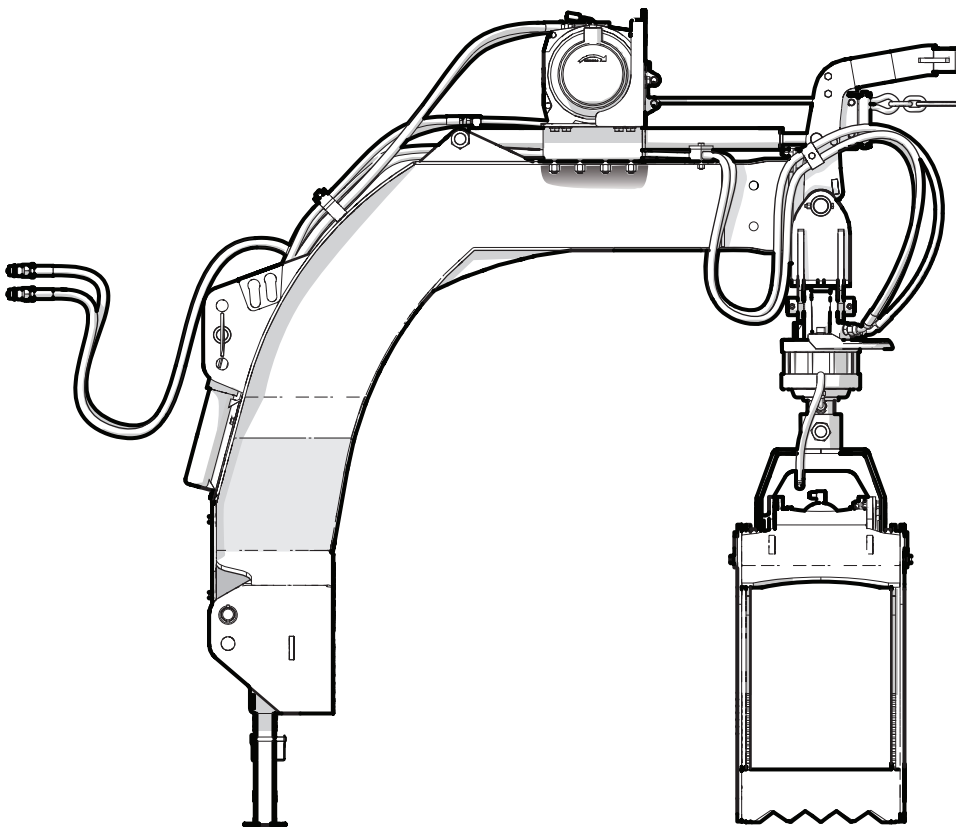


PARTS MANUAL

Serial Number 330RP001 to 330RP015

LXG330RP 3 PH GRAPPLE



Foreword

This Wallenstein parts manual is prepared to assist customers in ordering quality OEM replacement parts.

Regular maintenance combined with replacing old, worn or broken parts with the correct OEM parts is essential in prolonging the life of your Wallenstein product. Refer to this manual to identify replacement parts.

To order parts, contact your Wallenstein dealer or distributor. Have the product model and serial number handy.

If your dealer is no longer available, please go to our website: <http://wallensteinequipment.com> and click on the [Dealer Locator](#) to find the nearest dealer.

All information contained in this parts manual is current as per the revision date at the bottom of the page. Wallenstein reserves the right to change product specifications at any time without notice.

If your product specifications differ from those contained in this manual, contact Wallenstein for current information.

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WARNING!

Refer to the operators manual for safe operation and maintenance.

Maintenance should be performed by trained personnel only.

Serial Number Location

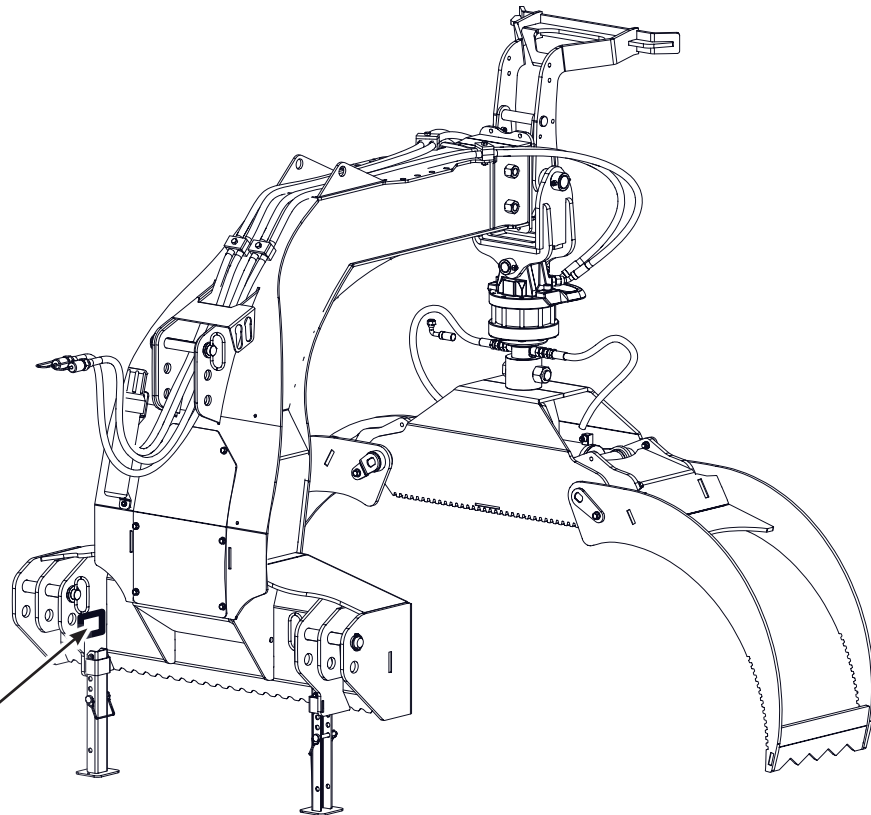
Always provide the model and serial number of your Wallenstein product when ordering parts or requesting service or other information. This information is found on the product information plate as shown below.

Record your product information here for future reference.

Model _____

Serial Number _____

Model and Serial
Number Location

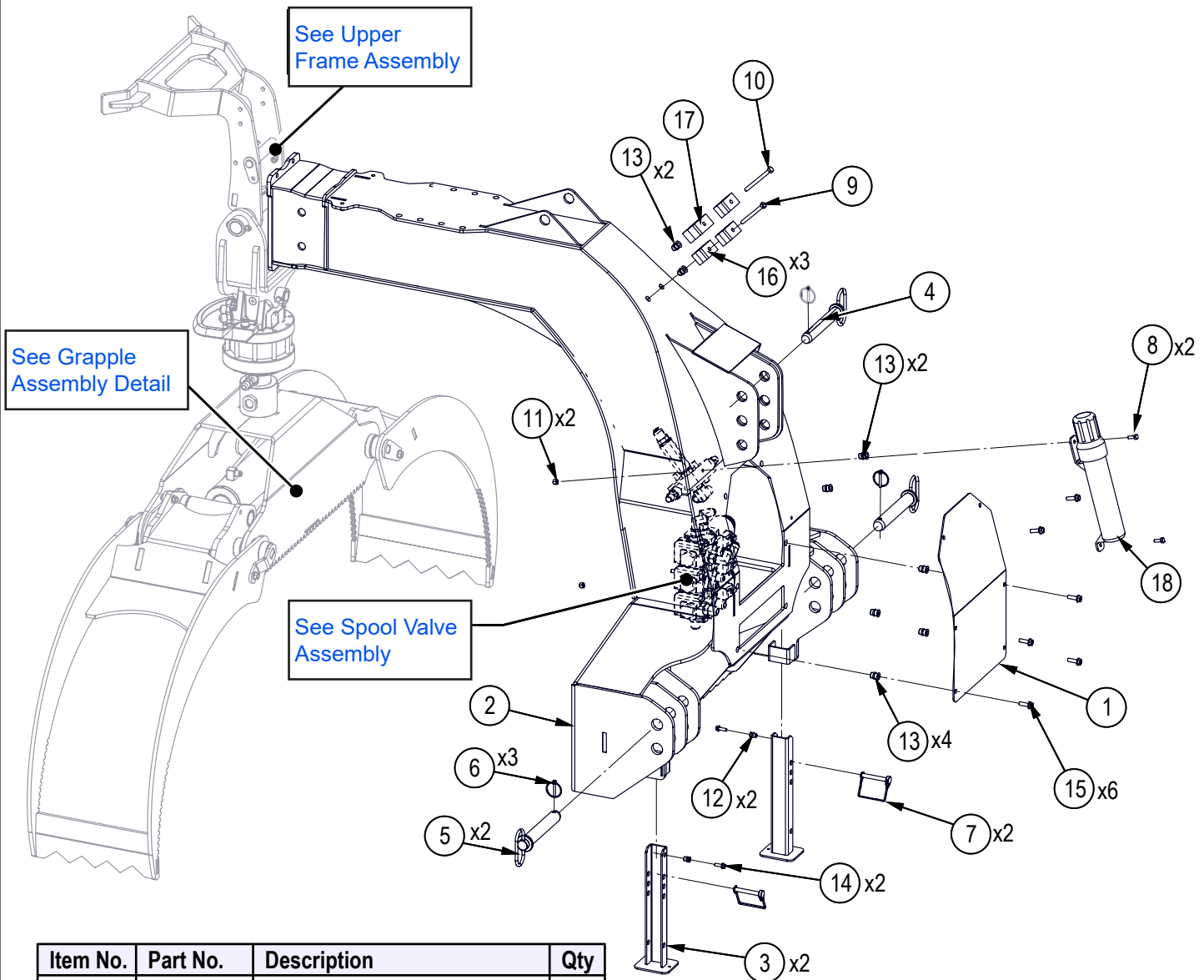


www.wallensteinequipment.com

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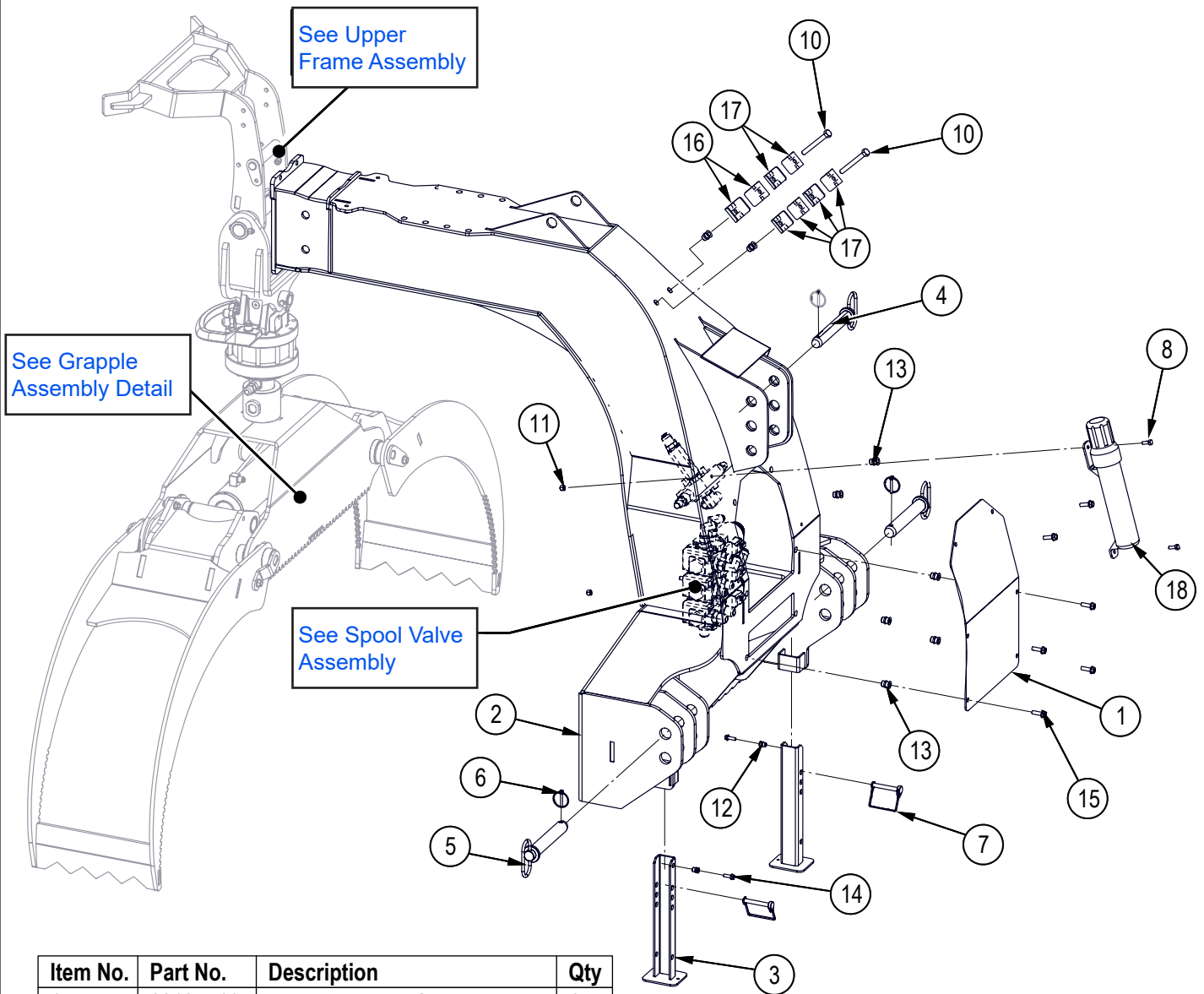
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Lower Main Frame Assembly S/N 330RP001 to 330RP014



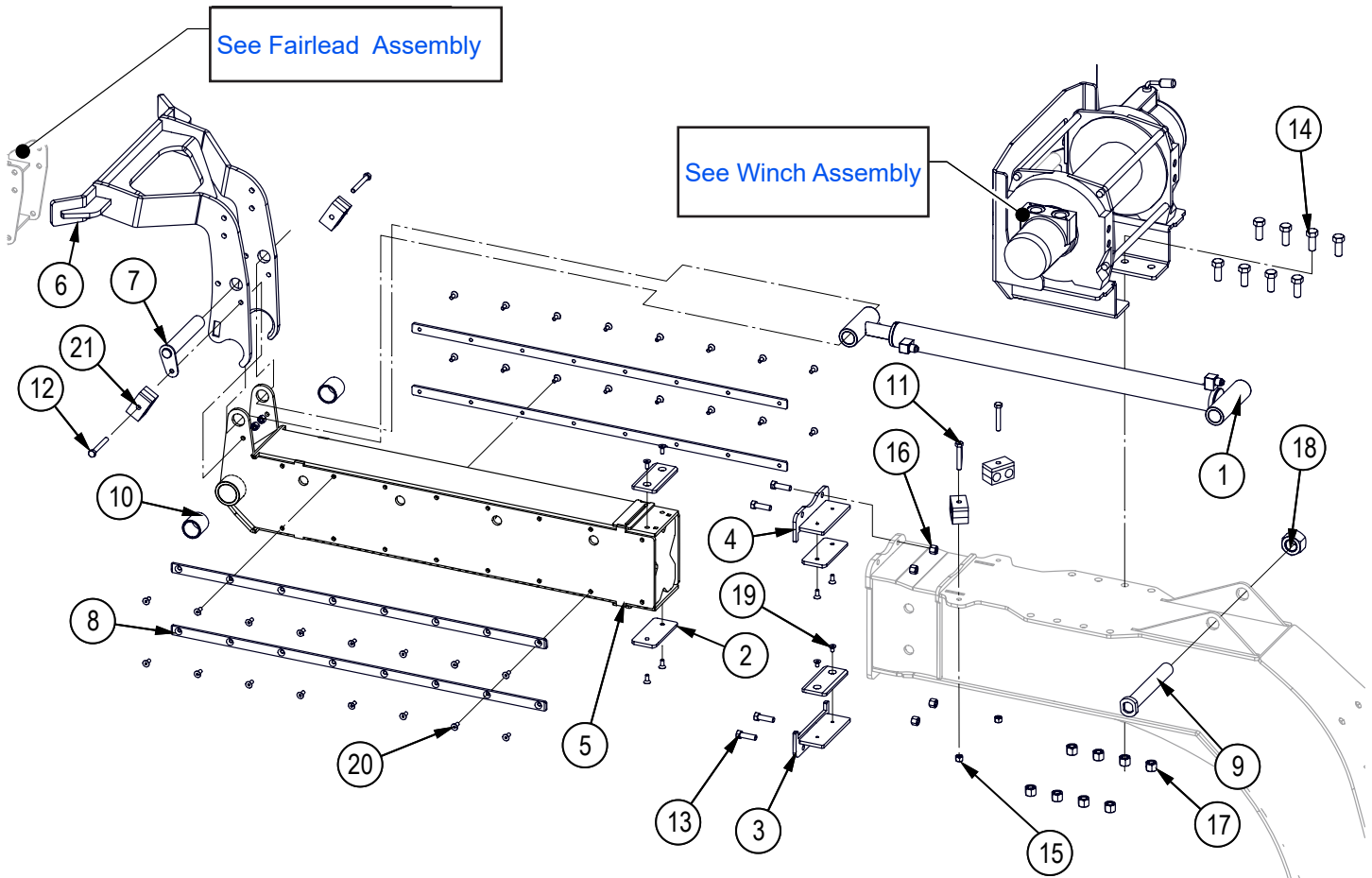
| Item No. | Part No. | Description | Qty |
|----------|----------|------------------------------|-----|
| 1 | 6018L541 | Plate, Hydraulic Cover | 1 |
| 2 | 6018W505 | Mainframe | 1 |
| 3 | 6018W516 | Support Leg | 2 |
| 4 | Z11261 | Hitch Pin, 1" x 6-1/4" | 1 |
| 5 | Z11271 | Hitch Pin, 1-1/8" x 6-1/4" | 2 |
| 6 | Z12110 | Lynch Pin, 3/16" | 3 |
| 7 | Z12432 | Snap Lock Pin, 3/8" x 2-1/2" | 2 |
| 8 | Z71107 | Hex Bolt, 1/4NC x 3/4" | 2 |
| 9 | Z71230 | Hex Bolt, 5/16NC x 3" | 1 |
| 10 | Z71235 | Hex Bolt, 5/16NC x 3-1/2" | 1 |
| 11 | Z72211 | Hex Lock Nut, 1/4NC | 2 |
| 12 | Z72955 | Rivet Nut, 1/4NC x 165 | 2 |
| 13 | Z72957 | Rivet Nut, 5/16NC x 312 | 8 |
| 14 | Z76111 | Flange Bolt, 1/4NC x 3/4" | 2 |
| 15 | Z76125 | Flange Bolt, 5/16NC x 1" | 6 |
| 16 | Z79463 | Double Hose Clamp, 11/16" OD | 3 |
| 17 | Z79464 | Double Hose Clamp, 13/16" OD | 1 |
| 18 | Z96505 | Manual Tube, 2" Short | 1 |

Lower Main Frame Assembly S/N 330RP015 & Up



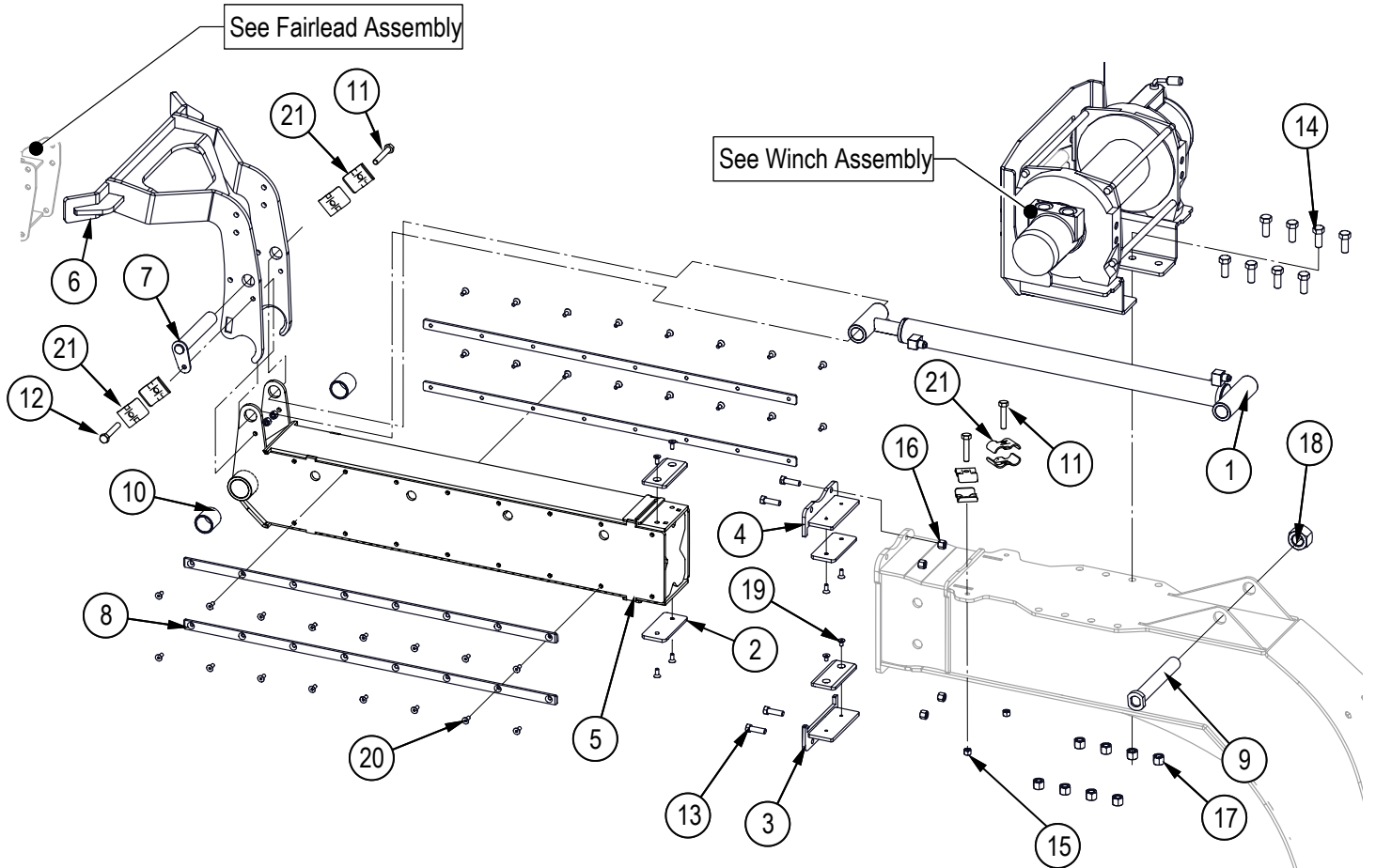
| Item No. | Part No. | Description | Qty |
|----------|----------|------------------------------|-----|
| 1 | 6018L541 | Plate, Hydraulic Cover | 1 |
| 2 | 6018W505 | Mainframe | 1 |
| 3 | 6018W516 | Support Leg | 2 |
| 4 | Z11261 | Hitch Pin, 1" x 6-1/4" | 1 |
| 5 | Z11271 | Hitch Pin, 1-1/8" x 6-1/4" | 2 |
| 6 | Z12110 | Lynch Pin, 3/16" | 3 |
| 7 | Z12432 | Snap Lock Pin, 3/8" x 2-1/2" | 2 |
| 8 | Z71107 | Hex Bolt, 1/4NC x 3/4" | 2 |
| 9 | Z71230 | Hex Bolt, 5/16NC x 3" | 1 |
| 10 | Z71227 | Hex Bolt 5/16NC x 2-3/4" | 2 |
| 11 | Z72211 | Hex Lock Nut, 1/4NC | 2 |
| 12 | Z72955 | Rivet Nut, 1/4NC x 165 | 2 |
| 13 | Z72957 | Rivet Nut, 5/16NC x 312 | 8 |
| 14 | Z76111 | Flange Bolt, 1/4NC x 3/4" | 2 |
| 15 | Z76125 | Flange Bolt, 5/16NC x 1" | 6 |
| 16 | 2054L412 | Hose Clamp 2 x 1/2" | 2 |
| 17 | 2250L286 | Hose Clamp 2 x 3/8" | 1 |
| 18 | Z96505 | Manual Tube, 2" Short | 1 |

Upper Frame Assembly S/N 330RP001 to 330RP014



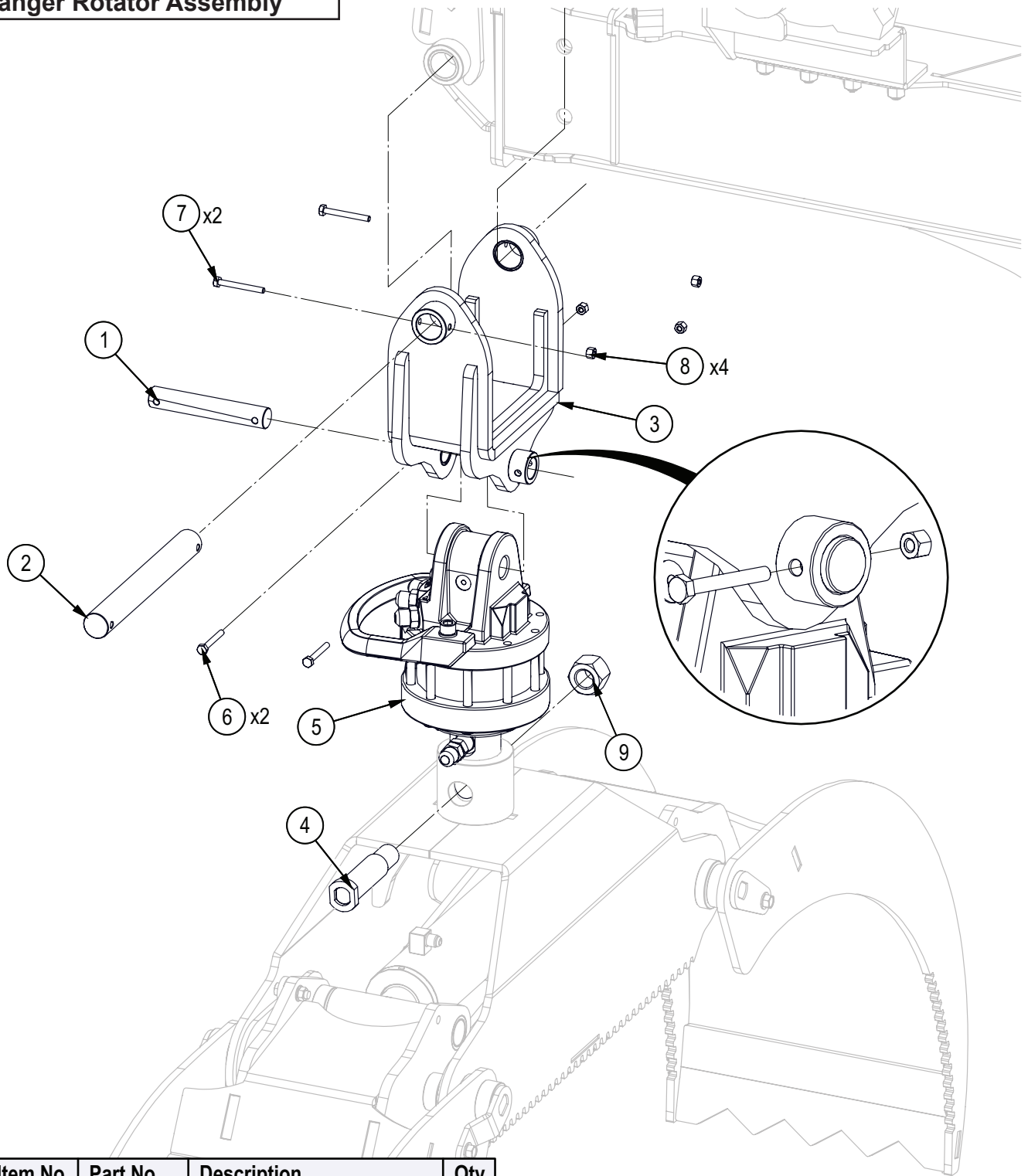
| Item No. | Part No. | Description | Qty |
|----------|----------|--|-----|
| 1 | 6018C801 | Cylinder, 1-1/2" x 1" x 24" | 1 |
| 2 | 6018S804 | Pad, Slide Wear | 4 |
| 3 | 6018W805 | Pad Holder Bottom | 1 |
| 4 | 6018W806 | Pad Holder Top | 1 |
| 5 | 6018W801 | Extension Arm | 1 |
| 6 | 6018W513 | Push Bar | 1 |
| 7 | 6018W515 | Push Bar Mount Pin | 1 |
| 8 | 6018S803 | Pad, Long Slide Wear | 4 |
| 9 | 6018W804 | Cylinder Pin | 1 |
| 10 | Z27107 | Composite Bearing, 1-1/4" ID x 1-1/2" long x 1/8" Wall | 2 |
| 11 | Z | Hex Bolt, | 2 |
| 12 | Z | Hex Bolt, | 2 |
| 13 | Z71312 | Hex Bolt, 3/8NC x 1-1/4" | 4 |
| 14 | Z71512 | Hex Bolt, 1/2NC x 1-1/4" | 8 |
| 15 | Z72221 | Hex Lock Nut, 5/16NC | 4 |
| 16 | Z72231 | Hex Lock Nut, 3/8NC | 4 |
| 17 | Z72251 | Hex Lock Nut, 1/2NC | 8 |
| 18 | Z72291 | Hex Lock Nut, 1NC | 1 |
| 19 | Z75212 | FHCS, 1/4NC x 7/16" | 2 |
| 20 | Z75213 | FHCS, 1/4NC x 5/8" | 38 |
| 21 | Z | Hose Clamp, | 4 |

Upper Frame Assembly S/N 330RP015 & Up



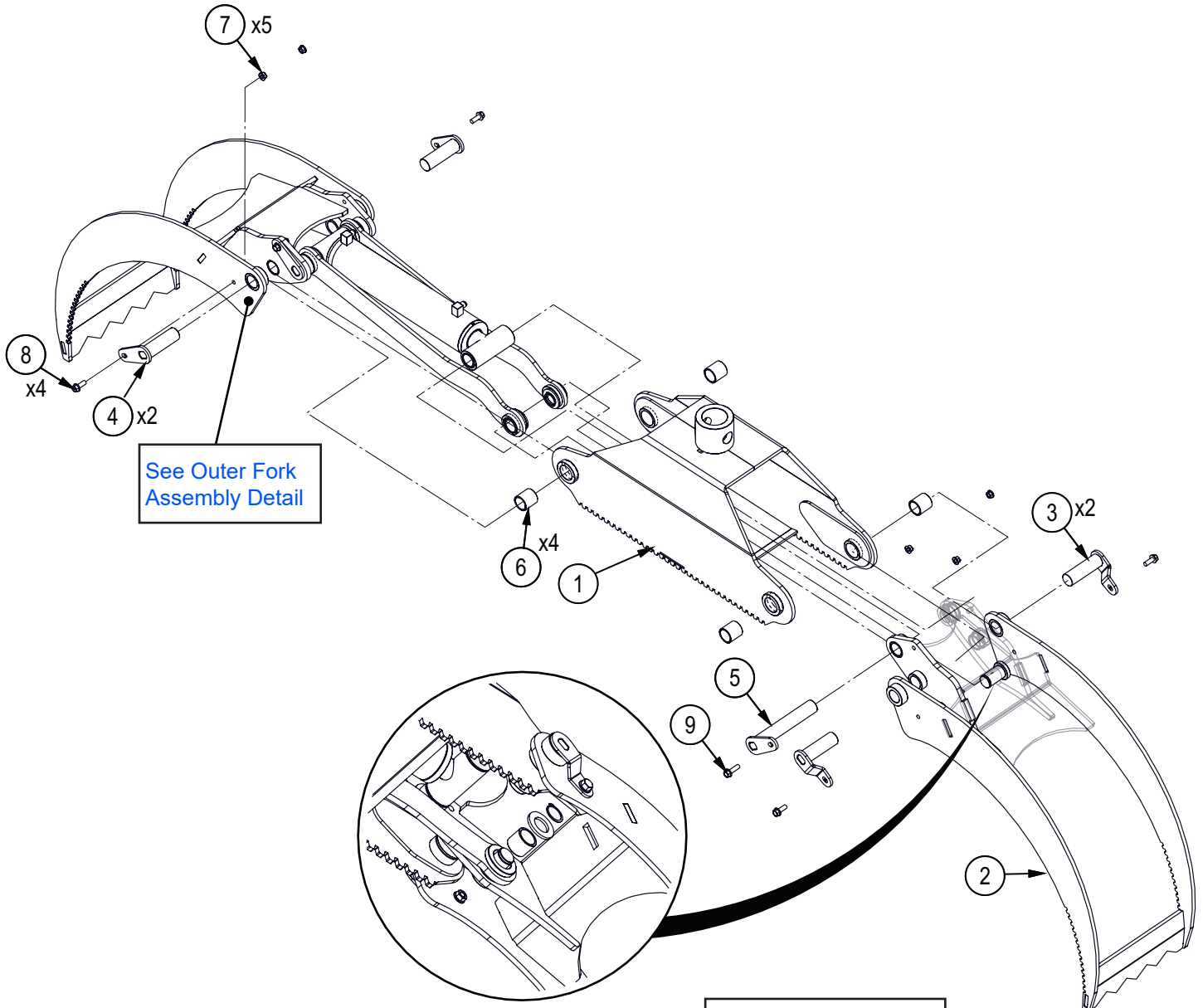
| Item No. | Part No. | Description | Qty |
|----------|----------|--|-----|
| 1 | 6018C801 | Cylinder, 1-1/2" x 1" x 24" | 1 |
| 2 | 6018S804 | Pad, Slide Wear | 4 |
| 3 | 6018W805 | Pad Holder Bottom | 1 |
| 4 | 6018W806 | Pad Holder Top | 1 |
| 5 | 6018W801 | Extension Arm | 1 |
| 6 | 6018W513 | Push Bar | 1 |
| 7 | 6018W515 | Push Bar Mount Pin | 1 |
| 8 | 6018S803 | Pad, Long Slide Wear | 4 |
| 9 | 6018W804 | Cylinder Pin | 1 |
| 10 | Z27107 | Composite Bearing, 1-1/4" ID x 1-1/2" long x 1/8" Wall | 2 |
| 11 | Z71215 | Hex Bolt, 5/16NC x 1-1/2" | 2 |
| 12 | Z71220 | Hex Bolt, | 2 |
| 13 | Z71312 | Hex Bolt, 3/8NC x 1-1/4" | 4 |
| 14 | Z76153 | Hex Bolt, 1/2NC x 1" | 8 |
| 15 | Z72221 | Hex Lock Nut, 5/16NC | 4 |
| 16 | Z72231 | Hex Lock Nut, 3/8NC | 4 |
| 17 | Z72551 | Serrated Flange Lock Nut, 1/2NC | 8 |
| 18 | Z72291 | Hex Lock Nut, 1NC | 1 |
| 19 | Z75212 | FHCS, 1/4NC x 7/16" | 2 |
| 20 | Z75213 | FHCS, 1/4NC x 5/8" | 38 |
| 21 | 2250L286 | Hose Clamp, 2 x 3/8" | 8 |

Hanger Rotator Assembly



| Item No. | Part No. | Description | Qty |
|----------|----------|---------------------------|-----|
| 1 | 6018M514 | Pin, Rotator Swing | 1 |
| 2 | 6018M515 | Pin, Rotator Mount | 1 |
| 3 | 6018W507 | Hanger | 1 |
| 4 | 6018W514 | Clamp Mount Pin | 1 |
| 5 | Z54110 | Hydraulic Rotator, CR400W | 1 |
| 6 | Z71120 | Hex Bolt, 1/4NC x 2" | 2 |
| 7 | Z71122 | Hex Bolt, 1/4NC x 2-1/4" | 2 |
| 8 | Z72211 | Hex Lock Nut, 1/4NC | 4 |
| 9 | Z72291 | Hex Lock Nut, 1NC | 1 |

Grapple Assembly S/N 330RP001 to 330RP014

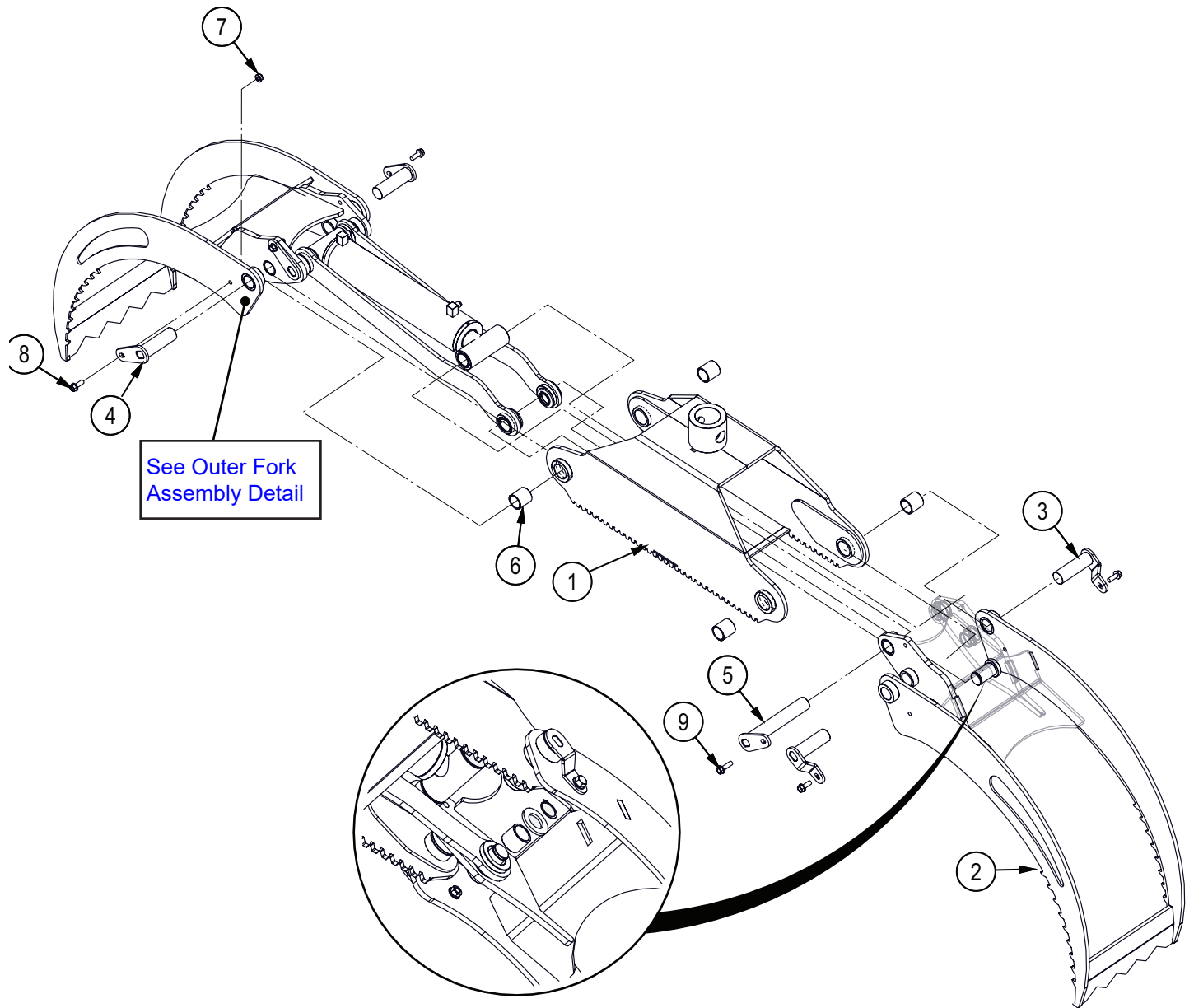


See Outer Fork Assembly Detail

Note: See Outer Fork Assembly Detail – Items 2, 8, and 9

| Item No. | Part No. | Description | Qty |
|----------|----------|--|-----|
| 1 | 6018W501 | Grapple Housing | 1 |
| 2 | 6018W502 | Inner Fork | 1 |
| 3 | 6018W508 | Inner Fork Pin | 2 |
| 4 | 6018W509 | Outer Fork Pin | 2 |
| 5 | 6018W510 | Short Cylinder Pin | 1 |
| 6 | Z27107 | Composite Bearing, 1-1/4" 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" | 4 |
| 9 | Z76137 | Flange Bolt, 3/8NC x 1-1/4" | 1 |

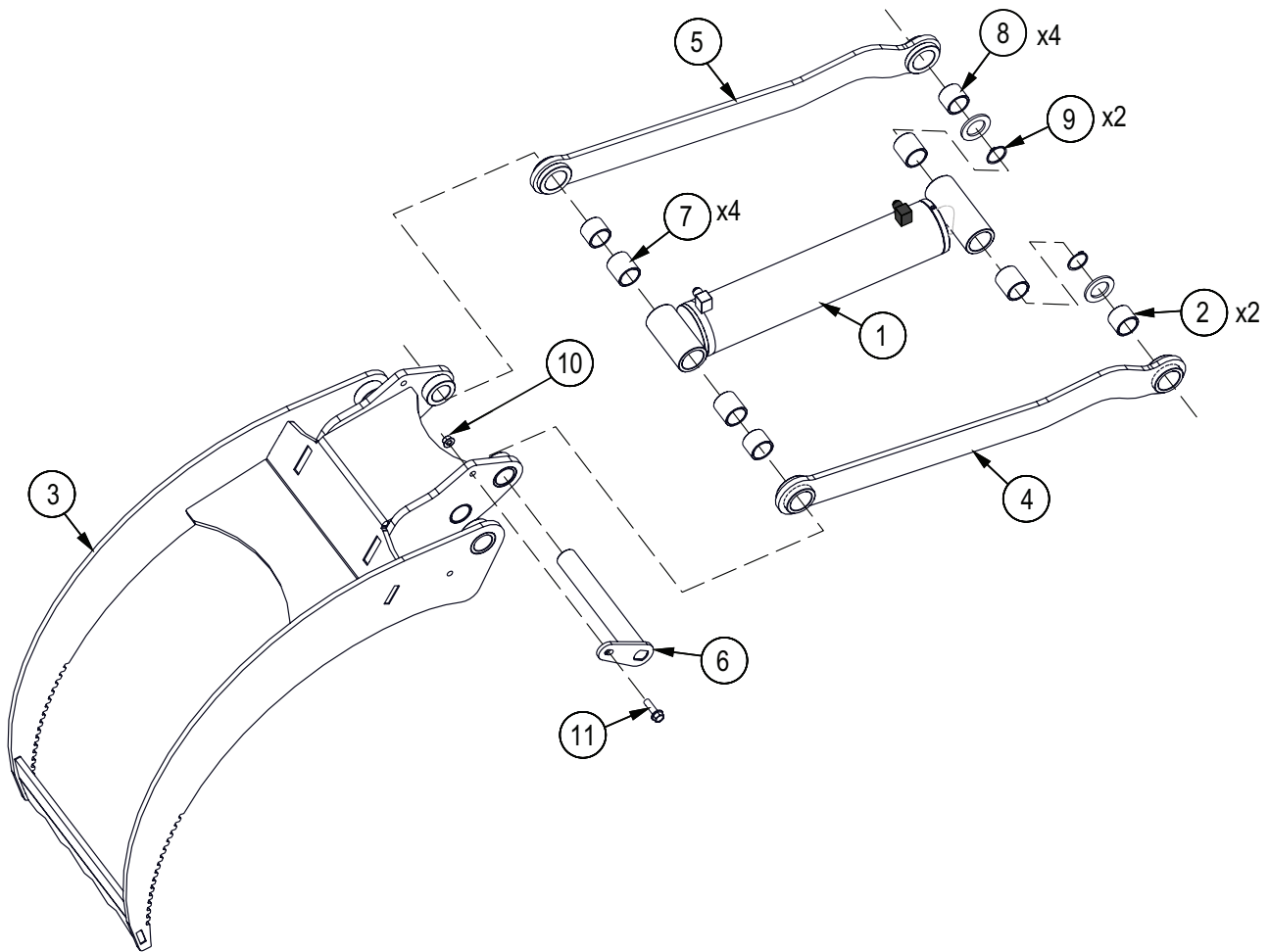
Grapple Assembly S/N 330RP015 & Up



Note: See Outer Fork Assembly Detail - Items 2, 8, and 9

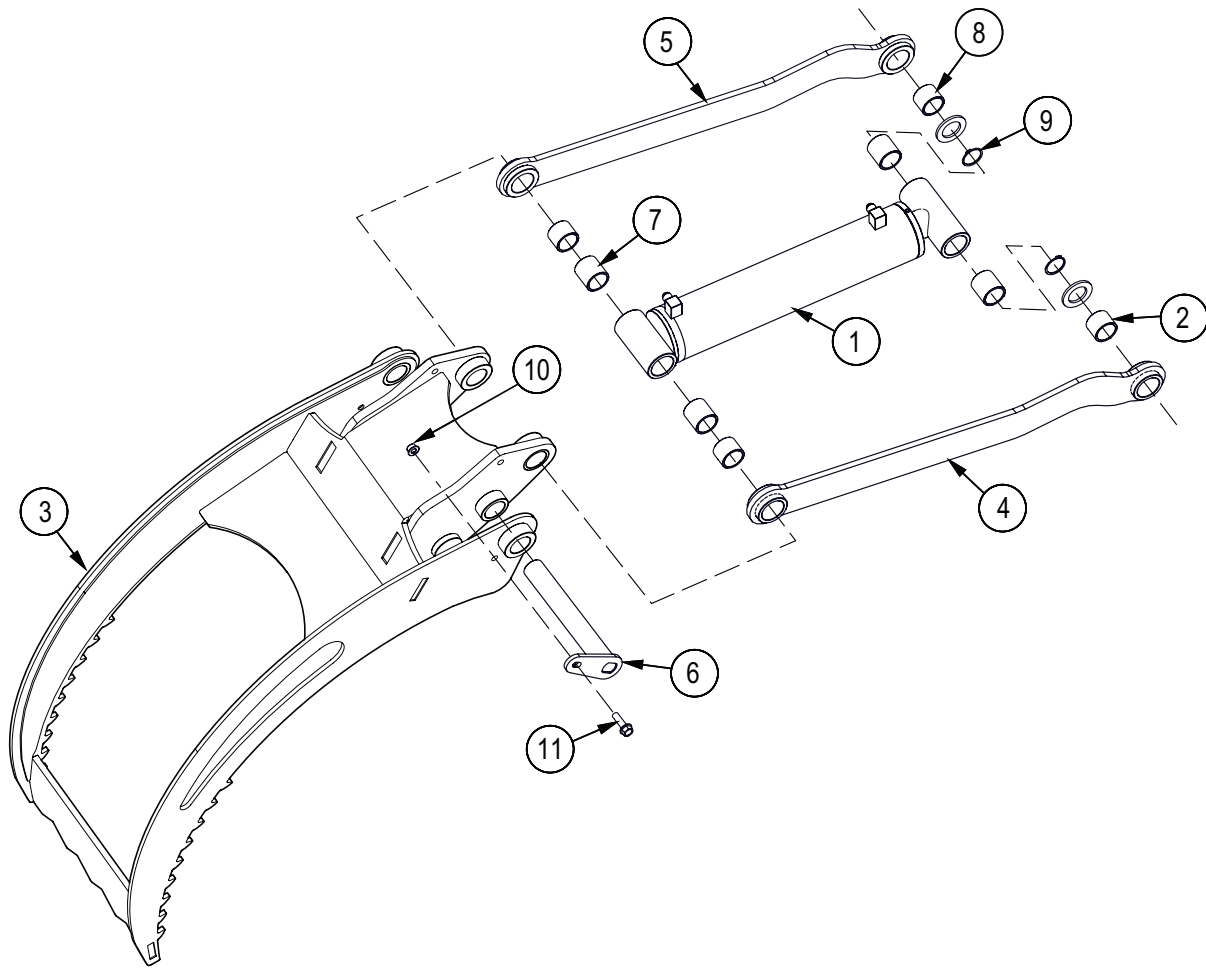
| Item No. | Part No. | Description | Qty |
|----------|----------|--|-----|
| 1 | 6018W501 | Grapple Housing | 1 |
| 2 | 6018W517 | Inner Fork | 1 |
| 3 | 6018W508 | Inner Fork Pin | 2 |
| 4 | 6018W509 | Outer Fork Pin | 2 |
| 5 | 6018W510 | Short Cylinder Pin | 1 |
| 6 | Z27107 | Composite Bearing, 1-1/4" 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" | 4 |
| 9 | Z76137 | Flange Bolt, 3/8NC x 1-1/4" | 1 |

Outer Fork Assembly Detail S/N 330RP001 to 330RP014



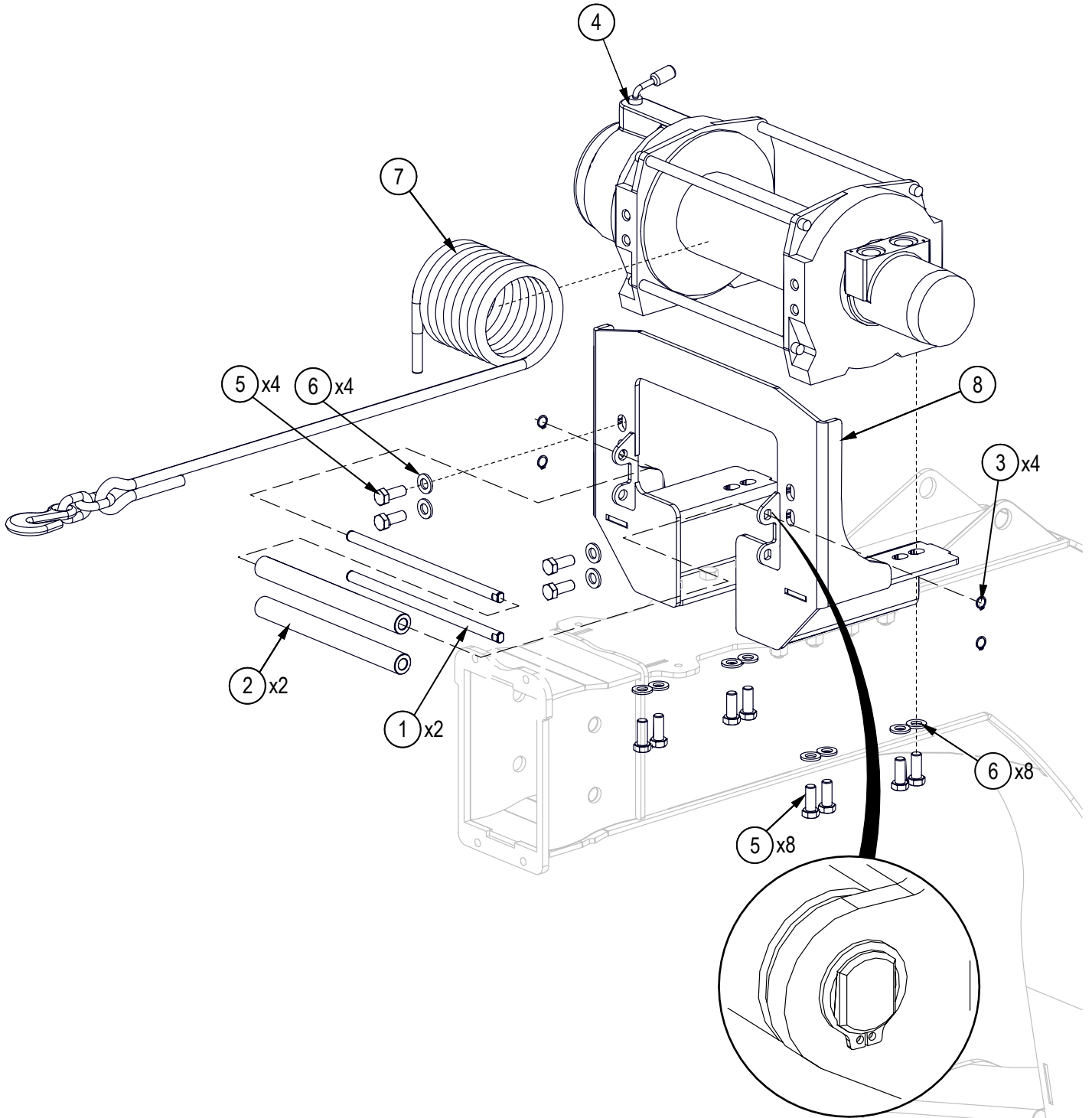
| Item No. | Part No. | Description | Qty |
|----------|-----------|--|-----|
| 1 | 6018C501 | Cylinder, 3" x 1-3/4" x 12-5/8" | 1 |
| 2 | 6018L526 | Washer, Linkage Retaining | 2 |
| 3 | 6018W503 | Outer Fork | 1 |
| 4 | 6018W504 | Linkage | 1 |
| 5 | 6018W504H | Linkage Mirror | 1 |
| 6 | 6018W511 | Long Cylinder Pin | 1 |
| 7 | Z27107 | Composite Bearing, 1-1/4" ID x 1-1/2" long x 1/8" Wall | 4 |
| 8 | Z27108 | Composite Bearing, 1-1/4" ID x 1-1/8" long x 1/8" Wall | 4 |
| 9 | Z46202 | External Retaining Ring, 1-1/4" | 2 |
| 10 | Z72531 | Serrated Flange Locknut, 3/8NC | 1 |
| 11 | Z76137 | Flange Bolt, 3/8NC x 1-1/4" | 1 |

Outer Fork Assembly S/N 330RP015 & Up



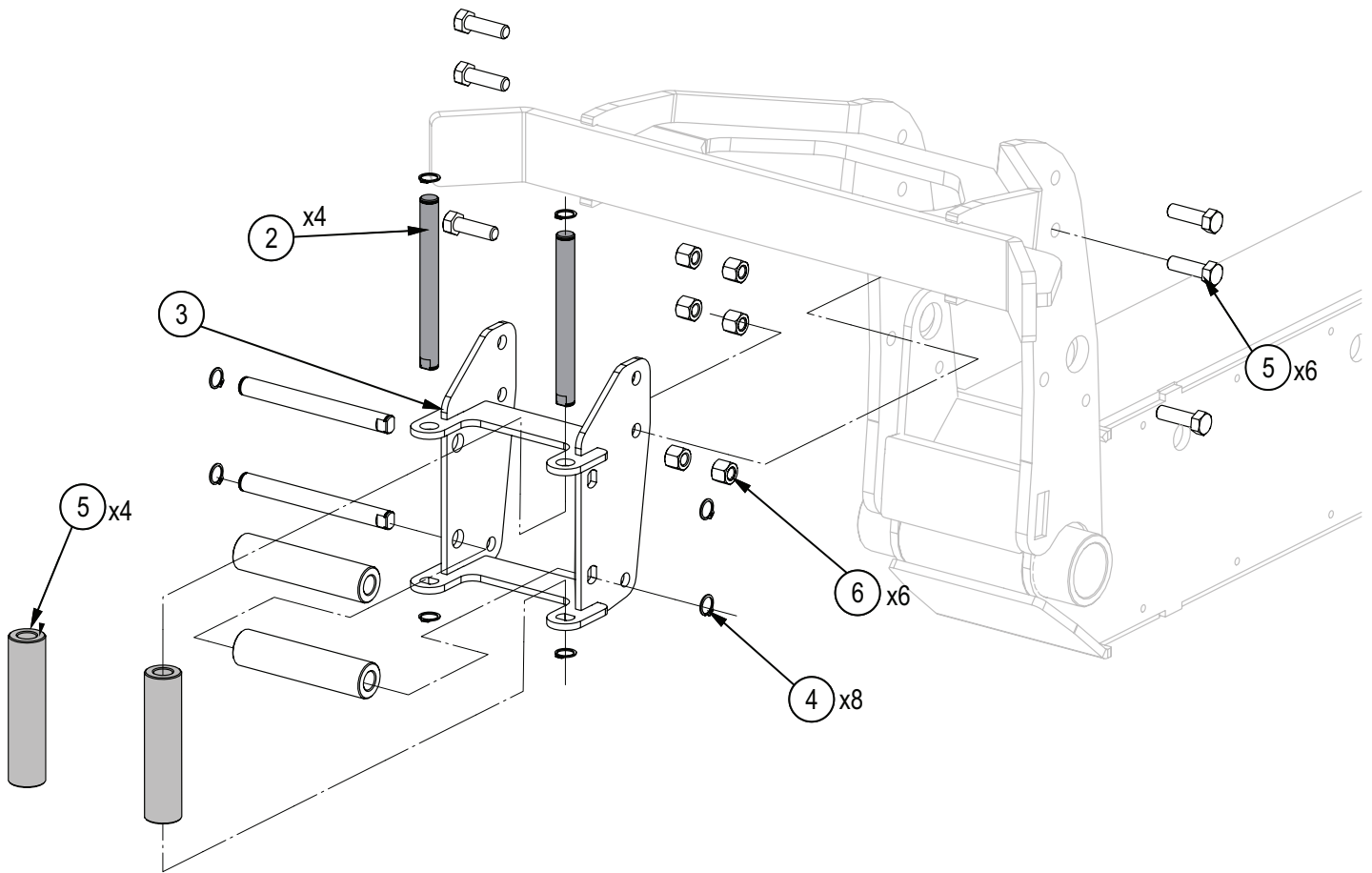
| Item No. | Part No. | Description | Qty |
|----------|-----------|--|-----|
| 1 | 6018C501 | Cylinder, 3" x 1-3/4" x 12-5/8" | 1 |
| 2 | 6018L526 | Washer, Linkage Retaining | 2 |
| 3 | 6018W518 | Outer Fork | 1 |
| 4 | 6018W504 | Linkage | 1 |
| 5 | 6018W504H | Linkage Mirror | 1 |
| 6 | 6018W511 | Long Cylinder Pin | 1 |
| 7 | Z27107 | Composite Bearing, 1-1/4" ID x 1-1/2" long x 1/8" Wall | 4 |
| 8 | Z27108 | Composite Bearing, 1-1/4" ID x 1-1/8" long x 1/8" Wall | 4 |
| 9 | Z46202 | External Retaining Ring, 1-1/4" | 2 |
| 10 | Z72531 | Serrated Flange Locknut, 3/8NC | 1 |
| 11 | Z76137 | Flange Bolt, 3/8NC x 1-1/4" | 1 |

Winch Assembly



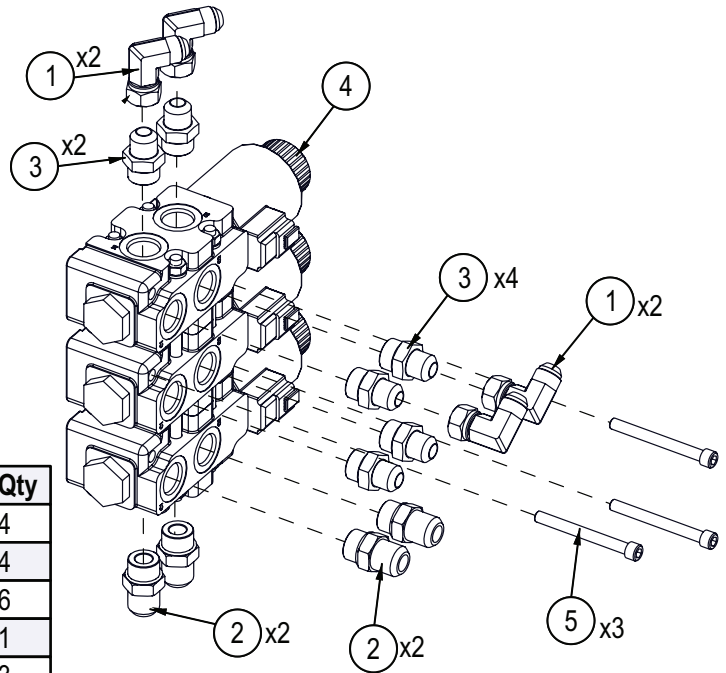
| Item No. | Part No. | Description | Qty |
|----------|----------|---|-----|
| 1 | 6018M801 | Pin, Long Fairlead | 2 |
| 2 | 6018S801 | Fairlead, Long | 2 |
| 3 | Z46201 | External Retaining Ring, 1/2" | 4 |
| 4 | Z54111 | Hydraulic Winch, 9-A-48 | 1 |
| 5 | Z77171 | Hex Bolt, M12x1.75 x 30mm | 12 |
| 6 | Z77372 | DIN 125 Washer, M12 | 12 |
| 7 | Z92128 | Synthetic Mainline, 1/2" x 100ft x Hook Chain End | 1 |
| 8 | 6018W802 | Winch Cradle | 1 |

Fairlead Assembly



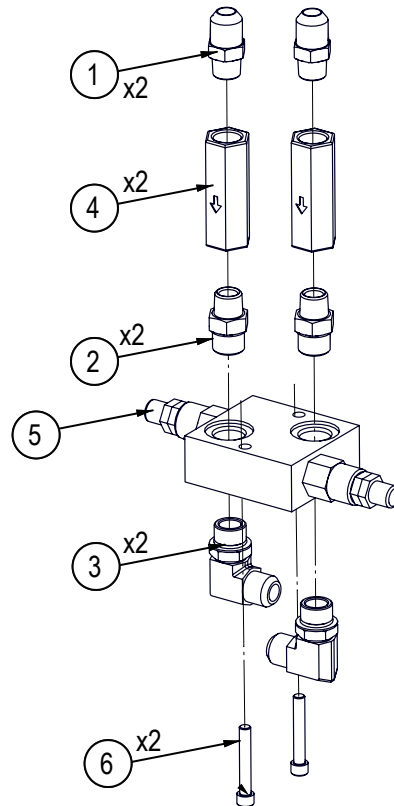
| Item No. | Part No. | Description | Qty |
|----------|----------|-------------------------------|-----|
| 1 | 6018M803 | Pin, Short Fairlead | 4 |
| 2 | 6018S802 | Fairlead, Short | 4 |
| 3 | 6018W803 | Weldment, Fairlead | 1 |
| 4 | Z46201 | External Retaining Ring, 1/2" | 8 |
| 5 | Z71312 | Hex Bolt, 3/8NC x 1-1/4" | 6 |
| 6 | Z72231 | Hex Lock Nut, 3/8NC | 6 |

Spool Valve Assembly



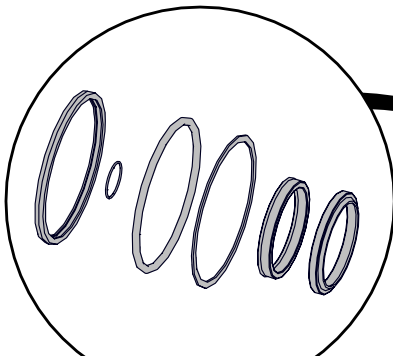
| Item No. | Part No. | Description | Qty |
|----------|----------|--|-----|
| 1 | Z51562 | Elbow 90, MJIC x FJICX 0808 | 4 |
| 2 | Z516413 | Straight, MJIC x MORB 1010 | 4 |
| 3 | Z51647 | Straight, MJIC x MORB 0810 | 6 |
| 4 | Z56616 | Triple Spool Valve Assy, Selector SOL 21 GPM | 1 |
| 5 | Z75122 | SHCS, 5/16NC x 3" | 3 |

Relief Valve Assembly

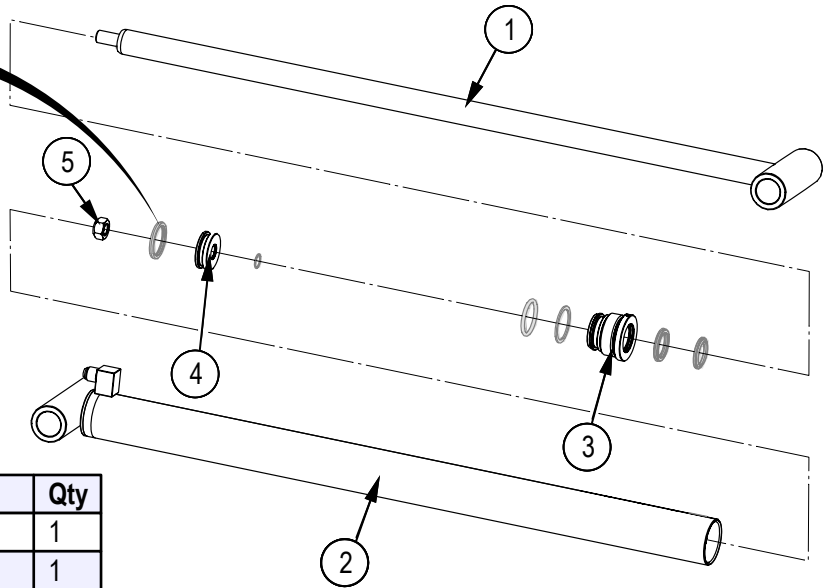


| Item No. | Part No. | Description | Qty |
|----------|----------|----------------------------------|-----|
| 1 | Z51449 | Straight, MJIC x MP 1008 | 2 |
| 2 | Z51611 | Straight, MORB x MP 1008 | 2 |
| 3 | Z516502 | Elbow 90, MJIC x MORB 1010 | 2 |
| 4 | Z56107 | Check Valve, FP08 x 0.110" | 2 |
| 5 | Z56407 | Crossover Relief Valve x 2200PSI | 1 |
| 6 | Z75123 | SHCS, 5/16NC x 2" | 2 |

Extension Arm Cylinder Detail

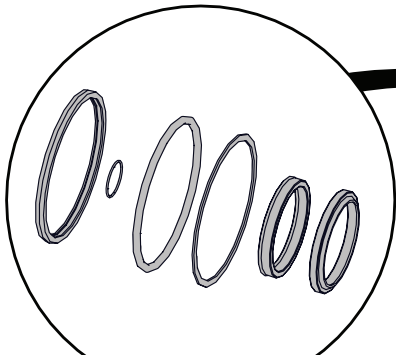


Seal Kit #SLK-1510AN

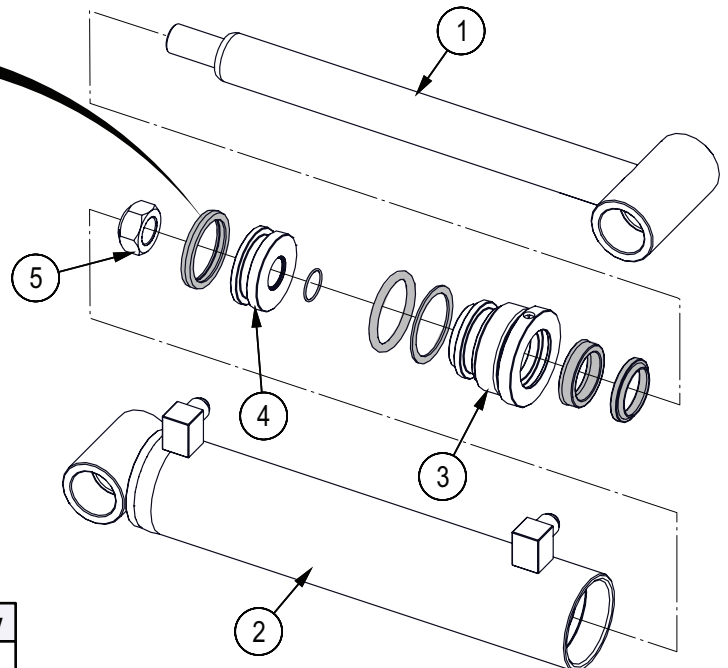


| Item No. | Part No. | Description | Qty |
|----------|------------|----------------------------|-----|
| 1 | 6018C8013 | Rod, 1-1/4" x 3/4NF | 1 |
| 2 | 6018C8014 | Barrel, 1-1/2" | 1 |
| 3 | G150-100S | Gland, 1-1/2" x 1" | 1 |
| 4 | P500-150SP | Piston, 1-1/2" Bore | 1 |
| 5 | Z72255G8 | Hex Top-lock Nut, 1/2NC G8 | 1 |

Grapple Cylinder Detail

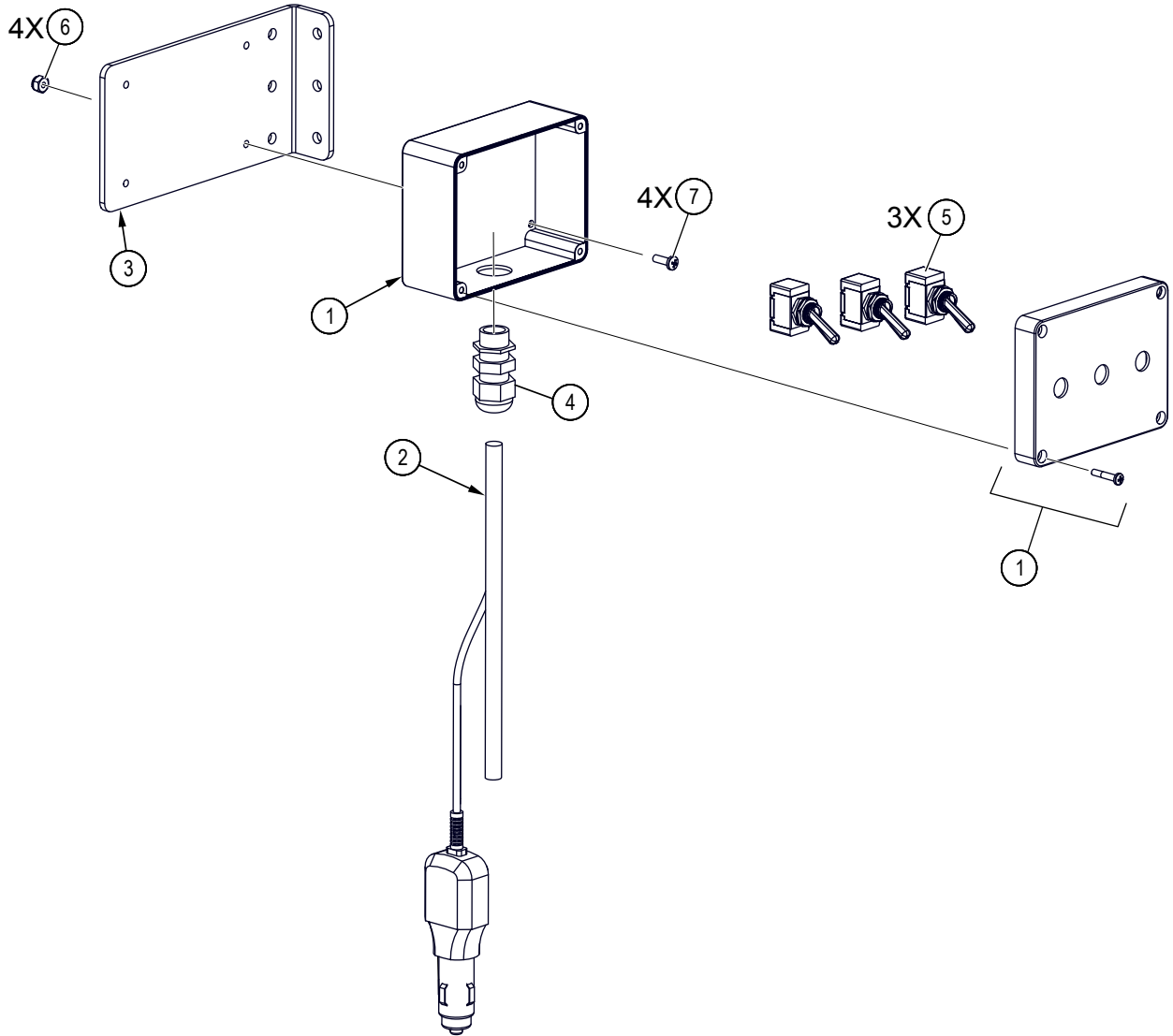


Seal Kit #SLK-3017



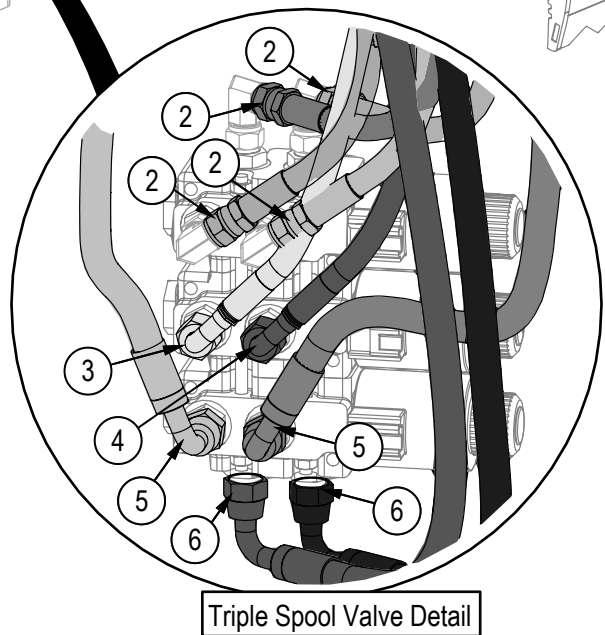
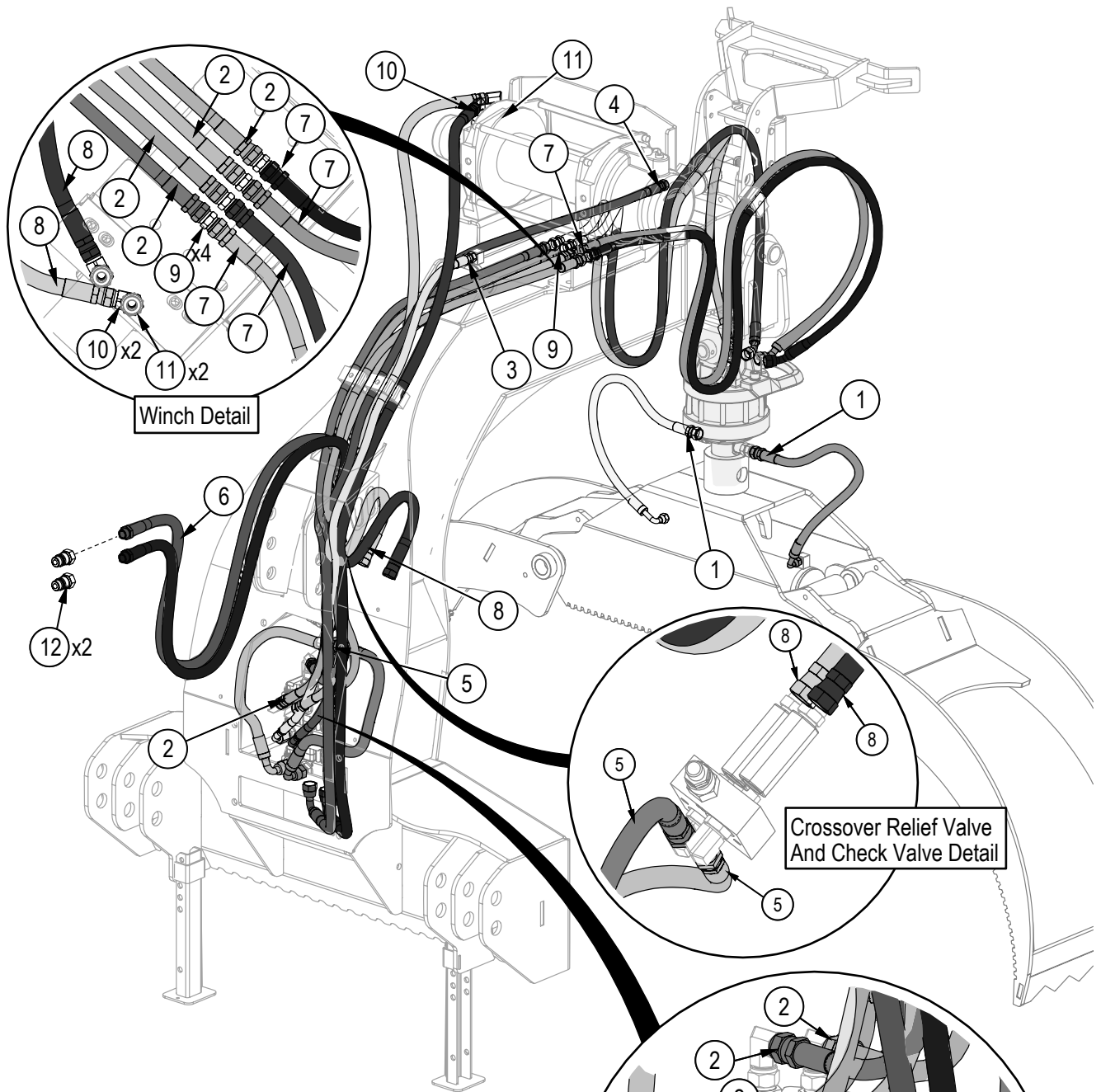
| Item No. | Part No. | Description | Qty |
|----------|------------|-----------------------------|-----|
| 1 | 6018C5013 | Rod, 1-3/4" 1" | 1 |
| 2 | 6018C5014 | Barrel, 3" | 1 |
| 3 | G300-175S | Gland, 3" x 1-3/4" | 1 |
| 4 | P100-300SP | Piston, 3" Bore | 1 |
| 5 | Z722909G8 | Hex Top-lock Nut, 1-14NF G8 | 1 |

Control Box



| Item No. | Part No. | Description | Qty |
|----------|----------|---|-----|
| 1 | Z62215 | Junction Box | 1 |
| 2 | 6018F801 | Wire Harness, 3-Spool Deutsch Connector | 1 |
| 3 | 6018L810 | Switch Box Mount | 1 |
| 4 | Z62820 | Straight Fitting, 3/8" Wire | 1 |
| 5 | Z66108 | Toggle Switch, Two Position | 3 |
| 6 | Z72202 | Hex Lock Nut, #8NC | 4 |
| 7 | Z78309 | Machine Screw, #8NC x 1/2" | 4 |

Hydraulic Circuit

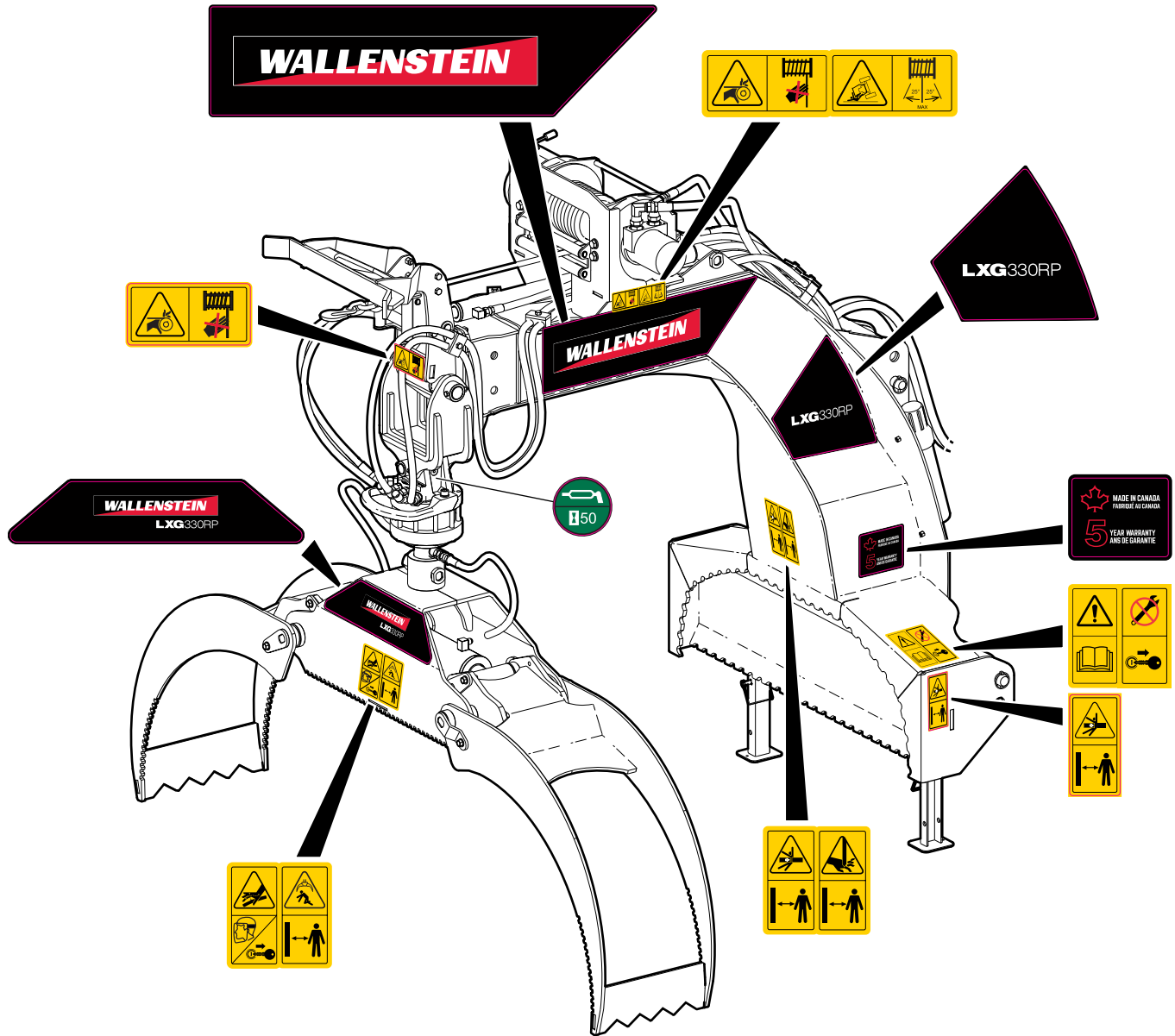


| Item No. | Part No. | Description | Qty |
|----------|----------|------------------------------------|-----|
| 1 | 6018F501 | 3/8" Hose, FJIC08 x 90FJIC06 x 21" | 2 |
| 2 | 6018F802 | 3/8" Hose, FJIC08 x FJIC08 x 52" | 4 |
| 3 | 6018F803 | 3/8" Hose, FJIC06 x 90FJIC08 x 45" | 1 |
| 4 | 6018F804 | 3/8" Hose, FJIC06 x 90FJIC08 x 70" | 1 |
| 5 | 6018F806 | 1/2" Hose, FJIC10 x 90FJIC10 x 15" | 2 |
| 6 | 6018F807 | 1/2" Hose, MP08 x 90FJIC10 x 80" | 2 |
| 7 | 6018F808 | 3/8" Hose, FJIC08 x 45FJIC08 x 72" | 4 |
| 8 | 6018F809 | 1/2" Hose, FJIC10 x FJIC08 x 58" | 2 |
| 9 | Z51411 | Straight, MJIC x MJIC 0808 | 4 |
| 10 | Z51564 | Elbow 90, MJIC x FJICX 0810 | 2 |
| 11 | Z516413 | Straight, MJIC x MORB 1010 | 2 |
| 12 | Z51926 | Quick Coupler, FP08 x M ISO 7241-1 | 2 |

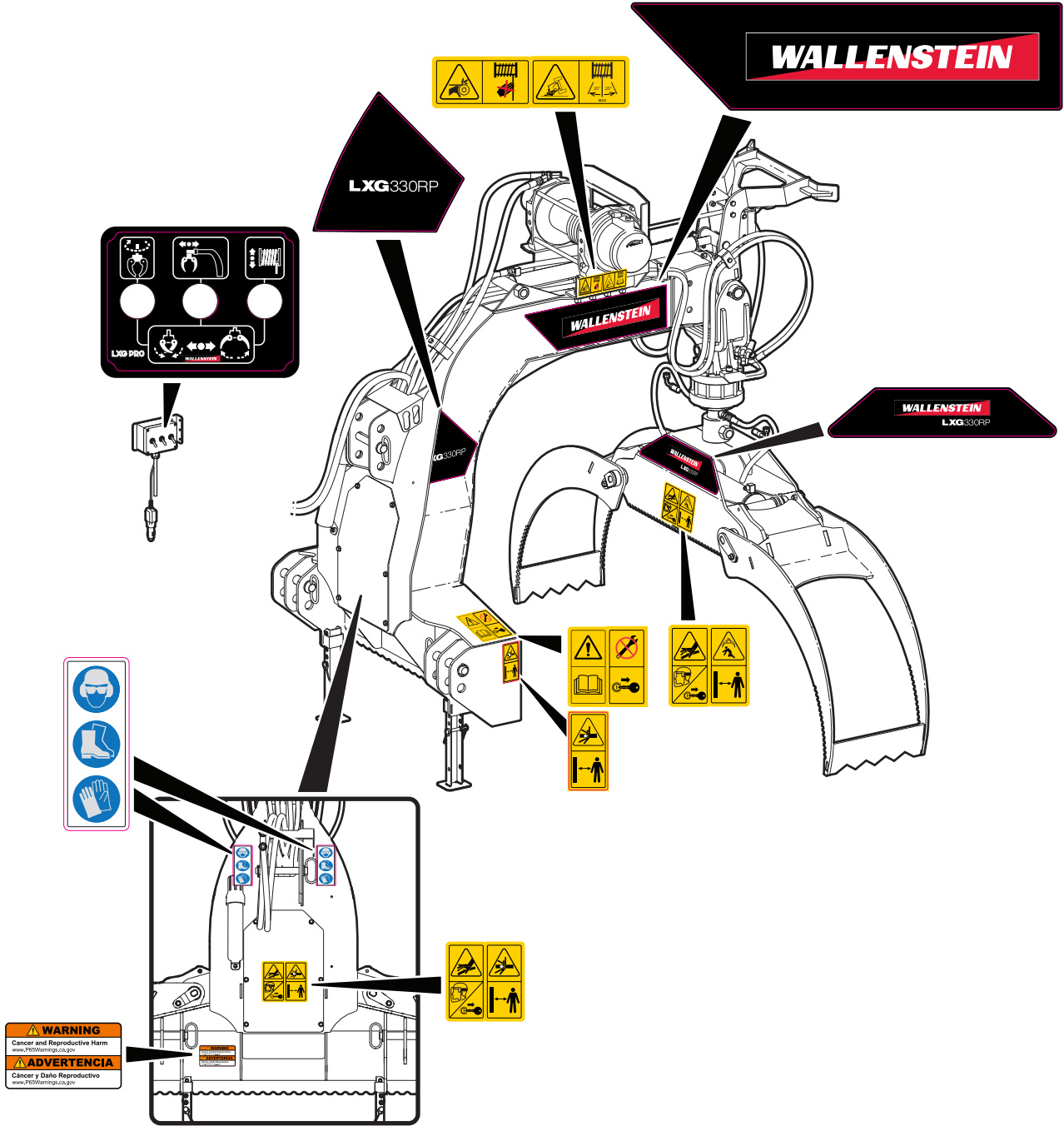
Decal Layout

IMPORTANT! If parts are replaced that have safety signs on them, new signs must be applied. Safety signs must always be replaced if they become damaged, are removed, or become illegible.

Safety signs are included in the product decal kit available from your authorized dealer. Decals are not available separately.

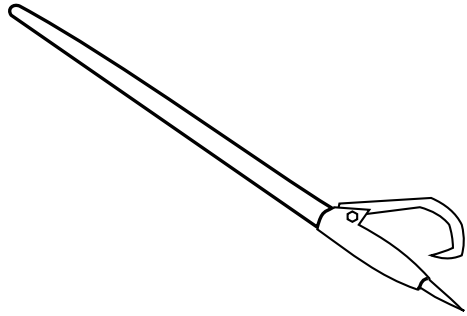


Decal Layout



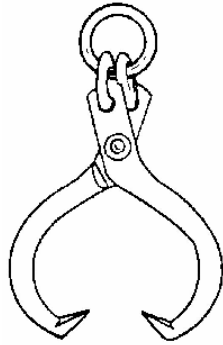
Accessories

Call your dealer for pricing and availability

**48" Log Peavey – P/N 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 – P/N 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.


Common Bolt Torque Values

Checking Bolt Torque

The tables shown give correct torque values for various bolts and capscrews. Tighten all bolts to the torque values specified in the table, unless indicated otherwise. Check tightness of bolts periodically.

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

IMPORTANT! Torque figures indicated in the table are for non-greased or non-oiled threads. Do not grease or oil threads unless indicated otherwise. When using a thread locker, increase torque values by 5%.

 **NOTE:** Bolt grades are identified by their head markings.

Imperial Bolt Torque Specifications

| Bolt Diameter | Torque Value | | | | | |
|---------------|--------------|-----|-----------|-----|-----------|------|
| | SAE Gr. 2 | | SAE Gr. 5 | | SAE Gr. 8 | |
| | lbf•ft | N•m | lbf•ft | N•m | lbf•ft | N•m |
| 1/4" | 6 | 8 | 9 | 12 | 12 | 17 |
| 5/16" | 10 | 13 | 19 | 25 | 27 | 36 |
| 3/8" | 20 | 27 | 33 | 45 | 45 | 63 |
| 7/16" | 30 | 41 | 53 | 72 | 75 | 100 |
| 1/2" | 45 | 61 | 80 | 110 | 115 | 155 |
| 9/16" | 60 | 95 | 115 | 155 | 165 | 220 |
| 5/8" | 95 | 128 | 160 | 215 | 220 | 305 |
| 3/4" | 165 | 225 | 290 | 390 | 400 | 540 |
| 7/8" | 170 | 230 | 420 | 570 | 650 | 880 |
| 1" | 225 | 345 | 630 | 850 | 970 | 1320 |



SAE Gr. 2



SAE Gr. 5



SAE Gr. 8

Metric Bolt Torque Specifications

| Bolt Diameter | Torque Value | | | |
|---------------|--------------|-------|----------|-------|
| | 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 Values

Tightening Flare Type Tube Fittings

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

If a torque wrench is not available, use the FFFT (Flats From Finger Tight) method.

| Hydraulic Fitting Torque | | | | | |
|--------------------------|-----------------------|--------------|---------|-------------------------|-------|
| Tube Size OD | Hex Size Across Flats | Torque value | | Flats From Finger Tight | |
| | | lbf·ft | N·m | Flats | Turns |
| 3/16 | 7/16 | 8 | 8 | 2 | 1/8 |
| 1/4 | 9/16 | 11–12 | 15–17 | 2 | 1/8 |
| 5/16 | 5/8 | 14–18 | 19–22 | 2 | 1/8 |
| 3/8 | 11/16 | 20–22 | 27–30 | 1-1/4 | 1/8 |
| 1/2 | 7/8 | 44–48 | 59–65 | 1 | 1/8 |
| 5/8 | 1 | 50–58 | 68–79 | 1 | 1/8 |
| 3/4 | 1-1/4 | 79–88 | 107–119 | 1 | 1/8 |
| 1 | 1-5/8 | 117–125 | 158–170 | 1 | 1/8 |

Values shown are for non-lubricated connections.