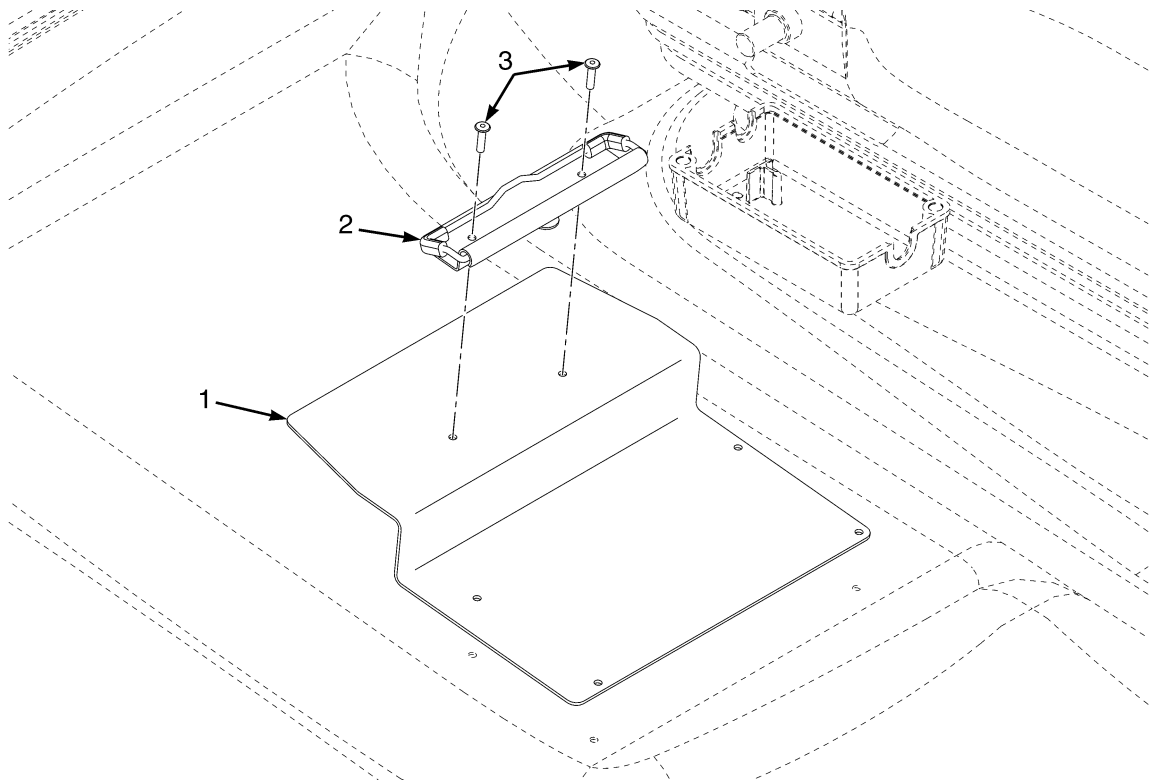
| ITEM | PART NO. | DESCRIPTION                  | QTY |
|------|----------|------------------------------|-----|
| 1    | 4122989  | Screen , Undercarriage ..... | 1   |
| 2    | 1531557  | Insert .....                 | 4   |
| 3    | 1510113  | Capscrew .....               | 4   |

**DOCUMENT CLIP (FIGURE 13-8)  
WITHOUT HOOD BLANKET**

BP001030

| ITEM | PART NO. | DESCRIPTION | QTY |
|------|----------|-------------|-----|
| 1    | 4154207  |             |     |
|      | 2306899  | Clip .....  | 1   |
| 2    | 4154208  | Tape .....  | 1   |

**DOCUMENT CLIP (FIGURE 13-9)  
W/ HOOD BLANKET**



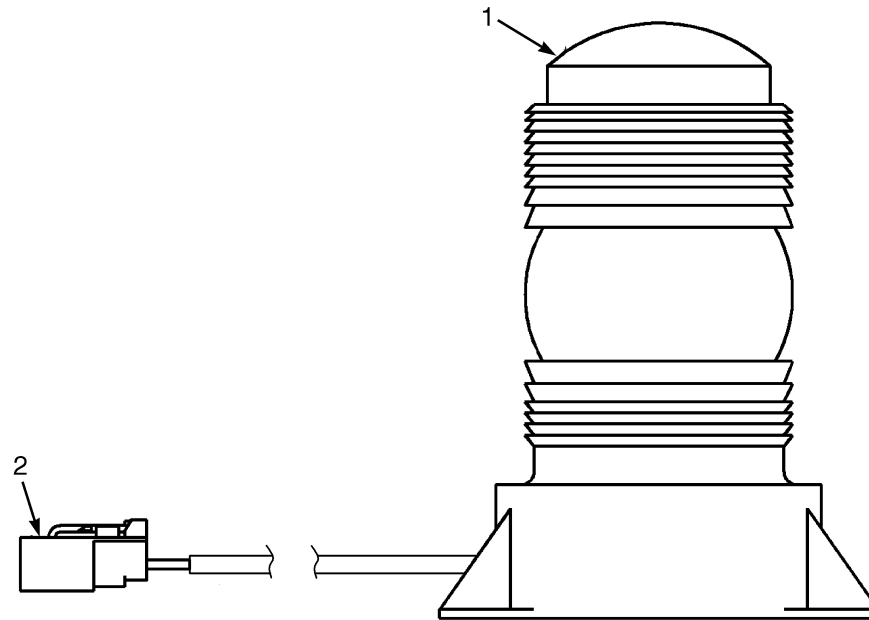
BP001059

| ITEM | PART NO.  | DESCRIPTION                   | QTY |
|------|-----------|-------------------------------|-----|
| 1    | 4170277   | Bracket (Document Clip) ..... | 1   |
| 2    | 4154207   |                               |     |
|      | 2306899   | Clip .....                    | 1   |
| 3    | 170658    | Rivet .....                   | 2   |
|      | a 4154208 | Tape (Option) .....           | AR  |

**FOOTNOTES:**

a Not illustrated

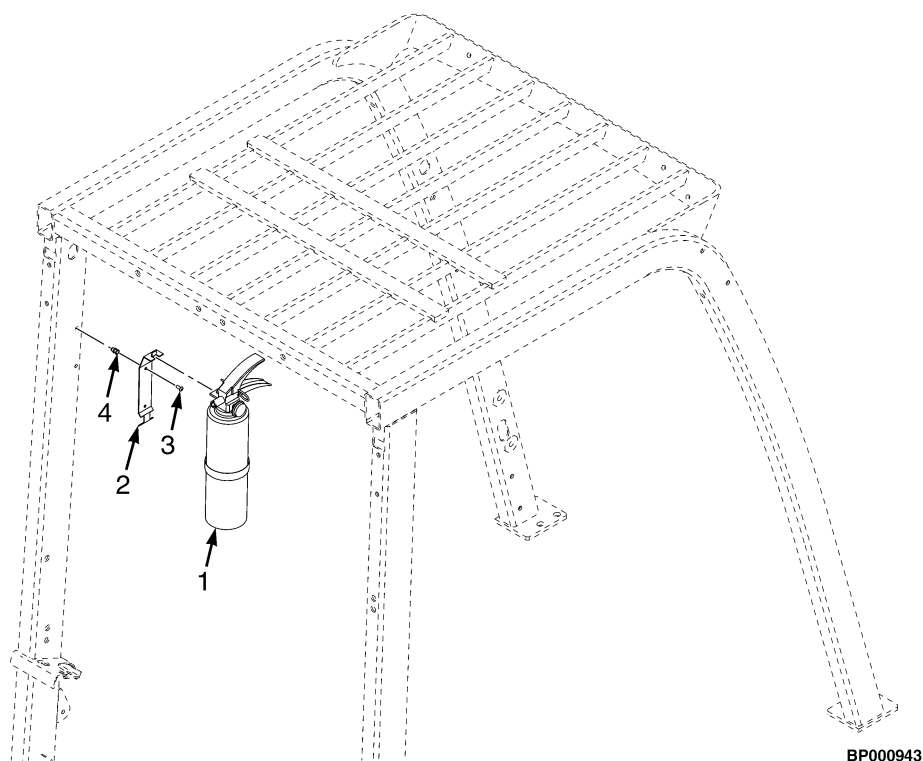


**STROBE LIGHT (FIGURE 13-10)**  
**LED**

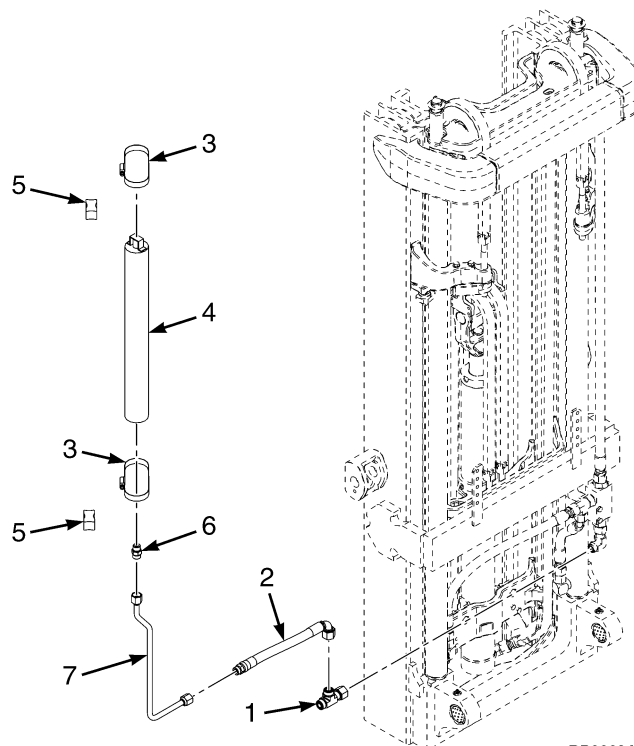
BP000363

| ITEM | PART NO. | DESCRIPTION                      | QTY |
|------|----------|----------------------------------|-----|
|      | 1654013  | Strobe Light Assembly .....      | 1   |
| 1    | 1652290  | Strobe Light (Amber LED) .....   | 1   |
| 2    | 1463138  | Terminal Pin .....               | 2   |
| 2    | 1561559  | Connector (2 Pin) .....          | 1   |
| 2    | 1561755  | Connector (Secondary Lock) ..... | 1   |

## FIRE EXTINGUISHER (FIGURE 13-11)



| ITEM | PART NO. | DESCRIPTION                      | QTY |
|------|----------|----------------------------------|-----|
| 1    | 146540   | Fire Extinguisher Assembly ..... | 1   |
| 2    | 1561749  | Bracket .....                    | 1   |
| 3    | 4601042  | Capscrew .....                   | 2   |
| 4    | 1669561  | Insert .....                     | 2   |

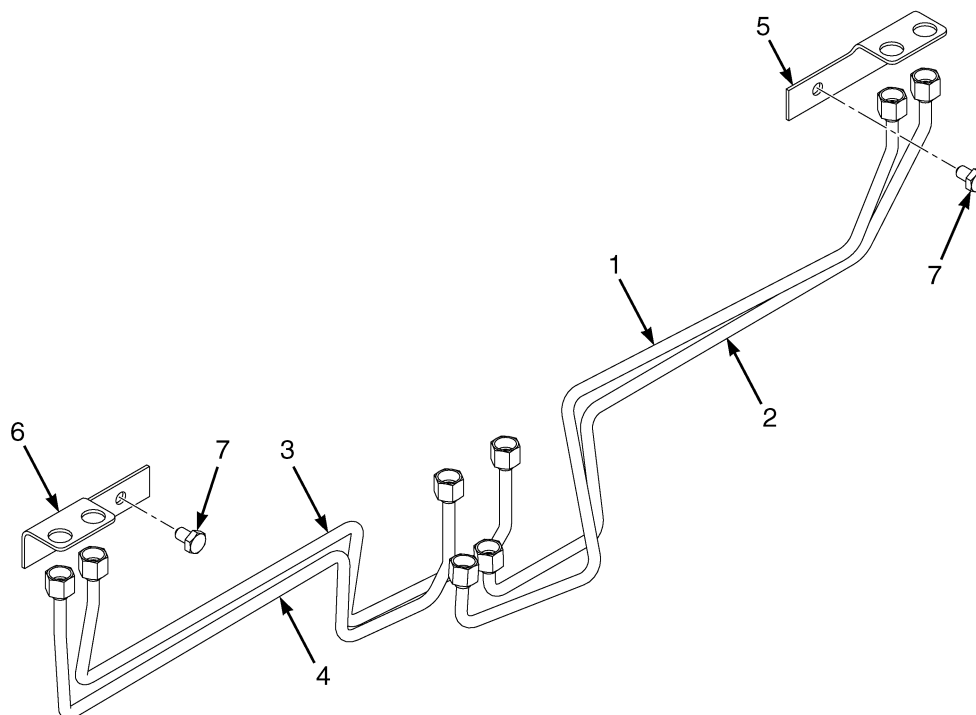
**ACCUMULATOR (FIGURE 13-12)**  
**THREE STAGE FFL/TWO STAGE LFL**

BP000944

| ITEM | PART NO. | DESCRIPTION                 | QTY   |
|------|----------|-----------------------------|-------|
| 1    | 1487096  | Fitting .....               | 1     |
| 2    | 4626480  | Hose Assy .....             | 1     |
| 3    | 4031653  | Strap Clamp .....           | 2     |
| 4    | 1465897  | Accumulator (1 Quart) ..... | 1     |
| 5    | 1609864  | Spacer .....                | 2     |
| 6    | 6996684  | .....                       | ..... |
|      | 1473887  | Fitting .....               | 1     |
| 7    | 4641248  | Tube Assy .....             | 1     |

# AUXILIARY TUBE EXTENSIONS (FIGURE 13-13)

## THREE STAGE FFL — THREE AND FOUR FUNCTION

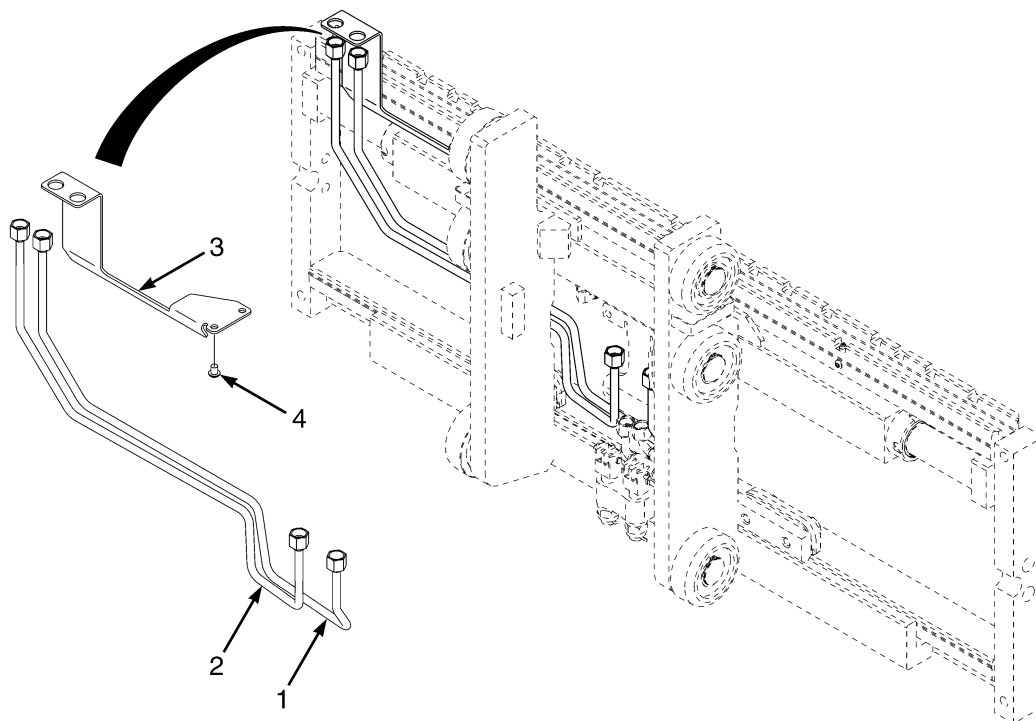


BP001082

**KEY:****A: Class II****B: Class III**

| ITEM | PART NO. | DESCRIPTION                          | QTY |    |
|------|----------|--------------------------------------|-----|----|
|      |          |                                      | A   | B  |
| 1    | 4651681  | Tube Assy (Three Function) .....     | ..  | 1  |
| 1    | 4651683  | Tube Assy (Three Function) .....     | 1   | .. |
| 2    | 4651682  | Tube Assy (Three Function) .....     | ..  | 1  |
| 2    | 4651684  | Tube Assy (Three Function) .....     | 1   | .. |
| 3    | 4651687  | Tube Assy (Four Function) .....      | ..  | 1  |
| 3    | 4651685  | Tube Assy (Four Function) .....      | 1   | .. |
| 4    | 4651688  | Tube Assy (Four Function) .....      | ..  | 1  |
| 4    | 4651686  | Tube Assy (Four Function) .....      | 1   | .. |
| 5    | 4155330  | Bracket (RH Aux Tube Mounting) ..... | 1   | 1  |
| 6    | 4155331  | Bracket (LH Aux Tube Mounting) ..... | 1   | 1  |
| 7    | 1658934  | Capscrew .....                       | 2   | 2  |

**AUXILIARY TUBE EXTENSIONS ISS ONLY (FIGURE 13-14)**  
**FOUR FUNCTION, THREE STAGE FULL FREE-LIFT (12/2016 →)**

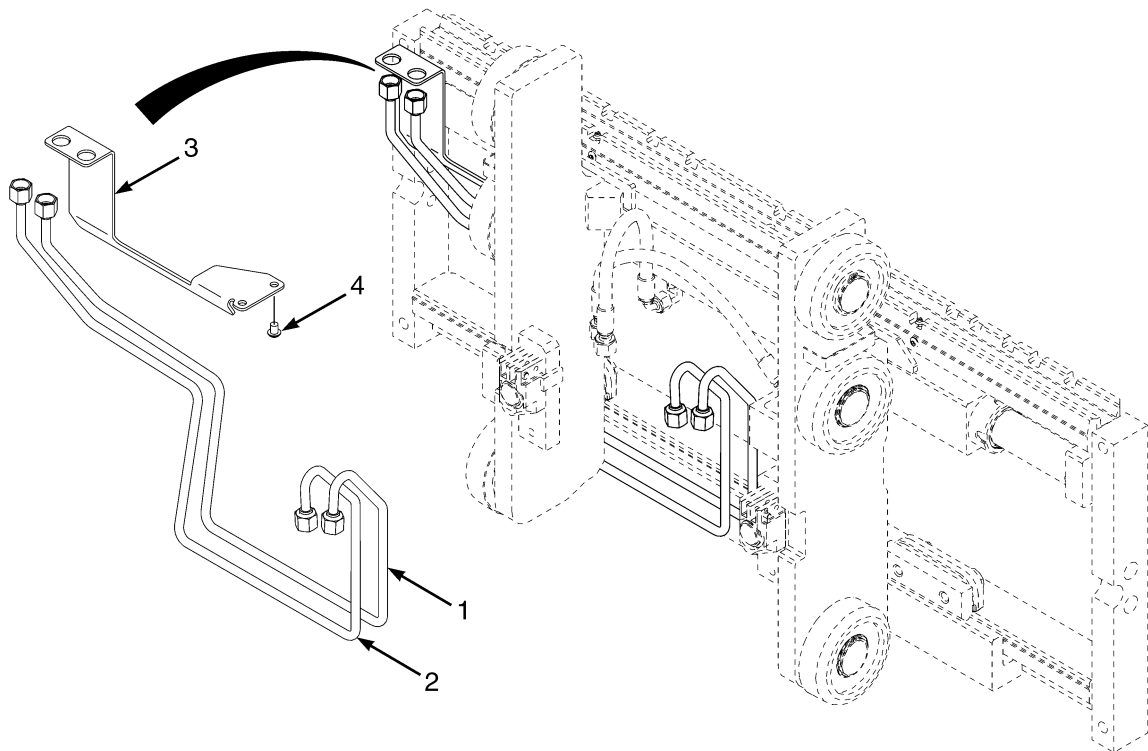


BP001005

**KEY:****A: CLASS II****B: CLASS III**

| ITEM | PART NO. | DESCRIPTION                     | QTY |    |
|------|----------|---------------------------------|-----|----|
|      |          |                                 | A   | B  |
| 1    | 4651685  | Tube Assy (Four Function) ..... | 1   | .. |
| 1    | 4651687  | Tube Assy (Four Function) ..... | ..  | 1  |
| 2    | 4651686  | Tube Assy (Four Function) ..... | 1   | .. |
| 2    | 4651688  | Tube Assy (Four Function) ..... | ..  | 1  |
| 3    | 4156005  | Bracket .....                   | 1   | 1  |
| 4    | 296163   | Capscrew .....                  | 2   | 2  |

## AUXILIARY TUBE EXTENSIONS ISS ONLY (FIGURE 13-15) FOUR FUNCTION, TWO STAGE LIMITED FREE-LIFT (12/2016 →)



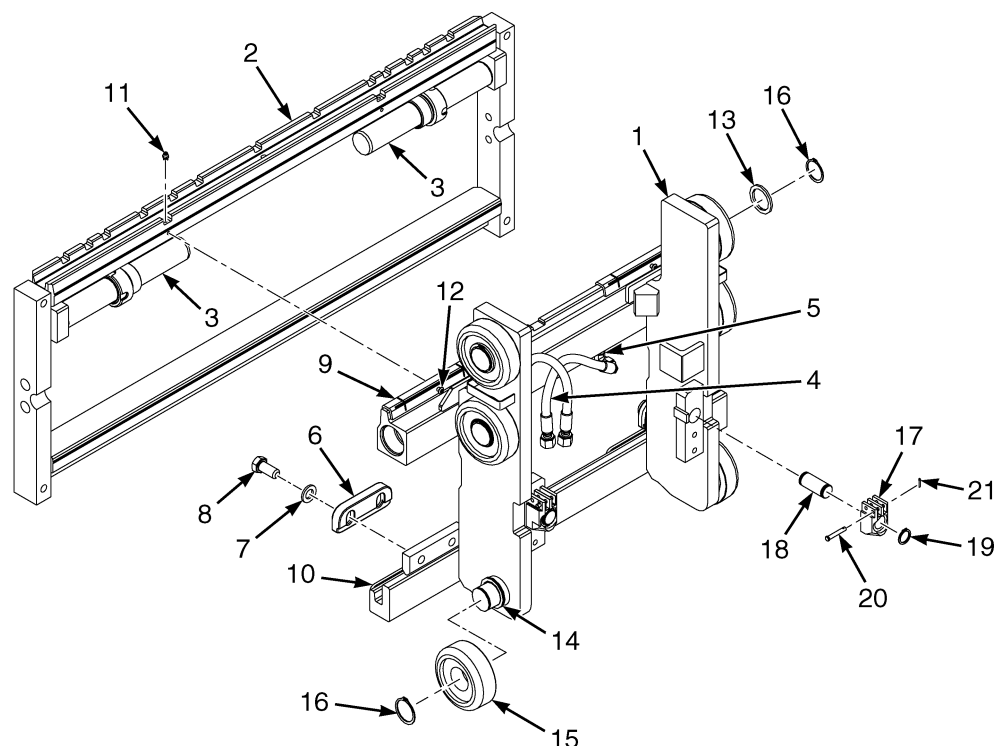
BP001006

### KEY:

A: CLASS II

B: CLASS III

| ITEM | PART NO. | DESCRIPTION     | QTY |    |
|------|----------|-----------------|-----|----|
|      |          |                 | A   | B  |
| 1    | 4652411  | Tube Assy ..... | 1   | .. |
| 1    | 4651694  | Tube Assy ..... | ..  | 1  |
| 2    | 4652412  | Tube Assy ..... | 1   | .. |
| 2    | 4651693  | Tube Assy ..... | ..  | 1  |
| 3    | 4156005  | Bracket .....   | 1   | 1  |
| 4    | 296163   | Capscrew .....  | 2   | 2  |

**INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 13-16)**  
**TWO STAGE LIMITED FREE- LIFT — 1067 MM (42 IN)**

BP001000

**KEY:****A: CLASS II****B: CLASS III**

| ITEM | PART NO.         | DESCRIPTION                        | QTY |    |
|------|------------------|------------------------------------|-----|----|
|      |                  |                                    | A   | B  |
|      | 4621584          | Side-Shift Carriage .....          | 1   | .. |
|      | 4621588          | Side-Shift Carriage .....          | ..  | 1  |
| 1    | 4099382          | Carriage Wldmt .....               | 1   | .. |
| 1    | 4099387          | Carriage Wldmt .....               | ..  | 1  |
| 2    | 4090860          | Frame .....                        | 1   | .. |
| 2    | 4090864          | Frame .....                        | ..  | 1  |
| 3    | .....            | Rod Assembly (☞ Figure 13-22)..... | 2   | 2  |
| 4    | 4626626          | Hose Assy (LH) .....               | 1   | .. |
| 4    | 4651752          | Hose Assy (RH) .....               | 1   | .. |
| 4    | 4634486          | Hose Assy .....                    | ..  | 2  |
| 5    | 4116469          | Fitting , 90 deg elbow .....       | 2   | .. |
| 5    | 4116399          | Fitting , Straight .....           | ..  | 2  |
| 6    | 4631491          | Hook .....                         | 2   | 2  |
| 7    | 1581854          | Washer .....                       | 4   | 4  |
| 8    | 1581833          | Capscrew .....                     | 4   | 4  |
| 9    | <b>b</b> 4632428 | Bearing (Upper) .....              | 2   | 2  |
| 9    | <b>c</b> 4693335 | Bearing (Upper) .....              | 2   | 2  |
| 10   | <b>b</b> 4632430 | Bearing (Lower) .....              | 2   | 2  |
| 10   | <b>c</b> 4693334 | Bearing (Lower) .....              | 2   | 2  |
| 11   | 16041            | Grease Fitting .....               | 2   | 2  |

**KEY:**
**A: CLASS II**
**B: CLASS III**

| ITEM | PART NO.         | DESCRIPTION                             | QTY |    |
|------|------------------|-----------------------------------------|-----|----|
|      |                  |                                         | A   | B  |
| 12   | 220082           | Capscrew .....                          | 2   | 2  |
| 13   | 366116           | Spacer .....                            | 2   | 2  |
| 14   | 1345263          | Shim (0.020 in.) .....                  | AR  | AR |
| 15   | 1345219          | Load Roller ("B") (111.48/111.22) ..... | 6   | 6  |
| 15   | <b>a</b> 1395172 | Load Roller ("A") (111.10/110.84) ..... | 6   | 6  |
| 15   | <b>a</b> 1345220 | Load Roller ("C") (112.62/112.36) ..... | 6   | 6  |
| 16   | 12891            | Snap Ring .....                         | 6   | 6  |
| 17   | 1504010          | Chain Anchor (Single Hole) .....        | 2   | .. |
| 17   | 1504012          | Chain Anchor (Single Hole) .....        | ..  | 2  |
| 17   | <b>a</b> 1369345 | Chain Anchor (Dual Hole) .....          | 2   | .. |
| 17   | <b>a</b> 1369344 | Chain Anchor (Dual Hole) .....          | ..  | 2  |
| 18   | 1353408          | Pin .....                               | 2   | 2  |
| 19   | 131358           | Snap Ring .....                         | 4   | 4  |
| 20   | 1514866          | Pin .....                               | 2   | 2  |
| 22   | 15211            | Cotter Pin .....                        | 2   | 2  |

**FOOTNOTES:**
**a** Optional

**c** 4/2020 →

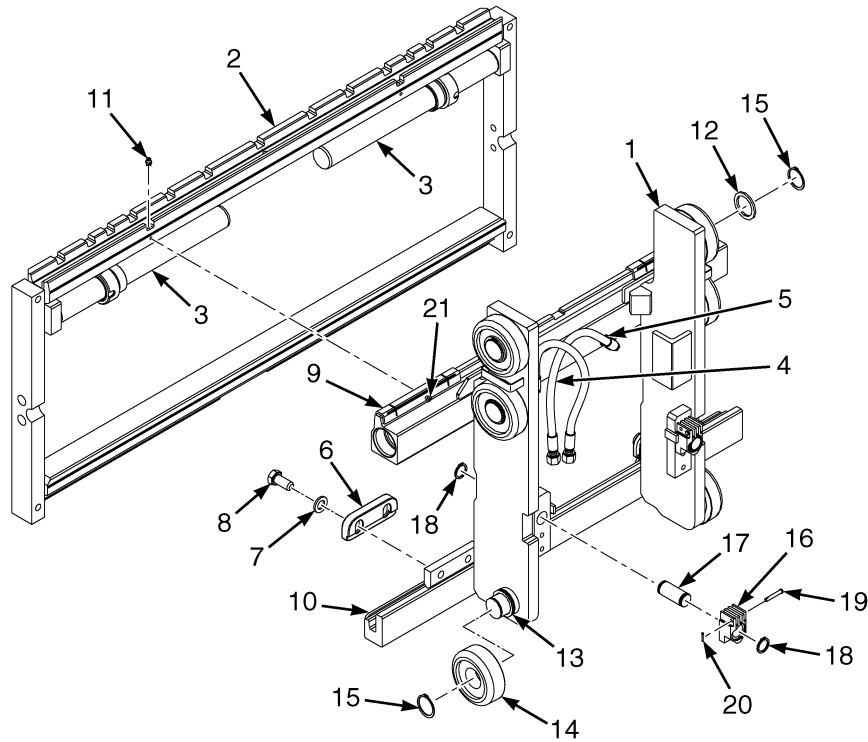
**b** → 4/2020



## NOTES

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 13-17) TWO STAGE LIMITED FREE- LIFT — 1219 MM (48 IN)



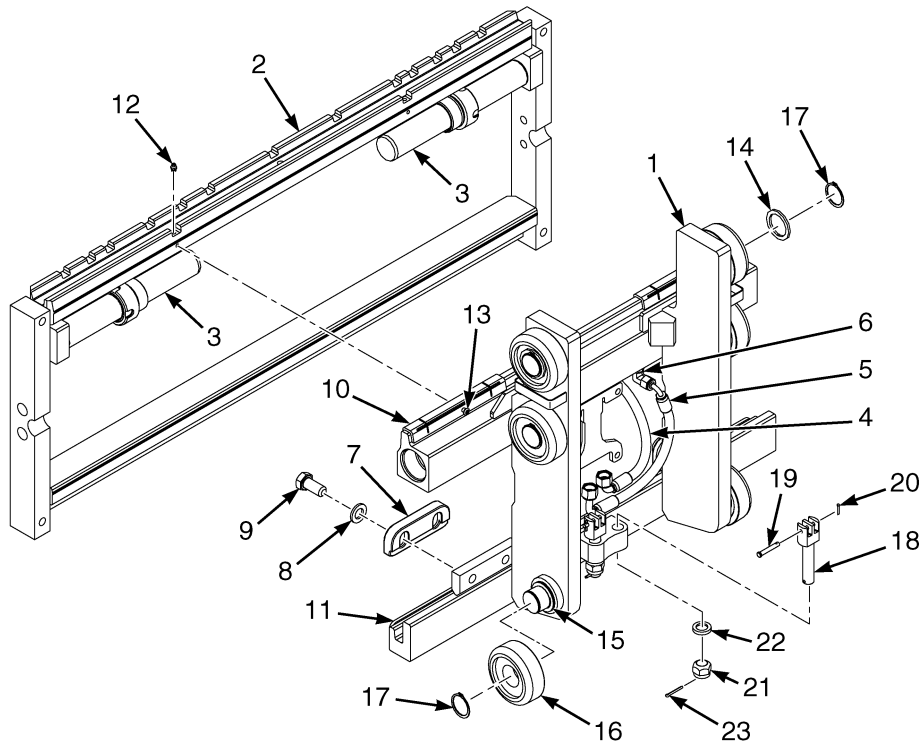
BP000999

**INTEGRAL SIDE-SHIFT CARRIAGE**  
**TWO STAGE LIMITED FREE- LIFT – 1219 MM (48 IN)****KEY:****A: CLASS II****B: CLASS III**

| ITEM | PART NO.                    | DESCRIPTION                             | QTY |    |
|------|-----------------------------|-----------------------------------------|-----|----|
|      |                             |                                         | A   | B  |
|      | 4621585                     | Side-Shift Carriage .....               | 1   | .. |
|      | 4621589                     | Side-Shift Carriage .....               | ..  | 1  |
| 1    | 4099383                     | Carriage Wldmt .....                    | 1   | .. |
| 1    | 4099388                     | Carriage Wldmt .....                    | ..  | 1  |
| 2    | 4090861                     | Frame .....                             | 1   | .. |
| 2    | 4090865                     | Frame .....                             | ..  | 1  |
| 3    | .....                       | Rod Assembly (☞ Figure 13-22).....      | 2   | 2  |
| 4    | 4626626                     | Hose Assy (LH) .....                    | 1   | .. |
| 4    | 4651752                     | Hose Assy (RH) .....                    | 1   | .. |
| 4    | 4634486                     | Hose Assy .....                         | ..  | 2  |
| 5    | 4116469                     | Fitting , 90 deg elbow .....            | 2   | .. |
| 5    | 4116399                     | Fitting , Straight .....                | ..  | 2  |
| 6    | 4631491                     | Hook .....                              | 2   | 2  |
| 7    | 1581854                     | Washer .....                            | 4   | 4  |
| 8    | 1581833                     | Capscrew .....                          | 4   | 4  |
| 9    | <b>b</b> 4632428            | Bearing (Upper) .....                   | 2   | 2  |
| 9    | <b>c</b> 4693335            | Bearing (Upper) .....                   | 2   | 2  |
| 10   | <b>b</b> <del>4632430</del> |                                         |     |    |
|      | 4671363                     | Bearing (Lower) .....                   | 2   | 2  |
| 10   | <b>c</b> 4693334            | Bearing (Lower) .....                   | 2   | 2  |
| 11   | 16041                       | Grease Fitting .....                    | 2   | 2  |
| 12   | 366116                      | Spacer .....                            | 2   | 2  |
| 13   | 1345263                     | Shim (0.020 in.) .....                  | AR  | AR |
| 14   | 1345219                     | Load Roller ("B") (111.48/111.22) ..... | 6   | 6  |
| 14   | <b>a</b> 1395172            | Load Roller ("A") (111.10/110.84) ..... | 6   | 6  |
| 14   | <b>a</b> 1345220            | Load Roller ("C") (112.62/112.36) ..... | 6   | 6  |
| 15   | 12891                       | Snap Ring .....                         | 6   | 6  |
| 16   | 1504010                     | Chain Anchor (Single Hole) .....        | 2   | .. |
| 16   | 1504012                     | Chain Anchor (Single Hole) .....        | ..  | 2  |
| 16   | <b>a</b> 1369345            | Chain Anchor (Dual Hole) .....          | 2   | .. |
| 16   | <b>a</b> 1369344            | Chain Anchor (Dual Hole) .....          | ..  | 2  |
| 17   | 1353408                     | Pin .....                               | 2   | 2  |
| 18   | 131358                      | Snap Ring .....                         | 4   | 4  |
| 19   | 1514866                     | Pin .....                               | 2   | 2  |
| 20   | 15211                       | Cotter Pin .....                        | 2   | 2  |
| 21   | 220082                      | Capscrew .....                          | 2   | 2  |

**FOOTNOTES:****a** Optional  
**b** → 4/2020**c** 4/2020 →

**INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 13-18)**  
**THREE STAGE FULL FREE- LIFT — WITH DUAL RODS, 1067 MM (42 IN)**



BP000977

**KEY:****A: CLASS II****B: CLASS III**

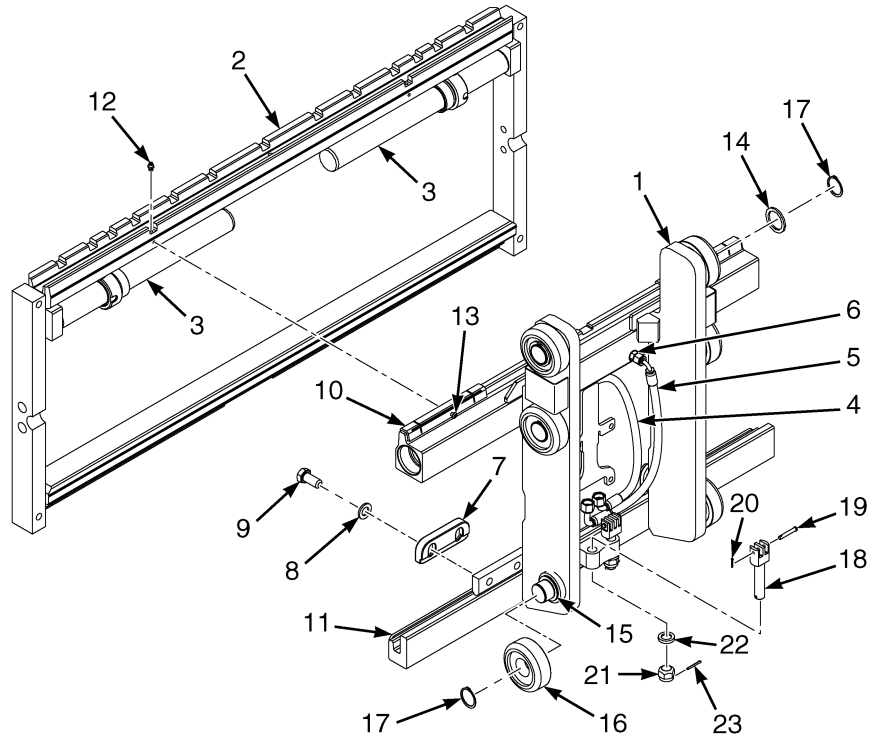
| ITEM | PART NO.         | DESCRIPTION                           | QTY |    |
|------|------------------|---------------------------------------|-----|----|
|      |                  |                                       | A   | B  |
|      | 4631898          | Side-Shift Carriage .....             | 1   | .. |
|      | 4631901          | Side-Shift Carriage .....             | ..  | 1  |
| 1    | 4090873          | Carriage Wldmt .....                  | 1   | .. |
| 1    | 4090877          | Carriage Wldmt .....                  | ..  | 1  |
| 2    | 4090860          | Frame .....                           | 1   | .. |
| 2    | 4090864          | Frame .....                           | ..  | 1  |
| 3    | .....            | Rod Assembly (☞ Figure 13-22).....    | 2   | 2  |
| 4    | 4651750          | Hose Assy (LH) .....                  | 1   | .. |
| 4    | 4651751          | Hose Assy (LH) .....                  | ..  | 1  |
| 5    | 4633877          | Hose Assy (RH) .....                  | 1   | .. |
| 5    | 4633879          | Hose Assy (RH) .....                  | ..  | 1  |
| 6    | 4116469          | Fitting , 90 deg elbow (90 Deg) ..... | 2   | 1  |
| 6    | 4116399          | Fitting , Straight (Straight) .....   | ..  | 1  |
| 7    | 4631491          | Hook .....                            | 2   | 2  |
| 8    | 1581854          | Washer .....                          | 4   | 4  |
| 9    | 1581833          | Capscrew .....                        | 4   | 4  |
| 10   | <b>b</b> 4632428 | Bearing (Upper) .....                 | 2   | 2  |
| 10   | <b>c</b> 4693335 | Bearing (Upper) .....                 | 2   | 2  |
| 11   | <b>b</b> 4632430 | Bearing (Lower) .....                 | 2   | 2  |
| 11   | <b>c</b> 4693334 | Bearing (Lower) .....                 | 2   | 2  |

**KEY:****A: CLASS II****B: CLASS III**

| ITEM | PART NO.         | DESCRIPTION                                 | QTY |    |
|------|------------------|---------------------------------------------|-----|----|
|      |                  |                                             | A   | B  |
| 12   | 16041            | Grease Fitting .....                        | 2   | 2  |
| 13   | 220082           | Capscrew .....                              | 2   | 2  |
| 14   | 366115           | Spacer .....                                | 2   | 2  |
| 15   | 129387           | Shim (0.020 in.) .....                      | AR  | AR |
| 16   | 1333399          | Load Roller ("B") (3.63 in./3.62 in.) ..... | 6   | 6  |
| 16   | <b>a</b> 1395169 | Load Roller ("A") (3.61 in./3.60 in.) ..... | 6   | 6  |
| 16   | <b>a</b> 1337900 | Load Roller ("C") (3.67 in./3.66 in.) ..... | 6   | 6  |
| 17   | 58901            | Snap Ring .....                             | 6   | 6  |
| 18   | 1365140          | Chain Anchor .....                          | 2   | .. |
| 18   | 1333329          | Chain Anchor .....                          | ..  | 2  |
| 19   | 1514866          | Pin .....                                   | 2   | 2  |
| 20   | 15211            | Cotter Pin .....                            | 2   | 2  |
| 21   | 161003           | Nut .....                                   | 2   | 2  |
| 22   | 297649           | Ring .....                                  | 2   | 2  |
| 23   | 15223            | Cotter Pin .....                            | 2   | 2  |

**FOOTNOTES:****a** Optional**c** 4/2020 →**b** → 4/2020

**INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 13-19)**  
**THREE STAGE FULL FREE-LIFT — WITH DUAL RODS 1219 MM (48 IN)**



BP000978

**KEY:****A: CLASS II****B: CLASS III**

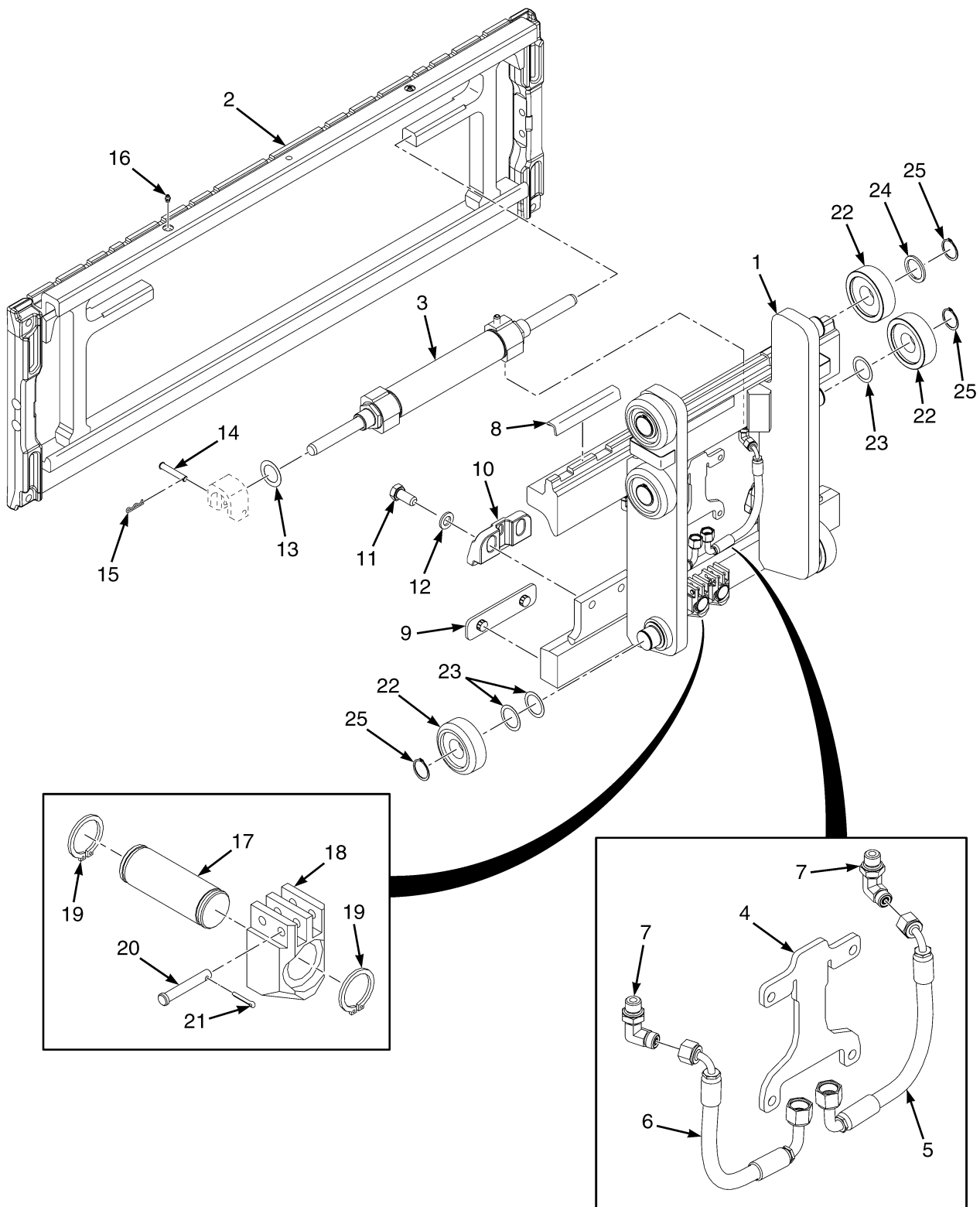
| ITEM | PART NO.         | DESCRIPTION                           | QTY |    |
|------|------------------|---------------------------------------|-----|----|
|      |                  |                                       | A   | B  |
|      | 4631899          | Side-Shift Carriage .....             | 1   | .. |
|      | 4631903          | Side-Shift Carriage .....             | ..  | 1  |
| 1    | 4090874          | Carriage Wldmt .....                  | 1   | .. |
| 1    | 4090879          | Carriage Wldmt .....                  | ..  | 1  |
| 2    | 4090861          | Frame .....                           | 1   | .. |
| 2    | 4090865          | Frame .....                           | ..  | 1  |
| 3    | .....            | Rod Assembly (☞ Figure 13-22).....    | 2   | 2  |
| 4    | 4651750          | Hose Assy (LH) .....                  | 1   | .. |
| 4    | 4651751          | Hose Assy (LH) .....                  | ..  | 1  |
| 5    | 4633877          | Hose Assy (RH) .....                  | 1   | .. |
| 5    | 4633879          | Hose Assy (RH) .....                  | ..  | 1  |
| 6    | 4116469          | Fitting , 90 deg elbow (90 Deg) ..... | 2   | 1  |
| 6    | 4116399          | Fitting , Straight (Straight) .....   | ..  | 1  |
| 7    | 4631491          | Hook .....                            | 2   | 2  |
| 8    | 1581854          | Washer .....                          | 4   | 4  |
| 9    | 1581833          | Capscrew .....                        | 4   | 4  |
| 10   | <b>b</b> 4632428 | Bearing (Upper) .....                 | 2   | 2  |
| 10   | <b>c</b> 4693335 | Bearing (Upper) .....                 | 2   | 2  |
| 11   | <b>b</b> 4632430 | Bearing (Lower) .....                 | 2   | 2  |
| 11   | <b>c</b> 4693334 | Bearing (Lower) .....                 | 2   | 2  |

**KEY:****A: CLASS II****B: CLASS III**

| ITEM | PART NO.         | DESCRIPTION                                 | QTY |    |
|------|------------------|---------------------------------------------|-----|----|
|      |                  |                                             | A   | B  |
| 12   | 16041            | Grease Fitting .....                        | 2   | 2  |
| 13   | 220082           | Capscrew .....                              | 2   | 2  |
| 14   | 366115           | Spacer .....                                | 2   | 2  |
| 15   | 129387           | Shim (0.020 in.) .....                      | AR  | AR |
| 16   | 1333399          | Load Roller ("B") (3.63 in./3.62 in.) ..... | 6   | 6  |
| 16   | <b>a</b> 1395169 | Load Roller ("A") (3.61 in./3.60 in.) ..... | 6   | 6  |
| 16   | <b>a</b> 1337900 | Load Roller ("C") (3.67 in./3.66 in.) ..... | 6   | 6  |
| 17   | 58901            | Snap Ring .....                             | 6   | 6  |
| 18   | 1365140          | Chain Anchor .....                          | 2   | .. |
| 18   | 1333329          | Chain Anchor .....                          | ..  | 2  |
| 19   | 1514866          | Pin .....                                   | 2   | 2  |
| 20   | 15211            | Cotter Pin .....                            | 2   | 2  |
| 21   | 161003           | Nut .....                                   | 2   | 2  |
| 22   | 297649           | Ring .....                                  | 2   | 2  |
| 23   | 15223            | Cotter Pin .....                            | 2   | 2  |

**FOOTNOTES:****a** Optional**c** 4/2020 →**b** → 4/2020

## INTEGRAL SIDE-SHIFT CARRIAGE ASSEMBLY (FIGURE 13-20) THREE STAGE FULL FREE-LIFT — CLASS II AND III WITH SINGLE CYLINDER



BP001055



# **INTEGRAL SIDE-SHIFT CARRIAGE ASSEMBLY** **THREE STAGE FULL FREE-LIFT – CLASS II AND III WITH SINGLE CYLINDER**

**KEY:****A: Class II 1067MM (42")****B: Class II 1219MM (48")****C: Class III 1067MM (42")****D: Class III 1219MM (48")**

| ITEM | PART NO.  | DESCRIPTION                                      | QTY |    |    |    |
|------|-----------|--------------------------------------------------|-----|----|----|----|
|      |           |                                                  | A   | B  | C  | D  |
|      | 4617799   | Side-Shift Carriage (42 in.) .....               | 1   | .. | .. | .. |
|      | 4621636   | Side-Shift Carriage (48 in.) .....               | ..  | 1  | .. | .. |
|      | 4617798   | Side-Shift Carriage (42 in.) .....               | ..  | .. | 1  | .. |
|      | 4621641   | Side-Shift Carriage (48 in.) .....               | ..  | .. | .. | 1  |
| 1    | 4046434   | Carriage Wldmt (42 in. and 48 in.) .....         | 1   | 1  | .. | .. |
| 1    | 4046468   | Carriage Wldmt (42 in. and 48 in.) .....         | ..  | .. | 1  | 1  |
| 2    | 1489011   |                                                  |     |    |    |    |
|      | 4033955   | Frame (Outer) (42 in.) .....                     | 1   | .. | .. | .. |
| 2    | 1489012   |                                                  |     |    |    |    |
|      | 4033958   | Frame Wldmt (48 in.) .....                       | ..  | 1  | .. | .. |
| 2    | 1488975   |                                                  |     |    |    |    |
|      | 4033960   | Frame (Outer) (42 in.) .....                     | ..  | .. | 1  | .. |
| 2    | 1488976   |                                                  |     |    |    |    |
|      | 4033957   | Frame Wldmt (48 in.) .....                       | ..  | .. | .. | 1  |
| 3    | 2043528   | Sideshift Cylinder Assembly (☞Figure 13-21)..... | 1   | 1  | .. | .. |
| 3    | 2043529   | Sideshift Cylinder Assembly (☞Figure 13-21)..... | ..  | .. | 1  | 1  |
| 4    | 4082004   | Plate (Hose) .....                               | 1   | 1  | .. | .. |
| 4    | 4082006   | Plate (Hose) .....                               | ..  | .. | 1  | 1  |
| 5    | 4623988   | Hose Assy (RH) .....                             | 1   | 1  | .. | .. |
| 5    | 4623990   | Hose Assy (RH) .....                             | ..  | .. | 1  | 1  |
| 6    | 4623989   | Hose Assy (LH) .....                             | 1   | 1  | .. | .. |
| 6    | 4623991   | Hose Assy (LH) .....                             | ..  | .. | 1  | 1  |
| 7    | 1487059   | Fitting .....                                    | 2   | 2  | 2  | 2  |
| 8    | 2043531   | Bearing Strip (Upper) .....                      | 2   | 2  | .. | .. |
| 8    | 2043532   | Bearing (Upper) .....                            | ..  | .. | 2  | 2  |
| 9    | 2043533   | Bearing Strip (Lower) .....                      | 2   | 2  | .. | .. |
| 9    | 2043534   | Wear Plate .....                                 | ..  | .. | 2  | 2  |
| 10   | 2043530   |                                                  |     |    |    |    |
|      | 4611363   | Hook .....                                       | 2   | 2  | 2  | 2  |
| 11   | 1581833   | Capscrew .....                                   | 4   | 4  | 4  | 4  |
| 12   | 1581854   | Washer .....                                     | 4   | 4  | 4  | 4  |
| 13   | 1498326   | Shim .....                                       | AR  | AR | AR | AR |
| 14   | 1401746   | Pin .....                                        | 2   | 2  | 2  | 2  |
| 15   | 18832     | Cotter Pin .....                                 | 2   | 2  | 2  | 2  |
| 16   | 16041     | Grease Fitting .....                             | 2   | 2  | 2  | 2  |
| 17   | 317735    | Pin .....                                        | 2   | 2  | 2  | 2  |
| 18   | 1369345   | Chain Anchor (Dual Hole) .....                   | 2   | 2  | .. | .. |
| 18   | a 1504010 | Chain Anchor (Single Hole) .....                 | 2   | 2  | .. | .. |
| 18   | 1369344   | Chain Anchor (Dual Hole) .....                   | ..  | .. | 2  | 2  |
| 18   | a 1504012 | Chain Anchor (Single Hole) .....                 | ..  | .. | 2  | 2  |
| 19   | 131358    | Snap Ring .....                                  | 4   | 4  | 4  | 4  |
| 20   | 1514866   | Pin .....                                        | 2   | 2  | 2  | 2  |
| 21   | 15211     | Cotter Pin .....                                 | 2   | 2  | 2  | 2  |

# **INTEGRAL SIDE-SHIFT CARRIAGE ASSEMBLY** **THREE STAGE FULL FREE-LIFT – CLASS II AND III WITH SINGLE CYLINDER**

**KEY:**

- A:** Class II 1067MM (42")  
**B:** Class II 1219MM (48")  
**C:** Class III 1067MM (42")  
**D:** Class III 1219MM (48")

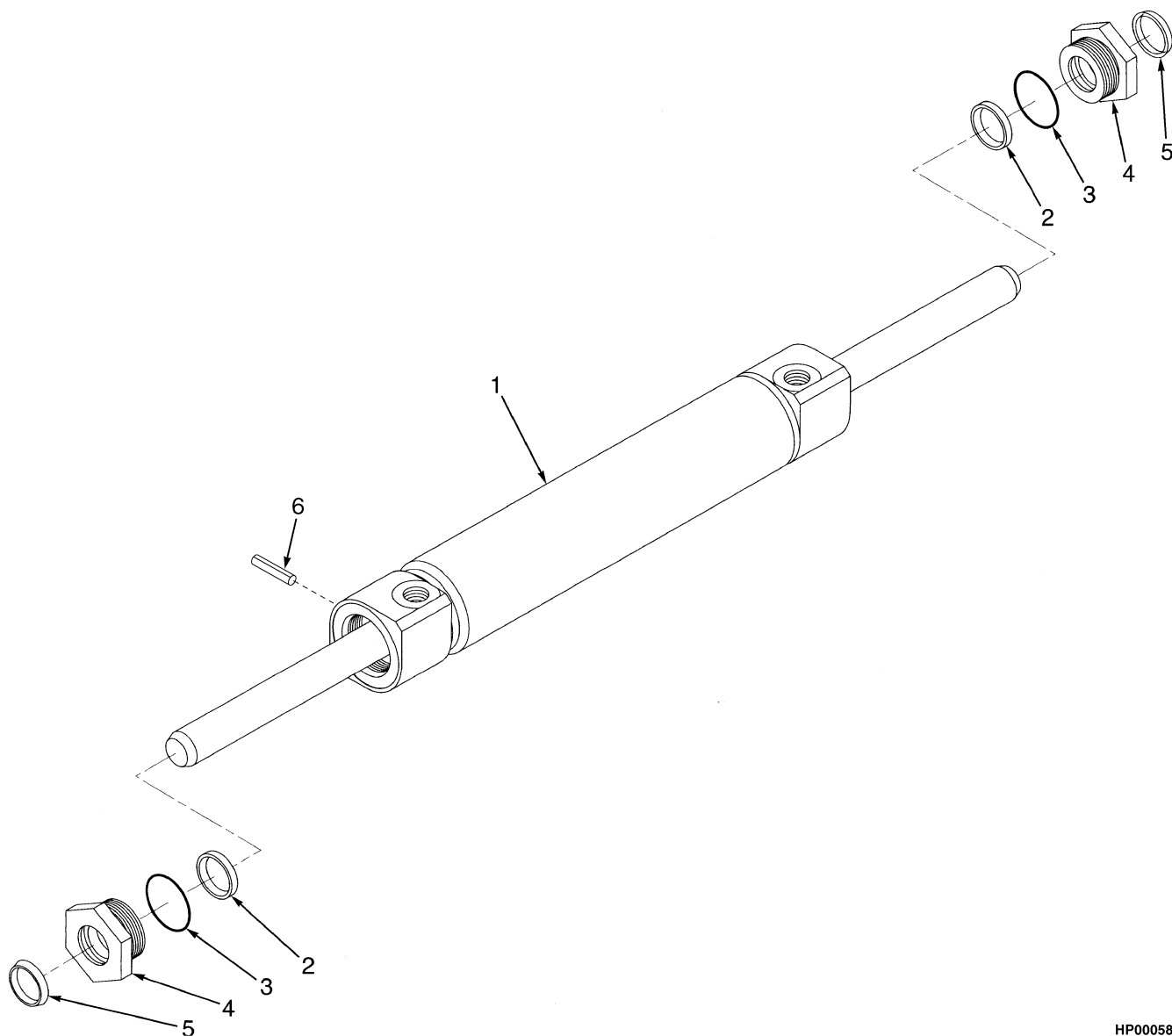
| ITEM | PART NO.         | DESCRIPTION                                 | QTY |    |    |    |
|------|------------------|---------------------------------------------|-----|----|----|----|
|      |                  |                                             | A   | B  | C  | D  |
| 22   | 1333399          | Load Roller ("B") (3.63 in./3.62 in.) ..... | 6   | 6  | 6  | 6  |
| 22   | <b>a</b> 1395169 | Load Roller ("A") (3.61 in./3.60 in.) ..... | 6   | 6  | 6  | 6  |
| 22   | <b>a</b> 1337900 | Load Roller ("C") (3.67 in./3.66 in.) ..... | 6   | 6  | 6  | 6  |
| 23   | 129387           | Shim (0.020 in.) .....                      | AR  | AR | AR | AR |
| 24   | 366115           | Spacer .....                                | 2   | 2  | 2  | 2  |
| 25   | 58901            | Snap Ring .....                             | 6   | 6  | 6  | 6  |
| 25   | <b>a</b> 1374797 | Snap Ring .....                             | 6   | 6  | 6  | 6  |

**FOOTNOTES:**

- a** Optional

## NOTES

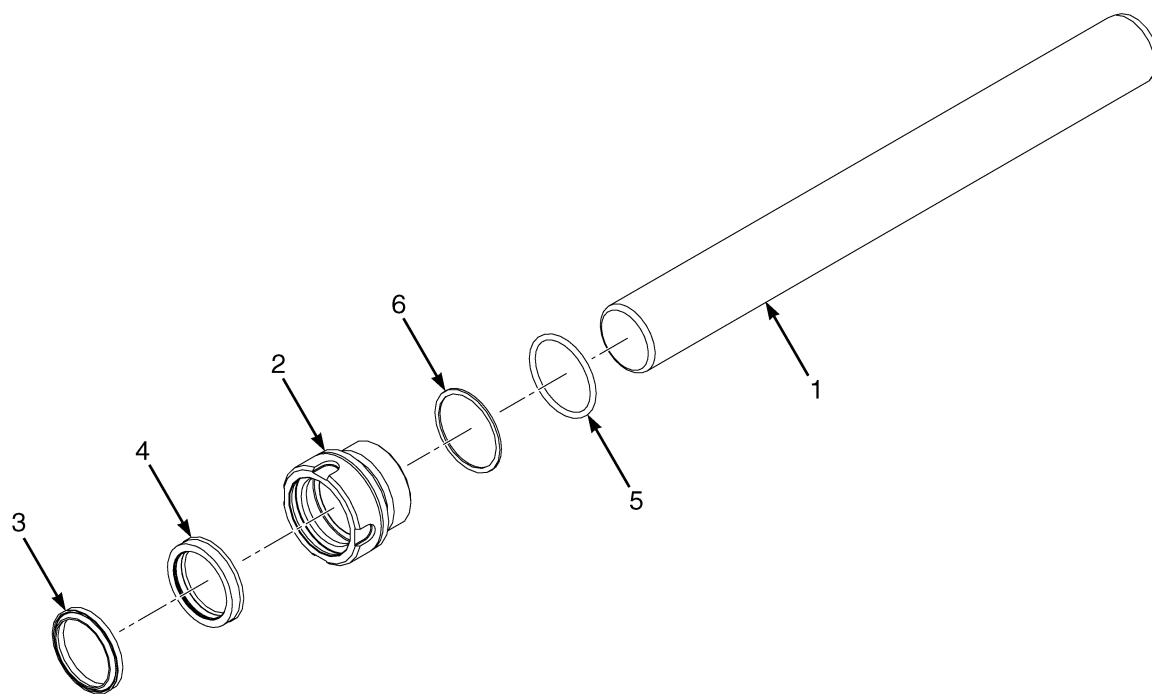
[illegible]

**INTEGRAL SIDE-SHIFT CYLINDER (FIGURE 13-21)**

HP000581

**INTEGRAL SIDE-SHIFT CYLINDER**

| ITEM | PART NO. | DESCRIPTION                                   | QTY |
|------|----------|-----------------------------------------------|-----|
|      | 2043528  | Sideshift Cylinder Assembly (Class II) .....  | 1   |
|      | 2043529  | Sideshift Cylinder Assembly (Class III) ..... | 1   |
| 1    | 1489016  | Sideshift Cylinder .....                      | 1   |
| 2    | 1489037  | Rod Seal .....                                | 2   |
| 3    | 1489035  | O-Ring .....                                  | 2   |
| 4    | 1498325  | Retainer .....                                | 2   |
| 5    | 1489039  | Rod Wiper .....                               | 2   |
| 6    | 302487   | Roll Pin .....                                | 1   |
|      | 1503096  | Kit-Seal .....                                | 1   |

**INTEGRAL SIDE-SHIFT CYLINDER (FIGURE 13-22)  
ROD ASSEMBLY**

BP000995

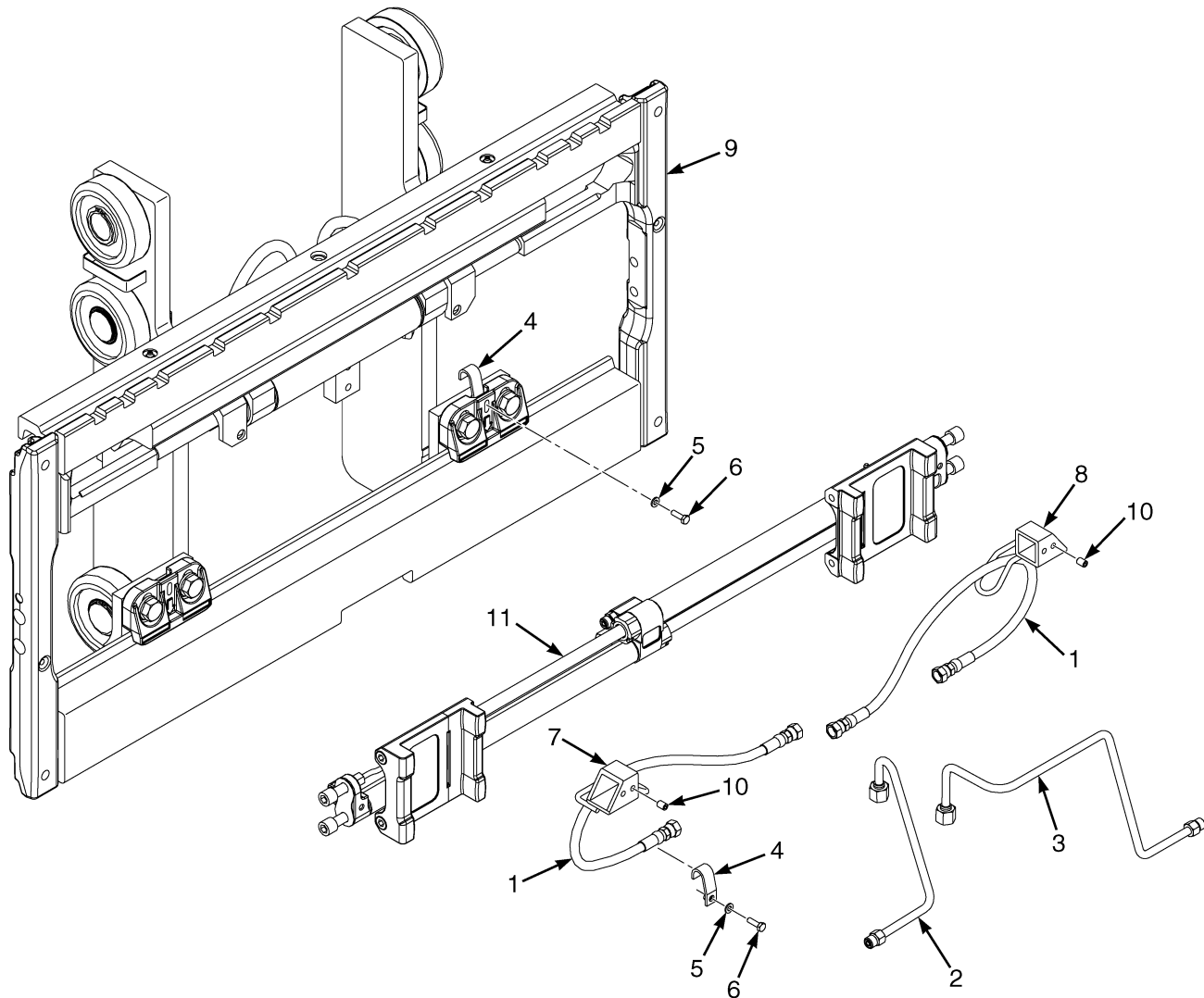
**INTEGRAL SIDE-SHIFT CYLINDER  
ROD ASSEMBLY****KEY:**

**A:** Class II 1067mm  
**B:** Class III 1067mm  
**C:** Class II 1219mm  
**D:** Class III 1219mm

| ITEM | PART NO.                    | DESCRIPTION        | QTY |    |    |    |
|------|-----------------------------|--------------------|-----|----|----|----|
|      |                             |                    | A   | B  | C  | D  |
|      | <b>b</b> 4634600            |                    |     |    |    |    |
|      | 4662719                     | Rod Assy .....     | 1   | .. | .. | .. |
|      | <b>a</b> 4634601            | Rod Assy .....     | ..  | .. | 1  | .. |
|      | <b>b</b> 4662720            | Rod Assy .....     | ..  | .. | 1  | .. |
|      | <b>a</b> 4634602            | Rod Assy .....     | ..  | 1  | .. | .. |
|      | <b>b</b> 4662721            | Rod Assy .....     | ..  | 1  | .. | .. |
|      | <b>a</b> 4634603            | Rod Assy .....     | ..  | .. | .. | 1  |
|      | <b>b</b> 4662722            | Rod Assy .....     | ..  | .. | .. | 1  |
| 1    | 4090982                     | Cylinder Rod ..... | 1   | .. | .. | .. |
| 1    | 4090983                     | Cylinder Rod ..... | ..  | .. | 1  | .. |
| 1    | 4090984                     | Cylinder Rod ..... | ..  | 1  | .. | .. |
| 1    | 4090985                     | Cylinder Rod ..... | ..  | .. | .. | 1  |
| 2    | 4198566                     | Gland .....        | 1   | .. | 1  | .. |
| 2    | 4198567                     | Gland .....        | ..  | 1  | .. | 1  |
| 3    | 1383064                     | Rod Wiper .....    | 1   | .. | 1  | .. |
| 3    | 1383065                     | Rod Wiper .....    | ..  | 1  | .. | 1  |
| 4    | 2032488                     | Seal .....         | 1   | .. | 1  | .. |
| 4    | 378440                      | Seal .....         | ..  | 1  | .. | 1  |
| 5    | 55407                       | O-Ring .....       | 1   | .. | 1  | .. |
| 5    | <del>4028986</del><br>92861 | O-Ring .....       | ..  | 1  | .. | 1  |
| 6    | 153919                      | Back-Up Ring ..... | 1   | .. | 1  | .. |
| 6    | 147972                      | Back-Up Ring ..... | ..  | 1  | .. | 1  |
|      | <b>a</b> 4093714            | Kit-Seal .....     | 1   | .. | 1  | .. |
|      | <b>a</b> 4093740            | Kit-Seal .....     | ..  | 1  | .. | 1  |
|      | <b>b</b> 4212006            | Kit-Seal .....     | 1   | .. | 1  | .. |
|      | <b>b</b> 4212007            | Kit-Seal .....     | ..  | 1  | .. | 1  |

**FOOTNOTES:****a** → PENDING PER ECN 160711**b** PENDING PER ECN 160711 →

## INTEGRAL SIDE-SHIFT (FIGURE 13-23) FORK POSITIONER — TWO STAGE LIMITED FREE-LIFT



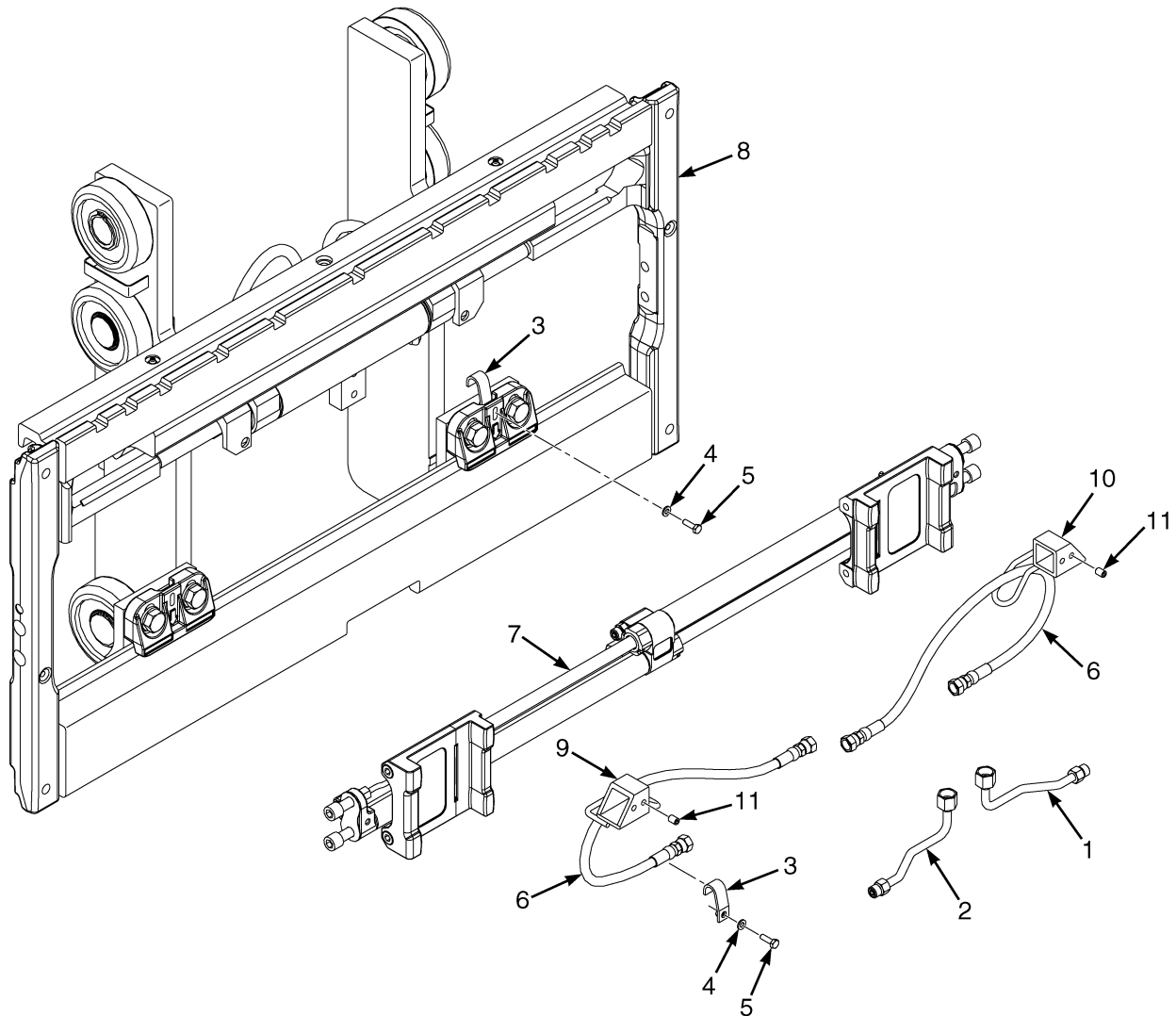
BP000831



**INTEGRAL SIDE-SHIFT  
FORK POSITIONER – TWO STAGE LIMITED FREE-LIFT****KEY:****A: Class II****B: Class III**

| ITEM | PART NO. | DESCRIPTION                                                              | QTY |    |
|------|----------|--------------------------------------------------------------------------|-----|----|
|      |          |                                                                          | A   | B  |
| 1    | 4618718  |                                                                          |     |    |
|      | 4611913  | Hose Assy .....                                                          | 2   | 2  |
| 2    | 4626768  | Tube Assy (RH) .....                                                     | 1   | .. |
| 2    | 4626772  | Tube Assy (RH) .....                                                     | ..  | 1  |
| 3    | 4626769  | Tube Assy (LH) .....                                                     | 1   | .. |
| 3    | 4626773  | Tube Assy (LH) .....                                                     | ..  | 1  |
| 4    | 4050817  | Bracket Wldmt .....                                                      | 2   | 2  |
| 5    | 1673754  | Washer .....                                                             | 2   | 2  |
| 6    | 1670032  | Capscrew .....                                                           | 2   | 2  |
| 7    | 4061319  | Guide (Hose) (RH) .....                                                  | 1   | 1  |
| 8    | 4061318  | Guide (Hose) (LH) .....                                                  | 1   | 1  |
| 9    | .....    | Carriage Assembly .....                                                  | 1   | 1  |
| 10   | 4055634  | Setscrew .....                                                           | 4   | 4  |
| 11   | 4611880  | Fork Positioner Carriage (42 in.) (Fork Positioner) (☞Figure 13-26)..... | 1   | .. |
| 11   | 4611882  | Fork Positioner Carriage (42 in.) (Fork Positioner) (☞Figure 13-26)..... | ..  | 1  |
| 11   | 4034634  | Kit-Service Cylinder .....                                               | 1   | 1  |

## INTEGRAL SIDE-SHIFT (FIGURE 13-24) FORK POSITIONER — THREE STAGE FULL FREE-LIFT (→ 12/2016)



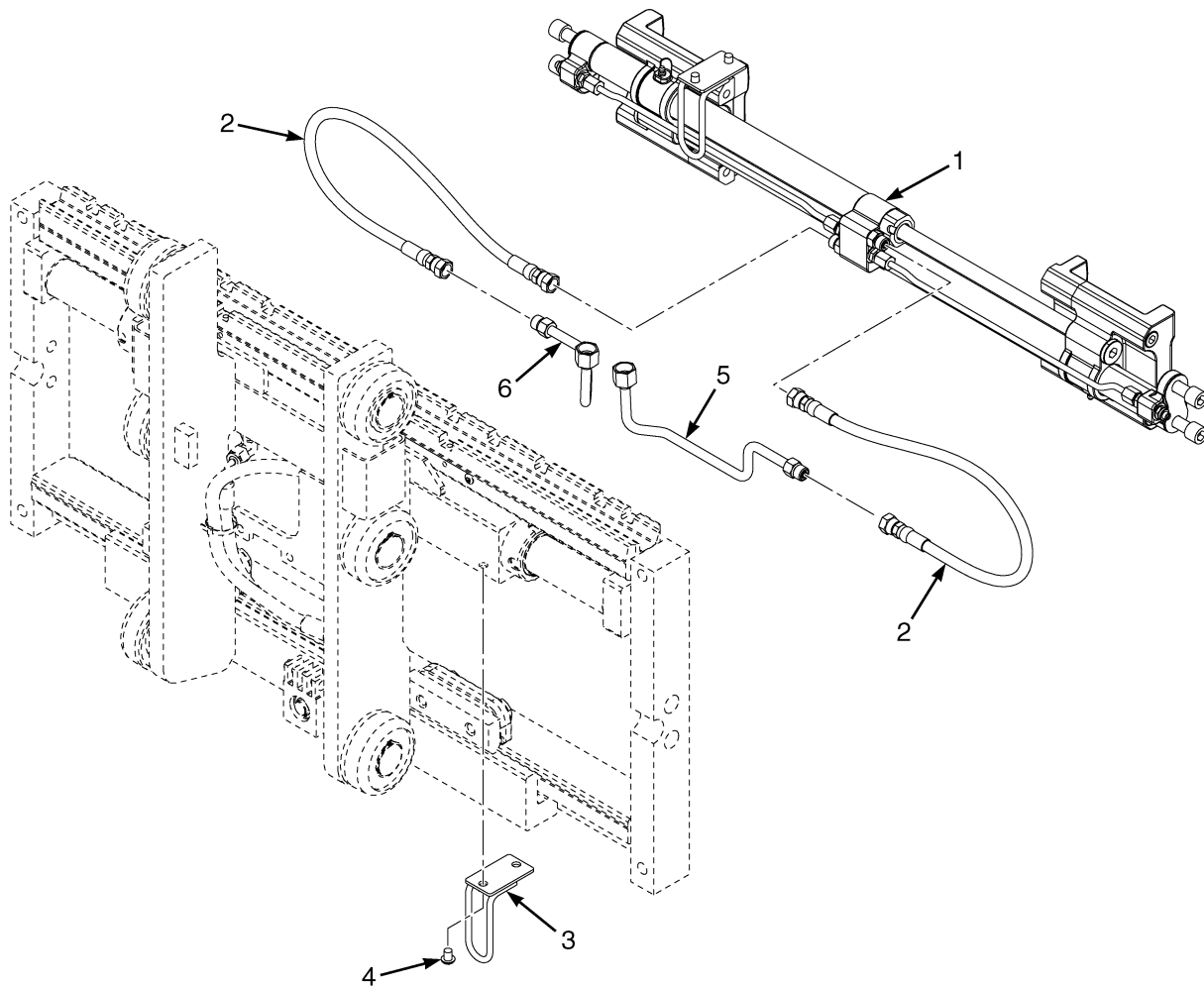
BP020071

# **INTEGRAL SIDE-SHIFT** **FORK POSITIONER – THREE STAGE FULL FREE-LIFT (→ 12/2016)**

**KEY:****A: Class II****B: Class III**

| ITEM | PART NO. | DESCRIPTION                                             | QTY |    |
|------|----------|---------------------------------------------------------|-----|----|
|      |          |                                                         | A   | B  |
| 1    | 4633850  | Tube Assy (LH) .....                                    | 1   | .. |
| 1    | 4633852  | Tube Assy (LH) .....                                    | ..  | 1  |
| 2    | 4633851  | Tube Assy (RH) .....                                    | 1   | .. |
| 2    | 4633853  | Tube Assy (RH) .....                                    | ..  | 1  |
| 3    | 4050817  | Bracket Wldmt .....                                     | 2   | 2  |
| 4    | 1673754  | Washer .....                                            | 2   | 2  |
| 5    | 1670032  | Capscrew .....                                          | 2   | 2  |
| 6    | 4618718  |                                                         |     |    |
|      | 4611913  | Hose Assy .....                                         | 2   | .. |
| 6    | 4622266  | Hose Assy .....                                         | ..  | 2  |
| 7    | 4611880  | Fork Positioner Carriage (42 in.) (☞ Figure 13-26)..... | 1   | .. |
| 7    | 4611882  | Fork Positioner Carriage (42 in.) (☞ Figure 13-26)..... | ..  | 1  |
| 7    | 4034634  | Kit-Service Cylinder .....                              | 1   | 1  |
| 7    | 4034635  | Kit-Bearing .....                                       | 1   | 1  |
| 8    | .....    | Carriage Assembly .....                                 | 1   | 1  |
| 9    | 4061319  | Guide (Hose) (RH) .....                                 | 1   | 1  |
| 10   | 4061318  | Guide (Hose) (LH) .....                                 | 1   | 1  |
| 11   | 4055634  | Setscrew .....                                          | 4   | 4  |

## INTEGRAL SIDE-SHIFT (FIGURE 13-25) FORK POSITIONER — TWO LFL AND THREE STAGE FFL (12/2016 →)



BP001058

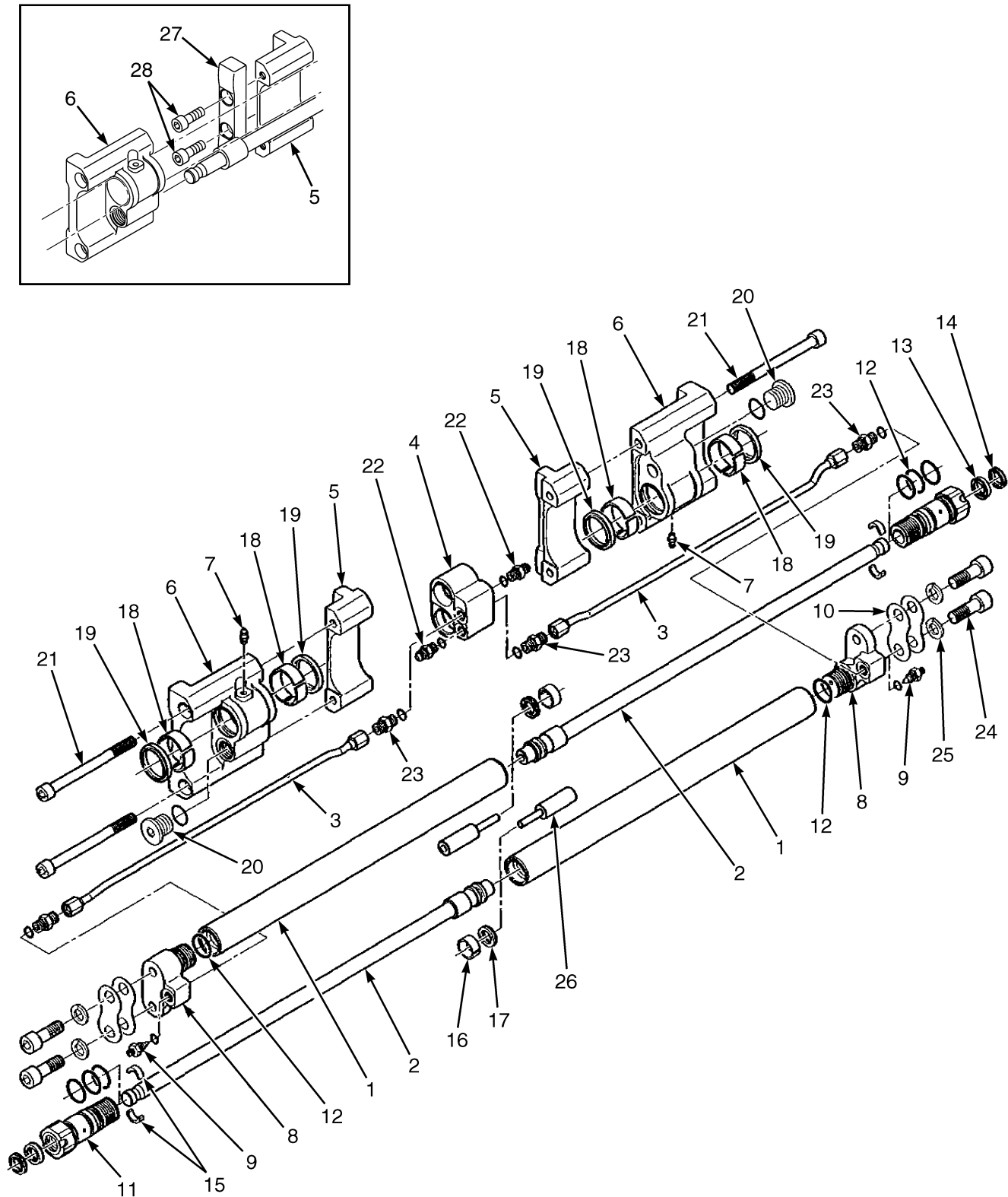
# **INTEGRAL SIDE-SHIFT** **FORK POSITIONER – TWO LFL AND THREE STAGE FFL (12/2016 →)**

**KEY:****A: Class II****B: Class III**

| ITEM | PART NO.           | DESCRIPTION                                             | QTY |    |
|------|--------------------|---------------------------------------------------------|-----|----|
|      |                    |                                                         | A   | B  |
| 1    | 4611880            | Fork Positioner Carriage (42 in.) (☞ Figure 13-26)..... | 1   | .. |
| 1    | 4611882            | Fork Positioner Carriage (42 in.) (☞ Figure 13-26)..... | ..  | 1  |
| 2    | <del>4618748</del> |                                                         |     |    |
|      | 4611913            | Hose Assy .....                                         | 2   | 2  |
| 3    | 4100517            | Bracket Wldmt .....                                     | 2   | .. |
| 3    | 4100518            | Bracket Wldmt .....                                     | ..  | 2  |
| 4    | 296163             | Capscrew .....                                          | 4   | 4  |
| 5    | <b>b</b> 4635189   | Tube Assy (RH) .....                                    | 1   | 1  |
| 5    | <b>a</b> 4634454   | Tube Assy (RH) .....                                    | 1   | 1  |
| 6    | <b>b</b> 4635190   | Tube Assy (LH) .....                                    | 1   | 1  |
| 6    | <b>a</b> 4634453   | Tube Assy (LH) .....                                    | 1   | 1  |

**FOOTNOTES:****a** Three Stage FFL**b** Two Stage LFL

## FORK POSITIONER ASSEMBLY (FIGURE 13-26)



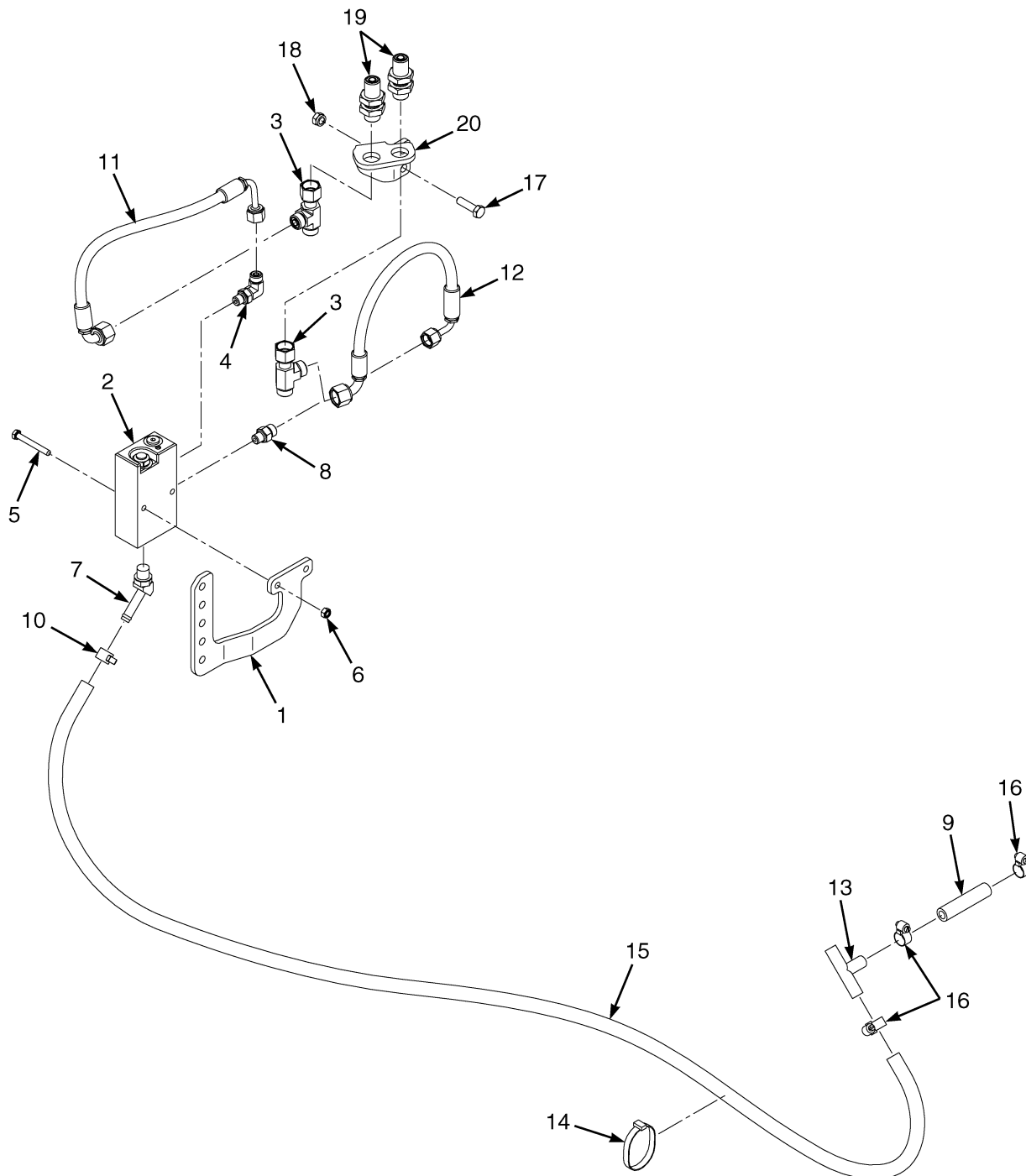
BP000920

**FORK POSITIONER ASSEMBLY****KEY:****A: CIs II****B: CIs III**

| ITEM | PART NO.         | DESCRIPTION                                        | QTY |    |
|------|------------------|----------------------------------------------------|-----|----|
|      |                  |                                                    | A   | B  |
|      | 4611880          | Fork Positioner Carriage (42 in.) (H40-50XT) ..... | 1   | .. |
|      | 4611882          | Fork Positioner Carriage (42 in.) (H60XT) .....    | ..  | 1  |
| 1    | .....            | Cylinder Shell .....                               | 2   | 2  |
| 2    | .....            | Cylinder Rod .....                                 | 2   | 2  |
| 3    | 4084993          | Tube .....                                         | 2   | .. |
| 4    | .....            | Manifold .....                                     | 1   | .. |
| 4    | 4217960          | Manifold .....                                     | ..  | 1  |
| 5    | .....            | Inner Carrier .....                                | 2   | .. |
| 5    | 4217961          | Carrier , Inner .....                              | ..  | 2  |
| 6    | .....            | Outer Carrier .....                                | 2   | .. |
| 6    | 4217962          | Carrier , Outer .....                              | ..  | 2  |
| 7    | 4063703          | Grease Fitting .....                               | 2   | 2  |
| 8    | .....            | End Cap .....                                      | 2   | .. |
| 8    | 4217963          | End Cap , Cylinder .....                           | ..  | 2  |
| 9    | 4133804          | Restrictor Fitting .....                           | 2   | 2  |
| 10   | 4084991          | Shim .....                                         | 4   | 4  |
| 11   | .....            | Retainer .....                                     | 2   | .. |
| 11   | 4220419          | Retainer .....                                     | ..  | 2  |
| 12   | .....            | O-Ring .....                                       | 8   | 8  |
| 13   | .....            | Rod Seal .....                                     | 2   | 2  |
| 14   | .....            | Rod Wiper .....                                    | 2   | 2  |
| 15   | 4215485          | Keeper .....                                       | 4   | 4  |
| 16   | .....            | Piston Wear Ring .....                             | 2   | 2  |
| 17   | .....            | Piston Seal .....                                  | 2   | 2  |
| 18   | .....            | Composite Bearing .....                            | 4   | 4  |
| 19   | .....            | Wiper .....                                        | 4   | 4  |
| 20   | 4139422          | Plug .....                                         | 2   | 2  |
| 21   | 4139423          | Capscrew .....                                     | 4   | 4  |
| 22   | 4145044          | Fitting .....                                      | 2   | 2  |
| 23   | 4063717          | Fitting .....                                      | 4   | 4  |
| 24   | .....            | Capscrew .....                                     | 4   | .. |
| 24   | 4217964          | Capscrew .....                                     | ..  | 4  |
| 25   | 4065036          | Lockwasher .....                                   | 4   | 4  |
| 26   | .....            | Piston Spacers .....                               | 2   | 2  |
| 27   | <b>a</b> 4084441 | Spacer Bar (Class II) .....                        | 2   | .. |
| 28   | <b>a</b> 4058427 | Capscrew (Class II) .....                          | 4   | .. |
|      | 4034634          | Kit-Service Cylinder .....                         | 1   | .. |
|      | 4034635          | Kit-Bearing .....                                  | 1   | .. |

**FOOTNOTES:****a** With 100mm width Forks

## AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 13-27) THREE STAGE FULL FREE-LIFT (SINGLE AUXILIARY WITH E-HYDRAULICS) — THREE FUNCTION (→ 12/2017)



BP000951



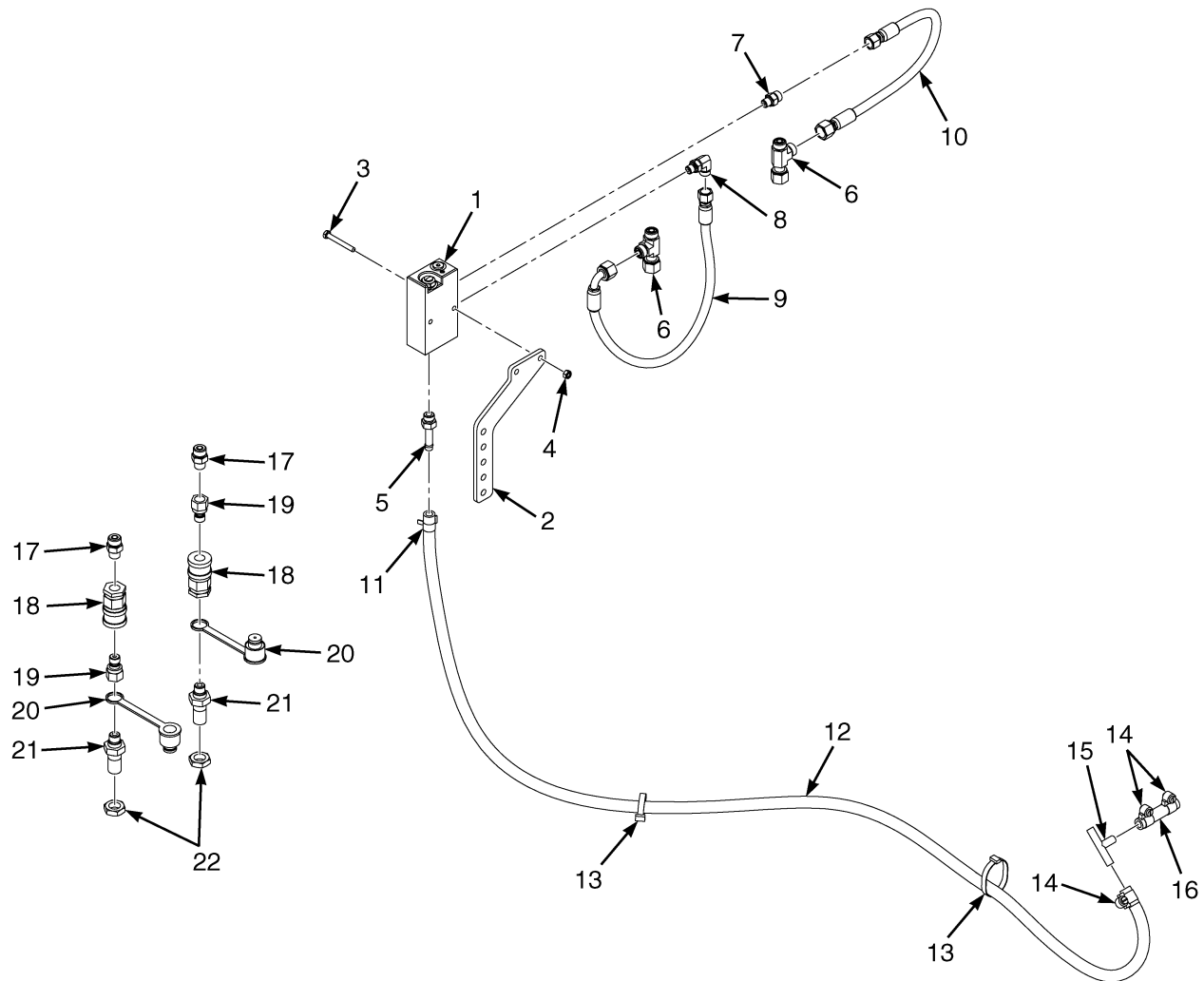
**AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES**  
**THREE STAGE FULL FREE-LIFT (SINGLE AUXILIARY WITH E-HYDRAULICS) – THREE FUNCTION**  
 (→ 12/2017)

| ITEM | PART NO. | DESCRIPTION                       | QTY |
|------|----------|-----------------------------------|-----|
| 1    | 4124366  | Bracket .....                     | 1   |
| 2    | 2111754  | Valve .....                       | 1   |
| 3    | 1487097  | Fitting .....                     | 2   |
| 4    | 1487058  | Fitting .....                     | 1   |
| 5    | 292505   | Capscrew .....                    | 2   |
| 6    | 302399   | Nut .....                         | 2   |
| 7    | 222501   | Fitting .....                     | 1   |
| 8    | 1486737  | Fitting .....                     | 1   |
| 9    | 4641682  | Hose Assy (QD Valve Return) ..... | 1   |
| 10   | 1569616  | Hose Clamp .....                  | 2   |
| 11   | 4641679  | Hose Assy (QD Function A) .....   | 1   |
| 12   | 4641680  | Hose Assy (QD Function B) .....   | 1   |
| 13   | 2046871  | Fitting .....                     | 1   |
| 14   | 129563   | Strap Clamp .....                 | 2   |
| 15   | 4641683  | Hose Assy (QD Valve Return) ..... | 1   |
| 16   | 168718   | Clamp .....                       | 3   |
| 17   | 1696161  | Capscrew .....                    | 2   |
| 18   | 1581566  | Nut .....                         | 2   |
| 19   | 1528573  | Fitting (To Header Hoses) .....   | 2   |
| 20   | 4122876  | Bracket .....                     | 1   |

## AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 13-28)

### THREE STAGE FULL FREE-LIFT — SINGLE AUXILIARY WITH E-HYDRAULICS, THREE FUNCTION

(12/2017 →)

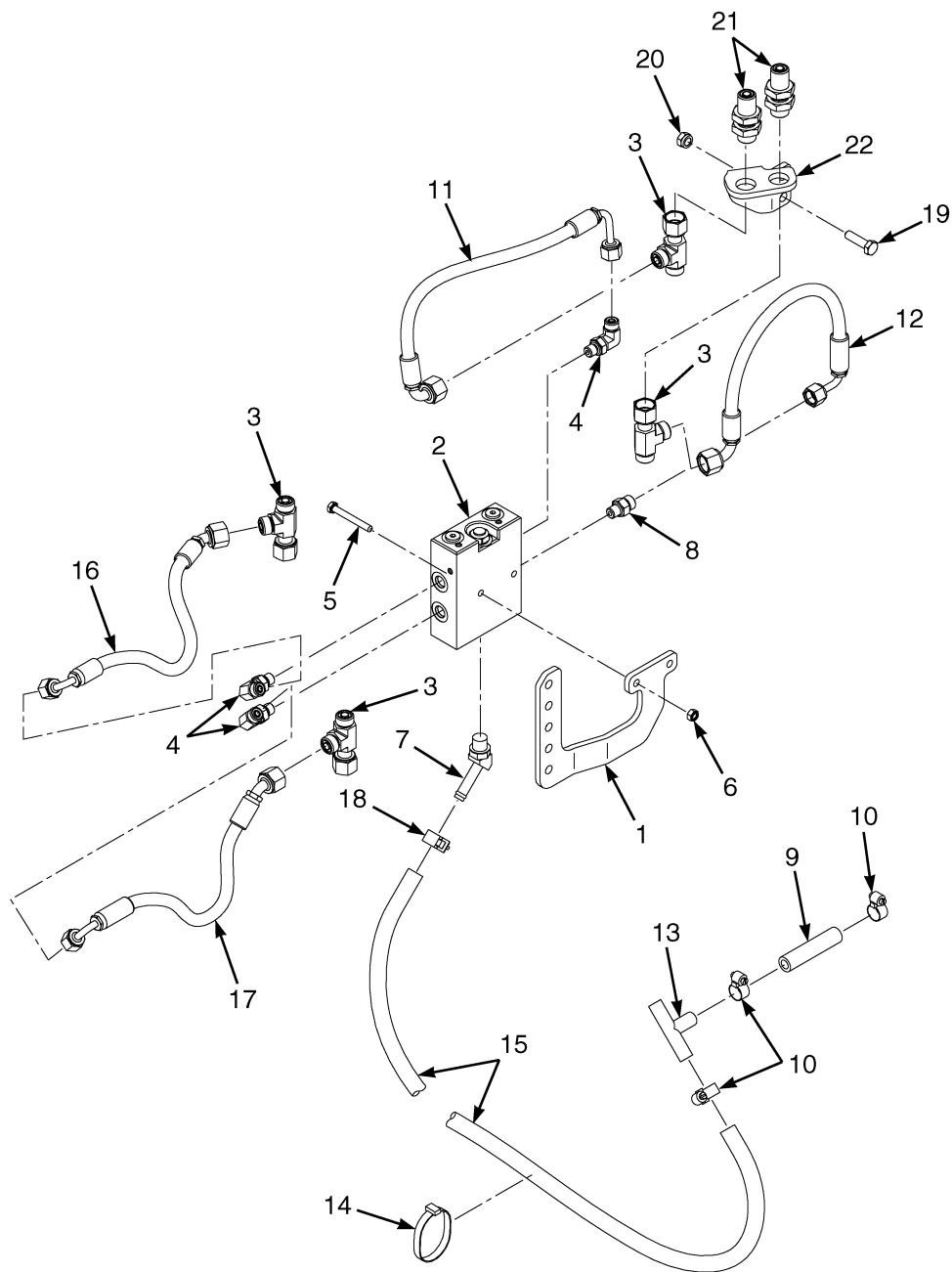


BP001131

**AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES**  
**THREE STAGE FULL FREE-LIFT – SINGLE AUXILIARY WITH E-HYDRAULICS, THREE FUNCTION**  
**(12/2017 →)**

| ITEM | PART NO.                     | DESCRIPTION                            | QTY |
|------|------------------------------|----------------------------------------|-----|
| 1    | 2111754                      | Valve (QD, Single Aux) .....           | 1   |
| 1    | 4010972                      | Valve .....                            | 1   |
| 2    | 4130112                      | Bracket (QD Valve Mount) .....         | 1   |
| 3    | 292505                       | Capscrew .....                         | 2   |
| 4    | 302399                       | Nut .....                              | 2   |
| 5    | 222492                       | Fitting .....                          | 1   |
| 5    | 16483                        | O-Ring .....                           | 1   |
| 6    | 1487097                      | Fitting .....                          | 2   |
| 7    | 1486737                      | Fitting .....                          | 1   |
| 8    | 1487058                      | Fitting .....                          | 1   |
| 9    | 4665992                      | Hose Assy (S and D Aux 3F FNC A) ..... | 1   |
| 10   | 4666219                      | Hose Assy (S and D Aux 3F FNC B) ..... | 1   |
| 11   | 1569616                      | Hose Clamp .....                       | 1   |
| 12   | 4640857                      | Hose (QD Valve Return) .....           | 1   |
| 13   | 129563                       | Strap Clamp .....                      | 2   |
| 14   | 166857                       | Clamp .....                            | 3   |
| 15   | 2074990                      | Fitting .....                          | 1   |
| 16   | 4641682                      | Hose Assy (QD Valve Return) .....      | 1   |
| 17   | 1486740                      | Fitting .....                          | 2   |
| 17   | <del>6992657</del><br>265787 | O-Ring .....                           | 1   |
| 18   | 1483663                      | Quick Disconnect Fitting .....         | 2   |
| 19   | 1483664                      | Fitting .....                          | 2   |
| 20   | 1483661                      | Dust Cap .....                         | 2   |
| 21   | 1708364                      | Bulkhead .....                         | 2   |
| 22   | 1528602                      | Locknut .....                          | 2   |

## AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 13-29) THREE STAGE FULL FREE-LIFT (DUAL AUXILIARY WITH E-HYDRAULICS) — THREE AND FOUR FUNCTION (→ 12/2017)

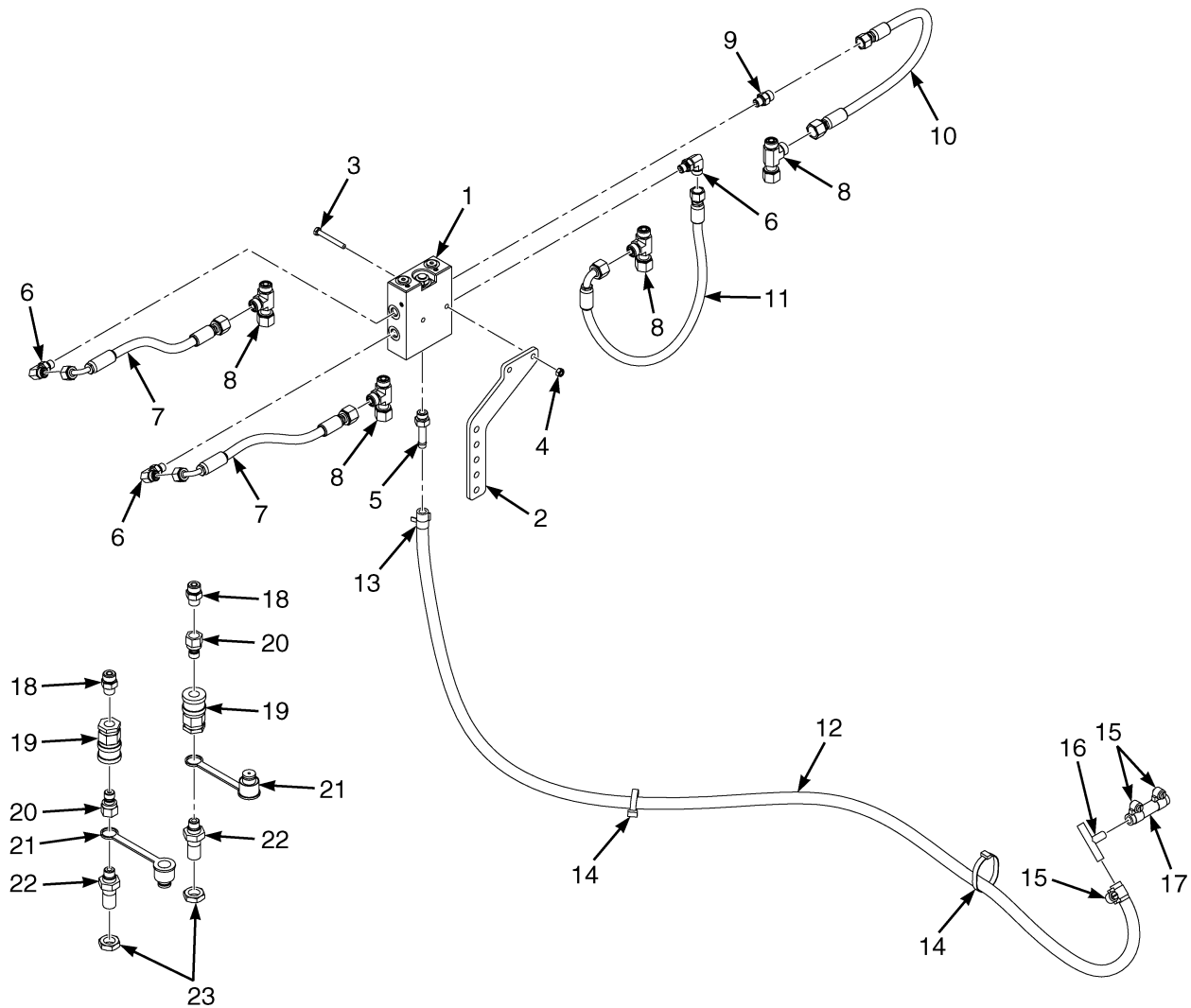


BP000952

**AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES**  
**THREE STAGE FULL FREE-LIFT (DUAL AUXILIARY WITH E-HYDRAULICS) – THREE AND FOUR**  
**FUNCTION (→ 12/2017)**

| ITEM | PART NO. | DESCRIPTION                       | QTY |
|------|----------|-----------------------------------|-----|
| 1    | 4124366  | Bracket .....                     | 1   |
| 2    | 2111755  | Valve .....                       | 1   |
| 3    | 1487097  | Fitting .....                     | 4   |
| 4    | 1487058  | Fitting .....                     | 3   |
| 5    | 292505   | Capscrew .....                    | 2   |
| 6    | 302399   | Nut .....                         | 2   |
| 7    | 222501   | Fitting .....                     | 1   |
| 8    | 1486737  | Fitting .....                     | 1   |
| 9    | 4641682  | Hose Assy (QD Valve Return) ..... | 1   |
| 10   | 168718   | Clamp .....                       | 3   |
| 11   | 4641679  | Hose Assy (QD Function A) .....   | 1   |
| 12   | 4641680  | Hose Assy (QD Function B) .....   | 1   |
| 13   | 2046871  | Fitting .....                     | 1   |
| 14   | 129563   | Strap Clamp .....                 | 2   |
| 15   | 4641683  | Hose Assy (QD Valve Return) ..... | 1   |
| 16   | 4641732  | Hose Assy (QD 4 Function C) ..... | 1   |
| 17   | 4641733  | Hose Assy (QD 4 Function D) ..... | 1   |
| 18   | 1569616  | Hose Clamp .....                  | 1   |
| 19   | 1696161  | Capscrew .....                    | 2   |
| 20   | 1581566  | Nut .....                         | 2   |
| 21   | 1528573  | Fitting (To Header Hoses) .....   | 2   |
| 22   | 4122876  | Bracket .....                     | 1   |

## AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 13-30) THREE STAGE FULL FREE-LIFT — DUAL AUXILIARY WITH E-HYDRAULICS, THREE AND FOUR FUNCTION (12/2017 →)

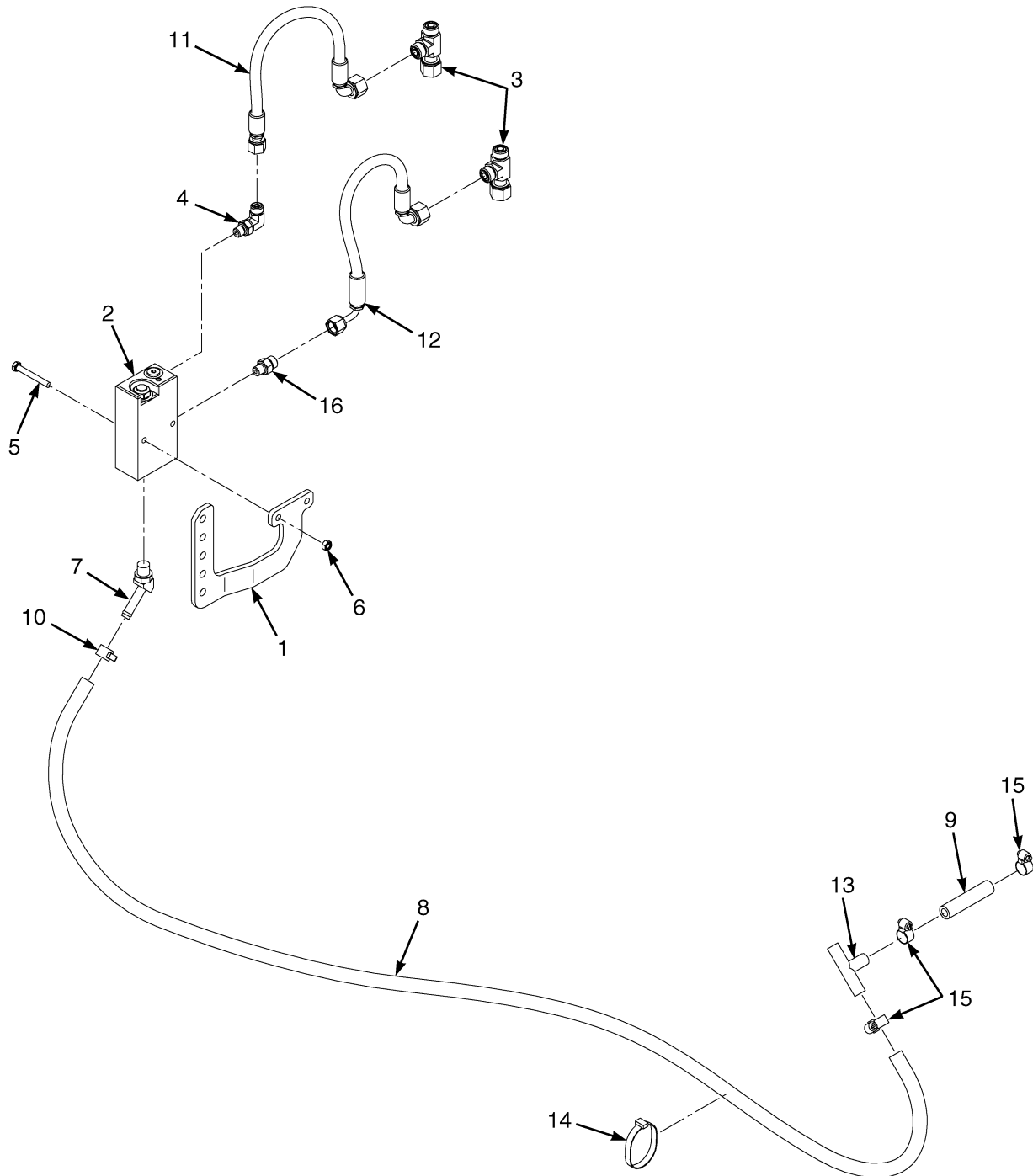


BP001130

**AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES**  
**THREE STAGE FULL FREE-LIFT – DUAL AUXILIARY WITH E-HYDRAULICS, THREE AND FOUR**  
**FUNCTION (12/2017 →)**

| ITEM | PART NO.                     | DESCRIPTION                                  | QTY |
|------|------------------------------|----------------------------------------------|-----|
| 1    | 2111755                      | Valve (QD, Dual Aux) .....                   | 1   |
| 1    | 4010972                      | Valve .....                                  | 1   |
| 2    | 4130112                      | Bracket (QD Valve Mount) .....               | 1   |
| 3    | 292505                       | Capscrew .....                               | 2   |
| 4    | 302399                       | Nut .....                                    | 2   |
| 5    | 222492                       | Fitting .....                                | 1   |
| 5    | 16483                        | O-Ring .....                                 | 1   |
| 6    | 1487058                      | Fitting .....                                | 3   |
| 7    | 4665930                      | Hose Assy (S and D Aux 4F FNC C and D) ..... | 2   |
| 8    | 1487097                      | Fitting .....                                | 4   |
| 9    | 1486737                      | Fitting .....                                | 1   |
| 10   | 4666219                      | Hose Assy (S and D Aux 3F FNC B) .....       | 1   |
| 11   | 4665992                      | Hose Assy (S and D Aux 3F FNC A) .....       | 1   |
| 12   | 4640857                      | Hose (QD Valve Return) .....                 | 1   |
| 13   | 1569616                      | Hose Clamp .....                             | 1   |
| 14   | 129563                       | Strap Clamp .....                            | 2   |
| 15   | 166857                       | Clamp .....                                  | 3   |
| 16   | 2074990                      | Fitting .....                                | 1   |
| 17   | 4641682                      | Hose Assy (QD Valve Return) .....            | 1   |
| 18   | 1486740                      | Fitting .....                                | 4   |
| 18   | <del>6992657</del><br>265787 | O-Ring .....                                 | 1   |
| 19   | 1483663                      | Quick Disconnect Fitting .....               | 4   |
| 20   | 1483664                      | Fitting .....                                | 4   |
| 21   | 1483661                      | Dust Cap .....                               | 4   |
| 22   | 1708364                      | Bulkhead .....                               | 4   |
| 23   | 1528602                      | Locknut .....                                | 4   |

**AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 13-31)**  
**THREE STAGE FULL FREE-LIFT (SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS)**  
**— FOUR FUNCTION (→ 12/2017)**



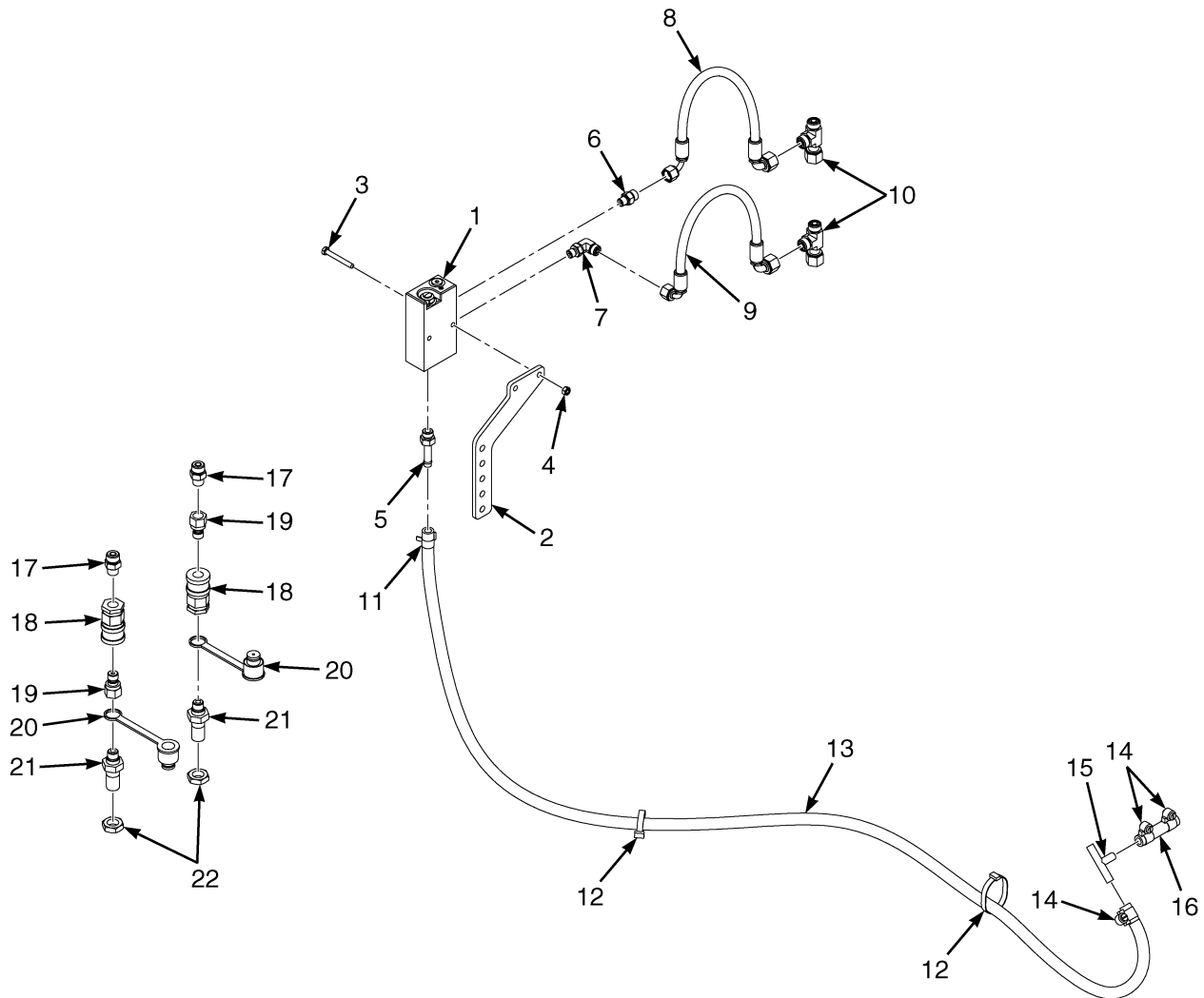
BP000953



**AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES**  
**THREE STAGE FULL FREE-LIFT (SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS)**  
**– FOUR FUNCTION (→ 12/2017)**

| ITEM | PART NO. | DESCRIPTION                       | QTY |
|------|----------|-----------------------------------|-----|
| 1    | 4124366  | Bracket .....                     | 1   |
| 2    | 2111754  | Valve .....                       | 1   |
| 3    | 1487097  | Fitting .....                     | 2   |
| 4    | 1487058  | Fitting .....                     | 1   |
| 5    | 292505   | Capscrew .....                    | 2   |
| 6    | 302399   | Nut .....                         | 2   |
| 7    | 222501   | Fitting .....                     | 1   |
| 8    | 4641683  | Hose Assy (QD Valve Return) ..... | 1   |
| 9    | 4641682  | Hose Assy (QD Valve Return) ..... | 1   |
| 10   | 1569616  | Hose Clamp .....                  | 2   |
| 11   | 4626238  | Hose Assy (QD 4 Function C) ..... | 1   |
| 12   | 4626239  | Hose Assy (QD 4 Function D) ..... | 1   |
| 13   | 2046871  | Fitting .....                     | 1   |
| 14   | 129563   | Strap Clamp .....                 | 2   |
| 15   | 168718   | Clamp .....                       | 3   |
| 16   | 1486737  | Fitting .....                     | 1   |

## AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 13-32) THREE STAGE FULL FREE-LIFT — SINGLE AUXILIARY WITH E-HYDRAULICS, FOUR FUNCTION (12/2017 →)

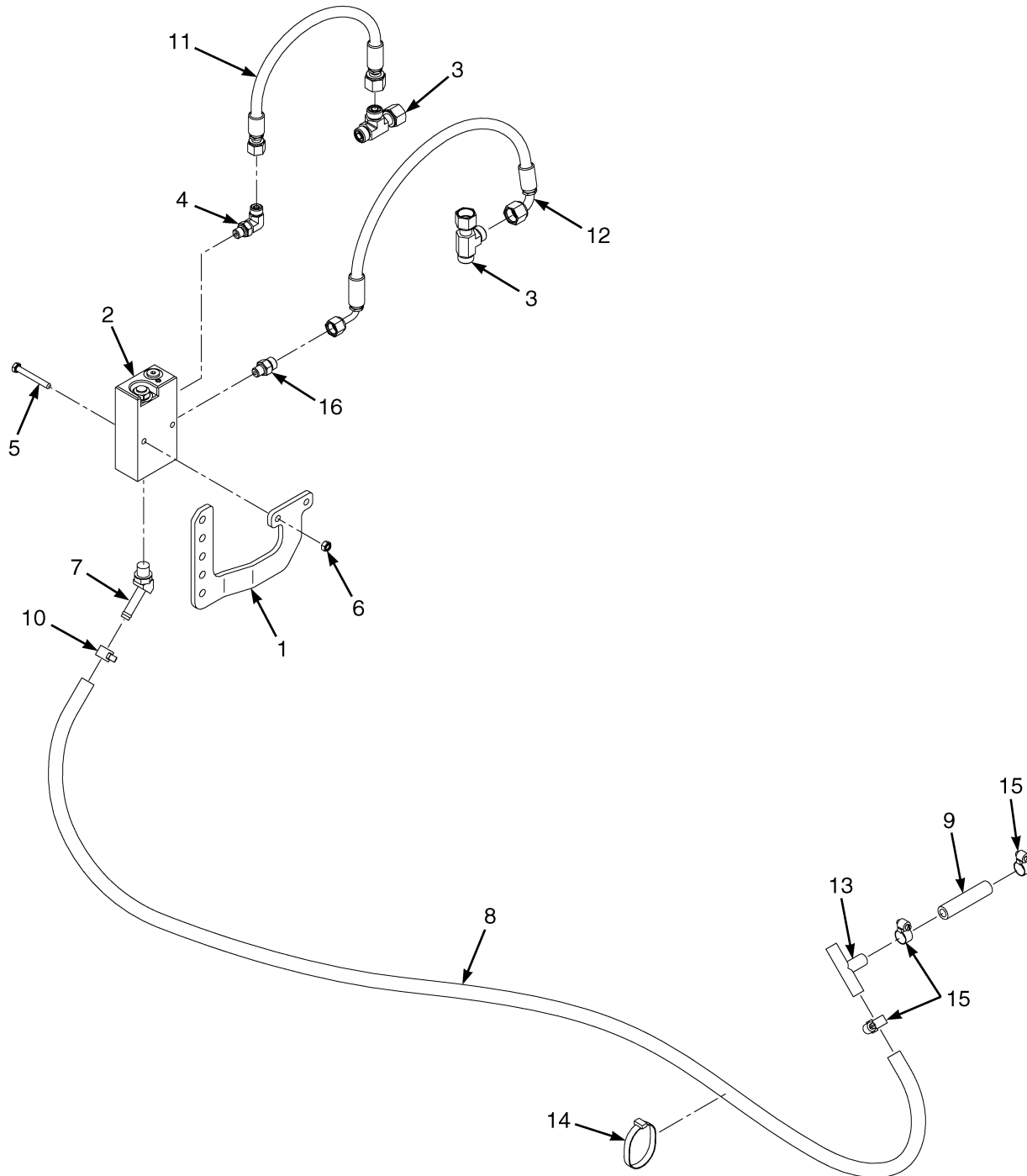


BP001132

**AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES**  
**THREE STAGE FULL FREE-LIFT – SINGLE AUXILIARY WITH E-HYDRAULICS, FOUR FUNCTION**  
**(12/2017 →)**

| ITEM | PART NO.                     | DESCRIPTION                                | QTY |
|------|------------------------------|--------------------------------------------|-----|
| 1    | 2111754                      | Valve (Single Aux QD Valve) .....          | 1   |
| 1    | 4010972                      | Valve .....                                | 1   |
| 2    | 4130112                      | Bracket (QD Valve Mount) .....             | 1   |
| 3    | 292505                       | Capscrew .....                             | 2   |
| 4    | 302399                       | Nut .....                                  | 2   |
| 5    | 222492                       | Fitting .....                              | 1   |
| 5    | 16483                        | O-Ring .....                               | 1   |
| 6    | 1486737                      | Fitting .....                              | 1   |
| 7    | 1487058                      | Fitting .....                              | 1   |
| 8    | 4665931                      | Hose Assy (Single Aux 4F 3ffl FNC C) ..... | 1   |
| 9    | 4665932                      | Hose Assy (Single Aux 4F 3ffl FNC D) ..... | 1   |
| 10   | 1487097                      | Fitting .....                              | 2   |
| 11   | 1569616                      | Hose Clamp .....                           | 1   |
| 12   | 129563                       | Strap Clamp .....                          | 2   |
| 13   | 4640857                      | Hose (QD Valve Return) .....               | 1   |
| 14   | 166857                       | Clamp .....                                | 3   |
| 15   | 2074990                      | Fitting .....                              | 1   |
| 16   | 4641682                      | Hose Assy (QD Valve Return) .....          | 1   |
| 17   | 1486740                      | Fitting .....                              | 2   |
| 17   | <del>6992657</del><br>265787 | O-Ring .....                               | 1   |
| 18   | 1483663                      | Quick Disconnect Fitting .....             | 2   |
| 19   | 1483664                      | Fitting .....                              | 2   |
| 20   | 1483661                      | Dust Cap .....                             | 2   |
| 21   | 1708364                      | Bulkhead .....                             | 2   |
| 22   | 1528602                      | Locknut .....                              | 2   |

**AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 13-33)**  
**TWO STAGE LIMITED FREE-LIFT (SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS)**  
**— FOUR FUNCTION (→ 12/2017)**



BP000954

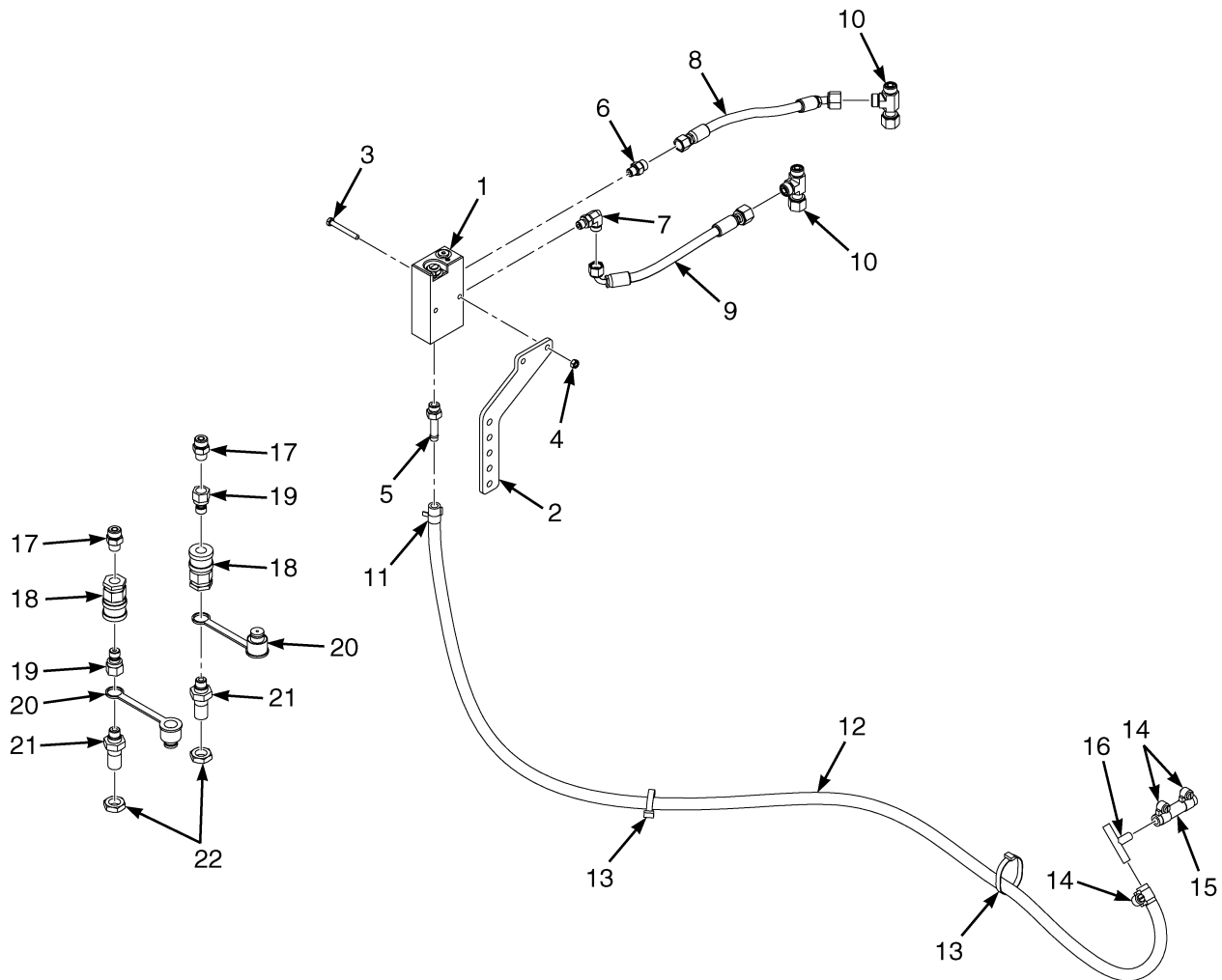
**AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES**  
**TWO STAGE LIMITED FREE-LIFT (SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS)**  
**– FOUR FUNCTION (→ 12/2017)**

| ITEM | PART NO. | DESCRIPTION                       | QTY |
|------|----------|-----------------------------------|-----|
| 1    | 4124366  | Bracket .....                     | 1   |
| 2    | 2111754  | Valve .....                       | 1   |
| 3    | 1487097  | Fitting .....                     | 2   |
| 4    | 1487058  | Fitting .....                     | 1   |
| 5    | 292505   | Capscrew .....                    | 2   |
| 6    | 302399   | Nut .....                         | 2   |
| 7    | 222501   | Fitting .....                     | 1   |
| 8    | 4641683  | Hose Assy (QD Valve Return) ..... | 1   |
| 9    | 4641682  | Hose Assy (QD Valve Return) ..... | 1   |
| 10   | 1569616  | Hose Clamp .....                  | 1   |
| 11   | 4641738  | Hose Assy (QD 4 Function C) ..... | 1   |
| 12   | 4641739  | Hose Assy (QD 4 Function D) ..... | 1   |
| 13   | 2046871  | Fitting .....                     | 1   |
| 14   | 129563   | Strap Clamp .....                 | 2   |
| 15   | 168718   | Clamp .....                       | 3   |
| 16   | 1486737  | Fitting .....                     | 1   |

## AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 13-34)

### TWO STAGE LIMITED FREE-LIFT — SINGLE AUXILIARY WITH E-HYDRAULICS, FOUR FUNCTION

(12/2017 →)

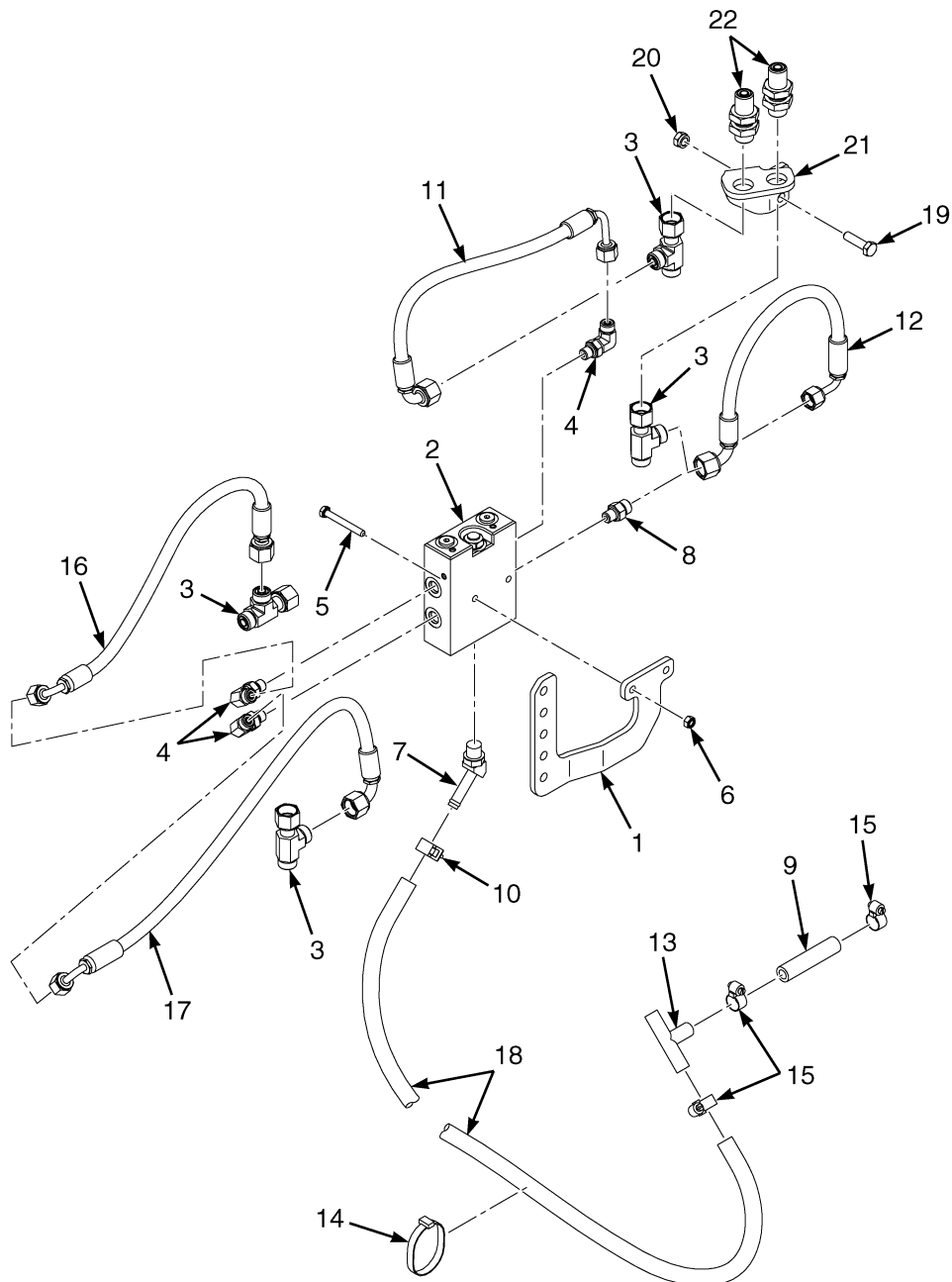


BP001133

**AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES**  
**TWO STAGE LIMITED FREE-LIFT – SINGLE AUXILIARY WITH E-HYDRAULICS, FOUR FUNCTION**  
**(12/2017 →)**

| ITEM | PART NO.           | DESCRIPTION                                | QTY |
|------|--------------------|--------------------------------------------|-----|
| 1    | 2111754            | Valve (QD, Single Aux) .....               | 1   |
| 1    | 4010972            | Valve .....                                | 1   |
| 2    | 4130112            | Bracket (QD, Valve Mount) .....            | 1   |
| 3    | 292505             | Capscrew .....                             | 2   |
| 4    | 302399             | Nut .....                                  | 2   |
| 5    | 222492             | Fitting .....                              | 1   |
| 5    | 16483              | O-Ring .....                               | 1   |
| 6    | 1486737            | Fitting .....                              | 1   |
| 7    | 1487058            | Fitting .....                              | 1   |
| 8    | 4665933            | Hose Assy (Single Aux 4F 2LFL FNC C) ..... | 1   |
| 9    | 4665934            | Hose Assy (Single Aux 4F 2LFL FNC D) ..... | 1   |
| 10   | 1487097            | Fitting .....                              | 2   |
| 11   | 1569616            | Hose Clamp .....                           | 1   |
| 12   | 4640857            | Hose (QD Valve Return) .....               | 1   |
| 13   | 129563             | Strap Clamp .....                          | 2   |
| 14   | 166857             | Clamp .....                                | 3   |
| 15   | 4641682            | Hose Assy (QD Valve Return) .....          | 1   |
| 16   | 2074990            | Fitting .....                              | 1   |
| 17   | 1486740            | Fitting .....                              | 2   |
| 17   | <del>6992657</del> |                                            |     |
|      | 265787             | O-Ring .....                               | 1   |
| 18   | 1483663            | Quick Disconnect Fitting .....             | 2   |
| 19   | 1483664            | Fitting .....                              | 2   |
| 20   | 1483661            | Dust Cap .....                             | 2   |
| 21   | 1708364            | Bulkhead .....                             | 2   |
| 22   | 1528602            | Locknut .....                              | 2   |

## AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 13-35) TWO STAGE LIMITED FREE-LIFT (DUAL AUXILIARY WITH E-HYDRAULICS) — THREE AND FOUR FUNCTION (→ 12/2017)



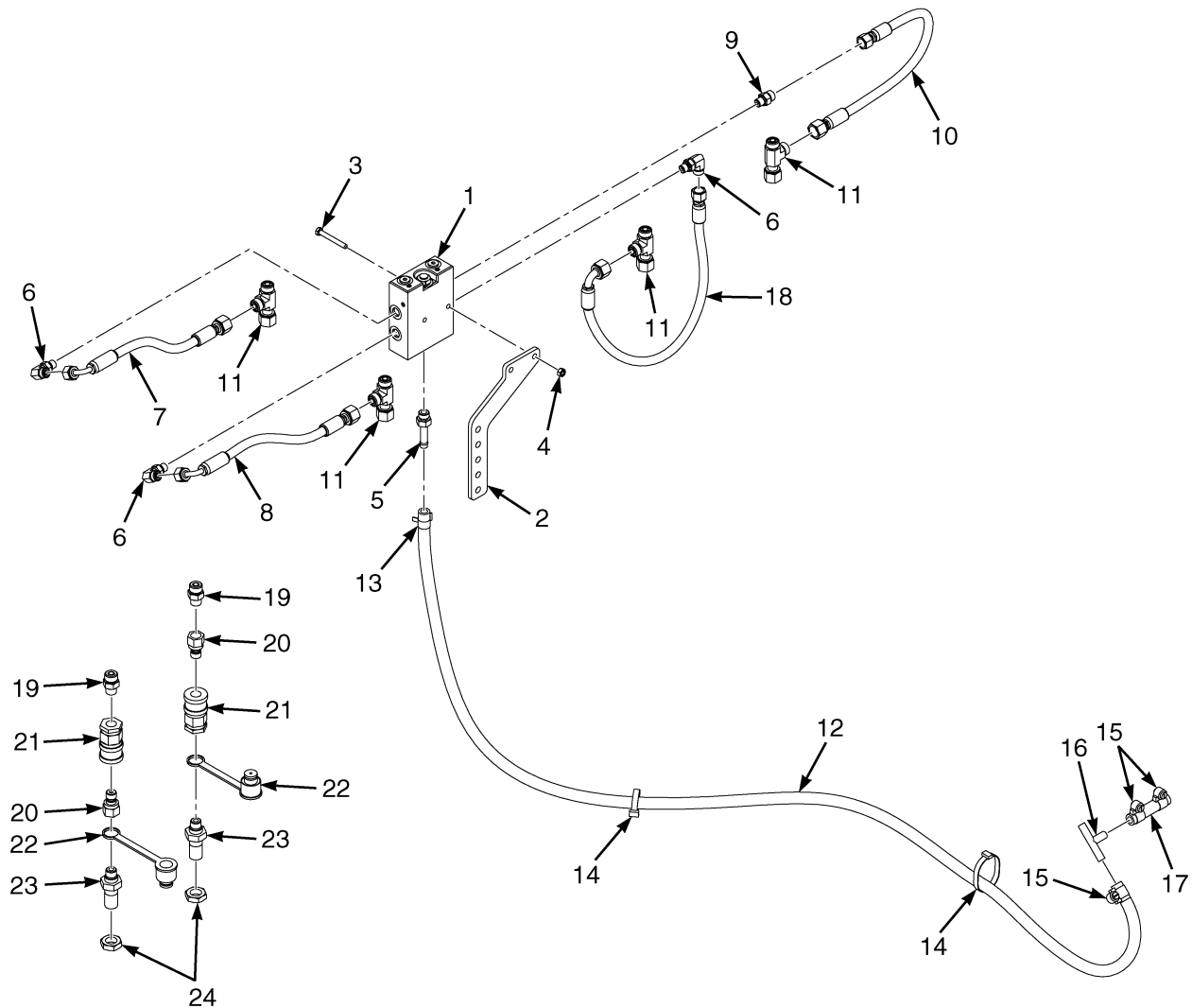
BP000955



**AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES**  
**TWO STAGE LIMITED FREE-LIFT (DUAL AUXILIARY WITH E-HYDRAULICS) – THREE AND FOUR**  
**FUNCTION (→ 12/2017)**

| ITEM | PART NO. | DESCRIPTION                       | QTY |
|------|----------|-----------------------------------|-----|
| 1    | 4124366  | Bracket .....                     | 1   |
| 2    | 2111755  | Valve .....                       | 1   |
| 3    | 1487097  | Fitting .....                     | 4   |
| 4    | 1487058  | Fitting .....                     | 4   |
| 5    | 292505   | Capscrew .....                    | 2   |
| 6    | 302399   | Nut .....                         | 2   |
| 7    | 222501   | Fitting .....                     | 1   |
| 8    | 1486737  | Fitting .....                     | 1   |
| 9    | 4641682  | Hose Assy (QD Valve Return) ..... | 1   |
| 10   | 1569616  | Hose Clamp .....                  | 1   |
| 11   | 4641679  | Hose Assy (QD Function A) .....   | 1   |
| 12   | 4641680  | Hose Assy (QD Function B) .....   | 1   |
| 13   | 2046871  | Fitting .....                     | 1   |
| 14   | 129563   | Strap Clamp .....                 | 2   |
| 15   | 168718   | Clamp .....                       | 3   |
| 16   | 4641741  | Hose Assy (QD 4 Function C) ..... | 1   |
| 17   | 4641742  | Hose Assy (QD 4 Function D) ..... | 1   |
| 18   | 4641683  | Hose Assy (QD Valve Return) ..... | 1   |
| 19   | 1696161  | Capscrew .....                    | 2   |
| 20   | 1581566  | Nut .....                         | 2   |
| 21   | 4122876  | Bracket .....                     | 1   |
| 22   | 1528573  | Fitting (To Header Hoses) .....   | 2   |

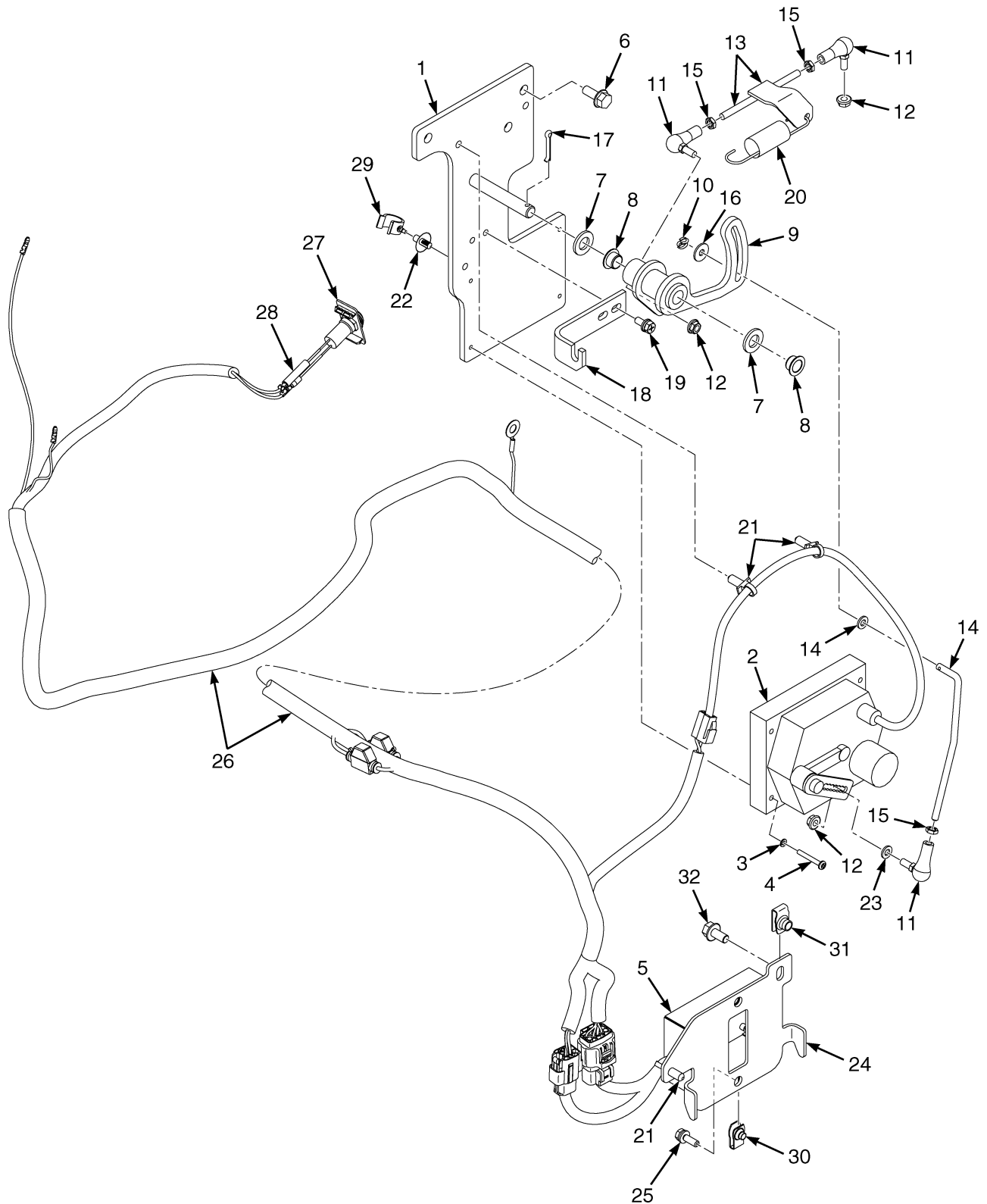
## AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES (FIGURE 13-36) TWO STAGE LIMITED FREE-LIFT — DUAL AUXILIARY WITH E-HYDRAULICS, THREE AND FOUR FUNCTION (12/2017 →)



BP001134

**AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES**  
**TWO STAGE LIMITED FREE-LIFT – DUAL AUXILIARY WITH E-HYDRAULICS, THREE AND FOUR**  
**FUNCTION (12/2017 →)**

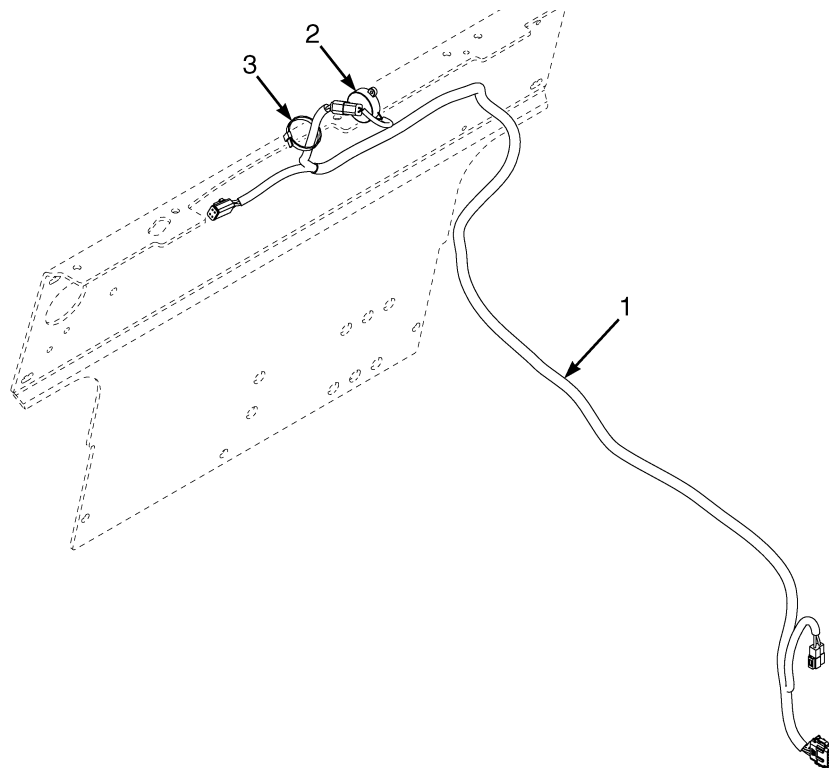
| ITEM | PART NO.           | DESCRIPTION                          | QTY |
|------|--------------------|--------------------------------------|-----|
| 1    | 2111755            | Valve (QD Dual Aux) .....            | 1   |
| 1    | 4010972            | Valve .....                          | 1   |
| 2    | 4130112            | Bracket .....                        | 1   |
| 3    | 292505             | Capscrew .....                       | 2   |
| 4    | 302399             | Nut .....                            | 2   |
| 5    | 222492             | Fitting .....                        | 1   |
| 5    | 16483              | O-Ring .....                         | 1   |
| 6    | 1487097            | Fitting .....                        | 3   |
| 7    | 4665935            | Hose Assy (Dual Aux, 4F FNC C) ..... | 1   |
| 8    | 4665936            | Hose Assy (Dual Aux, 4F FNC D) ..... | 1   |
| 9    | 1486737            | Fitting .....                        | 1   |
| 10   | 4666219            | Hose Assy (Dual Aux, 4F FNC B) ..... | 1   |
| 11   | 1487097            | Fitting .....                        | 4   |
| 12   | 4640857            | Hose (QD Valve Return) .....         | 1   |
| 13   | 1569616            | Hose Clamp .....                     | 1   |
| 14   | 129563             | Strap Clamp .....                    | 2   |
| 15   | 166857             | Clamp .....                          | 3   |
| 16   | 2074990            | Fitting .....                        | 1   |
| 17   | 4641682            | Hose Assy (QD Valve Return) .....    | 1   |
| 18   | 4665992            | Hose Assy (Dual Aux, 4F FNC A) ..... | 1   |
| 19   | 1486740            | Fitting .....                        | 4   |
| 19   | <del>6992657</del> |                                      |     |
|      | 265787             | O-Ring .....                         | 1   |
| 20   | 1483664            | Fitting .....                        | 4   |
| 21   | 1483663            | Quick Disconnect Fitting .....       | 4   |
| 22   | 1483661            | Dust Cap .....                       | 4   |
| 23   | 1708364            | Bulkhead .....                       | 4   |
| 24   | 1528602            | Locknut .....                        | 4   |

**TRACTION SPEED LIMITER (FIGURE 13-37)**  
**YANMAR DIESEL**

BP001070

**TRACTION SPEED LIMITER  
YANMAR DIESEL**

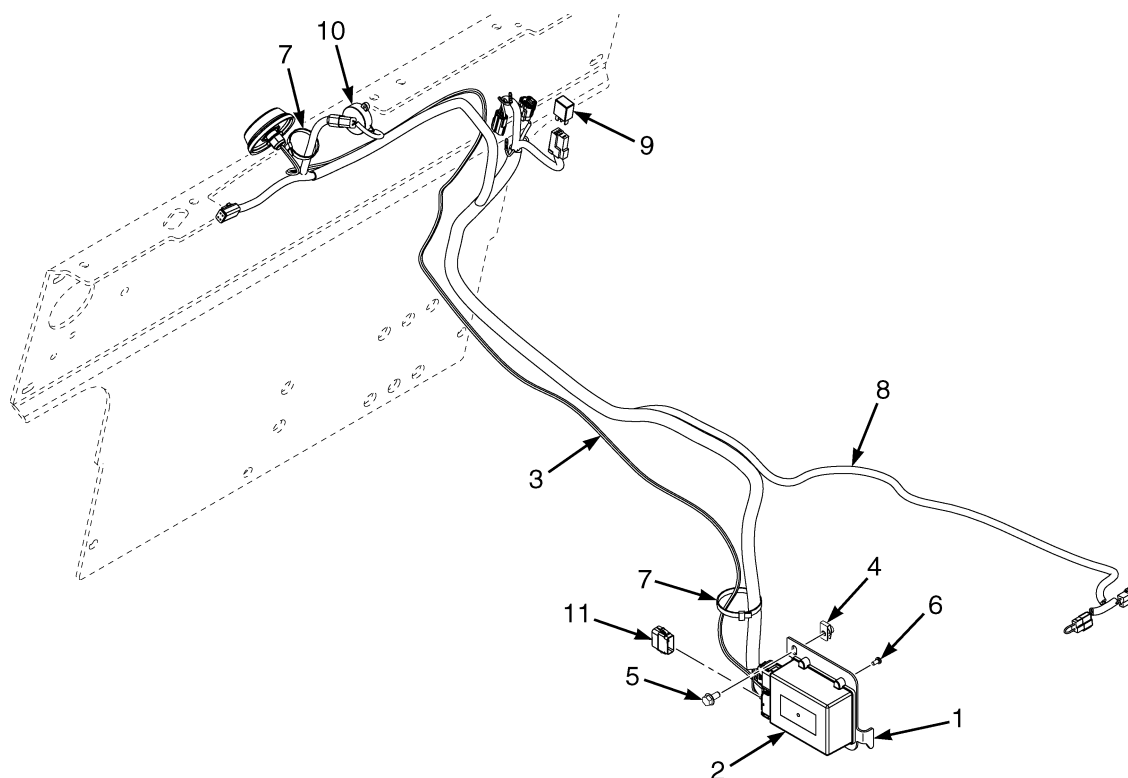
| ITEM | PART NO.           | DESCRIPTION                                       | QTY |
|------|--------------------|---------------------------------------------------|-----|
| 1    | 4154315            | Bracket Wldmt (Actuator) .....                    | 1   |
| 2    | 4635498            | Actuator Assembly .....                           | 1   |
| 2    | 3071815            | Actuator .....                                    | 1   |
| 2    | 2039248            | Connector Body .....                              | 1   |
| 2    | 2314734            | Terminal .....                                    | 2   |
| 3    | 292678             | Lockwasher .....                                  | 4   |
| 4    | 302026             | Screw .....                                       | 4   |
| 5    | 4650938            | Driver .....                                      | 1   |
| 6    | 1527880            | Capscrew .....                                    | 3   |
| 7    | 320161             | Washer .....                                      | 2   |
| 8    | 2027716            | Bushing .....                                     | 2   |
| 9    | 4154319            | Lever .....                                       | 1   |
| 10   | 2089188            | Cotter Pin .....                                  | 1   |
| 11   | 2027949            | Ball Joint .....                                  | 3   |
| 12   | <del>1307884</del> |                                                   |     |
|      | 1514429            | Nut .....                                         | 3   |
| 13   | 2089837            | Rod .....                                         | 1   |
| 14   | 2089840            | Push Rod .....                                    | 1   |
| 14   | 320156             | Washer .....                                      | 1   |
| 15   | 1593334            | Nut .....                                         | 3   |
| 16   | 1476421            | Washer .....                                      | 1   |
| 17   | 2027673            | Pin .....                                         | 1   |
| 17   | 1517361            | Locking Ring Cotter Pin (Alternate Part) .....    | 1   |
| 18   | 2089834            | Bracket .....                                     | 1   |
| 19   | 2079547            | Capscrew .....                                    | 2   |
| 20   | 2062961            | Spring .....                                      | 1   |
| 21   | 4140361            | Cable Clip .....                                  | 3   |
| 22   | 1543842            | Clamp (Base) .....                                | 1   |
| 23   | 320156             | Washer .....                                      | 1   |
| 24   | 4141755            | Bracket (Speed Controller) .....                  | 1   |
| 25   | 2079548            | Capscrew .....                                    | 2   |
| 26   | 4655901            | Wire Harness (Speed Limiter) (☞ Figure 5-36)..... | 1   |
| 27   | 4636394            | Cover .....                                       | 1   |
| 28   | 4616424            | Lamp .....                                        | 1   |
| 28   | 1324308            | Terminal .....                                    | 1   |
| 28   | 1324307            | Sleeve .....                                      | 1   |
| 28   | 1324310            | Terminal .....                                    | 1   |
| 28   | 1324309            | Sleeve .....                                      | 1   |
| 29   | 1543698            | Clamp (Swivel) .....                              | 1   |
| 30   | 1566420            | Nut (Foldover) .....                              | 2   |
| 31   | 1480237            | Nut (Fold Over) .....                             | 1   |
| 32   | <del>4109993</del> |                                                   |     |
|      | 1527879            | Capscrew .....                                    | 1   |

**TELEMETRY LEVEL 2 (FIGURE 13-38)**  
**HARNESS GROUP (→ 3/2017)**

| ITEM | PART NO.    | DESCRIPTION                             | QTY |
|------|-------------|-----------------------------------------|-----|
| 1    | 4641253     | Wire Harness (Telemetry FM1B XIC) ..... | 1   |
| 2    | 1695284     | Buzzer Assembly .....                   | 1   |
| 3    | 129563      | Strap Clamp .....                       | 1   |
| 4    | a . . . . . | Card Reader (☞ Figure 13-41).....       | 1   |
|      | 4628296     | Adhesive (For Buzzer) .....             | AR  |

**FOOTNOTES:**

**a** Not illustrated

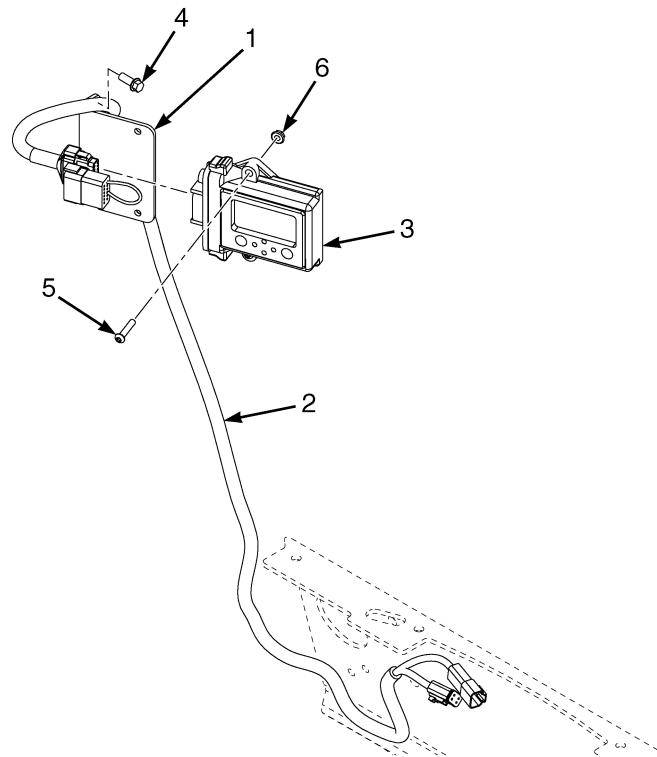
**TELEMETRY LEVEL 1 AND 2 (FIGURE 13-39)  
WITH ANTENNA (3/2017 →)**

BP001061

| ITEM | PART NO. | DESCRIPTION                                          | QTY |
|------|----------|------------------------------------------------------|-----|
| 1    | 4140273  | Bracket (Telemetry Module) .....                     | 1   |
| 2    | 4618252  | Control Module (GSM Cellular - 3G Std Voltage) ..... | 1   |
| 2    | 4618237  | Control Module (FM1 WiFi Standard Voltage) .....     | 1   |
| 3    | 4618313  | Antenna (Dual GSM/GPS) .....                         | 1   |
| 3    | 4618315  | Antenna (WiFi) .....                                 | 1   |
| 3    | 4618314  | Antenna (WiFi) .....                                 | 1   |
| 4    | 1480237  | Nut (Fold Over) .....                                | 1   |
| 5    | 4109993  | Capscrew .....                                       | 1   |
| 5    | 1527879  | Capscrew .....                                       | 1   |
| 6    | 4045049  | Screw .....                                          | 4   |
| 7    | 129563   | Strap Clamp .....                                    | 2   |
| 8    | 4656103  | Wire Harness (Telemetry FM1A and FM1B) .....         | 1   |
| 8    | 4653293  | Wire Harness (Telemetry FM1A) (Optional) .....       | 1   |
| 9    | 4145648  | Relay .....                                          | 1   |
| 10   | 1695284  | Buzzer Assembly .....                                | 1   |
| 11   | 1593331  | Connector .....                                      | 1   |
| a    | 4628296  | Adhesive (For Buzzer) .....                          | 1   |

**FOOTNOTES:****a** Not illustrated

## TELEMETRY LEVEL 3 (FIGURE 13-40) DISPLAY



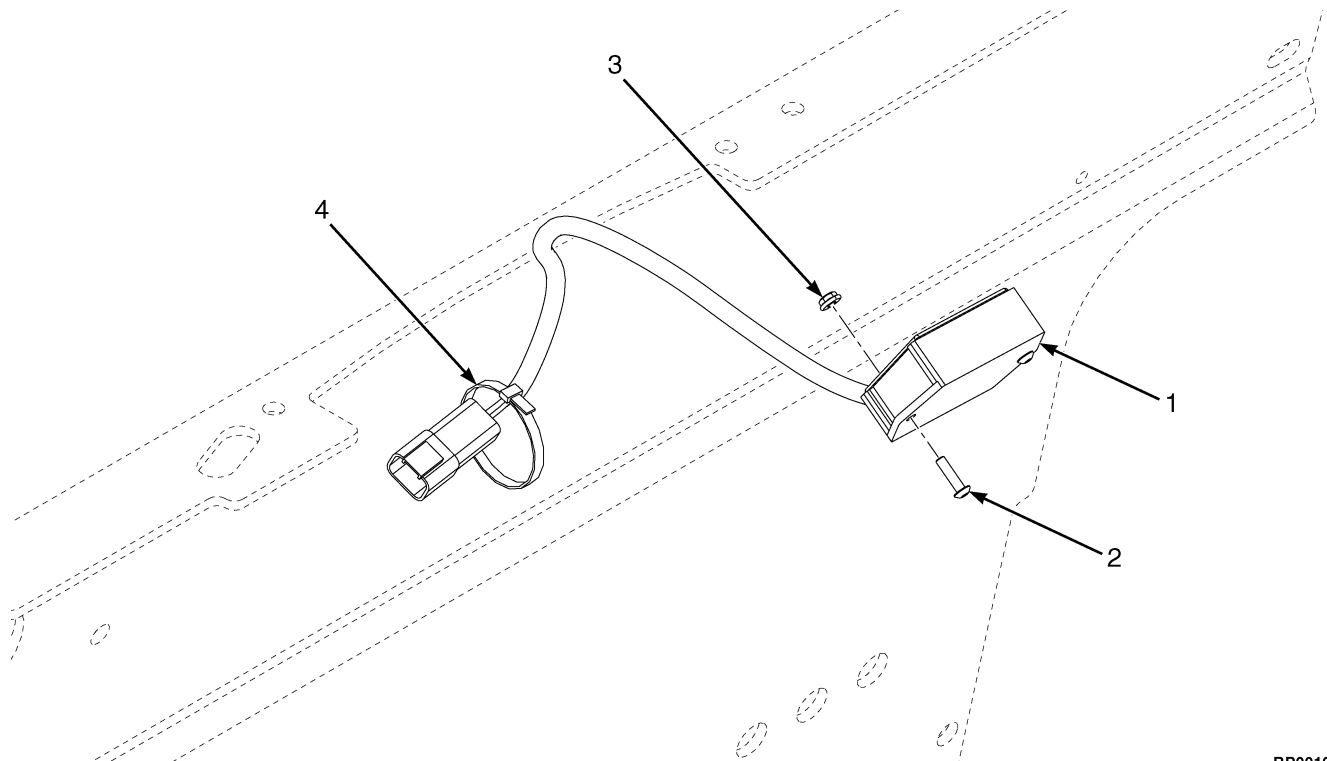
BP001026

| ITEM | PART NO.    | DESCRIPTION                             | QTY |
|------|-------------|-----------------------------------------|-----|
| 1    | 4618293     | Bracket (FM2 Mount) .....               | 1   |
| 2    | 4641250     | Wire Harness (Telemetry FM2A XIC) ..... | 1   |
| 3    | 4618224     | Display (FM2) .....                     | 1   |
| 4    | 1527877     | Capscrew .....                          | 2   |
| 5    | 2071261     | Capscrew .....                          | 2   |
| 6    | 1307884     | Nut .....                               | 2   |
| 7    | a 1531001   | Insert .....                            | 2   |
| 8    | a . . . . . | Card Reader (☞ Figure 13-41).....       | 1   |

### FOOTNOTES:

a Not illustrated



**TELEMETRY (FIGURE 13-41)  
CARD READER**

BP001027

| ITEM | PART NO. | DESCRIPTION                               | QTY |
|------|----------|-------------------------------------------|-----|
| 1    | 4618303  | Card-ID Reader (ISO-Prox) .....           | 1   |
| 1    | 4618304  | Card-ID Reader (HID Standard Prox) .....  | 1   |
| 1    | 4618305  | Card-ID Reader (IClass/MIFARE Prox) ..... | 1   |
| 2    | 4044956  | Capscrew .....                            | 2   |
| 3    | 1549398  | Nut .....                                 | 2   |
| 4    | 137852   | Strap Clamp .....                         | 1   |

[illegible]





**SECTION 14**  
**FIELD CONVERSION KITS**

| <b>DESCRIPTION</b>                       | <b>PAGE</b> |
|------------------------------------------|-------------|
| ADD ON FORK POSITIONER KITS              |             |
| ISS CARRIAGE .....                       | 14-5        |
| ADD ON KITS                              |             |
| ACCESSORIES .....                        | 14-7        |
| ADD ON OPTION KITS                       |             |
| HIGH TERMINATION EXT TUBES .....         | 14-5        |
| ADD-ON OPTION KITS .....                 | 14-6        |
| CONVERSION KIT                           |             |
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| DIRECTION CONTROL .....                  | 14-7        |
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| TWO STAGE LFL - A389 MAST SERIES .....   | 14-2        |
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| WITH E-HYDRAULICS .....                  | 14-6        |
| REPAIR KIT                               |             |
| CRG GLAND, CLS 2 AND 3 .....             | 14-9        |

**HEADER HOSE CONVERSION KITS  
TWO STAGE LFL — A389 MAST SERIES****THREE TO FOUR FUNCTION**

| <b>DESCRIPTION</b>           | <b>LIFT HEIGHT TO BOTTOM OF FORKS</b> |                                |
|------------------------------|---------------------------------------|--------------------------------|
|                              | <b>3252 mm<br/>(128.0 in.)</b>        | <b>4792 mm<br/>(188.7 in.)</b> |
| <b>Mast<br/>Group Number</b> | <b>A389<br/>3252</b>                  | <b>A389<br/>4792</b>           |
| Kit-Hose Group 3 TO 4<br>Way | 4090207                               | 4090249                        |

**TWO TO FOUR FUNCTION**

| <b>DESCRIPTION</b>           | <b>LIFT HEIGHT TO BOTTOM OF FORKS</b> |                                |
|------------------------------|---------------------------------------|--------------------------------|
|                              | <b>3252 mm<br/>(128.0 in.)</b>        | <b>4792 mm<br/>(188.7 in.)</b> |
| <b>Mast<br/>Group Number</b> | <b>A389<br/>3252</b>                  | <b>A389<br/>4792</b>           |
| Kit-Hose Group 2 TO 4<br>Way | 4090208                               | 4090250                        |

**TWO TO THREE FUNCTION**

| <b>DESCRIPTION</b>           | <b>LIFT HEIGHT TO BOTTOM OF FORKS</b> |                                |
|------------------------------|---------------------------------------|--------------------------------|
|                              | <b>3252 mm<br/>(128.0 in.)</b>        | <b>4792 mm<br/>(188.7 in.)</b> |
| <b>Mast<br/>Group Number</b> | <b>A389<br/>3252</b>                  | <b>A389<br/>4792</b>           |
| Kit-Hose Group 2 TO 3<br>Way | 4090206                               | 4090248                        |

**HEADER HOSE CONVERSION KITS  
TWO STAGE LFL — A399 MAST SERIES****THREE TO FOUR FUNCTION**

| <b>DESCRIPTION</b>           | <b>LIFT HEIGHT TO BOTTOM OF FORKS</b> |                                |                                |
|------------------------------|---------------------------------------|--------------------------------|--------------------------------|
|                              | <b>3059 mm<br/>(120.4 in.)</b>        | <b>3159 mm<br/>(124.4 in.)</b> | <b>4559 mm<br/>(179.5 in.)</b> |
| <b>Mast<br/>Group Number</b> | <b>A399<br/>3059</b>                  | <b>A399<br/>3159</b>           | <b>A399<br/>4559</b>           |
| Kit-Hose Group 3 TO 4<br>Way | 4090207                               | 4090210                        | 4090249                        |

**TWO TO FOUR FUNCTION**

| <b>DESCRIPTION</b>           | <b>LIFT HEIGHT TO BOTTOM OF FORKS</b> |                                |                                |
|------------------------------|---------------------------------------|--------------------------------|--------------------------------|
|                              | <b>3059 mm<br/>(120.4 in.)</b>        | <b>3159 mm<br/>(124.4 in.)</b> | <b>4559 mm<br/>(179.5 in.)</b> |
| <b>Mast<br/>Group Number</b> | <b>A399<br/>3059</b>                  | <b>A399<br/>3159</b>           | <b>A399<br/>4559</b>           |
| Kit-Hose Group 2 TO 4<br>Way | 4090208                               | 4090211                        | 4090250                        |

**TWO TO THREE FUNCTION**

| <b>DESCRIPTION</b>           | <b>LIFT HEIGHT TO BOTTOM OF FORKS</b> |                                |                                |
|------------------------------|---------------------------------------|--------------------------------|--------------------------------|
|                              | <b>3059 mm<br/>(120.4 in.)</b>        | <b>3159 mm<br/>(124.4 in.)</b> | <b>4559 mm<br/>(179.5 in.)</b> |
| <b>Mast<br/>Group Number</b> | <b>A399<br/>3059</b>                  | <b>A399<br/>3159</b>           | <b>A399<br/>4559</b>           |
| Kit-Hose Group 2 TO 3<br>Way | 4090206                               | 4090209                        | 4090248                        |

## HEADER HOSE CONVERSION KITS

### THREE STAGE FFL — A387 MAST SERIES

#### THREE TO FOUR FUNCTION

| DESCRIPTION                  | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |                        |
|------------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
|                              | 4310 mm<br>(169.7 in.)         | 4760 mm<br>(187.4 in.) | 4910 mm<br>(193.3 in.) | 5060 mm<br>(199.2 in.) | 5510 mm<br>(216.9 in.) |
| <b>Mast<br/>Group Number</b> | <b>A387<br/>4310</b>           | <b>A387<br/>4760</b>   | <b>A387<br/>4910</b>   | <b>A387<br/>5060</b>   | <b>A387<br/>5510</b>   |
| Kit-Hose Group 3 TO 4<br>Way | 4160554                        | 4160564                | 4160567                | 4160571                | 4160581                |

#### TWO TO FOUR FUNCTION

| DESCRIPTION                  | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |                        |
|------------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
|                              | 4310 mm<br>(169.7 in.)         | 4760 mm<br>(187.4 in.) | 4910 mm<br>(193.3 in.) | 5060 mm<br>(199.2 in.) | 5510 mm<br>(216.9 in.) |
| <b>Mast<br/>Group Number</b> | <b>A387<br/>4310</b>           | <b>A387<br/>4760</b>   | <b>A387<br/>4910</b>   | <b>A387<br/>5060</b>   | <b>A387<br/>5510</b>   |
| Kit-Hose Group 2 TO 4<br>Way | 4160556                        | 4160565                | 4160568                | 4160572                | 4160582                |

#### TWO TO THREE FUNCTION

| DESCRIPTION                  | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |                        |
|------------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
|                              | 4310 mm<br>(169.7 in.)         | 4760 mm<br>(187.4 in.) | 4910 mm<br>(193.3 in.) | 5060 mm<br>(199.2 in.) | 5510 mm<br>(216.9 in.) |
| <b>Mast<br/>Group Number</b> | <b>A387<br/>4310</b>           | <b>A387<br/>4760</b>   | <b>A387<br/>4910</b>   | <b>A387<br/>5060</b>   | <b>A387<br/>5510</b>   |
| Kit-Hose Group 2 TO 3<br>Way | 4160553                        | 4160563                | 4160566                | 4160569                | 4160580                |



**HEADER HOSE CONVERSION KITS  
THREE STAGE FFL — A397 MAST SERIES****THREE TO FOUR FUNCTION**

| DESCRIPTION                  | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------------------------------|--------------------------------|------------------------|------------------------|------------------------|
|                              | 4568 mm<br>(179.8 in.)         | 4718 mm<br>(185.7 in.) | 5318 mm<br>(209.4 in.) | 5768 mm<br>(227.1 in.) |
| <b>Mast<br/>Group Number</b> | <b>A397<br/>4568</b>           | <b>A397<br/>4718</b>   | <b>A397<br/>5318</b>   | <b>A397<br/>5768</b>   |
| Kit-Hose Group 3 TO 4<br>Way | 4160567                        | 4160571                | 4160584                | 4160593                |

**TWO TO FOUR FUNCTION**

| DESCRIPTION                  | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------------------------------|--------------------------------|------------------------|------------------------|------------------------|
|                              | 4568 mm<br>(179.8 in.)         | 4718 mm<br>(185.7 in.) | 5318 mm<br>(209.4 in.) | 5768 mm<br>(227.1 in.) |
| <b>Mast<br/>Group Number</b> | <b>A397<br/>4568</b>           | <b>A397<br/>4718</b>   | <b>A397<br/>5318</b>   | <b>A397<br/>5768</b>   |
| Kit-Hose Group 2 TO 4<br>Way | 4160568                        | 4160572                | 4160585                | 4160594                |

**TWO TO THREE FUNCTION**

| DESCRIPTION                  | LIFT HEIGHT TO BOTTOM OF FORKS |                        |                        |                        |
|------------------------------|--------------------------------|------------------------|------------------------|------------------------|
|                              | 4568 mm<br>(179.8 in.)         | 4718 mm<br>(185.7 in.) | 5318 mm<br>(209.4 in.) | 5768 mm<br>(227.1 in.) |
| <b>Mast<br/>Group Number</b> | <b>A397<br/>4568</b>           | <b>A397<br/>4718</b>   | <b>A397<br/>5318</b>   | <b>A397<br/>5768</b>   |
| Kit-Hose Group 2 TO 3<br>Way | 4160566                        | 4160569                | 4160583                | 4160592                |

**ADD ON FORK POSITIONER KITS  
ISS CARRIAGE**

| DESCRIPTION                                   | PART NUMBER      |
|-----------------------------------------------|------------------|
| Kit-Fork Positioner (3FFL 2.0-2.5T Class II)  | <b>a</b> 4149395 |
| Kit-Fork Positioner (3 FFL 2.0-2.5T Class II) | <b>b</b> 4064915 |
| Kit-Fork Positioner (3FFL 3.0-3.5T Class III) | <b>a</b> 4064919 |
| Kit-Fork Positioner (3FFL 3.0-3.5T Class III) | <b>b</b> 4149396 |

**FOOTNOTES:****a** → 11/2016**b** 12/2016 →**ADD ON OPTION KITS  
HIGH TERMINATION EXT TUBES**

### ADD ON OPTION KITS HIGH TERMINATION EXT TUBES (CONTINUED)

| DESCRIPTION                                                               | PART NUMBER |
|---------------------------------------------------------------------------|-------------|
| Kit-Aux Ext Tube 3 Function CL II Std CRG 3FFL                            | 4158878     |
| Kit-Aux Ext Tube 4 Function CLII Std Crg 3FFL                             | 4158879     |
| Kit-Aux Ext Tube 3 Function CLIII Std Crg 3FFL                            | 4158880     |
| Kit-Aux Ext Tube 4 Function CLIII Std Crg 3FFL                            | 4158881     |
| Kit-Aux Ext Tube 4 Function CLII ISS Crg 3 FFL                            | 4158882     |
| Kit-Aux Ext Tube 4 Function CLIII ISS Crg 3FFL                            | 4158883     |
| Kit-Aux Ext Tube 4 Function CL II ISS Crg 3FFL (For 2182mm Carriage Only) | 4158884     |
| Kit-Aux Ext Tube 4 Function CLIII ISS Crg 3FFL (For 2182mm Carriage Only) | 4158885     |
| Kit-Aux Ext Tube 3 Function CL II Std CRG 2LFL                            | 4158887     |
| Kit-Aux Ext Tube 4 Function CLII Std Crg 2LFL                             | 4158888     |
| Kit-Aux Ext Tube 3 Function CLIII Std Crg 2LFL                            | 4158889     |
| Kit-Aux Ext Tube 4 Function CLIII Std Crg 2LFL                            | 4158890     |
| Kit-Aux Ext Tube 4 Function CL II ISS Crg 2LFL                            | 4158891     |
| Kit-Aux Ext Tube 4 Function CLIII ISS Crg 2LFL                            | 4158892     |
| Kit-Aux Ext Tube 4 Function CL II ISS Crg 2LFL (For 2182mm Carriage Only) | 4158893     |
| Kit-Aux Ext Tube 4 Function CLIII ISS Crg 2LFL (For 2182mm Carriage Only) | 4158894     |

### QUICK DISCONNECT KITS WITH E-HYDRAULICS

| DESCRIPTION                        | PART NUMBER |
|------------------------------------|-------------|
| Kit QD Single Aux 3 Function       | 4165213     |
| Kit QD Dual Aux 3FFL               | 4165214     |
| Kit QD Single Aux 4 Function 3FFL  | 4165215     |
| Kit QD Single Aux 4 Function 2 LFL | 4165216     |
| Kit QD Dual Aux 2 LFL              | 4165217     |

### ADD-ON OPTION KITS

| DESCRIPTION                                      | PART NUMBER |
|--------------------------------------------------|-------------|
| Kit Dual Mirrors                                 | 4159355     |
| Kit Telemetry Level 1 WIFI                       | 4159363     |
| Kit Telemetry Level 2 Card Reader ISO Proxy      | 4159365     |
| Kit Telemetry Level Two Card Reader HID Standard | 4159366     |
| Kit Telemetry Level 2 Card Reader I Class/Mifare | 4159367     |
| Kit Telemetry Level 3 Display                    | 4159368     |
| Kit Telemetry Level 1 CDMA                       | 4161886     |

**ADD-ON OPTION KITS (CONTINUED)**

| DESCRIPTION               | PART NUMBER |
|---------------------------|-------------|
| Kit Telemetry Level 1 GSM | 4159364     |
| Kit Rear Drive Handle     | 4159361     |
| Kit 12V Power Outlet      | 4159362     |

**ADD ON KITS  
ACCESSORIES**

| DESCRIPTION                                 | PART NUMBER      |
|---------------------------------------------|------------------|
| Kit-Air Intake W Pre-Cleaner                | 4159357          |
| Kit-Fire Extinguisher                       | 4159358          |
| Kit-Accumulator                             | 4159359          |
| Kit Load Weight Indicator Manual Hydraulics | 4159369          |
| Kit Load Weight Indicator E-Hydraulics      | 4159370          |
| Kit Traction Speed Limiter PSI              | <b>a</b> 4159373 |
| Kit Traction Speed Limiter Yanmar           | 4165708          |
| Kit - Bi-Fuel LPG Hose Plug                 | 4167128          |

**FOOTNOTES:**

- a** Kit requires software that must be Dealer installed

**LIGHT KITS**

| DESCRIPTION                                                                    | PART NUMBER |
|--------------------------------------------------------------------------------|-------------|
| Kit LED Tail, Brake and Back-Up Light                                          | 4159347     |
| Kit LED Tail, Brake and Back-Up Light with Side Marker (High and Std. Low OHG) | 4159348     |
| Kit LED Tail, Brake, Back-up and Side Marker (Special Low OHG 78 in.)          | 4161533     |
| Kit Reverse Activated Rear Work Light                                          | 4159350     |
| Kit Hazard Light                                                               | 4159351     |
| Kit Audible Alarm manual adjust                                                | 4159352     |
| Kit Strobe Light Amber                                                         | 4159353     |
| Kit Blue Pedestrian Warning Light                                              | 4159354     |
| Kit LED Work Two Front and One Rear                                            | 4159349     |

**CONVERSION KITS  
DIRECTION CONTROL**

| DESCRIPTION                                      | PART NUMBER      |
|--------------------------------------------------|------------------|
| Kit-Fwd/Rev Lever TO Monotrol PSI                | <b>a</b> 4126930 |
| Kit-Fwd/Rev Lever TO Monotrol Yanmar             | <b>a</b> 4127778 |
| Kit-Fwd/Rev Lever TO Monotrol With Heater PSI    | <b>a</b> 4128316 |
| Kit-Fwd/Rev Lever TO Monotrol With Heater Yanmar | <b>a</b> 4128859 |

**CONVERSION KITS  
DIRECTION CONTROL  
(CONTINUED)**

| DESCRIPTION                                      | PART NUMBER      |
|--------------------------------------------------|------------------|
| Kit-Monotrol TO Fwd/Rev Lever PSI                | <b>a</b> 4128304 |
| Kit-Monotrol TO Fwd/Rev Lever Yanmar             | <b>a</b> 4128305 |
| Kit-Monotrol TO Fwd/Rev Lever With Heater PSI    | <b>a</b> 4128860 |
| Kit-Monotrol TO Fwd/Rev Lever With Heater Yanmar | <b>a</b> 4128861 |

**FOOTNOTES:**

**a** Kit requires software that must be Dealer installed

**CONVERSION KITS  
CONTROL VALVE**

| DESCRIPTION                                                                | PART NUMBER      |
|----------------------------------------------------------------------------|------------------|
| Kit Manual Lever Conv 3 Way W/O Clamp to 4 Way W/O Clamp                   | <b>c</b> 4159323 |
| Kit Manual Lever 3 Way W/O Clamping to 4 Way W/O Clamping                  | <b>e</b> 4206068 |
| Kit Manual Lever 3 Way W/O Clamp to 4 Way With Clamp                       | <b>c</b> 4159324 |
| Kit Manual Lever 3 Way W/O Clamp to 4 Way W/Clamp                          | <b>e</b> 4206069 |
| Kit Manual 3 Function to 4 Function w/o Clamp to Return to Set Tilt        | <b>b</b> 4159325 |
| Kit Manual 3 Function to 4 Function w/o Clamp with Return to Set Tilt      | <b>d</b> 4206070 |
| Kit Manual Valve 4 Way w/o Clamping to 4 Way with Clamping                 | 4159335          |
| Kit E-Hydraulic 3 Function to 4 Function w/o Clamp w/o Return to Set Tilt  | 4159327          |
| Kit E-Hydraulic 3 Function to 4 Function with Clamp w/o Return to Set Tilt | 4159328          |
| Kit Return to Vertical Tilt                                                | <b>a</b> 4159371 |

**FOOTNOTES:**

- a** This kit converts an M-Hyd control valve w/o RTSV to one with the RTSV option.  
**b** → 6/2017  
**c** → PENDING PER ECN 160748  
**d** 6/2017 →  
**e** PENDING PER ECN 160748 →

**CONVERSION KIT  
SEATS**

| DESCRIPTION                                         | PART NUMBER |
|-----------------------------------------------------|-------------|
| Kit Non To Full Suspension Cloth Seat with Armrests | 4159329     |
| Kit-Seat Non To Full Suspension Vinyl with Armrests | 4159330     |
| Kit-Seat Belt Black to High Visibility              | 4159331     |

**CONVERSION KIT  
HEAVY DUTY AIR FILTER**

**CONVERSION KIT  
HEAVY DUTY AIR FILTER  
(CONTINUED)**

| DESCRIPTION                                 | PART NUMBER |
|---------------------------------------------|-------------|
| Kit-Filter Element Dual Air UL Approved PSI | 4159332     |
| Kit-Filter Element Dual Air Non Cert. PSI   | 4160274     |

**MISCELLANEOUS CONVERSION KITS**

| DESCRIPTION                                | PART NUMBER |
|--------------------------------------------|-------------|
| Kit-Radiator Screen                        | 4159333     |
| Kit-Conversion Key to Non-Remove Key Start | 4159337     |
| Kit-Conversion Non-Remove Key to Key Start | 4159338     |

**REPAIR KIT  
CRG GLAND, CLS 2 AND 3**

| DESCRIPTION                                  | PART NUMBER |
|----------------------------------------------|-------------|
| Kit-Repair Carriage Gland (42 in. and Under) | 4198527     |
| Kit-Repair - Gland (48 in or 54 in.)         | 4198528     |

[illegible]







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