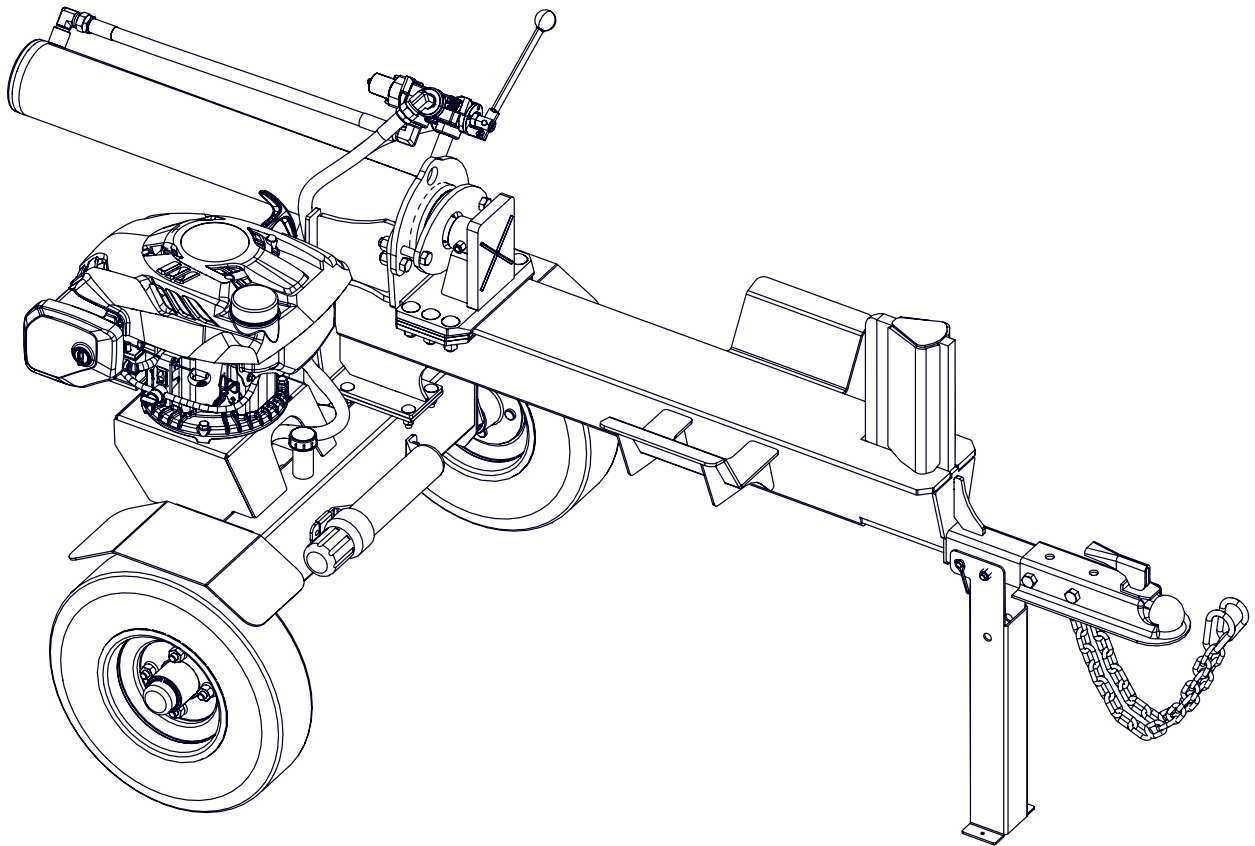




EMB Manufacturing Inc.  
4144 Boomer Line · St. Clements, On · N0B 2M0 · Canada  
Ph: (519) 699-9283 · Fax: (519) 699-4146  
www.wallensteinequipment.com

# WE220 Trailer Log Splitter Parts Manual

Starting with S/N 100256 & After



Refer to the operators  
manual for safe  
operation and  
maintenance

## 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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Maintenance should be performed by  
trained personnel only.



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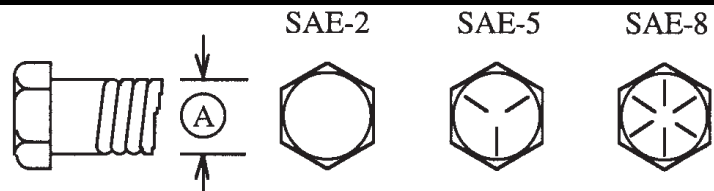
**Bolt Torque**

**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<br>(N.m) (lb-ft) |     | SAE 5<br>(N.m) (lb-ft) |     | SAE 8<br>(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 |

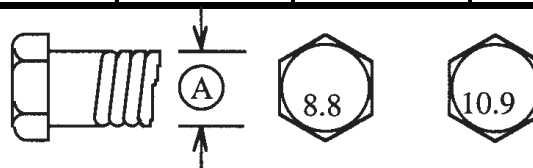


Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

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

**METRIC TORQUE SPECIFICATIONS**

| Bolt Diameter "A" | Bolt Torque*         |      |                       |      |
|-------------------|----------------------|------|-----------------------|------|
|                   | 8.8<br>(N.m) (lb-ft) |      | 10.9<br>(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<br>(in.) | Nut Size Across Flats<br>(in.) | 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        |
| <b>3/8</b>            | <b>11/16</b>                   | <b>24</b>     | <b>18</b> | <b>1</b>   | <b>1/6</b> |
| 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.

### Wheel Lug Torque

It is extremely important safety procedure to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches are the best method to assure the proper amount of torque is being applied to a fastener.

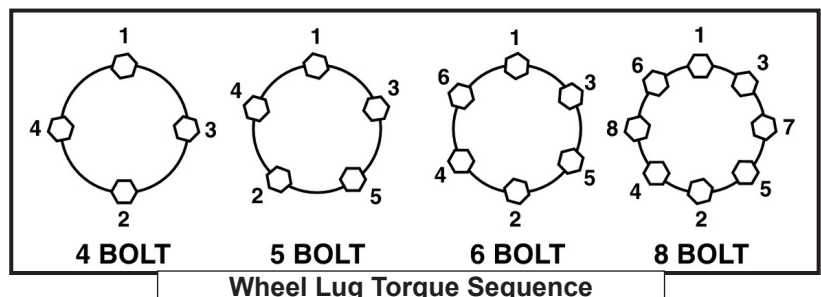
Wheel lugs should be torqued before first road use and after each wheel removal. Check and re torque after the first 16Km (10 miles), 40Km (25 miles), and again at 80Km (50 miles). Check periodically thereafter.

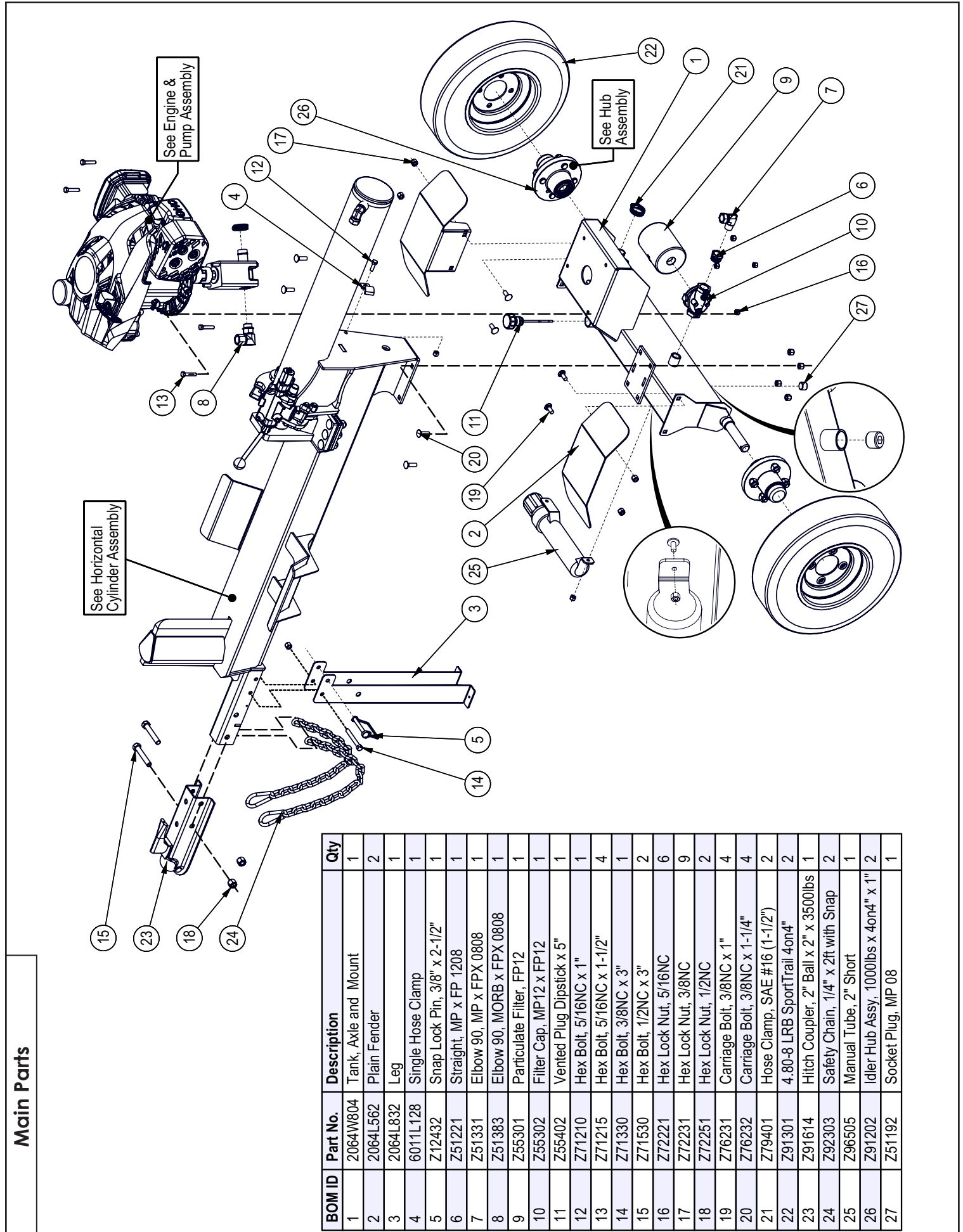
Note: Wheel lugs must be applied and maintained at the proper torque levels to prevent loose wheels, broken studs, and possible dangerous separation of wheels from your axle.

- Start all lugs by hand to prevent cross threading.
- Tighten lugs in sequence, per wheel lug torque sequence chart.
- The tightening of the fasteners should be done in stages. Following the recommended sequence, tighten fasteners per wheel torque requirements chart.

### Wheel Torque Requirements

| Wheel Size | Torque Unit | 1st Stage | 2nd Stage | 3rd Stage   |
|------------|-------------|-----------|-----------|-------------|
| 8"         | ft-lbs      | 12 - 20   | 30 - 35   | 45 - 55     |
|            | Nm          | 16 - 26   | 39 - 45.5 | 58.5 - 71.5 |
| 12"        | ft-lbs      | 20 - 25   | 35 - 40   | 50 - 60     |
|            | Nm          | 26 - 32.5 | 45.5 - 52 | 65 - 78     |
| 13"        | ft-lbs      | 20 - 25   | 35 - 40   | 50 - 60     |
|            | Nm          | 26 - 32.5 | 45.5 - 52 | 65 - 78     |
| 14"        | ft-lbs      | 20 - 25   | 50 - 60   | 90 - 120    |
|            | Nm          | 26 - 32.5 | 65 - 78   | 117 - 156   |
| 15"        | ft-lbs      | 20 - 25   | 50 - 60   | 90 - 120    |
|            | Nm          | 26 - 32.5 | 65 - 78   | 117 - 156   |
| 16"        | ft-lbs      | 20 - 25   | 50 - 60   | 90 - 120    |
|            | Nm          | 26 - 32.5 | 65 - 78   | 117 - 156   |

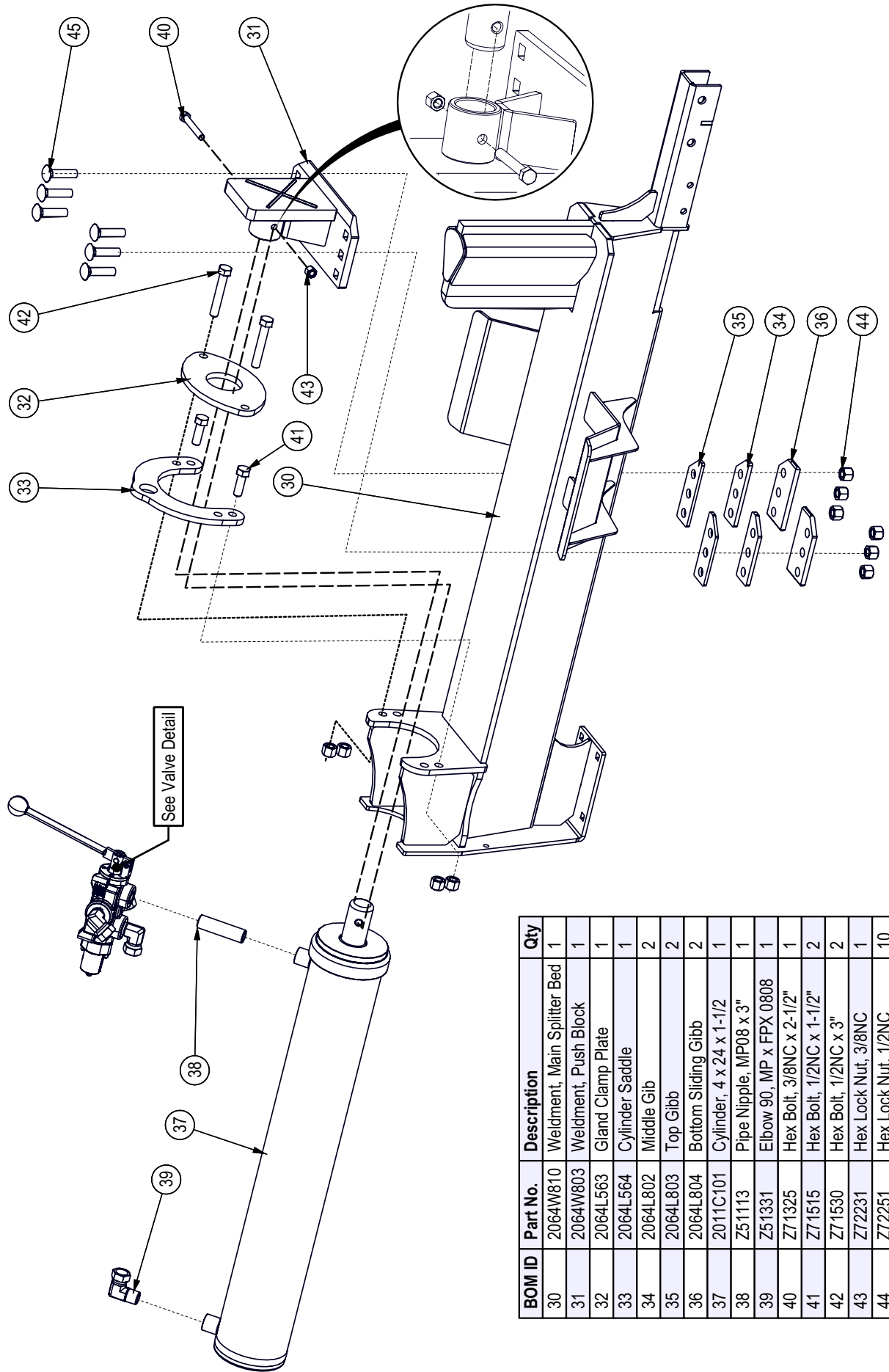




**Main Parts**

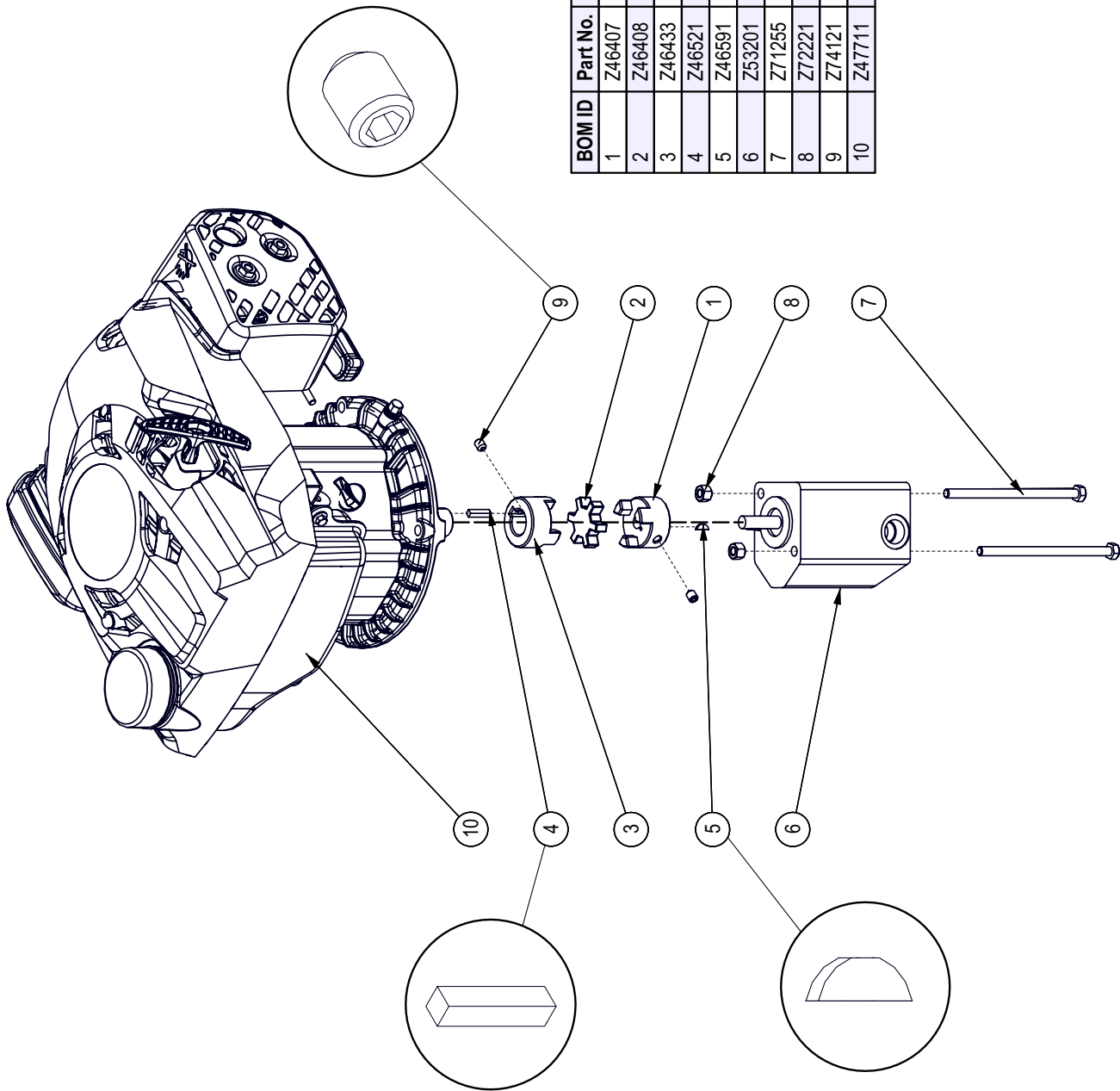
| BOM ID | Part No. | Description                           | Qty |
|--------|----------|---------------------------------------|-----|
| 1      | 2064W804 | Tank, Axle and Mount                  | 1   |
| 2      | 2064L562 | Plain Fender                          | 2   |
| 3      | 2064L832 | Leg                                   | 1   |
| 4      | 6011L128 | Single Hose Clamp                     | 1   |
| 5      | Z12432   | Snap Lock Pin, 3/8" x 2-1/2"          | 1   |
| 6      | Z51221   | Straight, MP x FP 1208                | 1   |
| 7      | Z51331   | Elbow 90, MP x FPX 0808               | 1   |
| 8      | Z51383   | Elbow 90, MORB x FPX 0808             | 1   |
| 9      | Z55301   | Particulate Filter, FP12              | 1   |
| 10     | Z55302   | Filter Cap, MP12 x FP12               | 1   |
| 11     | Z55402   | Vented Plug Dipstick x 5"             | 1   |
| 12     | Z71210   | Hex Bolt, 5/16NC x 1"                 | 1   |
| 13     | Z71215   | Hex Bolt, 5/16NC x 1-1/2"             | 4   |
| 14     | Z71330   | Hex Bolt, 3/8NC x 3"                  | 1   |
| 15     | Z71530   | Hex Bolt, 1/2NC x 3"                  | 2   |
| 16     | Z72221   | Hex Lock Nut, 5/16NC                  | 6   |
| 17     | Z72231   | Hex Lock Nut, 3/8NC                   | 9   |
| 18     | Z72251   | Hex Lock Nut, 1/2NC                   | 2   |
| 19     | Z76231   | Carriage Bolt, 3/8NC x 1"             | 4   |
| 20     | Z76232   | Carriage Bolt, 3/8NC x 1-1/4"         | 4   |
| 21     | Z79401   | Hose Clamp, SAE #16 (1-1/2")          | 2   |
| 22     | Z91301   | 4-80-8 LRB SportTrail 4on4"           | 2   |
| 23     | Z91614   | Hitch Coupler, 2" Ball x 2" x 3500lbs | 1   |
| 24     | Z92303   | Safety Chain, 1/4" x 2ft with Snap    | 2   |
| 25     | Z96505   | Manual Tube, 2" Short                 | 1   |
| 26     | Z91202   | Idle Hub Assy. 1000lbs x 4on4" x 1"   | 2   |
| 27     | Z51192   | Socket Plug, MP 08                    | 1   |

**Horizontal Cylinder Assembly**



| BOM ID | Part No. | Description                 | Qty |
|--------|----------|-----------------------------|-----|
| 30     | 2064W810 | Weldment, Main Splitter Bed | 1   |
| 31     | 2064W803 | Weldment, Push Block        | 1   |
| 32     | 2064L563 | Gland Clamp Plate           | 1   |
| 33     | 2064L564 | Cylinder Saddle             | 1   |
| 34     | 2064L802 | Middle Gibb                 | 2   |
| 35     | 2064L803 | Top Gibb                    | 2   |
| 36     | 2064L804 | Bottom Sliding Gibb         | 2   |
| 37     | 2011C101 | Cylinder, 4 x 24 x 1-1/2    | 1   |
| 38     | Z51113   | Pipe Nipple, MP08 x 3"      | 1   |
| 39     | Z51331   | Elbow 90, MP x FPX 0808     | 1   |
| 40     | Z71325   | Hex Bolt, 3/8NC x 2-1/2"    | 1   |
| 41     | Z71515   | Hex Bolt, 1/2NC x 1-1/2"    | 2   |
| 42     | Z71530   | Hex Bolt, 1/2NC x 3"        | 2   |
| 43     | Z72231   | Hex Lock Nut, 3/8NC         | 1   |
| 44     | Z72251   | Hex Lock Nut, 1/2NC         | 10  |
| 45     | Z76255   | Carriage Bolt, 1/2NC x 2"   | 6   |

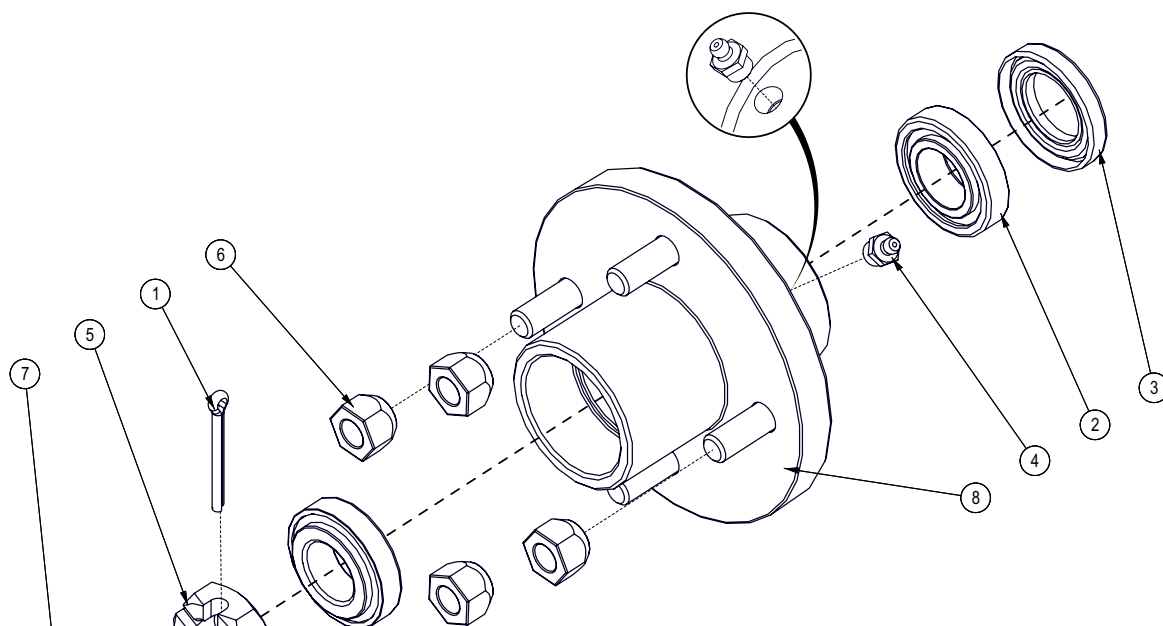
Engine & Pump Assembly



| BOM ID | Part No. | Description                                 | Qty |
|--------|----------|---|-----|
| 1      | Z46407   | Shaft Coupling, L075 x 7/16"                | 1   |
| 2      | Z46408   | Spider, L075                                | 1   |
| 3      | Z46433   | Shaft Coupling, L075 x 7/8" w/ 3/16" Keyway | 1   |
| 4      | Z46521   | Key, 3/16" x 3/16" x 7/8"                   | 1   |
| 5      | Z46591   | Woodruff Key, 3/32" x 1/2"                  | 1   |
| 6      | Z53201   | Two-Stage Pump, 11GPM                       | 1   |
| 7      | Z71255   | Hex Bolt, 5/16NC x 5-1/2"                   | 2   |
| 8      | Z72221   | Hex Lock Nut, 5/16NC                        | 2   |
| 9      | Z74121   | Set Screw, 5/16NC x 3/8"                    | 2   |
| 10     | Z47711   | Subaru EA190V5003M, Rope                    | 1   |



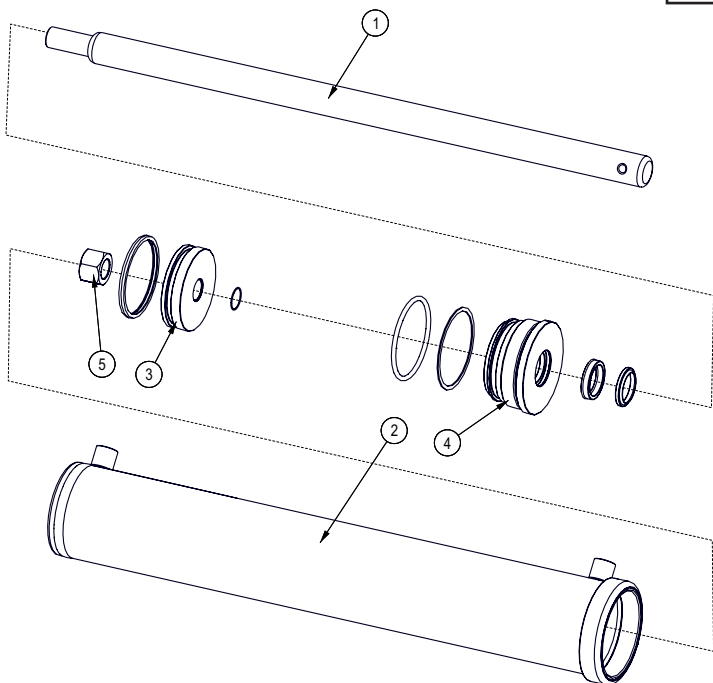
**Hub Assembly**



| BOM ID | Part No. | Description                   | Qty |
|--------|----------|-------------------------------|-----|
| 1      | Z12321   | Cotter Pin, 3/16" x 1-3/4"    | 1   |
| 2      | Z23201   | Roller Bearing, L44643 L44610 | 2   |
| 3      | Z28301   | Double Lip Seal, 1-1/4"       | 1   |
| 4      | Z29201   | Grease Fitting, MP02          | 1   |
| 5      | Z72691   | Castle Nut, 1NF x 9/16" Thick | 1   |
| 6      | Z72931   | Lug Nut, 1/2NF                | 4   |
| 7      | Z91801   | Dust Cap, 1.98 Bore           | 1   |
| 8      | Z91201   | Hub, 1000lbs x 4on4           | 1   |

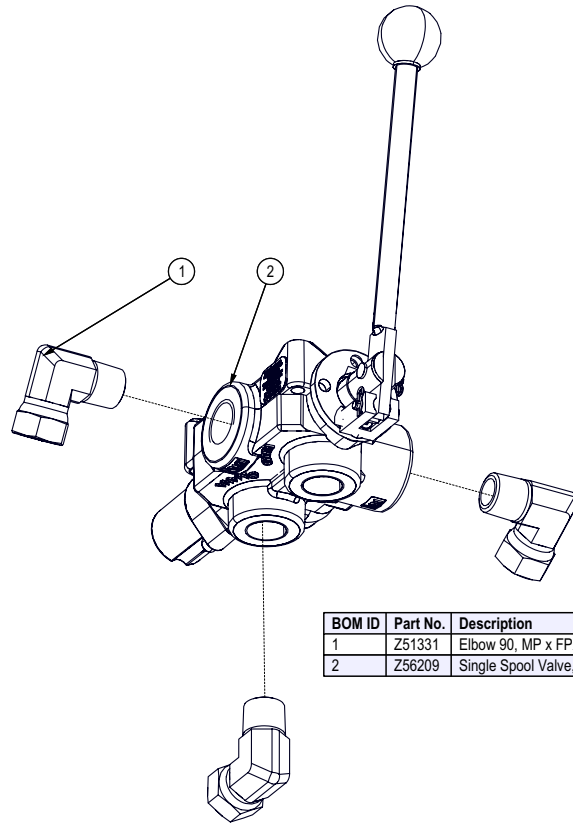
**Cylinder Assembly**

**Seal Kit #SLK-4015**



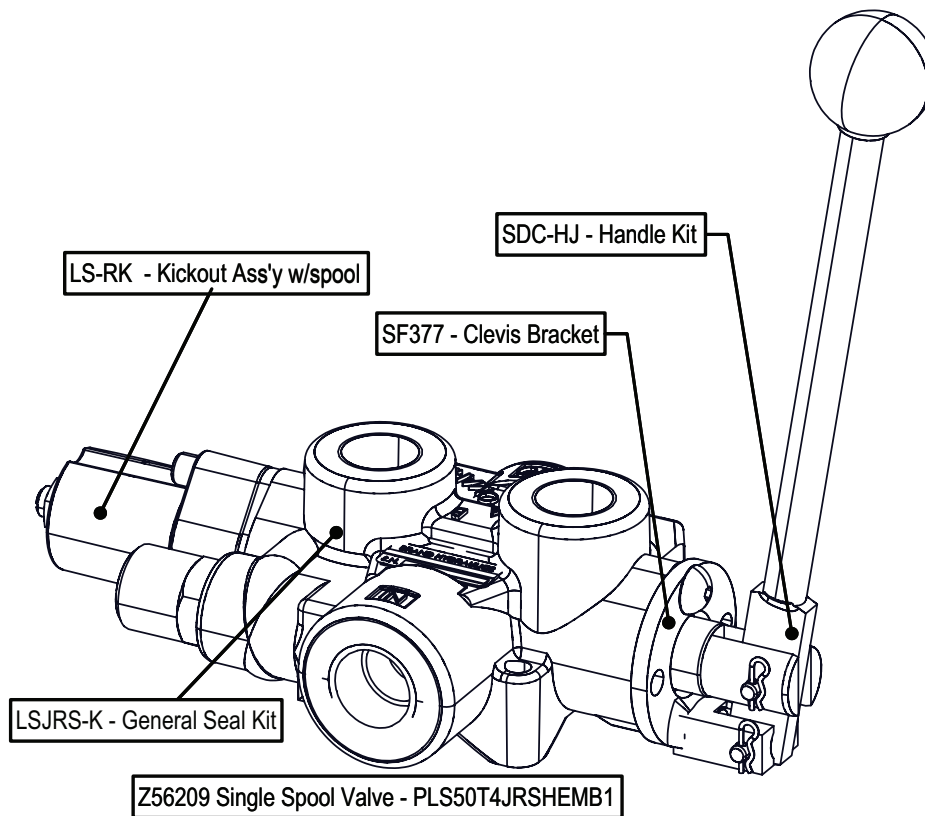
| BOM ID | Part No.   | Description              | Qty |
|--------|------------|--------------------------|-----|
| 1      | 2011C1012  | Rod, 1-1/2 x 1           | 1   |
| 2      | 2011C1014  | Barrel, 4"               | 1   |
| 3      | P100-400SP | Piston, 4" Bore          | 1   |
| 4      | G400-150S  | Gland, 4" x 1-1/2"       | 1   |
| 5      | Z72276     | Hex Lock Nut 1NF Grade 8 | 1   |

**Valve Assembly**

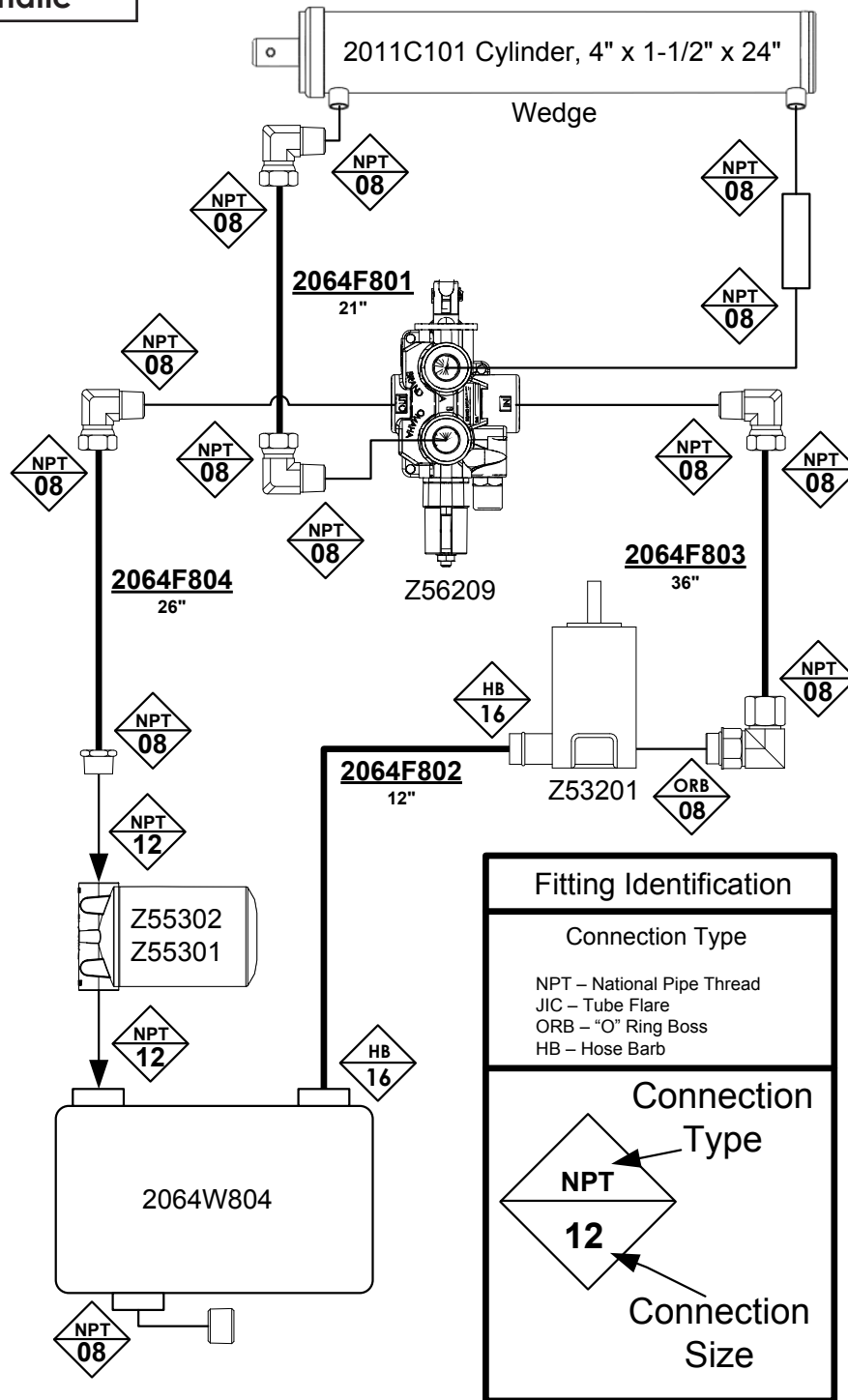


| BOM ID | Part No. | Description                                | Qty |
|--------|----------|--|-----|
| 1      | Z51331   | Elbow 90, MP x FPX 0808                    | 3   |
| 2      | Z56209   | Single Spool Valve, OC Tandem SCDK x 18GPM | 1   |

**Z56209 Service Kits**



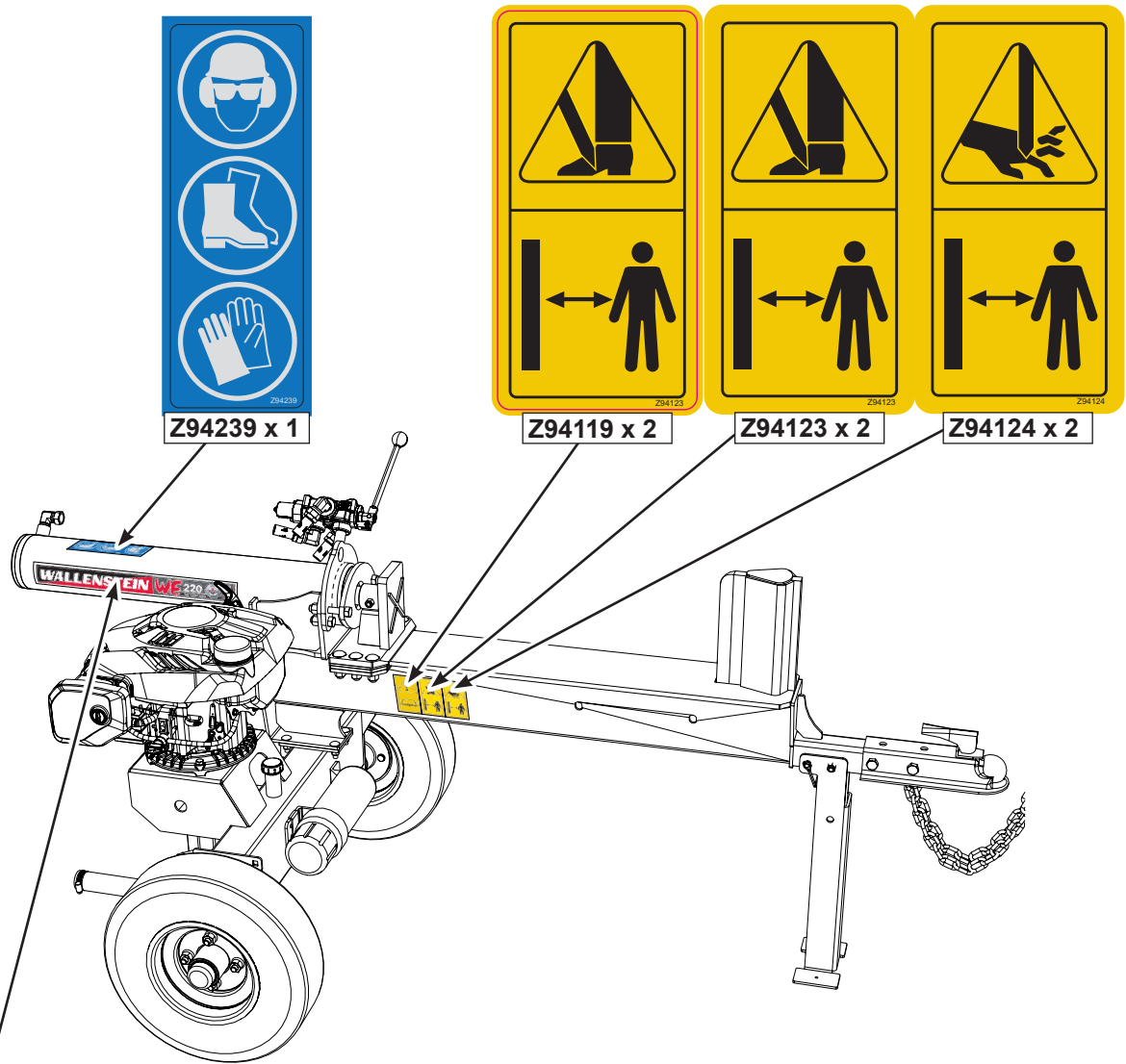
**Hydraulic Schematic**



**Hydraulic Hose List**

| PART NUMBER | DESCRIPTION                  | QTY |
|-------------|------------------------------|-----|
| 2064F801    | 1/2" Hose, MP08 x MP08 x 21" | 1   |
| 2064F802    | Suction Hose, 1"x 12"        | 1   |
| 2064F803    | 1/2" Hose, MP08 x MP08 x 36" | 1   |
| 2064F804    | 1/2" Hose, MP08 x MP08 x 26" | 1   |

**Label Layout**



Z94665 x 2

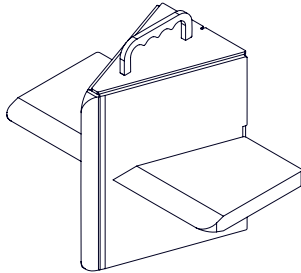


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