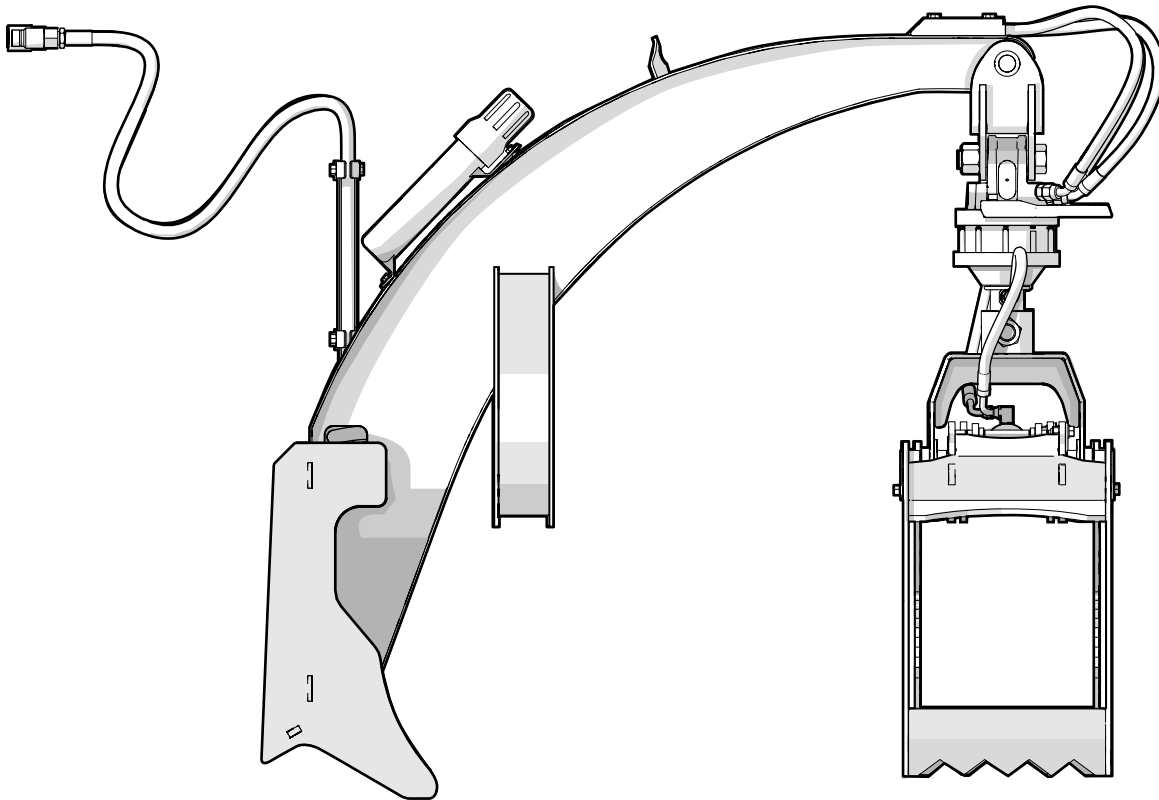


PARTS MANUAL

Serial number 420R001 to 420R106, 1100000 and up

LXG420R Skid Steer Log Grapple



Revision E May-2024

Part Number: 6073T000

WALLENSTEIN

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Introduction

! WARNING!

For safety, operation, and maintenance information, see the Operator's Manual for your product.

Only qualified people are approved to maintain the machine.

! WARNING!

Replace all safety labels that are missing, damaged, or illegible. If a component is replaced and it has a safety label on it, apply a safety label to the new component. If a person operates a machine with missing, damaged, or illegible safety labels it puts them at risk of serious injury or death.

W100

This document provides information about the original equipment manufacturer (OEM) components (parts). Always replace a part with the correct OEM part. For service, support, or to order parts, contact your local Wallenstein Equipment dealer or distributor.

Always provide the model and serial number of your Wallenstein product when you order parts, or request service or other information. The model and serial number location is shown in the following illustration.

Record the model and serial number of your product here:

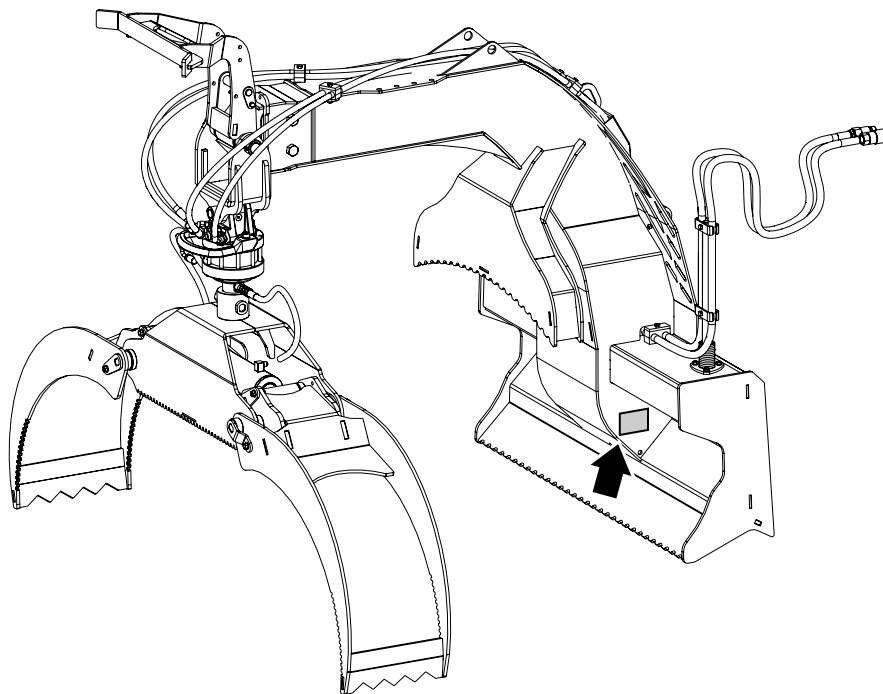
| | |
|----------------------|--|
| Model | |
| Serial Number | |

The information contained in this document was current at the revision date noted on the bottom of each page. Wallenstein Equipment reserves the right to change product specifications at any time without notice. If your product specifications are different from the information in this document, contact your local dealer or distributor. To find a local dealer or distributor, go to WallensteinEquipment.com and select **Dealer Locator** at the bottom of the page.

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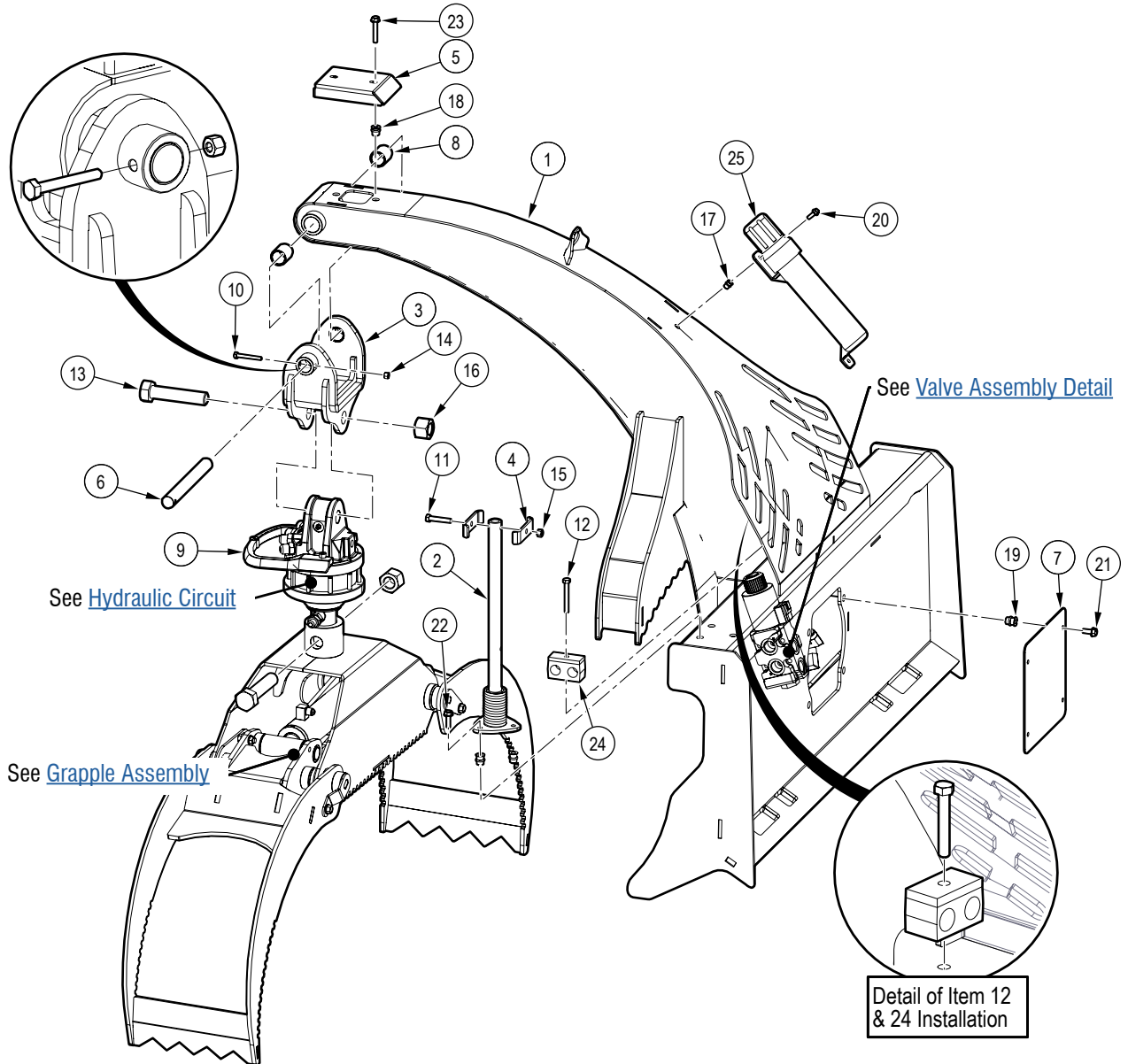
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Model and Serial Number Location



Main Frame Assembly

Serial number 420R001 to 420R039

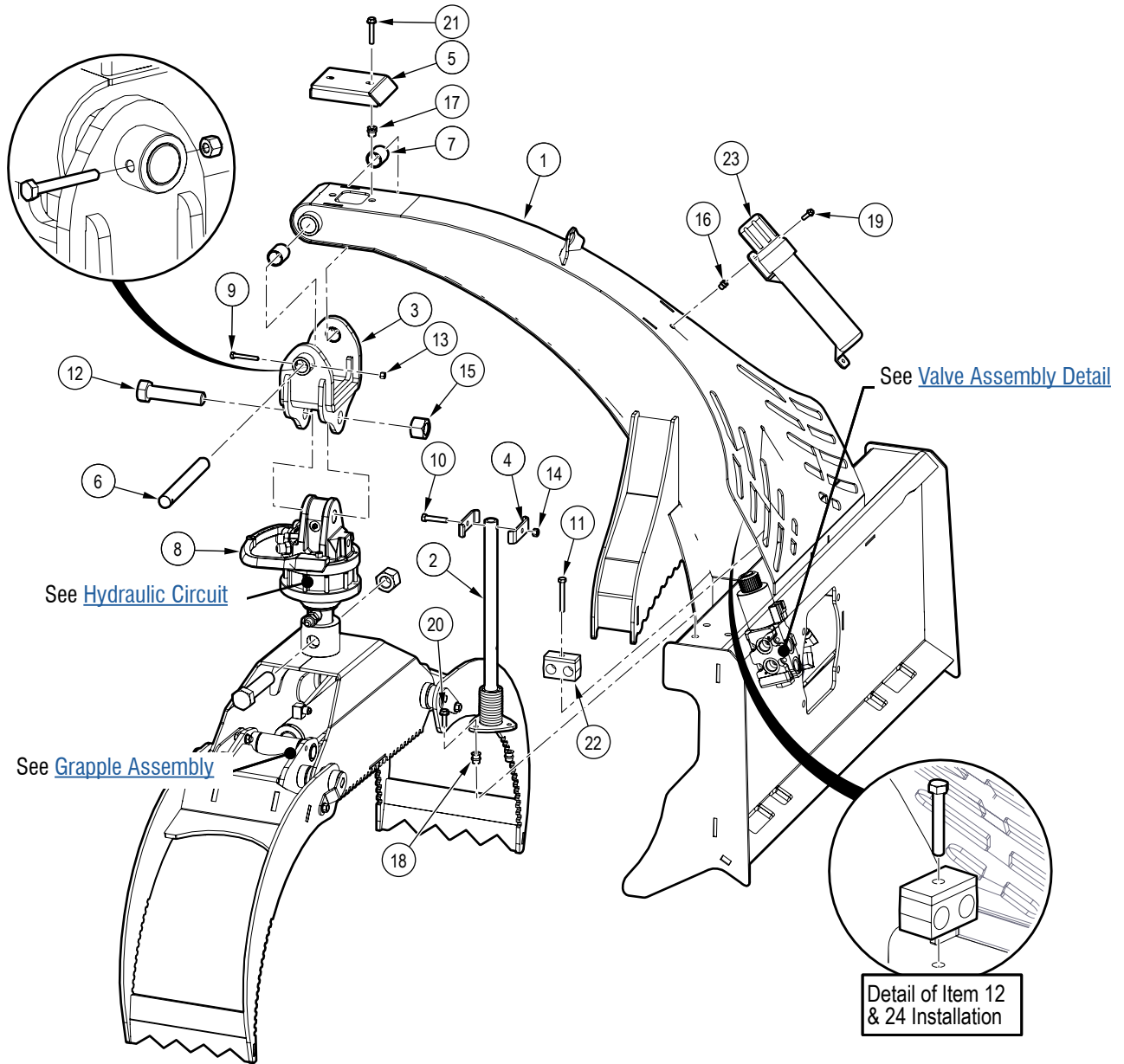


| Item | Part number | Description | Quantity |
|------|-------------|--|----------|
| 1 | 6073W001 | Mainframe | 1 |
| 2 | 6071W102 | Hose Mount Whip | 1 |
| 3 | 6018W007 | Hanget | 1 |
| 4 | 3011L176 | Clamp, Two Hose | 4 |
| 5 | 6018L031 | Cover, Hydraulic Hose | 1 |
| 6 | 6018M015 | Pin, Rotator Mount | 1 |
| 7 | 6073L014 | Plate, Hydraulic Valve Cover | 1 |
| 8 | Z27109 | Composite Bearing, 1" ID x 1-1/2"L x 1/8" Wall | 2 |
| 9 | Z54107 | Hydraulic Rotator, CR300W | 1 |
| 10 | Z71120 | Hex Bolt, 1/4NC x 2" | 1 |
| 11 | Z71217 | Hex Bolt, 5/16NC x 1-3/4" | 2 |
| 12 | Z71225 | Hex Bolt, 5/16NC x 2-1/2" | 1 |
| 13 | Z71911 | Hex Bolt, 1NC x 4-1/2" | 2 |

| Item | Part number | Description | Quantity |
|------|-------------|------------------------------|----------|
| 14 | Z72211 | Hex Lock Nut, 1/4NC | 1 |
| 15 | Z72221 | Hex Lock Nut, 5/16NC | 2 |
| 16 | Z72291 | Hex Lock Nut, 1NC | 2 |
| 17 | Z72955 | Rivet Nut, 1/4NC x 165 | 2 |
| 18 | Z72956 | Rivet Nut, 5/16NC x 150 | 2 |
| 19 | Z72957 | Rivet Nut, 5/16NC x 312 | 7 |
| 20 | Z76111 | Flange Bolt, 1/4NC x 3/4" | 2 |
| 21 | Z76121 | Flange Bolt, 5/16NC x 3/4" | 4 |
| 22 | Z76125 | Flange Bolt, 5/16NC x 1" | 1 |
| 23 | Z76127 | Flange Bolt, 5/16NC x 1-3/4" | 2 |
| 24 | Z79464 | Double Hose Clamp, 13/16" OD | 1 |
| 25 | Z96505 | Manual Tube, 2" Short | 1 |

Main Parts

Serial number 420R040 to 420R057

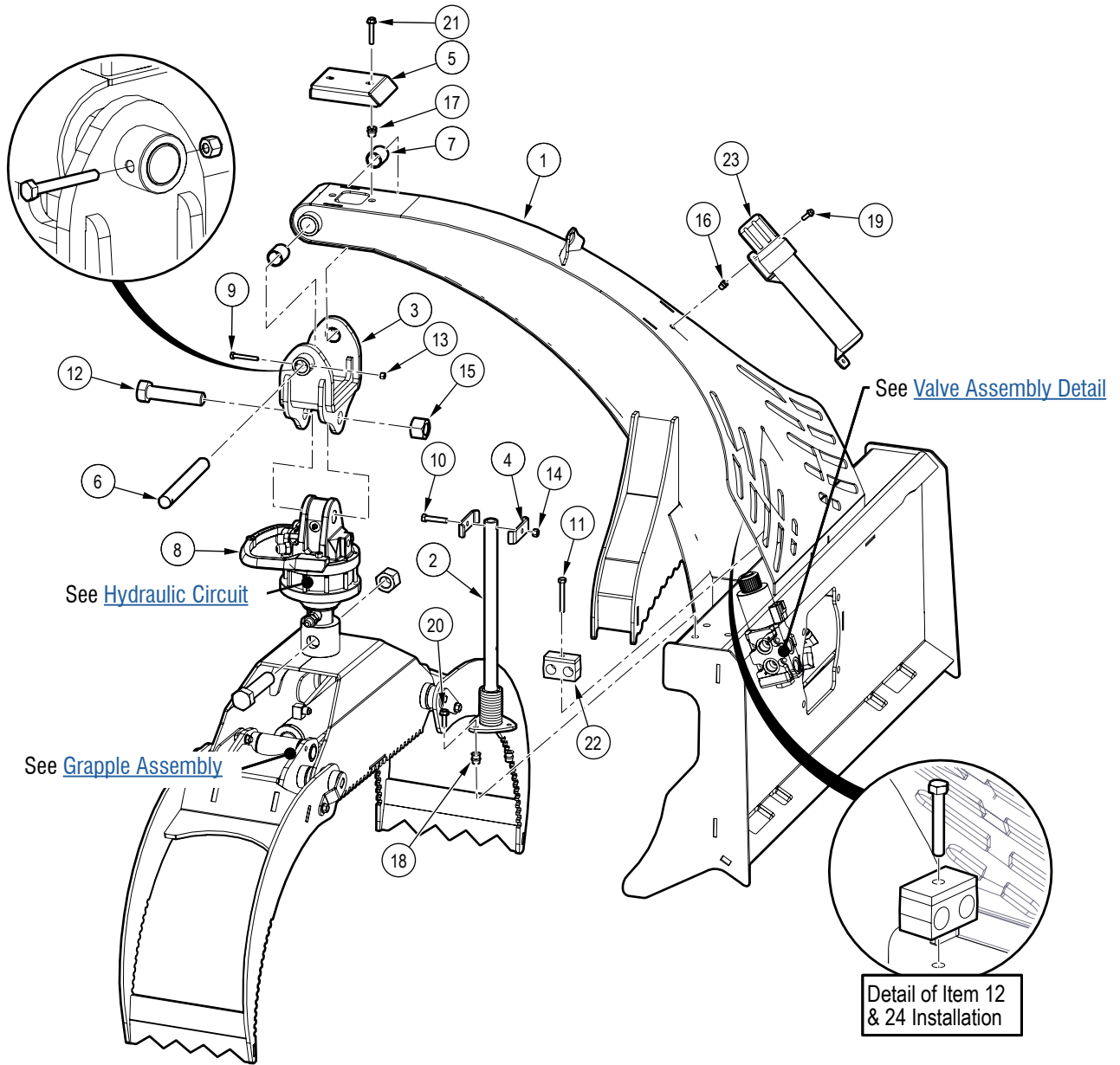


| Item | Part number | Description | Quantity |
|------|-------------|--|----------|
| 1 | 6073W001 | Mainframe | 1 |
| 2 | 6071W102 | Hose Mount Whip | 1 |
| 3 | 6018W007 | Hanget | 1 |
| 4 | 3011L176 | Clamp, Two Hose | 4 |
| 5 | 6018L031 | Cover, Hydraulic Hose | 1 |
| 6 | 6018M015 | Pin, Rotator Mount | 1 |
| 7 | Z27109 | Composite Bearing, 1" ID x 1-1/2"L x 1/8" Wall | 2 |
| 8 | Z54107 | Hydraulic Rotator, CR300W | 1 |
| 9 | Z71120 | Hex Bolt, 1/4NC x 2" | 1 |
| 10 | Z71217 | Hex Bolt, 5/16NC x 1-3/4" | 2 |
| 11 | Z71225 | Hex Bolt, 5/16NC x 2-1/2" | 1 |
| 12 | Z71911 | Hex Bolt, 1NC x 4-1/2" | 2 |

| Item | Part number | Description | Quantity |
|------|-------------|------------------------------|----------|
| 13 | Z72211 | Hex Lock Nut, 1/4NC | 1 |
| 14 | Z72221 | Hex Lock Nut, 5/16NC | 2 |
| 15 | Z72291 | Hex Lock Nut, 1NC | 2 |
| 16 | Z72955 | Rivet Nut, 1/4NC x 165 | 2 |
| 17 | Z72956 | Rivet Nut, 5/16NC x 150 | 2 |
| 18 | Z72957 | Rivet Nut, 5/16NC x 312 | 3 |
| 19 | Z76111 | Flange Bolt, 1/4NC x 3/4" | 2 |
| 20 | Z76125 | Flange Bolt, 5/16NC x 1" | 1 |
| 21 | Z76127 | Flange Bolt, 5/16NC x 1-3/4" | 2 |
| 22 | Z79464 | Double Hose Clamp, 13/16" OD | 2 |
| 23 | Z96505 | Manual Tube, 2" Short | 1 |

Main Parts

Serial number 420R058 and up

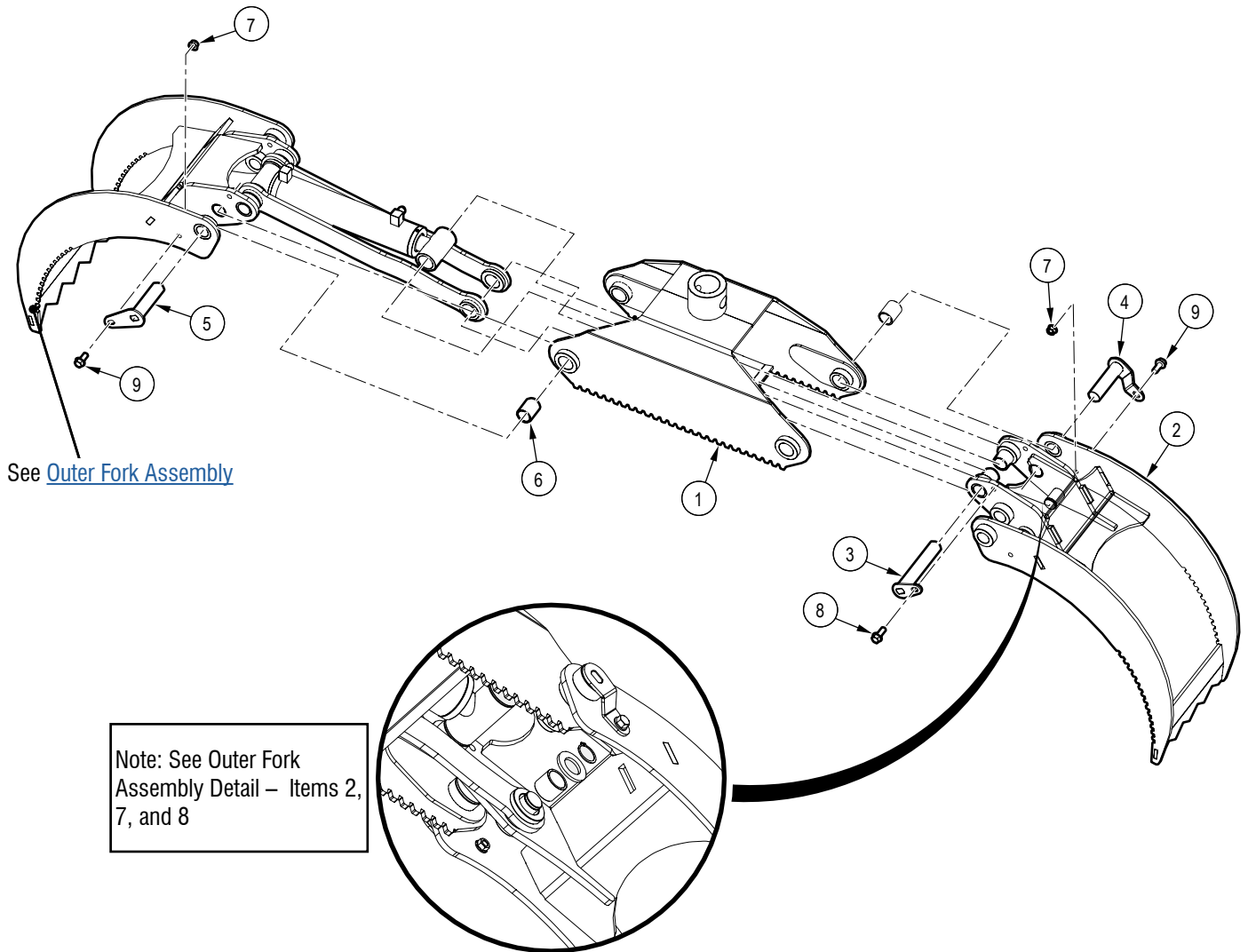


| Item | Part number | Description | Quantity |
|------|-------------|--|----------|
| 1 | 6073W001 | Mainframe | 1 |
| 2 | 6071W102 | Hose Mount Whip | 1 |
| 3 | 6018W007 | Hanget | 1 |
| 4 | 3011L176 | Clamp, Two Hose | 4 |
| 5 | 6018L031 | Cover, Hydraulic Hose | 1 |
| 6 | 6018M015 | Pin, Rotator Mount | 1 |
| 7 | Z27109 | Composite Bearing, 1" ID x 1-1/2"L x 1/8" Wall | 2 |
| 8 | Z54107 | Hydraulic Rotator, CR300W | 1 |
| 9 | Z71120 | Hex Bolt, 1/4NC x 2" | 1 |
| 10 | Z71217 | Hex Bolt, 5/16NC x 1-3/4" | 2 |
| 11 | Z71215 | Hex Bolt, 5/16NC x 1-1/2" | 2 |
| 12 | Z71911 | Hex Bolt, 1NC x 4-1/2" | 2 |

| Item | Part number | Description | Quantity |
|------|-------------|------------------------------|----------|
| 13 | Z72211 | Hex Lock Nut, 1/4NC | 1 |
| 14 | Z72221 | Hex Lock Nut, 5/16NC | 2 |
| 15 | Z72291 | Hex Lock Nut, 1NC | 2 |
| 16 | Z72955 | Rivet Nut, 1/4NC x 165 | 2 |
| 17 | Z72956 | Rivet Nut, 5/16NC x 150 | 2 |
| 18 | Z72957 | Rivet Nut, 5/16NC x 312 | 3 |
| 19 | Z76111 | Flange Bolt, 1/4NC x 3/4" | 2 |
| 20 | Z76125 | Flange Bolt, 5/16NC x 1" | 1 |
| 21 | Z76127 | Flange Bolt, 5/16NC x 1-3/4" | 2 |
| 22 | 2054L412 | Hose Clamp 2-1/2" | 2 |
| 23 | Z96505 | Manual Tube, 2" Short | 1 |

Grapple Assembly

Serial number 420R001 to 420R057

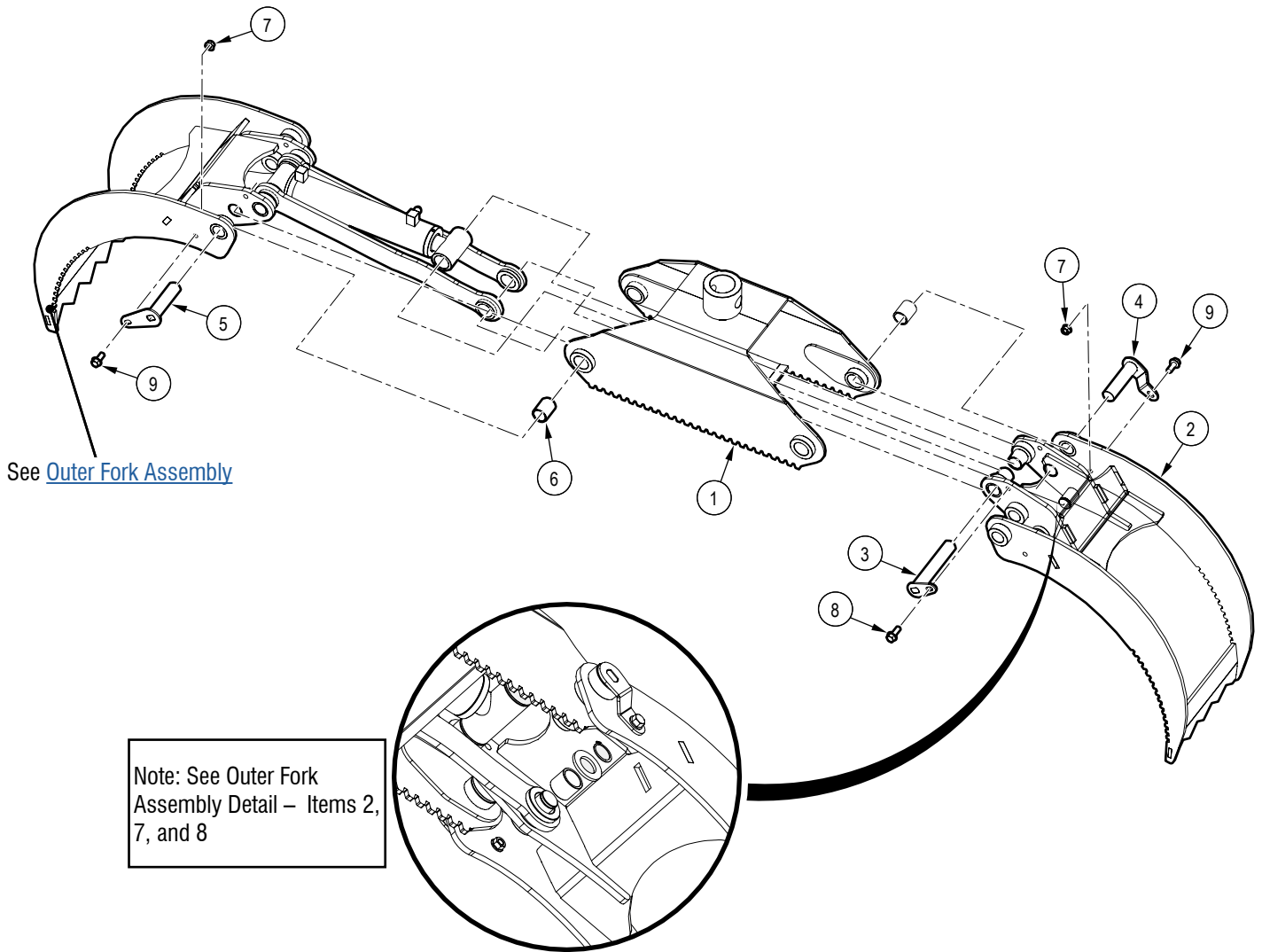


Note: See Outer Fork Assembly Detail – Items 2, 7, and 8

| Item | Part number | Description | Quantity |
|------|-------------|--|----------|
| 1 | 6018W001 | Grapple Housing | 1 |
| 2 | 6018W002 | Inner Fork | 1 |
| 3 | 6018W010 | Short Cylinder Pin | 1 |
| 4 | 6018W008 | Inner Fork Pin | 2 |
| 5 | 6018W009 | Outer Fork Pin | 2 |
| 6 | Z27109 | Composite Bearing, 1" ID x 1-1/2" long x 1/8" Wall | 4 |
| 7 | Z72531 | Serrated Flange Locknut, 3/8NC | 5 |
| 8 | Z76134 | Flange Bolt, 3/8NC x 1" | 1 |
| 9 | Z76139 | Flange Bolt, 3/8NC x 7/8" | 4 |

Grapple Assembly

Serial number 420R058 and up

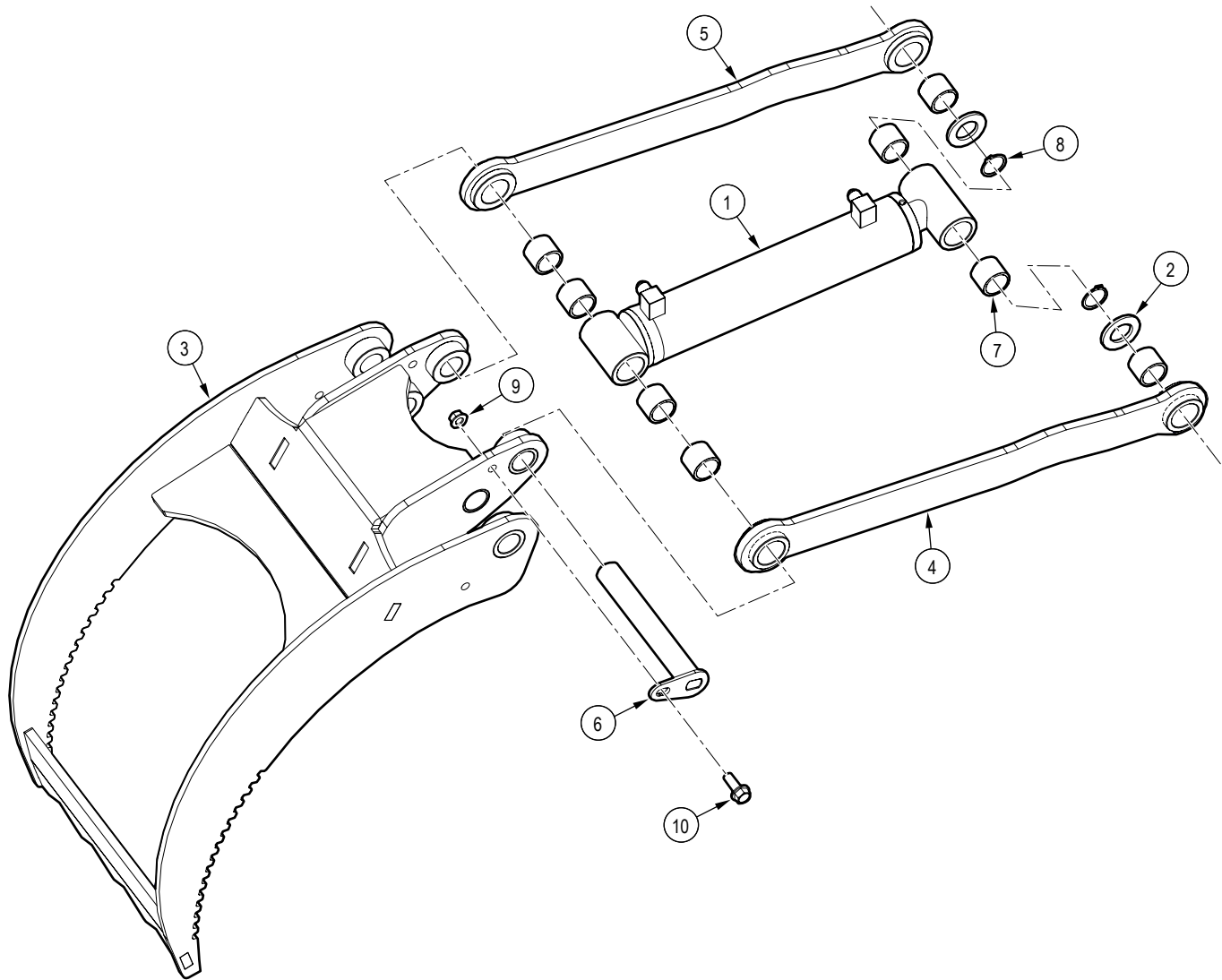


Note: See Outer Fork Assembly Detail – Items 2, 7, and 8

| Item | Part number | Description | Quantity |
|------|-------------|--|----------|
| 1 | 6018W001 | Grapple Housing | 1 |
| 2 | 6018W012 | Inner Fork | 1 |
| 3 | 6018W010 | Short Cylinder Pin | 1 |
| 4 | 6018W008 | Inner Fork Pin | 2 |
| 5 | 6018W009 | Outer Fork Pin | 2 |
| 6 | Z27109 | Composite Bearing, 1" ID x 1-1/2" long x 1/8" Wall | 4 |
| 7 | Z72531 | Serrated Flange Locknut, 3/8NC | 5 |
| 8 | Z76134 | Flange Bolt, 3/8NC x 1" | 1 |
| 9 | Z76139 | Flange Bolt, 3/8NC x 7/8" | 4 |

Outer Fork Assembly

Serial number 420R001 to 420R057

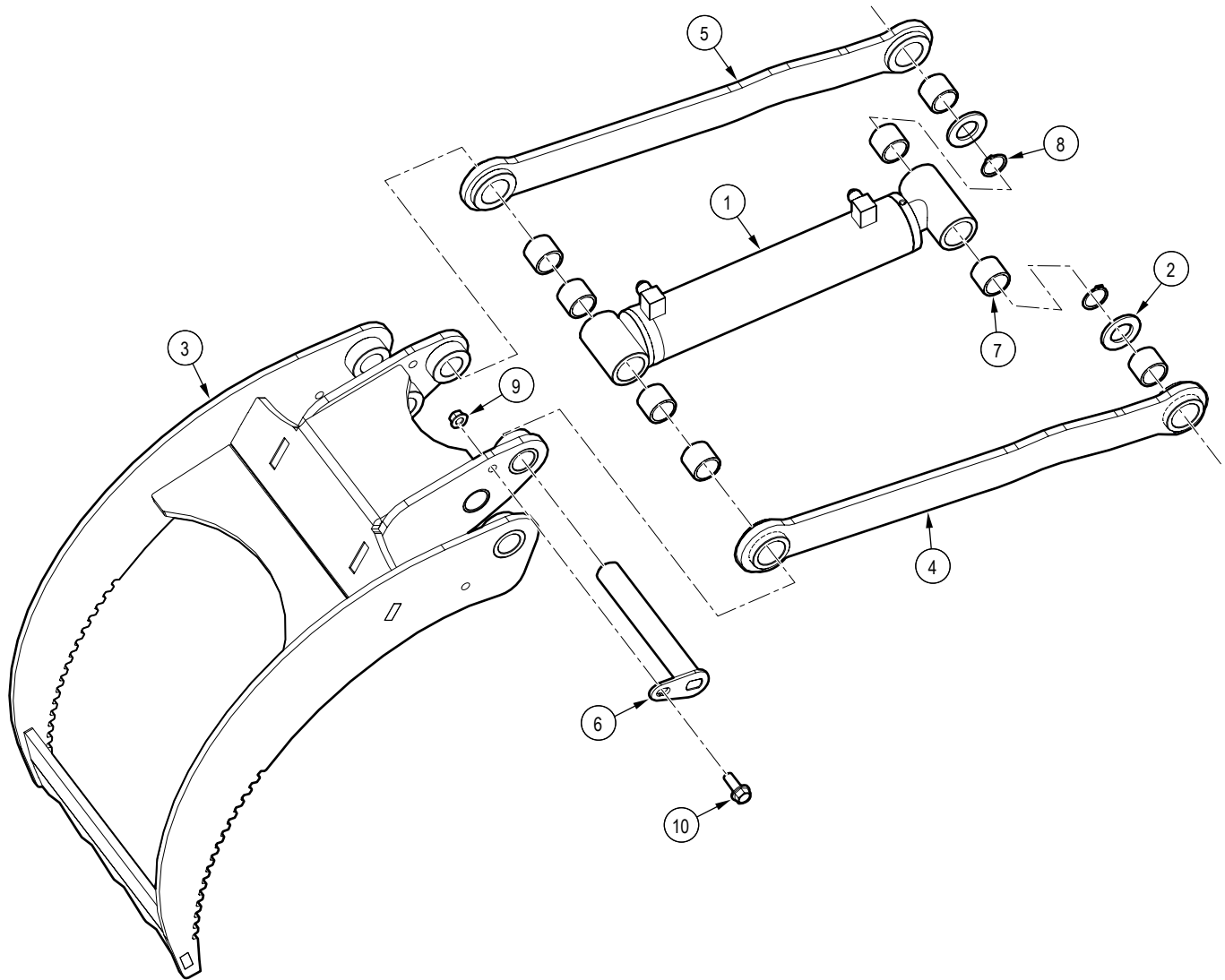


| Item | Part number | Description | Quantity |
|------|-------------|--------------------------------|----------|
| 1 | 6018C001 | Cylinder, 2" x 1-1/4" x 8-5/8" | 1 |
| 2 | 6018L026 | Washer, Linkage Retaining | 2 |
| 3 | 6018W003 | Outer Fork | 1 |
| 4 | 6018W004 | Linkage | 1 |
| 5 | 6018W004H | Linkage Mirror | 1 |
| 6 | 6018W011 | Long Cylinder Pin | 1 |

| Item | Part number | Description | Quantity |
|------|-------------|--|----------|
| 7 | Z27110 | Composite Bearing, 1" ID x 1" long x 1/8" Wall | 8 |
| 8 | Z46204 | External Retaining Ring, 1" | 2 |
| 9 | Z72531 | Serrated Flange Locknut, 3/8NC | 1 |
| 10 | Z76134 | Flange Bolt, 3/8NC x 1" | 1 |

Outer Fork Assembly

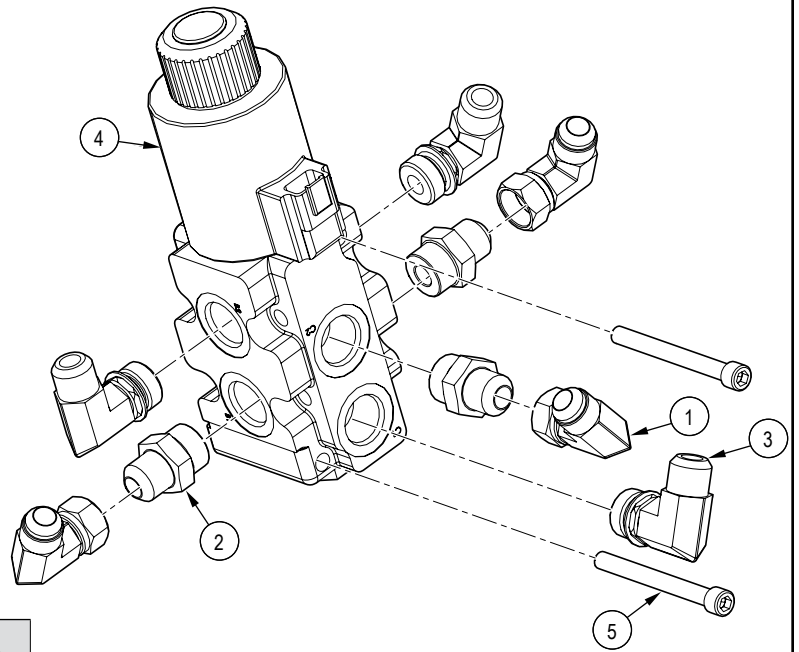
Serial number 420R058 and up



| Item | Part number | Description | Quantity |
|------|-------------|--------------------------------|----------|
| 1 | 6018C001 | Cylinder, 2" x 1-1/4" x 8-5/8" | 1 |
| 2 | 6018L026 | Washer, Linkage Retaining | 2 |
| 3 | 6018W013 | Outer Fork | 1 |
| 4 | 6018W004 | Linkage | 1 |
| 5 | 6018W004H | Linkage Mirror | 1 |
| 6 | 6018W011 | Long Cylinder Pin | 1 |

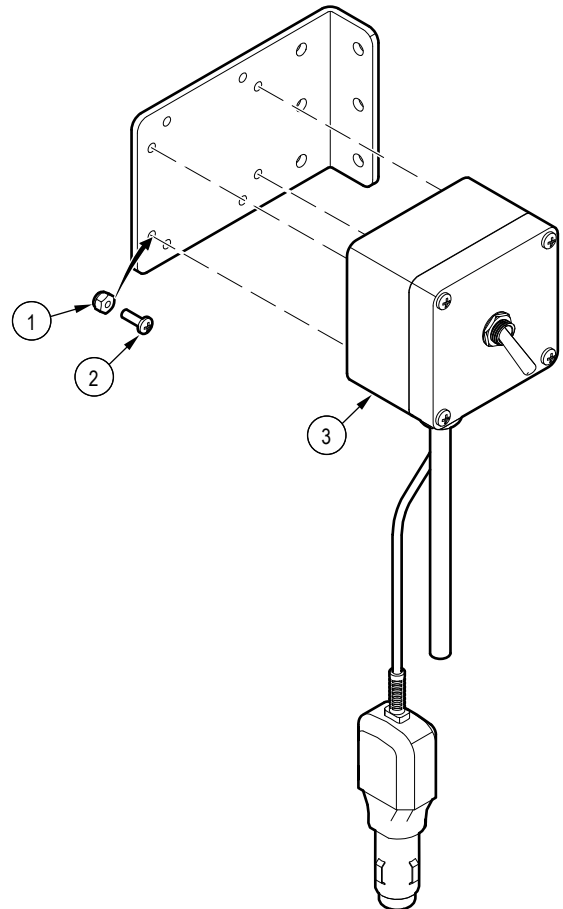
| Item | Part number | Description | Quantity |
|------|-------------|--|----------|
| 7 | Z27110 | Composite Bearing, 1" ID x 1" long x 1/8" Wall | 8 |
| 8 | Z46204 | External Retaining Ring, 1" | 2 |
| 9 | Z72531 | Serrated Flange Locknut, 3/8NC | 1 |
| 10 | Z76134 | Flange Bolt, 3/8NC x 1" | 1 |

Valve Assembly Detail



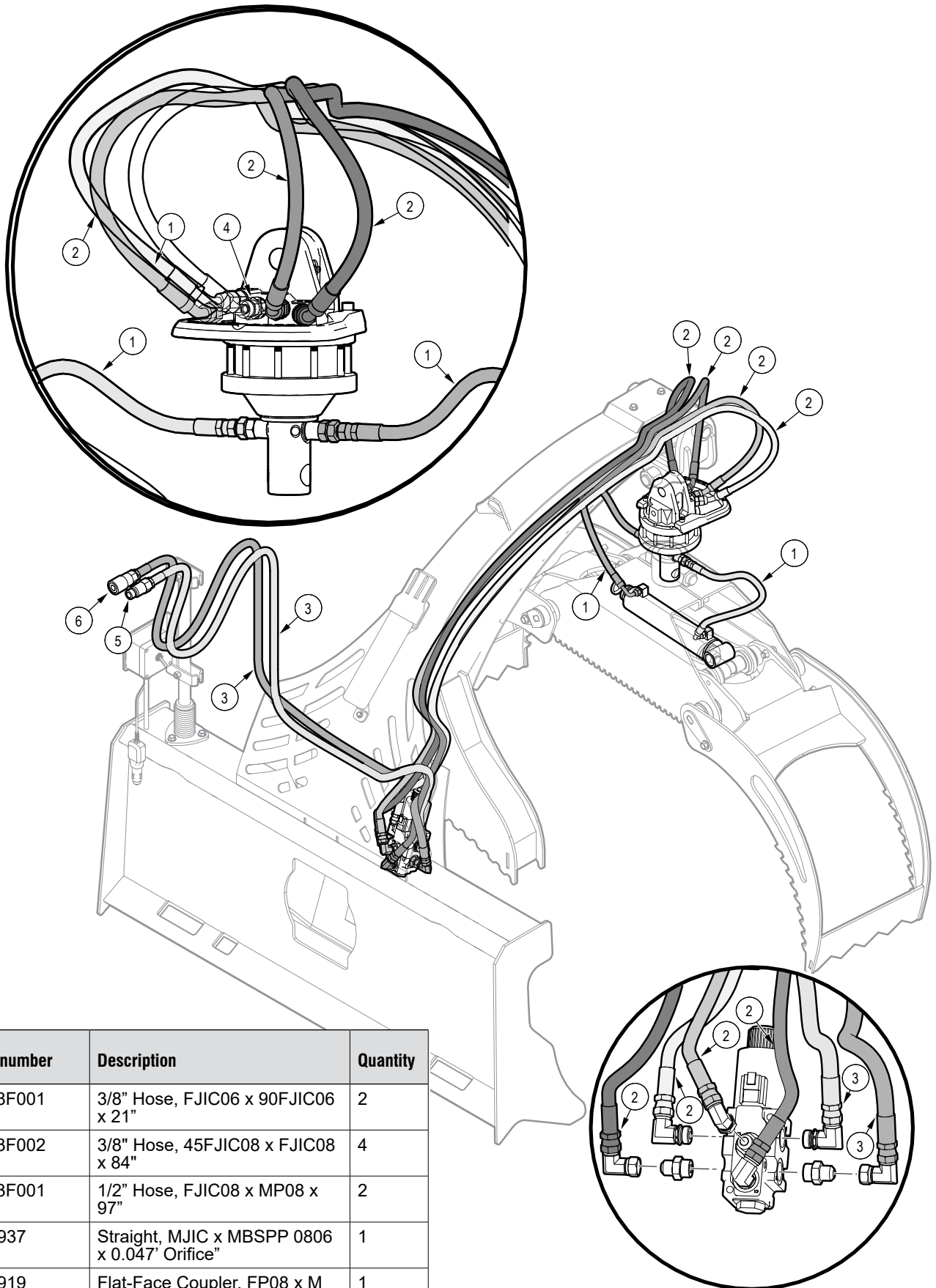
| Item | Part number | Description | Quantity |
|------|-------------|---|----------|
| 1 | Z51562 | Elbow 90, MJIC x FJICX 0808 | 3 |
| 2 | Z51647 | Straight, MJIC x MORB 0810 | 3 |
| 3 | Z51658 | Elbow 90, MJIC x MORB 0810 | 3 |
| 4 | Z56615 | Single Spool Valve, OC Selector SOL x 21GPM | 1 |
| 5 | Z75122 | SHCS, 5/16NC x 3" | 2 |

Hydraulic Function Selector Switch



| Item | Part number | Description | Quantity |
|------|-------------|----------------------------|----------|
| 1 | Z72202 | Hex Lock Nut, 8NC | 4 |
| 2 | Z78309 | Machine Screw, #8NC x 1/2" | 4 |
| 3 | 6073A050 | Selector Switch Assembly | 1 |

Hydraulic Circuit

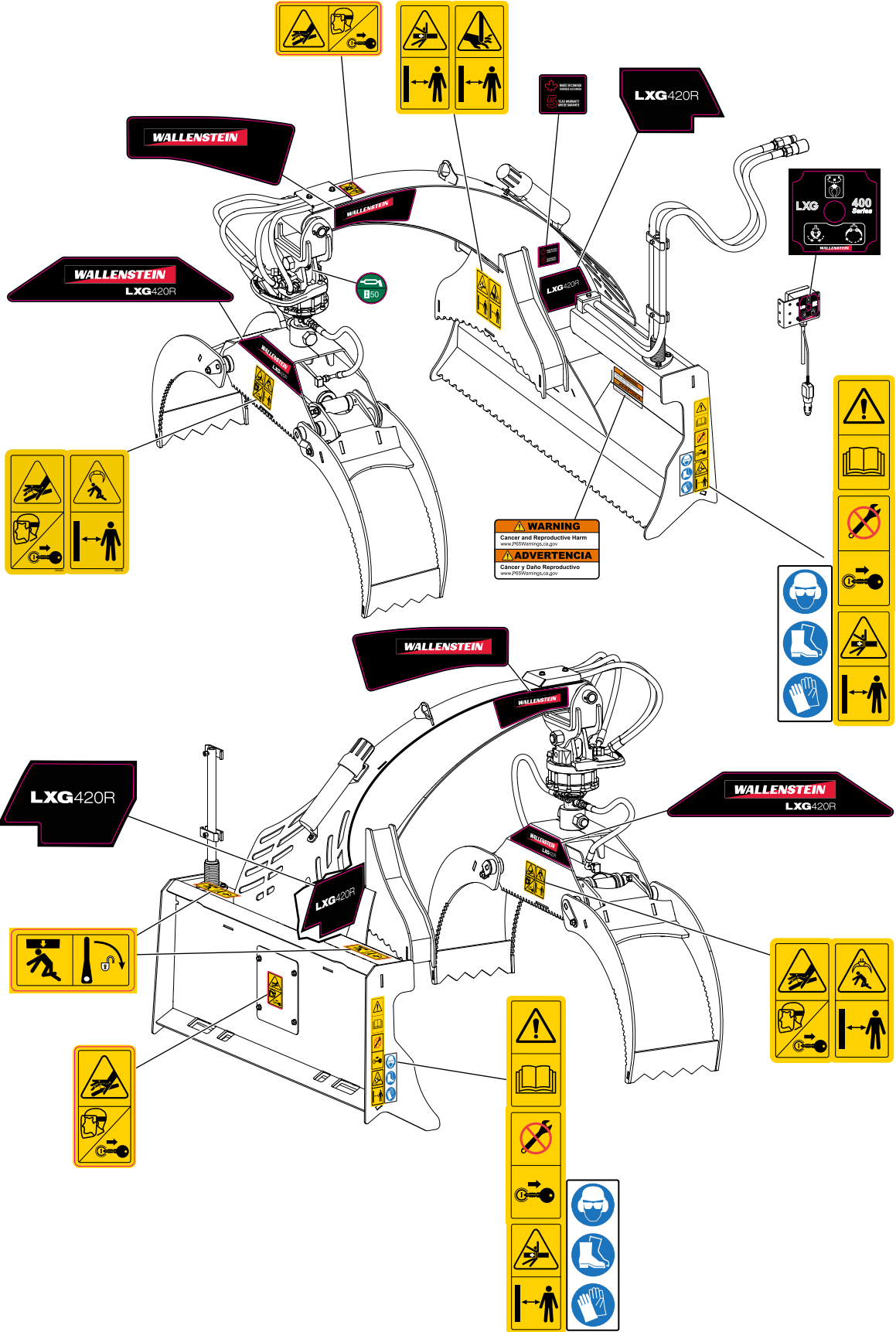


| Item | Part number | Description | Quantity |
|------|-------------|---|----------|
| 1 | 6018F001 | 3/8" Hose, FJIC06 x 90FJIC06 x 21" | 2 |
| 2 | 6073F002 | 3/8" Hose, 45FJIC08 x FJIC08 x 84" | 4 |
| 3 | 6073F001 | 1/2" Hose, FJIC08 x MP08 x 97" | 2 |
| 4 | Z51937 | Straight, MJIC x MBSPP 0806 x 0.047" Orifice" | 1 |
| 5 | Z51919 | Flat-Face Coupler, FP08 x M ISO 16028 | 1 |
| 6 | Z51920 | Flat-Face Coupler, FP08 x M ISO 16028 | 1 |

Label Locations

IMPORTANT! If you replace a part that has a safety label on it, you must apply a new safety label. Immediately replace safety labels that are damaged, have been removed, or are illegible.

Contact your local Wallenstein Equipment dealer or distributor to order a safety label kit. Labels are not sold individually.



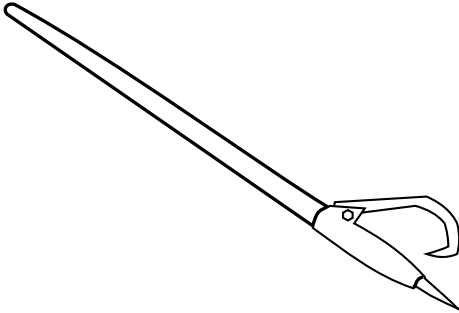
Accessories

For price and availability, contact your local Wallenstein dealer or distributor.

For accessory installation instructions, go to WallensteinEquipment.com/Support.aspx, and then select **Accessories**.

48" Log Peavey Z99001

Quality 2 3/8" diameter hardwood handle, with a Western Duck Bill Hook. Helps to move those heavy log timbers into position.



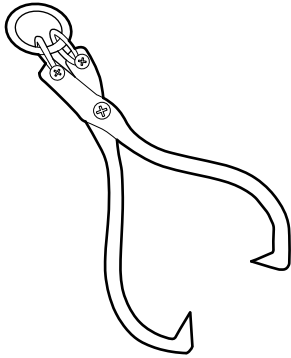
Skidding Tongs Z99003

Heavy Duty Forged Ring Skidding Tongs

Maximum Opening: 25"

Minimum Opening: 4-1/2"

Tough log skidding tongs are a quick and easy way to skid logs.



Bolt Torque

IMPORTANT! If you replace hardware, use fasteners of the same grade.

IMPORTANT! The torque specifications in these tables are for non-greased or non-oiled threads. Do not grease or oil fastener threads unless otherwise indicated. When using a thread lock, increase the specified torque 5%.



Bolt grades are identified by the marks on the bolt head.

The bolt torque specification tables provide the correct torque settings for common bolts and capscrews. Tighten all bolts to the torque that is specified in the table, unless otherwise indicated. Check the bolt tightness periodically.

Imperial Bolt Torque Specifications

| Bolt Diameter | Torque | | | | | |
|------------------|-----------|-----|-----------|-----|-----------|-----|
| | SAE Gr. 2 | | SAE Gr. 5 | | SAE Gr. 8 | |
| | lbf•ft | N•m | lbf•ft | N•m | lbf•ft | N•m |
| 1/4 inch | 6 | 8 | 9 | 12 | 12 | 17 |
| 5/16 inch | 10 | 13 | 19 | 25 | 27 | 36 |
| 3/8 inch | 20 | 27 | 33 | 45 | 45 | 63 |
| 7/16 inch | 30 | 41 | 53 | 72 | 75 | 100 |
| 1/2 inch | 45 | 61 | 80 | 110 | 115 | 155 |
| 9/16 inch | 60 | 95 | 115 | 155 | 165 | 220 |
| 5/8 inch | 95 | 128 | 160 | 215 | 220 | 305 |
| 3/4 inch | 165 | 225 | 290 | 390 | 400 | 540 |
| 7/8 inch | 170 | 230 | 420 | 570 | 650 | 880 |



SAE Gr. 2



SAE Gr. 5



SAE Gr. 8

Metric Bolt Torque Specifications

| Bolt Diameter | Torque | | | |
|---------------|---------|-------|----------|-------|
| | Gr. 8.8 | | Gr. 10.9 | |
| | lbf•ft | N•m | lbf•ft | N•m |
| M3 | 0.4 | 0.5 | 1.3 | 1.8 |
| M4 | 2.2 | 3 | 3.3 | 4.5 |
| M6 | 7 | 10 | 11 | 15 |
| M8 | 18 | 25 | 26 | 35 |
| M10 | 37 | 50 | 52 | 70 |
| M12 | 66 | 90 | 92 | 125 |
| M14 | 83 | 112 | 116 | 158 |
| M16 | 166 | 225 | 229 | 310 |
| M20 | 321 | 435 | 450 | 610 |
| M30 | 1,103 | 1,495 | 1,550 | 2,100 |



8.8



10.9

Hydraulic Fitting Torque

Tighten flare-type tube fittings:

1. Check the flare and flare seat for defects that might cause leaks.
2. Align the tube with the fitting before tightening.
3. Hand-tighten the swivel nut until it is snug.
4. To prevent the tube from twisting, use two wrenches. Place one wrench on the connector body and tighten the swivel nut with the second wrench. Torque the fitting to the correct specification.

If a torque wrench is not available, use the flats from finger tight (FFFT) method.

| Hydraulic Fitting Torque Specifications | | | | | |
|---|-----------------------------|---------|---------|----------------------------|-------|
| Tube size OD | Hex size across flats | Torque | | Flats from finger tight | |
| | | lbf•ft | N•m | Flats | Turns |
| 3/16 | 7/16 | 6 | 8 | 2 | 1/6 |
| 1/4 | 9/16 | 11–12 | 15–17 | 2 | 1/6 |
| 5/16 | 5/8 | 14–16 | 19–22 | 2 | 1/6 |
| 3/8 | 11/16 | 20–22 | 27–30 | 1-1/4 | 1/6 |
| 1/2 | 7/8 | 44–48 | 59–65 | 1 | 1/6 |
| 5/8 | 1 | 50–58 | 68–79 | 1 | 1/6 |
| 3/4 | 1-1/4 | 79–88 | 107–119 | 1 | 1/8 |
| 1 | 1-5/8 | 117–125 | 158–170 | 1 | 1/8 |

Specifications are for non-lubricated connections.



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