

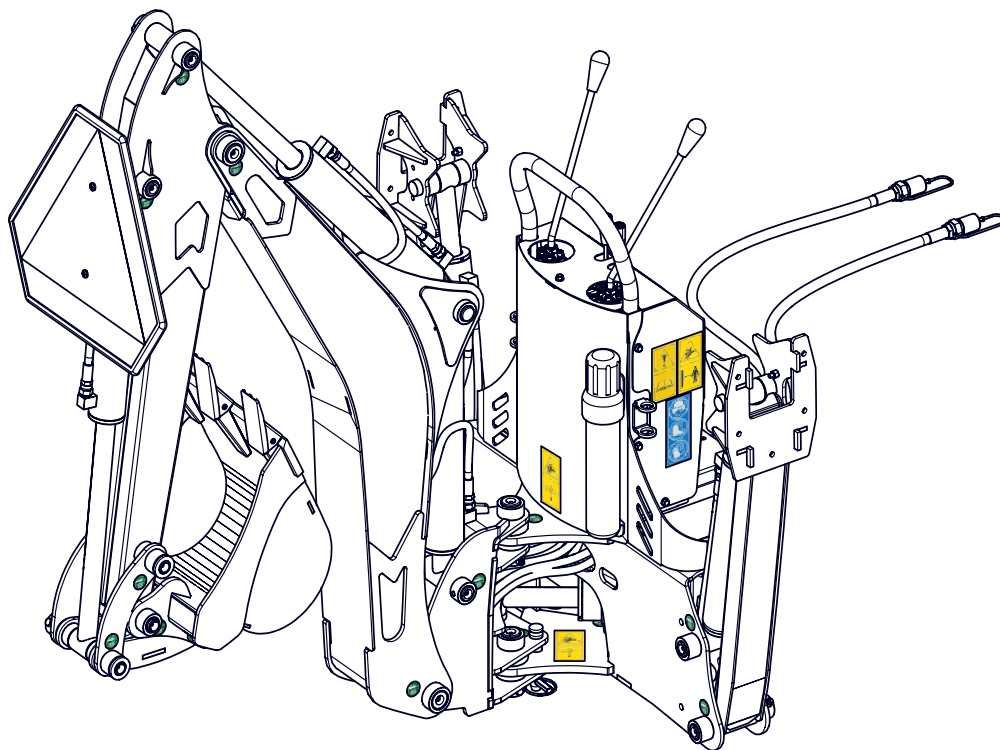


EMB Manufacturing Inc.
4144 Boomer Line · St. Clements, On · N0B 2M0 · Canada
Ph: (519) 699-9283 · Fax: (519) 699-4146
www.wallensteinequipment.com

GE605 Backhoe

Parts Manual

Starting with S/N's
3605001 and on



Refer to the operators
manual for safe
operation and
maintenance



3015T100 GE605 Rev A Parts Manual.241115
Rev # 150517

Foreword

EMB Mfg. has prepared this parts manual to assist customers in ordering quality OEM replacement parts.

Proper and regular service and replacing old, worn or broken parts with the correct OEM parts are essential to prolonging the life of your EMB product. Please refer to this manual before ordering any replacement parts.

All information contained in this parts manual is based on the latest product specification available at the time of printing this manual. If your product differs from the specifications contained within this manual contact EMB Mfg. for information.

EMB reserves the right to alter specifications on their products at any time.

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For parts and information please contact your dealer. If your dealer is no longer available please go to our website: <http://www.wallensteinequipment.com> and click on "FIND A DEALER NEAR YOU" for information on a local dealer.

Table of Contents Page

| | |
|--|-----------|
| Bolt Torque..... | 4 |
| Hydraulic Fitting Torque | 5 |
| Main Frame Assembly | 6 |
| Stabilizer Leg Assembly | 7 |
| Main Boom Assembly | 8 |
| Dipper Boom Assembly | 9 |
| Bucket & Linkage Assembly..... | 10 |
| Swing Cylinder Assembly | 11 |
| Main Tower Cylinder Assembly..... | 11 |
| Stabilizer Cylinder Assembly..... | 11 |
| Dipper Boom Cylinder Assembly..... | 11 |
| Bucket Cylinder Assembly | 12 |
| Hydraulics & Valve Assemblies..... | 12 |
| Valve Service Parts..... | 13 |
| Hydraulic Hose Schematic & List | 14 |
| Label Layout..... | 15 |
| Accessories..... | 16 |

Maintenance should be performed by
trained personnel only.



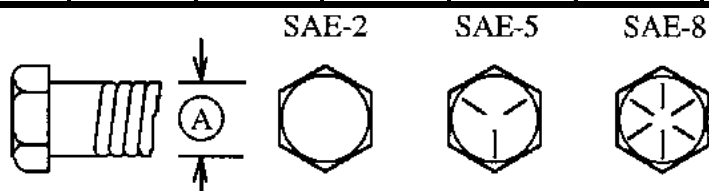
Refer to the operators
manual for safe
operation and
maintenance

Bolt Torque

CHECKING BOLT TORQUE

The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

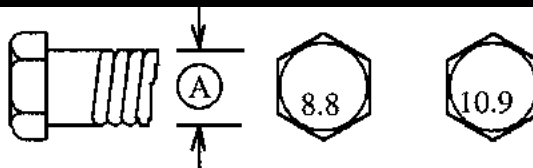
| ENGLISH TORQUE SPECIFICATIONS | | | | | | |
|-------------------------------|------------------------|-----|------------------------|-----|------------------------|-----|
| Bolt Diameter "A" | Bolt Torque* | | | | | |
| | SAE 2 (N.m) (lb-ft) | | SAE 5 (N.m) (lb-ft) | | SAE 8 (N.m) (lb-ft) | |
| 1/4"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



Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

* Torque value for bolts and capscrews are identified by their head markings.

| METRIC TORQUE SPECIFICATIONS | | | | |
|------------------------------|----------------------|------|-----------------------|------|
| Bolt Diameter "A" | Bolt Torque* | | | |
| | 8.8 (N.m) (lb-ft) | | 10.9 (N.m) (lb-ft) | |
| M3 | 0.5 | 0.4 | 1.8 | 1.3 |
| M4 | 3 | 2.2 | 4.5 | 3.3 |
| M5 | 6 | 4 | 9 | 7 |
| M6 | 10 | 7 | 15 | 11 |
| M8 | 25 | 18 | 35 | 26 |
| M10 | 50 | 37 | 70 | 52 |
| M12 | 90 | 66 | 125 | 92 |
| M14 | 140 | 103 | 200 | 148 |
| M16 | 225 | 166 | 310 | 229 |
| M20 | 435 | 321 | 610 | 450 |
| M24 | 750 | 553 | 1050 | 774 |
| M30 | 1495 | 1103 | 2100 | 1550 |
| M36 | 2600 | 1917 | 3675 | 2710 |



Hydraulic Fitting Torque

Tightening Flare Type Tube Fittings *

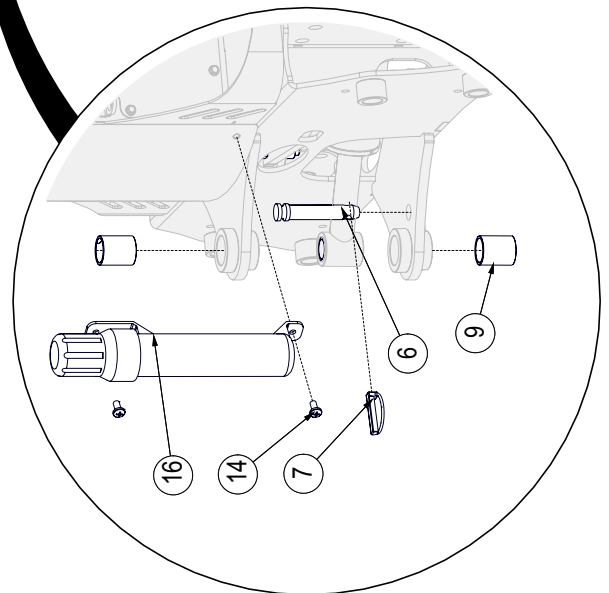
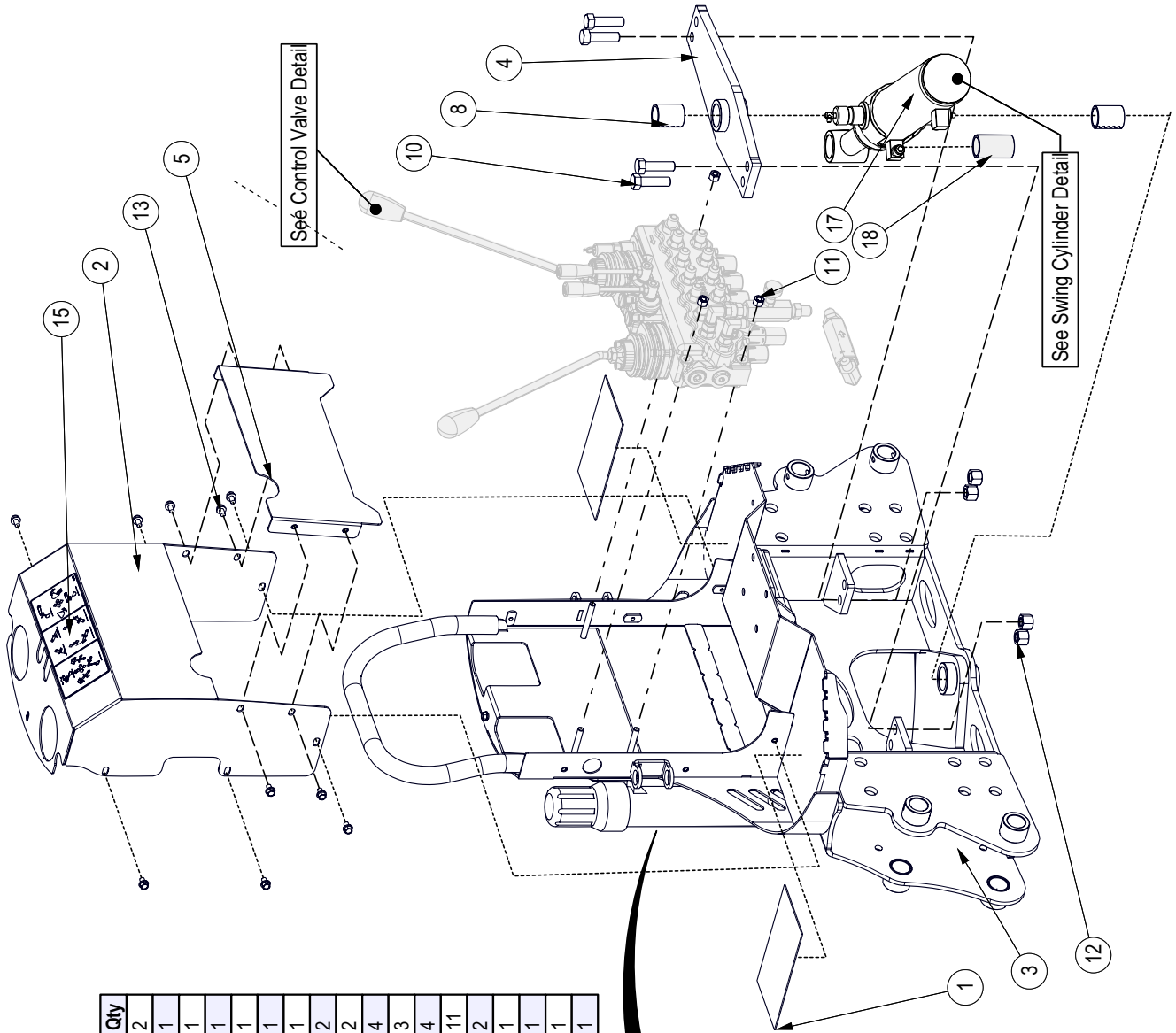
1. Check flare and flare seat for defects that might cause leakage.
2. Align tube with fitting before tightening.
3. Lubricate connection and hand tighten swivel nut until snug.
4. To prevent twisting the tube(s), use two wrenches. Place one wrench on the connector body and with the second tighten the swivel nut to the torque shown.

| Tube Size OD | Nut Size Across Flats | Torque Value* | | Recommended Turns To Tighten (After Finger Tightening) | |
|--------------|-----------------------|---------------|-----------|--|------------|
| | | (N.m) | (lb-ft) | (Flats) | (Turn) |
| 3/16 | 7/16 | 8 | 6 | 1 | 1/6 |
| 1/4 | 9/16 | 12 | 9 | 1 | 1/6 |
| 5/16 | 5/8 | 16 | 12 | 1 | 1/6 |
| 3/8 | 11/16 | 24 | 18 | 1 | 1/6 |
| 1/2 | 7/8 | 46 | 34 | 1 | 1/6 |
| 5/8 | 1 | 62 | 46 | 1 | 1/6 |
| 3/4 | 1-1/4 | 102 | 75 | 3/4 | 1/8 |
| 7/8 | 1-3/8 | 122 | 90 | 3/4 | 1/8 |

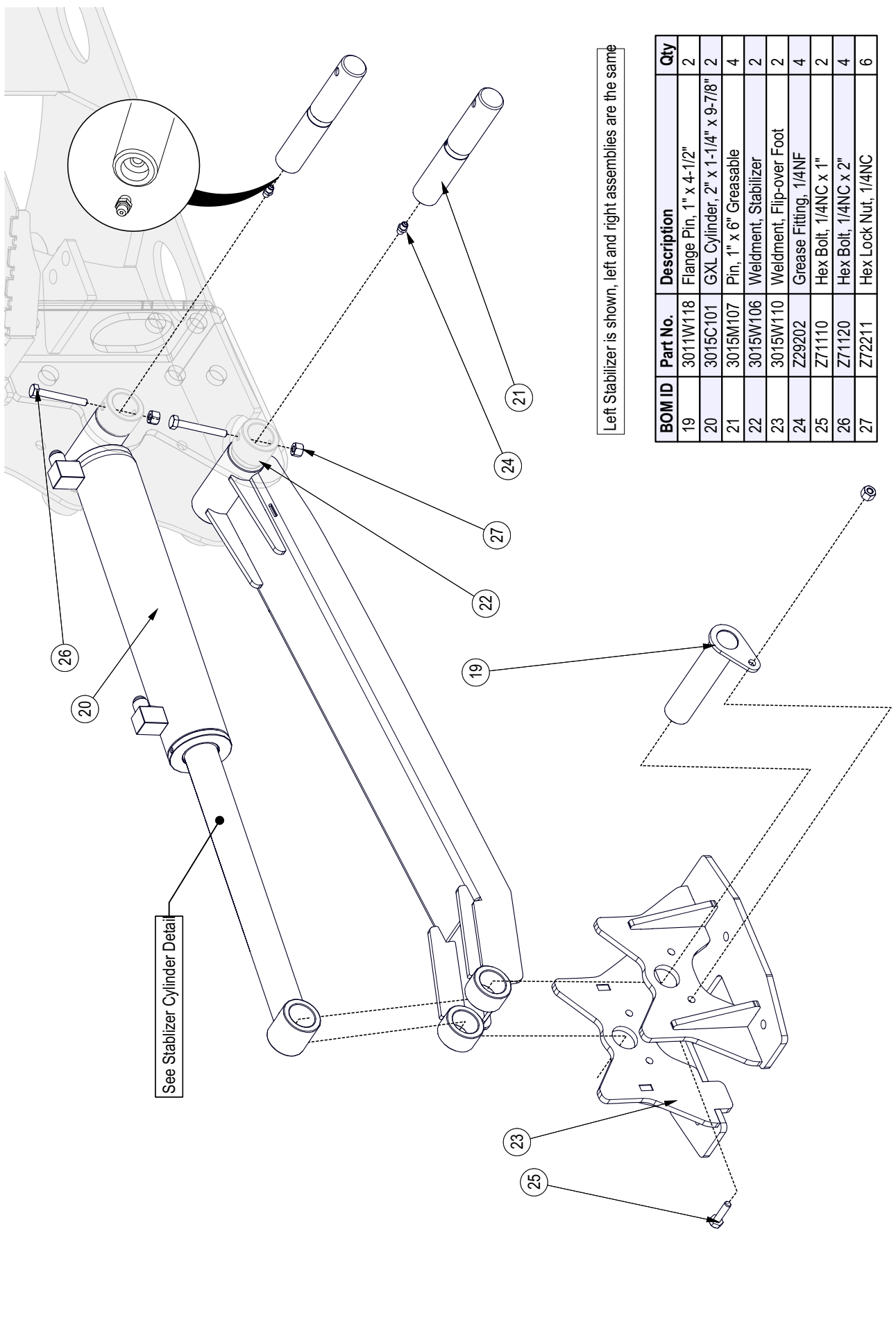
The torque values shown are based on lubricated connections as in reassembly.

Main Frame Assembly

| BOM ID | Part No. | Description | Qty |
|--------|----------|---|-----|
| 1 | 3015F101 | Extreme Antislip Tape, Black 4" x 7" Lg. | 2 |
| 2 | 3015L108 | Shield, Control Valve | 1 |
| 3 | 3015W104 | Main Frame | 1 |
| 4 | 3015W105 | Bar, Swing Cylinder Retaining | 1 |
| 5 | 3015W111 | Weldment, Hose Safety Cover | 1 |
| 6 | Z11121 | Toplink Pin, 3/4" x 2-3/4" | 1 |
| 7 | Z12140 | Lynch Pin, 7/16" | 1 |
| 8 | Z27221 | Connex Bushing, 1" ID x 1-1/2" Long x 1/8" Wall | 2 |
| 9 | Z27231 | Connex Bushing, 1-1/4" ID x 1-3/4" Long x 1/8" Wall | 2 |
| 10 | Z71517 | Hex Bolt, 1/2NC x 1-3/4" | 4 |
| 11 | Z72221 | Hex Lock Nut, 1/2NC | 3 |
| 12 | Z72251 | Hex Lock Nut, 1/2NC | 4 |
| 13 | Z76113 | Flange Bolt, 1/4NC x 3/8" | 11 |
| 14 | Z78306 | Machine Screw, 5/16NC x 5/8" | 2 |
| 15 | Z94152 | GX Backhoe Operation Decal | 1 |
| 16 | Z96505 | Manual Tube, 2' Short | 1 |
| 17 | 3015C105 | GXL Cylinder, 2-1/2" x 1-1/4" x 7-1/4" | 1 |
| 18 | Z27222 | Connex Bushing, 1" ID x 2" Long x 1/8" Wall | 1 |



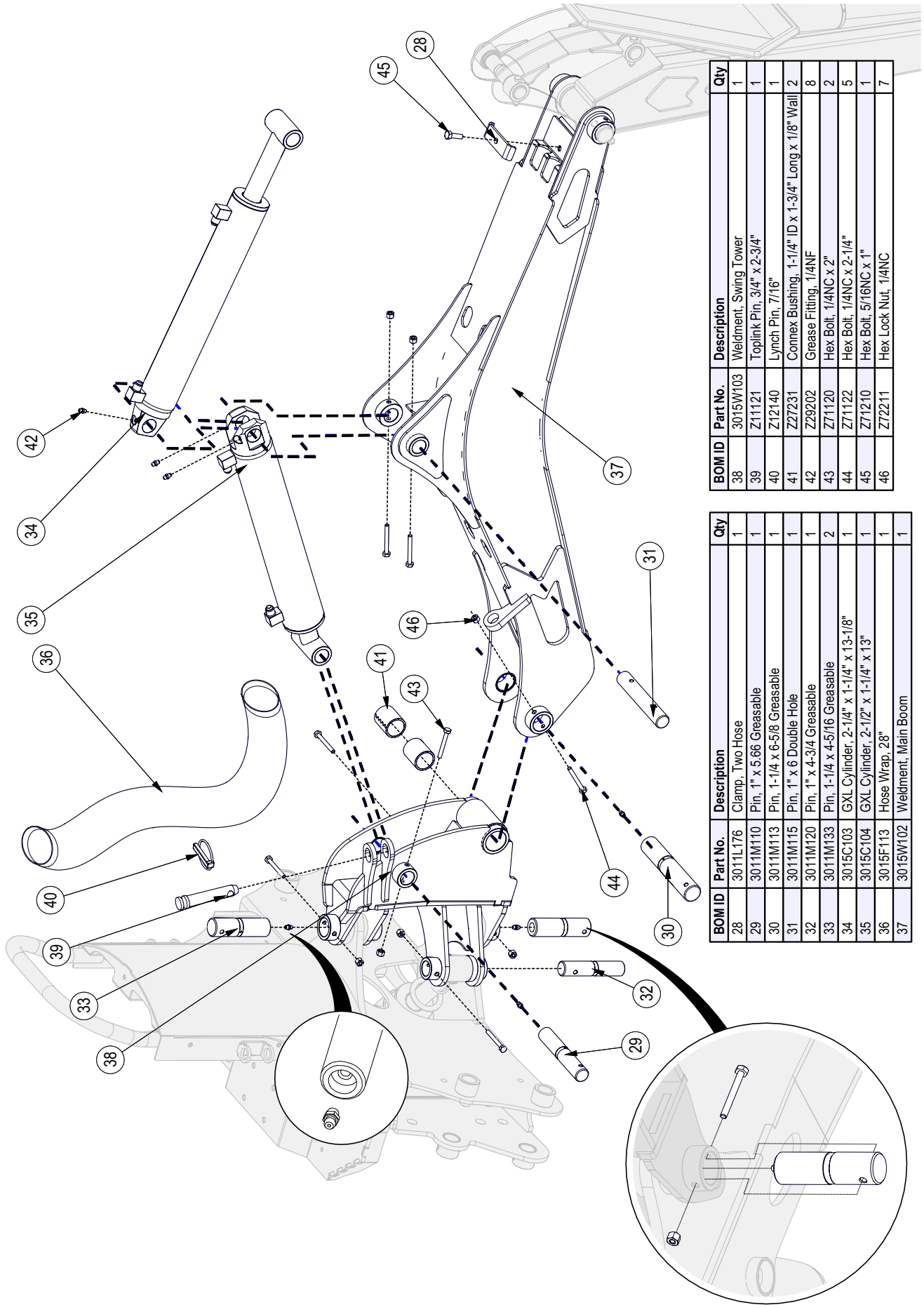
Stabilizer Leg Assembly



Left Stabilizer is shown, left and right assemblies are the same

| BOM ID | Part No. | Description | Qty |
|--------|----------|------------------------------------|-----|
| 19 | 3011W118 | Flange Pin, 1" x 4-1/2" | 2 |
| 20 | 3015C101 | GXL Cylinder, 2" x 1-1/4" x 9-7/8" | 2 |
| 21 | 3015M107 | Pin, 1" x 6" Greasable | 4 |
| 22 | 3015W106 | Weldment, Stabilizer | 2 |
| 23 | 3015W110 | Weldment, Flip-over Foot | 2 |
| 24 | Z29202 | Grease Fitting, 1/4NF | 4 |
| 25 | Z71110 | Hex Bolt, 1/4NC x 1" | 2 |
| 26 | Z71120 | Hex Bolt, 1/4NC x 2" | 4 |
| 27 | Z72211 | Hex Lock Nut, 1/4NC | 6 |

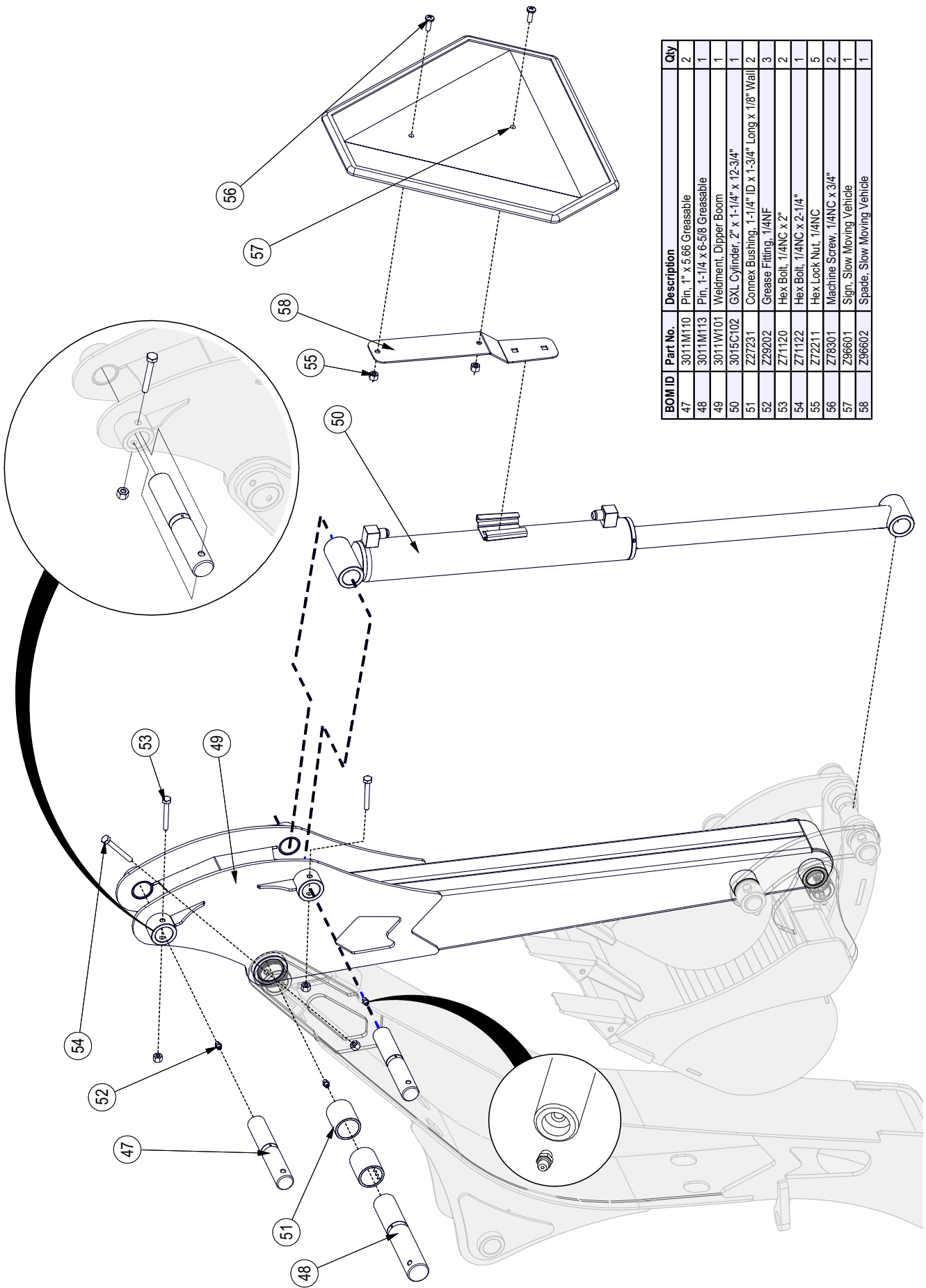
Main Boom Assembly



| BOM ID | Part No. | Description | Qty |
|--------|----------|---|-----|
| 38 | 3015W103 | Weldment, Swing Tower | 1 |
| 39 | Z11121 | Toplink Pin, 3/4" x 2-3/4" | 1 |
| 40 | Z12140 | Lynch Pin, 7/16" | 1 |
| 41 | Z27231 | Connex Bushing, 1-1/4" ID x 1-3/4" Long x 1/8" Wall | 2 |
| 42 | Z29202 | Grease Fitting, 1/4NF | 8 |
| 43 | Z71120 | Hex Bolt, 1/4NC x 2" | 2 |
| 44 | Z71122 | Hex Bolt, 1/4NC x 2-1/4" | 5 |
| 45 | Z71210 | Hex Bolt, 5/16NC x 1" | 1 |
| 46 | Z72211 | Hex Lock Nut, 1/4NC | 7 |

| BOM ID | Part No. | Description | Qty |
|--------|----------|---|-----|
| 28 | 3011L176 | Clamp, Two Hose | 1 |
| 29 | 3011M110 | Pin, 1" x 5.66 Greasable | 1 |
| 30 | 3011M113 | Pin, 1-1/4 x 6-5/8 Greasable | 1 |
| 31 | 3011M115 | Pin, 1" x 6 Double Hole | 1 |
| 32 | 3011M120 | Pin, 1" x 4-3/4 Greasable | 1 |
| 33 | 3011M133 | Pin, 1-1/4 x 4-5/16 Greasable | 2 |
| 34 | 3015C103 | GXL Cylinder, 2-1/4" x 1-1/4" x 13-1/8" | 1 |
| 35 | 3015C104 | GXL Cylinder, 2-1/2" x 1-1/4" x 13" | 1 |
| 36 | 3015F113 | Hose Wrap, 28" | 1 |
| 37 | 3015W102 | Weldment, Main Boom | 1 |

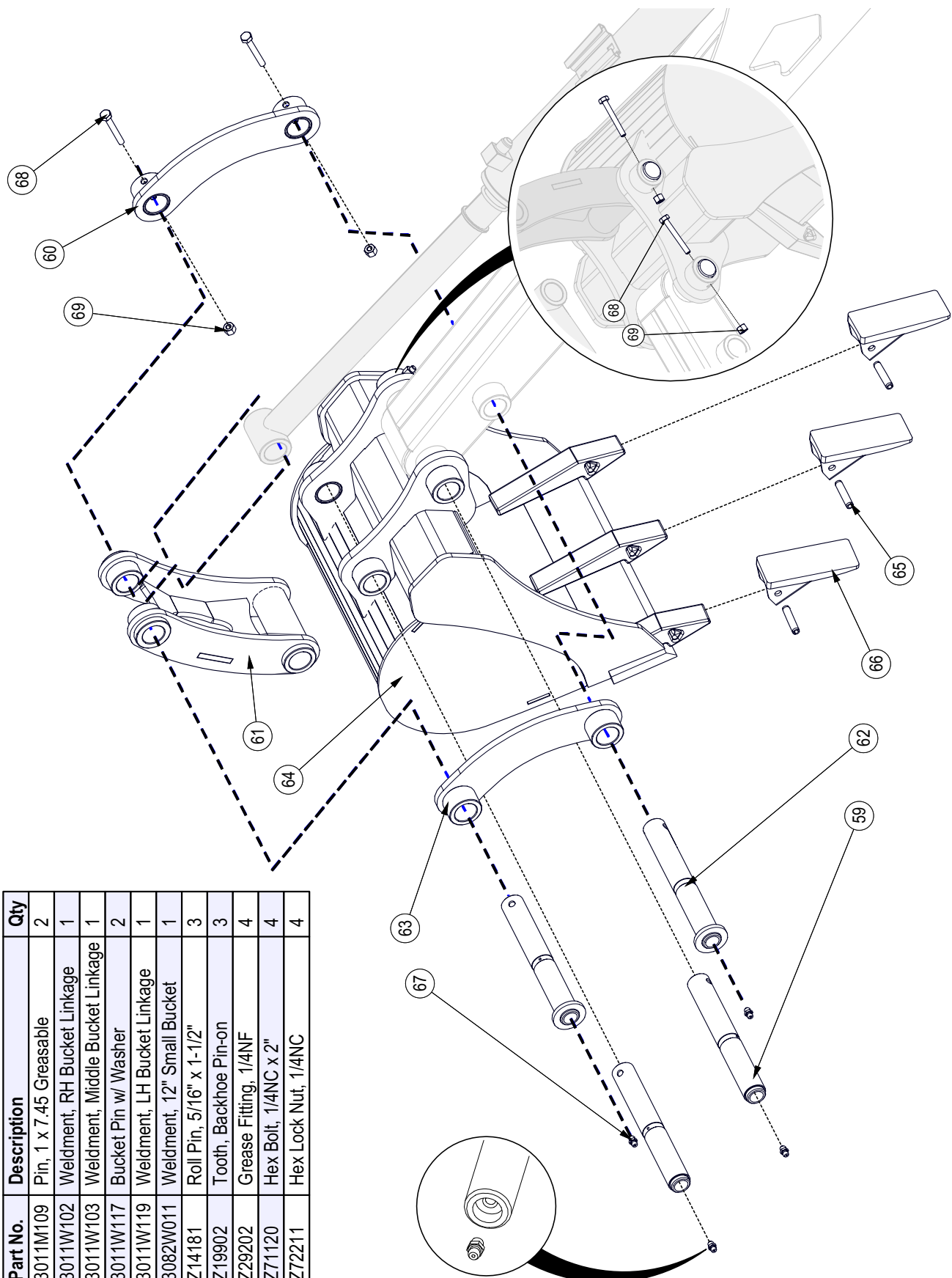
Dipper Boom Assembly



| BOM ID | Part No. | Description | Qty |
|--------|-----------|---|-----|
| 47 | 3011MT110 | Pin, 1" x 5.66 Greasable | 2 |
| 48 | 3011M113 | Pin, 1-1/4 x 6-5/8 Greasable | 1 |
| 49 | 3011W101 | Weldment, Dipper Boom | 1 |
| 50 | 3015C102 | GXL Cylinder, 2" x 1-1/4" x 12-3/4" | 1 |
| 51 | Z27231 | Comrex Bushing, 1-1/4" ID x 1-3/4" Long x 1/8" Wall | 2 |
| 52 | Z29202 | Grease Fitting, 1/4NF | 3 |
| 53 | Z71120 | Hex Bolt, 1/4NC x 2" | 2 |
| 54 | Z71122 | Hex Bolt, 1/4NC x 2-1/4" | 1 |
| 55 | Z72211 | Hex Lock Nut, 1/4NC | 5 |
| 56 | Z78301 | Machine Screw, 1/4NC x 3/4" | 2 |
| 57 | Z96601 | Sign, Slow Moving Vehicle | 1 |
| 58 | Z96602 | Spade, Slow Moving Vehicle | 1 |

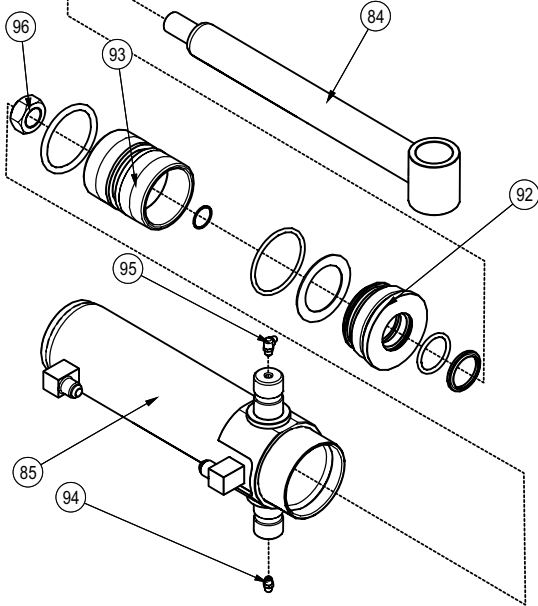
Bucket & Linkage Assembly

| BOM ID | Part No. | Description | Qty |
|--------|----------|---------------------------------|-----|
| 59 | 3011M109 | Pin, 1 x 7.45 Greasable | 2 |
| 60 | 3011W102 | Weldment, RH Bucket Linkage | 1 |
| 61 | 3011W103 | Weldment, Middle Bucket Linkage | 1 |
| 62 | 3011W117 | Bucket Pin w/ Washer | 2 |
| 63 | 3011W119 | Weldment, LH Bucket Linkage | 1 |
| 64 | 3082W011 | Weldment, 12" Small Bucket | 1 |
| 65 | Z14181 | Roll Pin, 5/16" x 1-1/2" | 3 |
| 66 | Z19902 | Tooth, Backhoe Pin-on | 3 |
| 67 | Z29202 | Grease Fitting, 1/4NF | 4 |
| 68 | Z71120 | Hex Bolt, 1/4NC x 2" | 4 |
| 69 | Z72211 | Hex Lock Nut, 1/4NC | 4 |



Swing Cylinder Assembly

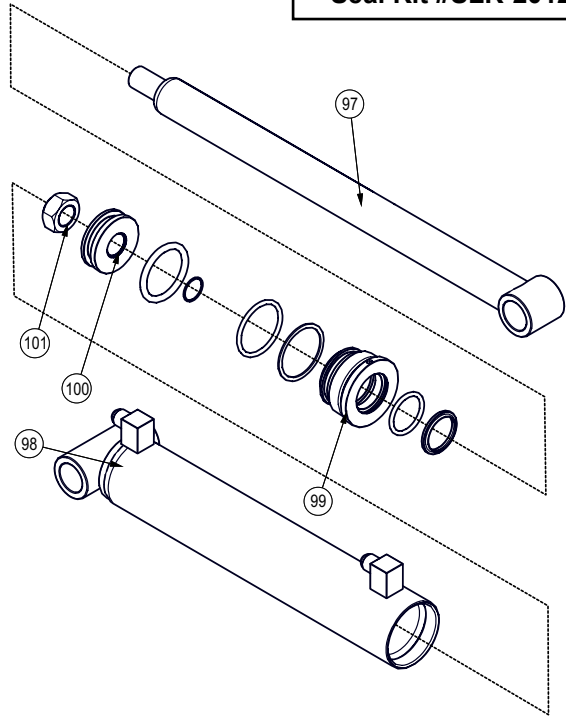
Seal Kit #SLK-2512GXL



| BOM ID | Part No. | Description | Qty |
|--------|-----------------|--|-----|
| 84 | 3015C1053 | Rod, 1-1/4" x 3/4NF | 1 |
| 85 | 3015C1054 | Barrel, 2-1/2" | 1 |
| 92 | G250-125GXL | Gland, 2-1/2" x 1-1/4" GXL | 1 |
| 93 | P750-250GXLDPCP | Piston GXL, 2-1/2" Bore x Double Cushion | 1 |
| 94 | Z29202 | Grease Fitting, 1/4NF | 1 |
| 95 | Z29203 | Elbow 90 Grease Fitting, 1/4NF | 1 |
| 96 | Z72276 | Hex Top-lock Nut, 3/4NF | 1 |

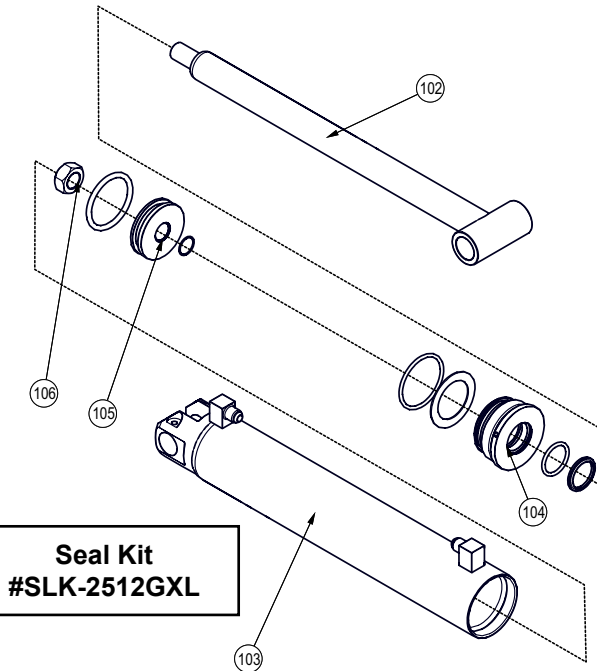
Stabilizer Cylinder Assembly

Seal Kit #SLK-2012GXL



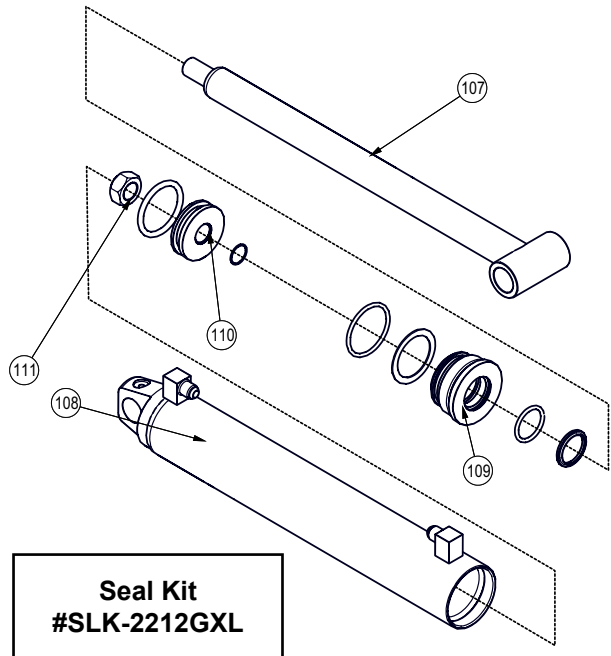
| BOM ID | Part No. | Description | Qty |
|--------|-------------|-------------------------|-----|
| 97 | 3015C1013 | Rod, 1-1/4" x 3/4NF | 1 |
| 98 | 3015C1014 | Barrel, 2" | 1 |
| 99 | G200-125GXL | Gland, 2" x 1-1/4" GXL | 1 |
| 100 | P750-200GXL | Piston GXL, 2" Bore | 1 |
| 101 | Z72276 | Hex Top-lock Nut, 3/4NF | 1 |

Main Tower Cylinder Assembly



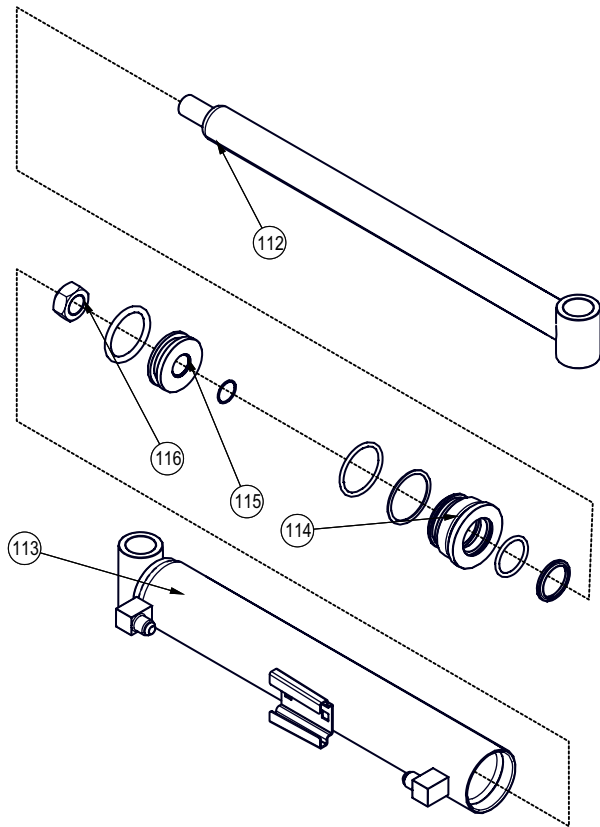
| BOM ID | Part No. | Description | Qty |
|--------|-------------|----------------------------|-----|
| 102 | 3015C1043 | Rod, 1-1/4" x 3/4NF | 1 |
| 103 | 3015C1044 | Barrel, 2-1/2" | 1 |
| 104 | G250-125GXL | Gland, 2-1/2" x 1-1/4" GXL | 1 |
| 105 | P750-250GXL | Piston GXL, 2-1/2" Bore | 1 |
| 106 | Z72276 | Hex Top-lock Nut, 3/4NF | 1 |

Dipper Boom Cylinder Assembly



| BOM ID | Part No. | Description | Qty |
|--------|-------------|----------------------------|-----|
| 107 | 3015C1033 | Rod, 1-1/4" x 3/4NF | 1 |
| 108 | 3015C1034 | Barrel, 2-1/4" | 1 |
| 109 | G225-125GXL | Gland, 2-1/4" x 1-1/4" GXL | 1 |
| 110 | P750-225GXL | Piston GXL, 2-1/4" Bore | 1 |
| 111 | Z72276 | Hex Top-lock Nut, 3/4NF | 1 |

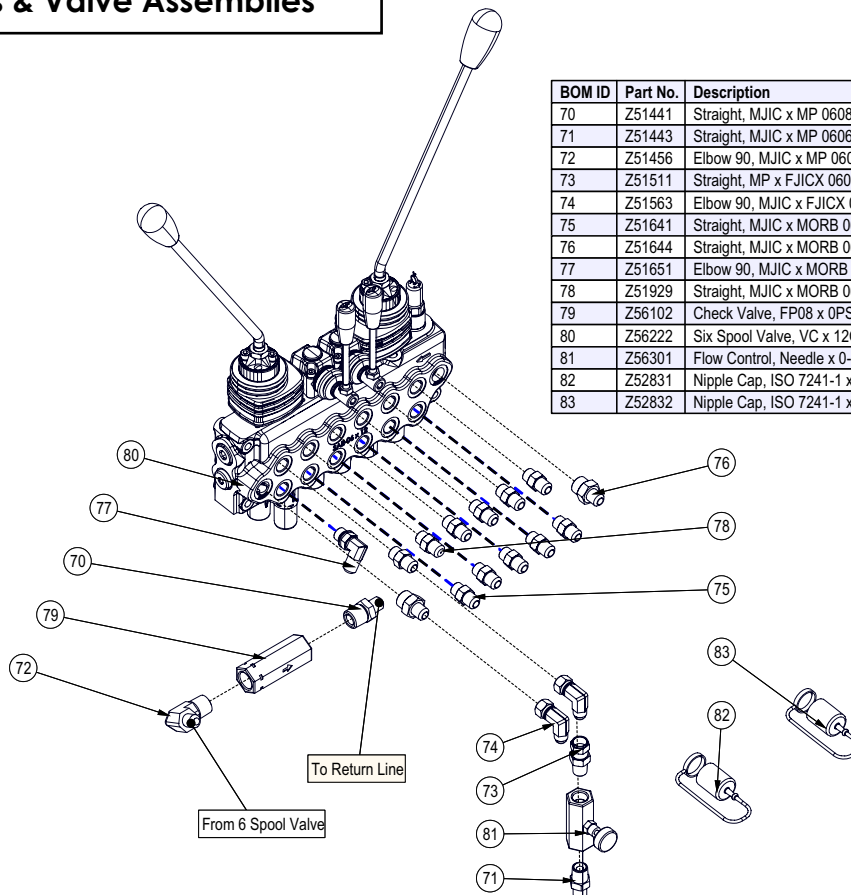
Bucket Cylinder Assembly



**Seal Kit
#SLK-2012GXL**

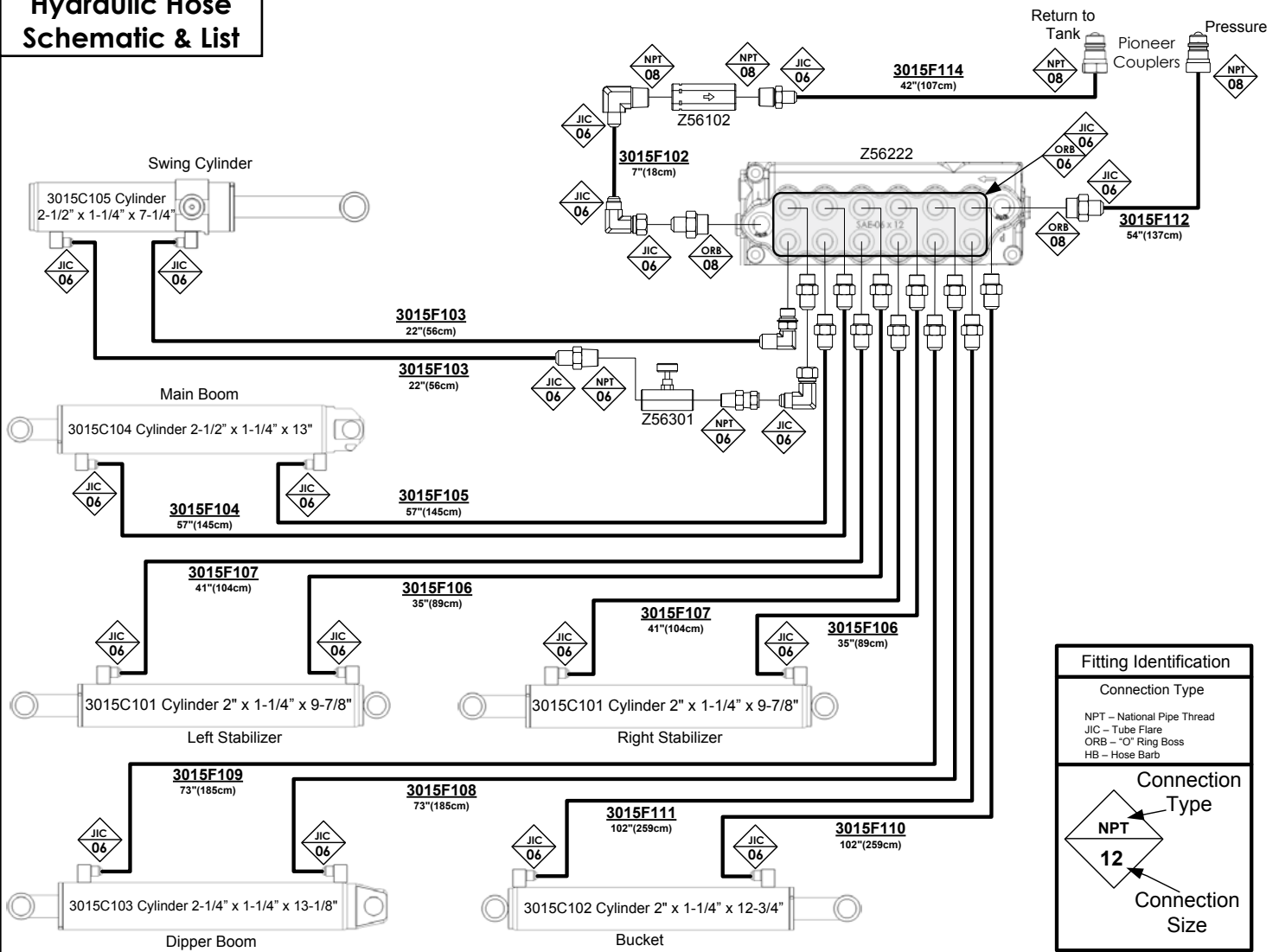
| BOM ID | Part No. | Description | Qty |
|--------|-------------|-------------------------|-----|
| 112 | 3015C1023 | Rod, 1-1/4" x 3/4NF | 1 |
| 113 | 3015C1024 | Barrel, 2" | 1 |
| 114 | G200-125GXL | Gland, 2" x 1-1/4" GXL | 1 |
| 115 | P750-200GXL | Piston GXL, 2" Bore | 1 |
| 116 | Z72276 | Hex Top-lock Nut, 3/4NF | 1 |

Hydraulics & Valve Assemblies

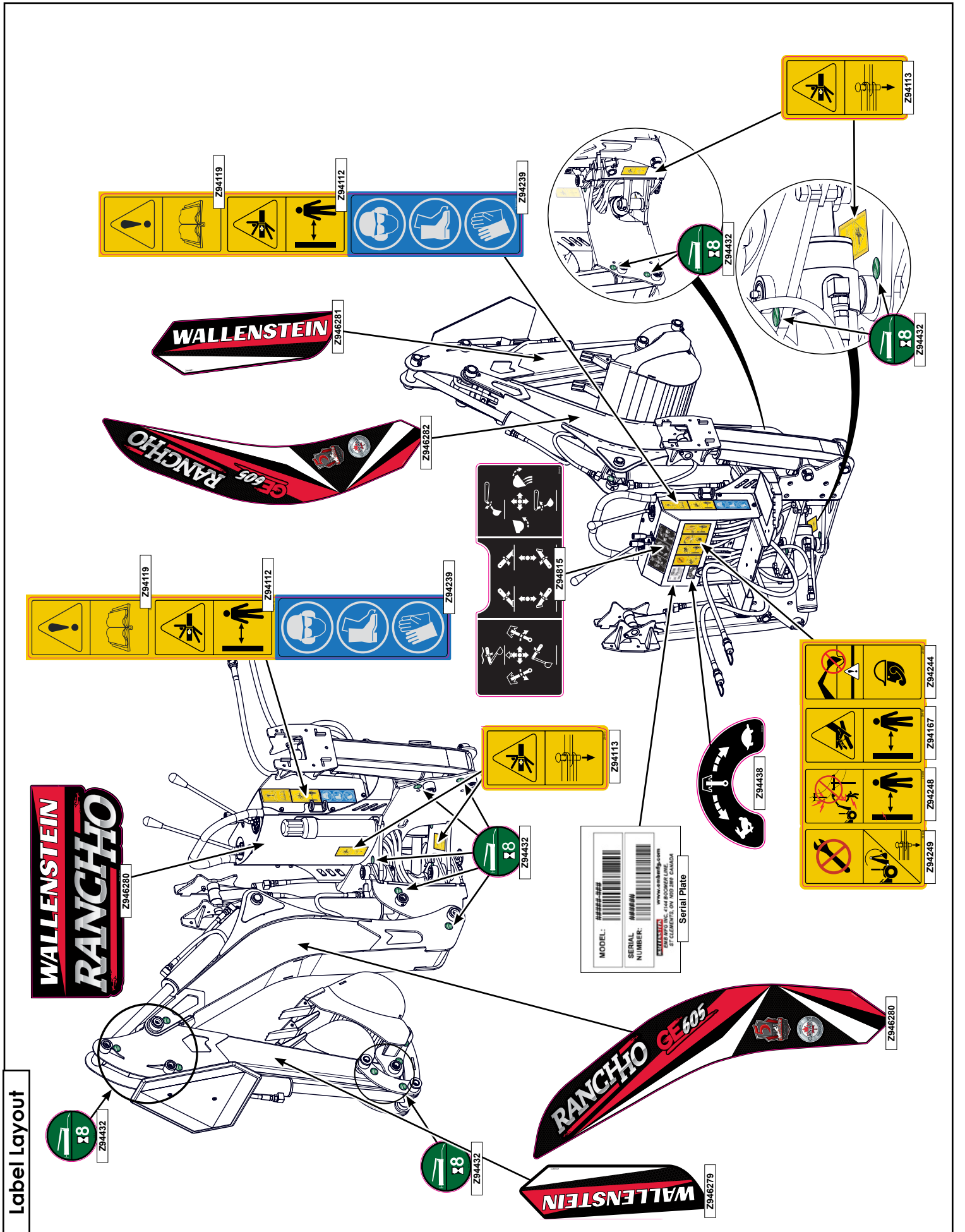


| BOM ID | Part No. | Description | Qty |
|--------|----------|---|-----|
| 70 | Z51441 | Straight, MJIC x MP 0608 | 1 |
| 71 | Z51443 | Straight, MJIC x MP 0606 | 1 |
| 72 | Z51456 | Elbow 90, MJIC x MP 0608 | 1 |
| 73 | Z51511 | Straight, MP x FJICX 0606 | 1 |
| 74 | Z51563 | Elbow 90, MJIC x FJICX 0606 | 2 |
| 75 | Z51641 | Straight, MJIC x MORB 0606 | 10 |
| 76 | Z51644 | Straight, MJIC x MORB 0608 | 2 |
| 77 | Z51651 | Elbow 90, MJIC x MORB 0606 | 1 |
| 78 | Z51929 | Straight, MJIC x MORB 0606 x 0.047" Orifice | 1 |
| 79 | Z56102 | Check Valve, FP08 x 0PSI | 1 |
| 80 | Z56222 | Six Spool Valve, VC x 12GPM | 1 |
| 81 | Z56301 | Flow Control, Needle x 0-9GPM | 1 |
| 82 | Z52831 | Nipple Cap, ISO 7241-1 x Red | 1 |
| 83 | Z52832 | Nipple Cap, ISO 7241-1 x Black | 1 |

Hydraulic Hose Schematic & List



| Part No. | Description | Qty |
|----------|--|-----|
| 3015F102 | 3/8" Hose, FJIC06 x FJIC06 x 7 | 1 |
| 3015F103 | 1/4" Hose, FJIC06 x FJIC06 x 22 | 2 |
| 3015F104 | 1/4" Hose, FJIC06 x Long 90 FJIC06 x 57 | 1 |
| 3015F105 | 1/4" Hose, FJIC06 x 90 FJIC06 x 57 | 1 |
| 3015F106 | 1/4" Hose, FJIC06 x Long 90 FJIC06 x 35 | 2 |
| 3015F107 | 1/4" Hose, FJIC06 x 90 FJIC06 x 41 | 2 |
| 3015F108 | 1/4" Hose, FJIC06 x Long 90 FJIC06 x 73 | 1 |
| 3015F109 | 1/4" Hose, FJIC06 x 90 FJIC06 x 73 | 1 |
| 3015F110 | 1/4" Hose, FJIC06 x Long 90 FJIC06 x 102 | 1 |
| 3015F111 | 1/4" Hose, FJIC06 x 90 FJIC06 x 102 | 1 |
| 3015F112 | 3/8" Hose, 90FJIC06 x MP08 x 54 | 1 |
| 3015F114 | 3/8" Hose, 90FJIC06 x MP08 x 42 | 1 |



Accessories

BK2690 9" Bucket

- 3 teeth
- Bucket Volume: 0.5115 cubic ft

BK2612 12" Bucket

- 3 teeth
- Bucket Volume: 0.6934 cubic ft

BK2615 15" Bucket

- 4 teeth
- Bucket Volume: 0.8749 cubic ft

BK2618 18" Bucket

- 4 teeth
- Bucket Volume: 1.0567 cubic ft

BT5280 Clamp on mechanical thumb

Using the mechanical thumb allows you to better control material that is difficult to scoop or place with precision

PTO605 PTO Hydraulic Pump Kit 5GPM

The optional self contained PTO pump kit provides hydraulic power for tractors without available auxiliary power.

BT7250 Operator's Seat, GE605

Optional seat for tractors without swivel seats

BP220 Street Pad Kit

protects pavement or cement from cleats on the backhoe stabilizer legs

WALLENSTEIN

EMB Manufacturing Inc.
4144 Boomer Line - St. Clements, On - N0B 2M0 - Canada
Ph: (519) 699-9283 - Fax: (519) 699-4146
www.embmfg.com

RANCHO SERIES BACKHOE GE605, GX620, GX720, GX920 & GX920 OPERATOR'S MANUAL

Warning
Underground Utility Hazard
Contacting underground utilities can cause electrocution. You must contact an underground utility locating/marketing service before digging.

Caution
Stability Hazard
The tractor must have a front bucket loader installed before installing the subframe and backhoe. The front loader is required to offset the weight of the backhoe, as well as provide the stability required to operate the backhoe safely.

NOTICE
Operation Hazard
Wallenstein backhoes are designed to operate at a specific flow rate. Operating the backhoe above the specified flow rate will cause damage to the seals and will void the warranty.
GE605 3.5-6 gpm (13.3-22.8 lpm)
GX Series 5-7 gpm (18.9-26.5 lpm)

NOTICE
When mounting a GE605 or GX620 backhoe to a skid steer that has a flow rate greater than 8 GPM (32 lpm), BFC501 Flow Divider Kit is required to prevent damage to the seals and voiding the warranty. Do not run the skid steer in high flow mode.

Keep this manual with the
Machine at all times



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PART NUMBER: Z97103

#Z97103 BACKHOE OPERATORS MANUAL

Available as a download at
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