



An EFCO Company

# SWAPLOADER<sup>®</sup>

*"Hooked on Quality"*

U.S.A. LTD.

# MODEL SL-75

PARTS AND OPERATION MANUAL



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**HOIST SERIAL NUMBER**



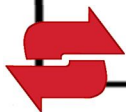
## **TABLE OF CONTENTS**

<b>I. <u>INTRODUCTION</u></b>	
Letter to Customer .....	1-1
Warranty Statement .....	1-2
Safety Suggestions.....	1-4
Decals .....	1-6
Serial Number Locations.....	1-8
<b>II. <u>INSTALLATION</u></b>	
Initial Inspection.....	2-1
General Installation Procedure.....	2-1
Hoist Installation .....	2-2
Spacer Kit Installation .....	2-4
Power Pack Installation .....	2-4
Connecting Power Pack Hydraulic Hoses.....	2-6
Power Pack Electrical Wiring .....	2-8
EHV Installation.....	2-10
P.T.O./Pump Selection .....	2-12
Hydraulic Tank Installation.....	2-12
Start Up Procedure.....	2-13
Subframe Dimensions .....	2-14
Accessory Installation	
Roller & Roller Mount.....	2-15
Toolbox Assembly .....	2-17
<b>III. <u>OPERATION</u></b>	
Loading a Container .....	3-1
Dumping a Container.....	3-2
Placing a Container on the Ground .....	3-3
<b>IV. <u>MAINTENANCE</u></b>	
Maintenance Instructions.....	4-1
Lubrication Diagram .....	4-2
Hydraulic Oil Specifications .....	4-3
Hydraulic Filter Specifications.....	4-3
Mast Lock (Pivot Lock) Inspection & Adjustment Instructions .....	4-4
Jib Proximity Sensor Inspection & Adjustment Instructions.....	4-5
Pressure Check Instructions (Power Pack) .....	4-6
Pressure Check Instructions (EHV).....	4-8
EHV Manual Over-Ride Instructions.....	4-9
<b>V. <u>PARTS</u></b>	
Base Hoist Assembly.....	5-1
Main Frame Assembly .....	5-2
Pivot Joint Assembly.....	5-3
Outer Tube Assembly .....	5-4
Safety Latch Assembly .....	5-5
Body Lock Assembly .....	5-6
Hoist Installation Kit .....	5-7
Base Cylinder Circuit .....	5-8



V. **OPTIONS**

Spacer Kit.....	6-1
Tank Circuit (EHV).....	6-2
Hose Circuit (EHV) .....	6-3





**TO THE CUSTOMER:**

Your new SwapLoader Hoist was carefully designed and manufactured to give years of dependable service. To keep it operating efficiently, read the instructions in this manual thoroughly. It contains detailed descriptions and instructions for the efficient operation and maintenance of your SwapLoader. Each section is clearly identified so you can easily find the information that you need. Read the Table of Contents to learn where each section is located. All instructions are recommended procedures only.



Throughout this manual you will come across "**Dangers,**" "**Warnings,**" or "**Cautions**" which will be carried out in bold type and preceded by the symbol as indicated to the left. Be certain to carefully read the message that follows to avoid the possibility of personal injury or machine damage.

Record your SwapLoader Hoist serial number in the appropriate space provided on the title page. Your SwapLoader dealer needs this information to give prompt, efficient service when ordering parts. It pays to rely on an authorized SwapLoader Distributor for your service needs. For the location of the Distributor nearest you, contact SwapLoader.

**NOTE:** It is SwapLoader's policy to constantly strive to improve SwapLoader products. The information, specifications, and illustrations in this publication are based on the information in effect at the time of approval for printing and publishing. SwapLoader therefore reserves the right to make changes in design and improvements whenever it is believed the efficiency of the unit will be improved without incurring any obligations to incorporate such improvements in any unit which has been shipped or is in service. It is recommended that users contact an authorized SwapLoader Distributor for the latest revisions.

# LIMITED WARRANTY STATEMENT

**Effective August 1, 2023**

SwapLoader U.S.A., Ltd., (SwapLoader), warrants to the original purchaser of any new SwapLoader product sold by an authorized SwapLoader distributor or service center, that such products are free of defects in material and workmanship. All SwapLoader products with an original factory in-service date of August 1, 2023, or later qualify for warranty as defined in this Limited Warranty Statement.

		1 YEAR	4 YEAR	5 YEAR
		Not to extend beyond 24 months from the original factory ship date	Not to extend beyond 60 months from the original factory ship date	Not to extend beyond 72 months from the original factory ship date
HOIST	<b>Manufactured Components</b>			
	SwapLoader Manufactured Parts (excludes replacement or service parts) includes but not limited to:			
	<ul style="list-style-type: none"> <li>Weldments</li> <li>Pins</li> <li>Hardware</li> <li>Piece Parts</li> </ul>			
	Repair Labor	✓		
	<b>Vendor Supplied Components</b>			
	Cylinders		✓	
	Hoses		✓	
	Fittings		✓	
	Jib Lockout Valve		✓	
	Hydraulic Body Lock Cylinder		✓	
	Repair Labor	✓		

		1 YEAR	4 YEAR	5 YEAR
		Not to extend beyond 24 months from the original factory ship date	Not to extend beyond 60 months from the original factory ship date	Not to extend beyond 72 months from the original factory ship date
OPTIONS & ACCESSORIES	<b>Manufactured Components</b>			
	SwapLoader Manufactured Parts (excludes replacement or service parts) includes but not limited to:			
	<ul style="list-style-type: none"> <li>Bumpers</li> <li>Sub-Frames</li> <li>Stabilizers (structural)</li> <li>Dual Rollers</li> </ul>			
	Repair Labor	✓		
	<b>Vendor Supplied Components</b>			
	Includes but not limited to:			
	<ul style="list-style-type: none"> <li>Pumps</li> <li>EHVs</li> <li>Valves</li> <li>Controls</li> <li>Sensors</li> <li>Tanks</li> <li>Toolboxes</li> <li>Tarps</li> <li>Lights</li> <li>Fenders</li> <li>PTOs</li> <li>All vendor replacement parts</li> </ul>			
	Repair Labor			

Reverts to Vendor Warranty

**Coverage Start Date:**

- Derived from the completed warranty registration at [www.swaploader.com/warranty-registration/](http://www.swaploader.com/warranty-registration/). In the event warranty registration is not completed, the factory ship date will be used.
- Items under “hoists” or “manufactured components” on page 1 are allowed a 12-month period between factory shipment and in service date to account for distributor stock.

**Warranty Process:**

- Unless otherwise stated the following warranty process must be followed for repairs and/or replacement parts to be covered:
  - Prior to any parts orders or repair work, contact SwapLoader at 888-767-8000 or [warranty@swaploader.net](mailto:warranty@swaploader.net) to initiate a claim and pre-authorize repairs.
  - Distributor will then order replacement parts and SwapLoader will invoice the distributor for the replacement parts and freight.
  - After authorized repair is completed the distributor must submit a fully completed warranty claim form.
  - If required by SwapLoader, defective parts will be assigned an RGA (return goods authorization) number, and those parts must be returned freight prepaid with a copy of the RGA form within 30 days of repair or credit consideration will not be given.
  - Upon evaluation of the returned parts if warranty is approved credit will be issued to the appropriate distributor account for the approved warranty costs which may include parts, labor, and/or freight.
  - SwapLoader will, at its discretion, adjust labor credit to pre-authorized or known repair times for covered repairs or service.

**Warranty Limitations & Responsibilities:**

- Warranty service must be performed by a distributor or service center authorized by SwapLoader to sell and/or service SwapLoader products. Distributors or service centers will use only new or remanufactured parts or components furnished by SwapLoader U.S.A. LTD.
- Defects in material and workmanship must be reported to SwapLoader immediately at time of discovery, subsequent damage caused by delay of defect reporting and repair will not be covered under warranty.
- Defects observed inside of the active warranty period and reported outside of the active warranty period will not be covered.
- Warranty service, repairs or returns must be pre-authorized by SwapLoader to be considered for credit.
- SwapLoader will, at its discretion, either repair defective parts or replace them with equivalent parts.
- SwapLoader will ship any replacement parts by the most economical, yet expedient means possible. Expedited freight delivery will be at the expense of the owner.
- Labor rates and credits are determined by the SwapLoader Distributor agreement.
- This warranty covers only defective material and workmanship. It does not cover depreciation or damage caused by normal wear and tear, accident, mishap, untrained operators, or improper or unintended use. The owner has the obligation of performing routine care and maintenance duties as stated in SwapLoader's written instructions, recommendations, and specifications. Any damage resulting from owner/operator failure to perform such duties shall void the coverage of this warranty. The cost of labor and supplies associated with routine maintenance will be paid by the owner.
- Warranty Registration must be submitted within 15 days of Retail Sale of SwapLoader hoist to [www.swaploader.com](http://www.swaploader.com). If unit has not been registered, then the warranty start date will revert to the original factory ship date. Warranty Registration is the ultimate responsibility of the owner. If the owner is unsure product registration has been completed, contact SwapLoader at 888-767-8000 or send email [sales@swaploader.net](mailto:sales@swaploader.net) to confirm.
- In no event will SwapLoader, the SwapLoader distributor or any company affiliated with SwapLoader be liable for business interruptions, costs of delay, or for any special, indirect, incidental, or consequential costs or damages. Such costs may include, but are not limited to:
 

• loss of time	• commissions	• travel
• loss of revenue	• lodging	• mileage
• loss of use	• meals	• any other incidental costs
• wages	• towing	
• salaries	• hydraulic fluid	
- Warranty shall not apply if the equipment is operated in abnormal conditions or operated at capacities more than factory ratings.
- Warranty is expressly void if the seal on the main relief control valve has been tampered with or broken.
- Warranty is expressly void if serial number plate or stamping is tampered with.
- Paint, plating, and coatings are not covered under this warranty policy.
- All products purchased by SwapLoader from outside vendors shall be covered by the warranty offered by that respective manufacturer unless defined otherwise on page 1.

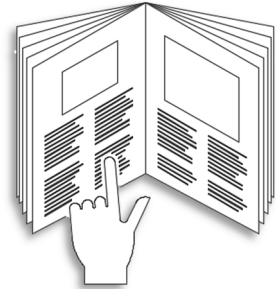
IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT THERE ARE NO WARRANTIES MADE BY THE MANUFACTURER OR ITS AGENTS, REPRESENTATIVES OR DISTRIBUTORS, EITHER EXPRESSED, IMPLIED, OR IMPLIED BY LAW, EXCEPT THOSE EXPRESSLY STATED ABOVE IN THIS STANDARD LIMITED WARRANTY AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP. THE MANUFACTURER AND ITS AGENTS, REPRESENTATIVES AND DISTRIBUTORS SPECIFICALLY DISCLAIM ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.



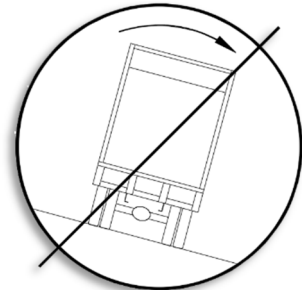
## **SAFETY SUGGESTIONS**



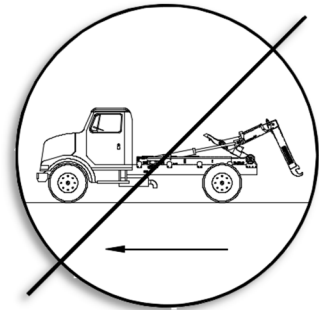
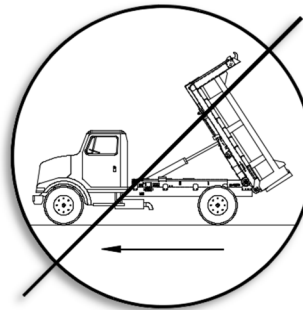
1. Do not operate or service this equipment until you have been properly trained and instructed in its use and have read the operation and service manual.



2. Do not operate this equipment on uneven ground.

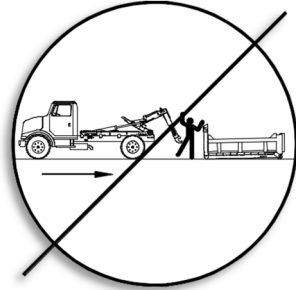


3. Do not drive with the hoist in the dump position or with the hook to the rear.

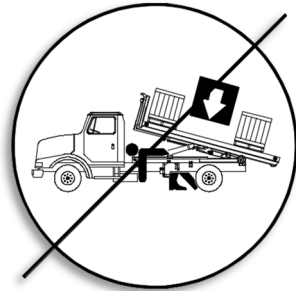


4. Do not exceed 1,500 Engine RPM when operating the Power Take Off (P.T.O.). Never leave the P.T.O. in gear while transporting.
5. The hoist must be used with containers that properly fit the hook and rear hold-downs. The container specifications must match the hoist specifications.
6. Keep the containers and hoist in good working order. **DO NOT** use if repairs are needed. Perform periodic inspections and maintenance as required by the maintenance section of the operator's manual.

7. Make sure work area is clear of people and obstacles prior to dumping or unloading containers. SwapLoader strongly recommends that a backup alarm be installed on the truck chassis. The operation of the hook hoist is that the truck is backed up to the body to pick it up and so there is a potential pinch point between the body and the hook.

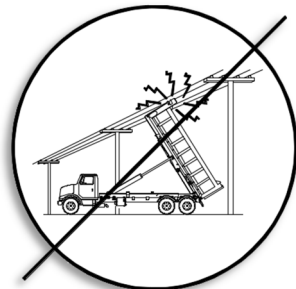


8. Any container, which is on the hoist, **MUST** be unloaded prior to performing any repairs or maintenance to the hoist. Also, **DO NOT** allow any person to work on or be under the hoist in a raised position without first installing adequate safety blocks to eliminate all possibility of the hoist accidentally lowering.



9. It is the responsibility of the owner and/or installer to insure that any additional safety devices required by state or local codes are installed on the SwapLoader Hoist and/or Truck Chassis.

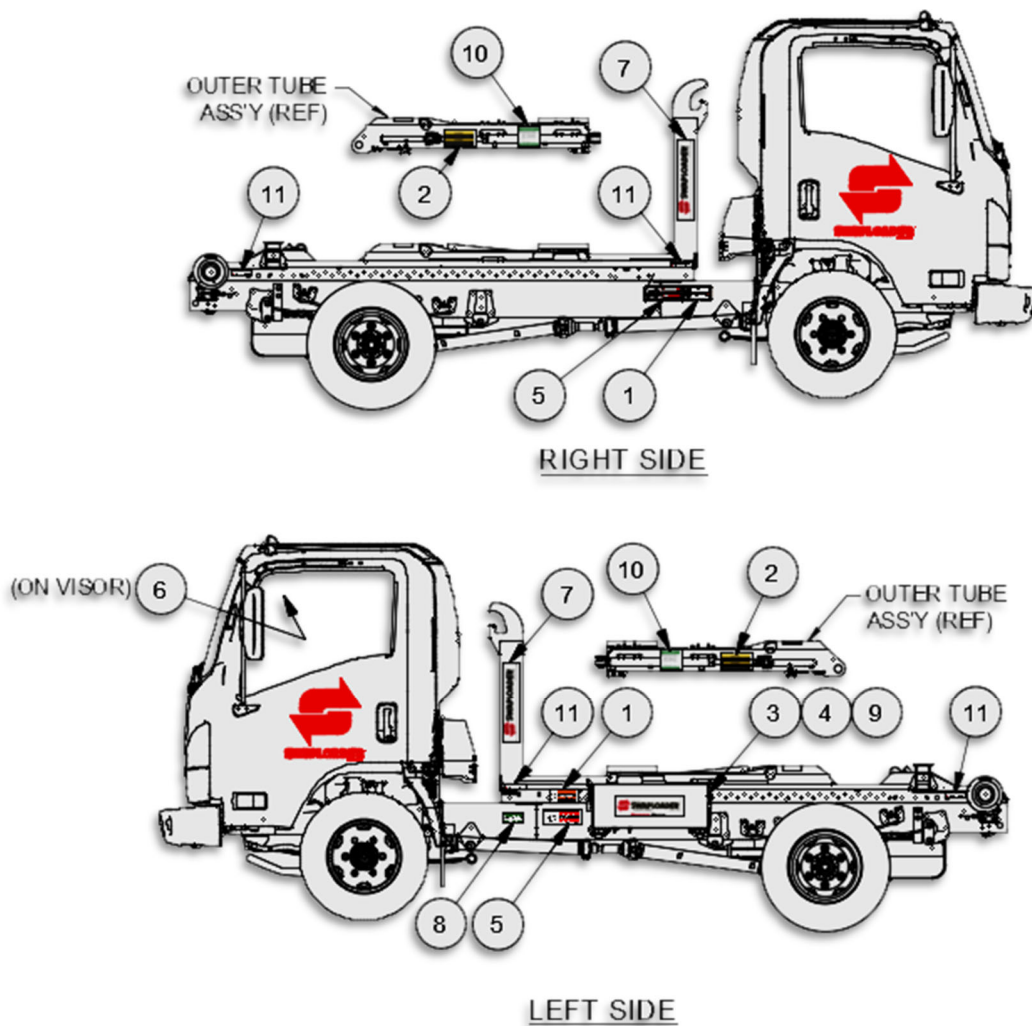
10. Keep away from overhead power lines. Serious injury or death can result from contact with electrical lines. Use care when operating hoist near electrical lines to avoid contact.



11. Avoid contact with high-pressure fluids. Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid hazardous conditions by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Search for leaks with a piece of cardboard, while protecting hands and body from the high-pressure fluids.



12. It is the responsibility of the owner to provide proper maintenance of the Safety Decals. Regular inspection and replacing of Safety Decals that have any fading or damage which would impair their function should be done (See the illustration on the following page for location of Safety Decals).



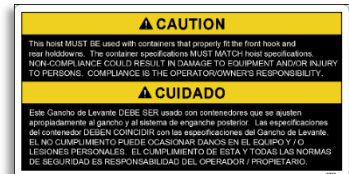
ITEM	QTY	P/N	DESCRIPTION
1	2	90P07	OPERATION & SERVICE MANUAL
2	2	90P08	HOIST-BODY SPECIFICATIONS
3	ONE	90P09	HYDRAULIC OIL SPECIFICATIONS
4	ONE	90P10	HYDRAULIC OIL FLAMMABLE
5	2	90P11	HOIST FALLING
6	ONE	90P13	SAFETY INSTRUCTIONS
7	2	90P14	SWAPLOADER - JIB
8	ONE	90P18	RELIEF VALVE
9	ONE	90P78	HIGH-PRESSURE FLUID
10	2	91P06	LUBRICATION POINTS
11	4	91P24	SL-75

The following is a list of all the SwapLoader Safety Decals, and their part numbers. Please use when reordering replacement decals.

## 90P07 – OPERATIONS & SERVICE MANUAL



## 90P08 – HOIST-BODY SPECIFICATIONS



## 90P09 – HYDRAULIC OIL SPECIFICATIONS



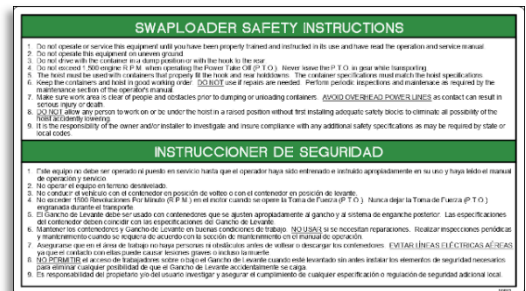
## 90P10 – HYDRAULIC OIL FLAMMABLE



## 90P11 – HOIST FALLING



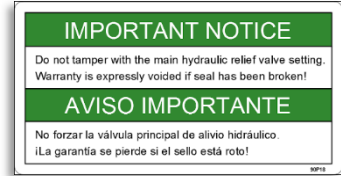
## 90P13 – SWAPLOADER SAFETY INSTRUCTIONS



## 90P14 – SWAPLOADER - JIB



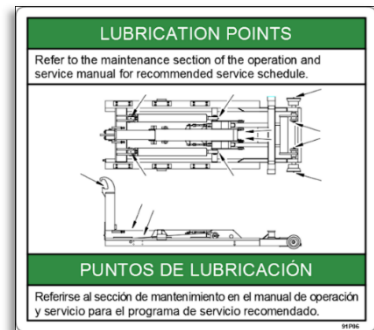
90P18 – RELIEF VALVE



90P78 – HIGH-PRESSURE FLUID



91P06 – LUBRICATION POINTS



91P24 – SL-75



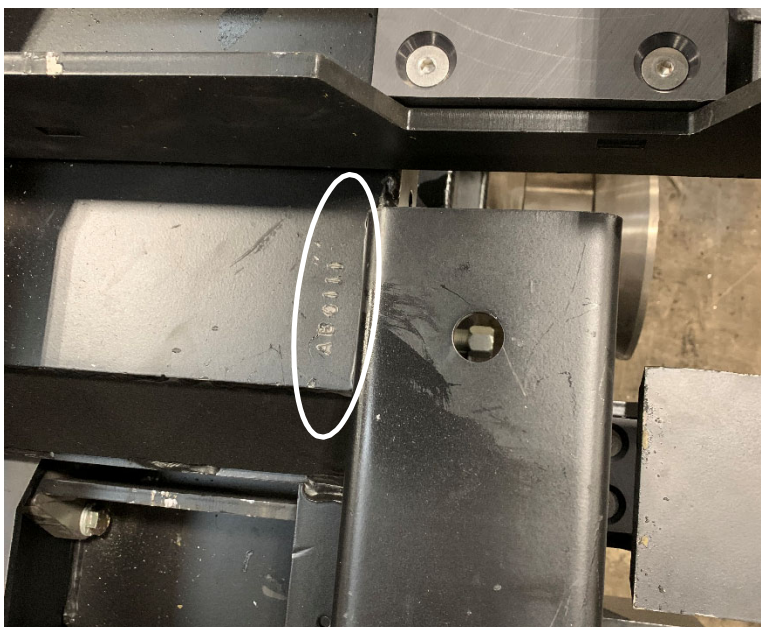


## SERIAL NUMBER LOCATIONS ON A SWAPLOADER HOIST



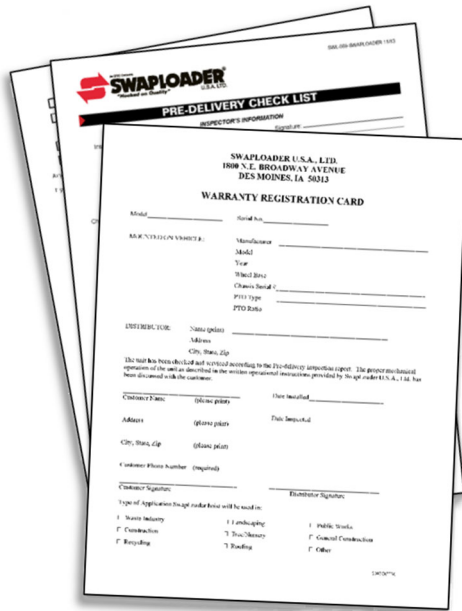
Serial Number Tag is located at the front driver side of the hoist (gray arrow on first picture).

The Serial Number is also stamped into the frame of the hoist on the top of the “inner rail” shown at the rear of the hoist (red arrow on first picture). An example of a 6-character serial number is shown in the second picture.



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## **INITIAL INSPECTION**



When the hoist is installed and ready for delivery, it is your responsibility to fill out and submit the Product Registration Form. Visit

<https://www.swaploader.com/warranty-registration/> to complete this form.

When the SwapLoader hoist is received from the factory, you should inspect the hoist for damage, which may have occurred in shipment. If damage has occurred, you should contact the shipper immediately. Be sure to note any damage or missing items on bill of Lading.

When you receive your SwapLoader hoist, it is your responsibility to make sure you have received all the parts and pieces that were ordered, within 30 days of the invoice date of the hoist. Lay out all the options, loose parts and accessories on a table and compare the items received vs the Packing List and the Loose Parts Box List(s) shipped with the hoist order.

If you have any problems, shortages, or questions, please contact SwapLoader U.S.A., Ltd. immediately.

## **GENERAL INSTALLATION PROCEDURE**

The installation of a SL-75 on a truck chassis will generally follow these steps:

1. Install hoist assembly onto truck chassis.
2. Install a Power Pack or EHV system to the hoist and install the hydraulic plumbing from the control valve to the hydraulic cylinders. Then install the control switchbox in the cab and route the harnesses to the Power Pack or EHV and truck battery.

**If utilizing an EHV complete the following additional steps:**

3. Select and install the P.T.O. on the truck transmission. (Note: This can be done prior to hoist installation on the truck chassis.)
4. Install the hydraulic pump and the plumbing from the pump to the hydraulic tank and control valve assembly.
5. Fill the hydraulic tank with oil, bleed the air from the pump suction line, and start up the unit.

Although SwapLoader attempts to include the mounts and attaching fasteners with each hoist unit, your installation may require some additional mounts or modifications. If you have problems with your installation, please contact SwapLoader at 1-888-767-8000, as we may be aware of another customer who has installed a SwapLoader on a similar truck chassis.

## HOIST INSTALLATION TO TRUCK CHASSIS

1. Place the SL-75 hoist assembly on the truck chassis. The truck chassis mounting surface should be flat without any steps or protrusions. If necessary, shim bars need to be added to ensure a flat surface on which to support hoist. It is advised to clamp the main frame of the hoist to the truck chassis prior to install of the mount brackets.

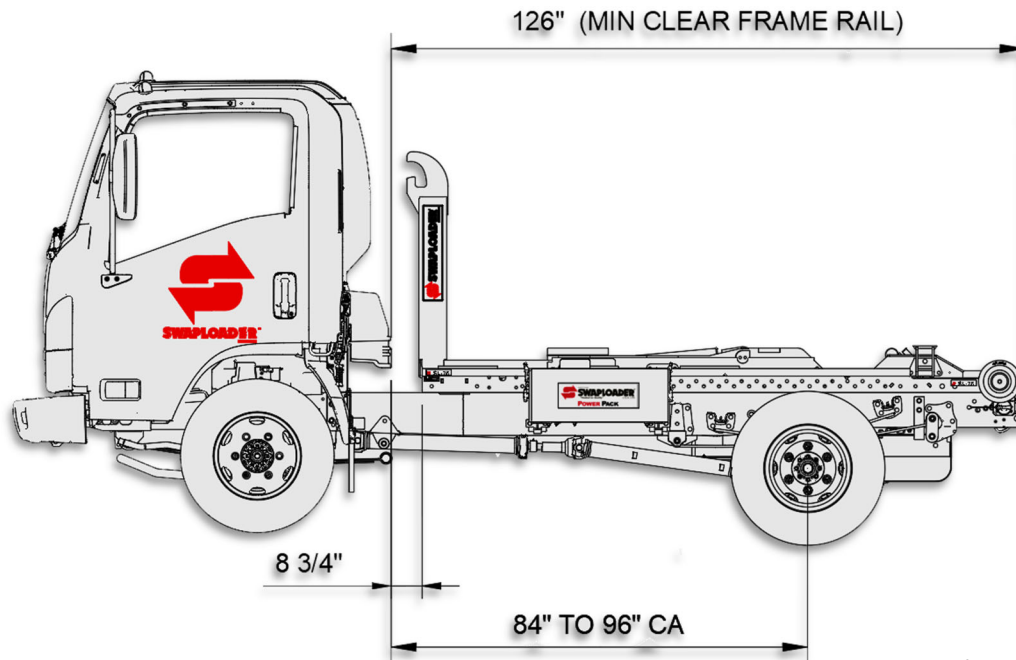


Figure A

The clear frame dimension indicated in *Fig. A* allows for the overall length of the hoist plus 5 inches for cab clearance and rear light bar mounting. Extra frame length may be needed to allow for mounting additional accessories (e.g. Cab Guard, Tarper, Light Kit, Stabilizer, etc.). For example, when mounting a light kit on a truck with a long CA, check that the hoist and the light kit are positioned far enough back to eliminate any interference between the fender and the light kit. You should also consider the final weight distribution regarding the bridge codes and axle GVWR when positioning the hoist.

### NOTE:

THE ABOVE SPECIFICATIONS ARE A MINIMUM REQUIREMENT. IT IS THE RESPONSIBILITY OF THE OWNER/ OPERATOR TO ENSURE THE COMPLETED CHASSIS MEETS OR EXCEEDS ALL FEDERAL, STATE, AND LOCAL REGULATIONS. ALSO, THE HOIST SHOULD NOT BE USED TO LIFT AND HAUL ANY LOAD THAT EXCEEDS THE LOAD RATING OF ANY OF THE INDIVIDUAL COMPONENTS OF THE COMPLETED CHASSIS (TIRES, AXLES, SUSPENSION, ETC.)

2. There are three types of mount brackets used on the Model SL-75 hoist as indicated in *Fig. B* and *Pg. 5-7*. They are the front brackets (*Pt. No. 25H91*), the mid brackets (*Pt. No. 25H89*) and the rear brackets (*Pt. No. 26H74*). Locate the mount brackets on the side of the

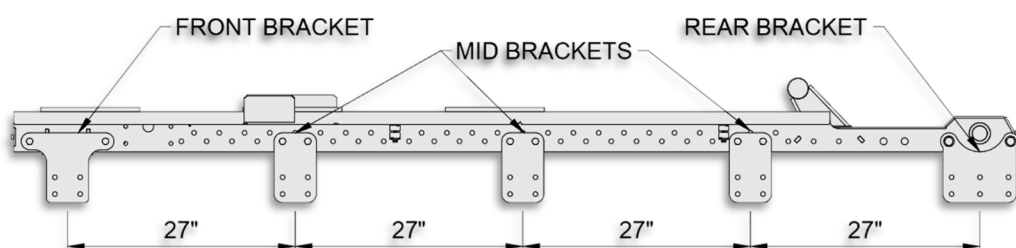


Figure B

hoist as indicated in *Fig. B*. These dimensions are flexible because of possible interference with chassis components. Also allow for mounting the Power Pack. You should consult the truck chassis supplier for any limitations regarding drilling mount holes in the truck chassis frame rails. Typically, the holes must be at least  $2\frac{3}{4}$ " from the top of the truck chassis rails (reference *Fig. C*, *Fig. D* & *Fig. E*). Mid brackets will have more flexibility due to the additional row of holes in the Main Frame and allows for drilling into the truck chassis frame rails at  $2\frac{3}{4}$ ",  $3\frac{3}{4}$ " or  $4\frac{3}{4}$ " (**bolts are only required on two of the four lower mount bracket holes**). Once the locations of the mount brackets have been determined, use the mount brackets as a template for marking the mounting holes in the truck chassis frame rails. Drill the  $\frac{17}{32}$ " diameter holes required and attach the brackets to the truck chassis with the  $\frac{1}{2}$ " diameter bolts, washers, and locking hex nuts provided. **Torque to 110 ft.lb.**

3. Bolt the mount brackets to the hoist main frame as indicated on *Fig. C*, *D* and *E*. You may need to modify the mount brackets or add shim plates to allow for variances in the width of the truck chassis as well as to allow for top rivets, stepped channels, etc.

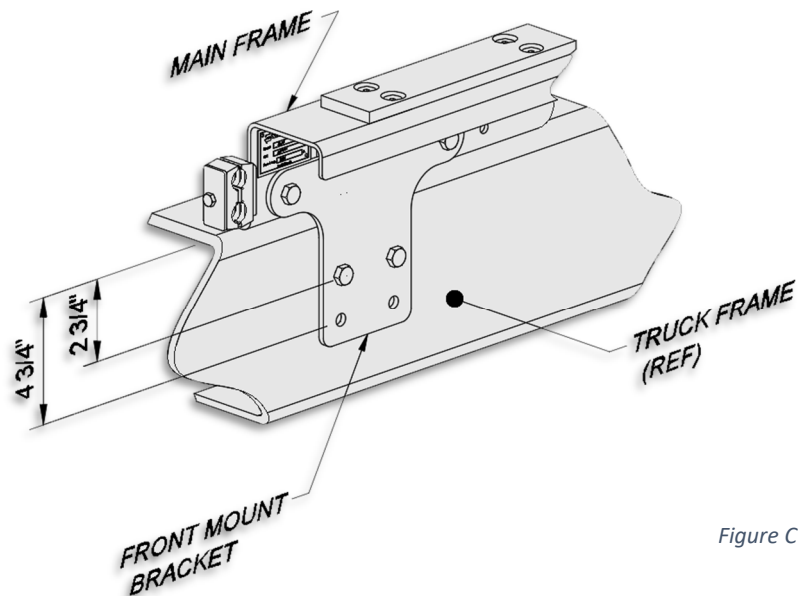


Figure C

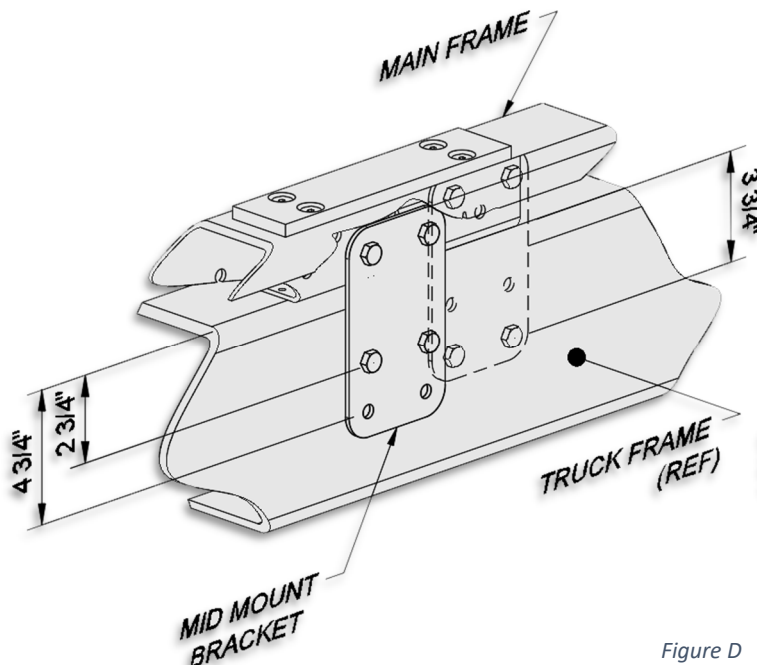


Figure D

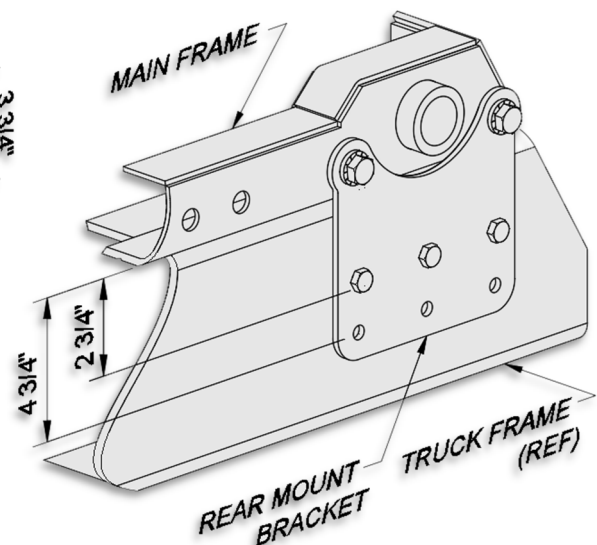


Figure E

## **SPACER KIT INSTALLATION**

The SL-75 has made available an alternative option when installing to the truck chassis. The Spacer Kit (*Pt. No. 13H49*) allows for the hoist to be raised to account for any interferences from components of the truck that are above the chassis. The main frame of the hoist will have pre-drilled holes into the bottom flange that will sit on top of the spacer provided in the spacer kit. Be sure to drill Ø1/4" holes into the spacers to drive the spring pins into.

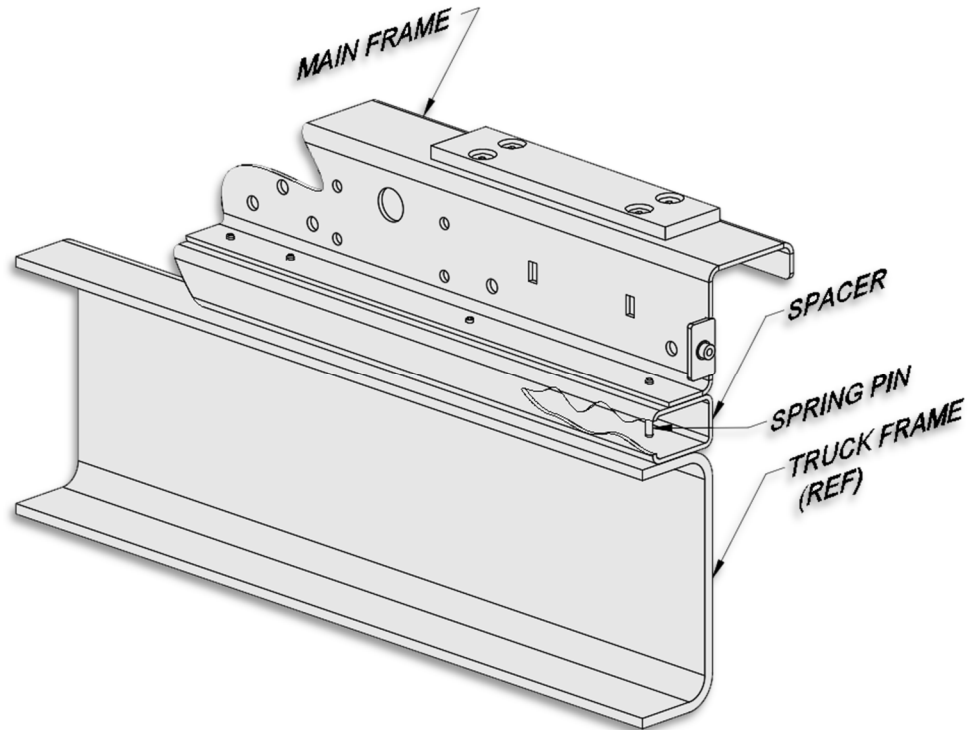


Figure F

## **POWER PACK INSTALLATION**

**Introduction to the Power Pack:** The SwapLoader Power Pack provides on demand hydraulic power from a self-contained power unit which consists of a gear pump, 24V electric motor, directional valve, and reservoir. To provide 24V to the motor, an additional 12V AGM 27 or AGM 31 auxiliary battery is required. The auxiliary battery is connected first to a series parallel switch and then subsequently to the truck batteries through the series parallel switch. This configuration allows for the auxiliary battery to charge in parallel with the truck batteries at 12V while the Power Pack is not engaged. When the in-cab control switch activates the power unit, this simultaneously triggers the series parallel switch and places the auxiliary battery in series with the truck battery thus providing 24V to the electric motor.

Also integrated into the hydraulic system is a ferrous proximity sensor, which detects only metal. In the case of the SL-75, the proximity sensor will sense the outer tube while it is in a flat position. When the outer tube is not flat, the sensor will not allow a signal to be sent to the jib section of the control valve, which effectively disables the jib function of the hoist

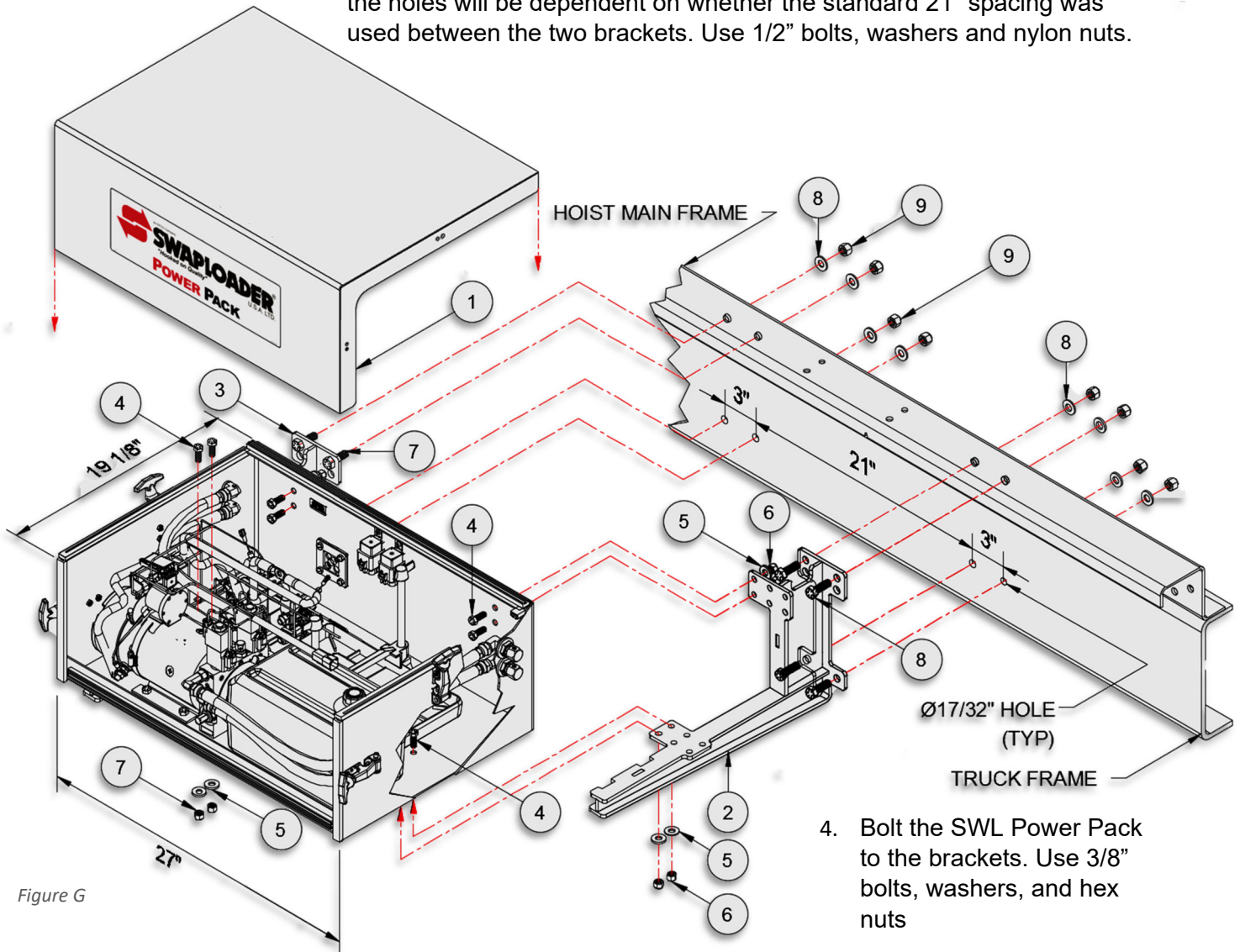


1. Review all directions and diagrams provided before starting the SwapLoader Power Pack installation.
2. Mount Right and Left Bracket to hoist main frame. Holes are predrilled on the main frame of the hoist. Measure 21" between the two holes as shown in *Fig. G*. If a 21" dimension is not possible due to truck constraints, the bracket can be brought closer together. In this case, use a dimension of 15". Use 1/2" bolts, washers and nylon nuts to secure the brackets to the main frame. Depending on truck frame width, it may be necessary to add shims (not included) to either the Main Frame or truck frame to mount brackets flush.

**22P72 – Power Pack**

ITEM	QTY	DESCRIPTION
1	1	Cover, Power Pack
2	1	Power Pack Support Bracket, Right
3	1	Power Pack Support Bracket, Left
4	8	HHCS 3/8-16 x 1 Gr8
5	8	Washer, Flat 3/8 Dia
6	8	Nut, Hex 3/8-16 Gr8
7	8	HHCS 1/2-13 x 1-1/2 Pl Gr8
8	8	Washer, Flat 1/2 Pl
9	8	Nut, Nylon 1/2-13 Gr8

3. Drill 17/32" diameter holes into the truck frame. The distance between the holes will be dependent on whether the standard 21" spacing was used between the two brackets. Use 1/2" bolts, washers and nylon nuts.



4. Bolt the SWL Power Pack to the brackets. Use 3/8" bolts, washers, and hex nuts

**CONNECTING POWER PACK HYDRAULIC HOSES**

- 5. Hook up hydraulic hoses to the lift cylinders as shown in *Fig. H*. Use item 1, 2 & 3 to secure hoses to the main frame of the hoist.
- 6. See *Fig. I* for connecting the hyd. lines to the jib. Use items 1, 2 & 3 to fasten hyd. hoses to the main frame of the hoist. See *Pg. 15* in your manual for a detailed view of proximity sensor adjustment.

Power Pack Hose Circuit			
ITEM	PART #	QTY	DESCRIPTION
1	10P63	2	HHCS 5/16 x 1-3/4
2	10P64	2	Cover Plate, Clamp 1/2"
3	10P65	2	Clamp Assy, Twin 7/8"
4	13P61	1	Proximity Sensor
5	13P70	2	Hose Assy 65 08-08FJ/08FJ
6	13P71	2	Hose Assy 70 08-08FJ/08FJ90

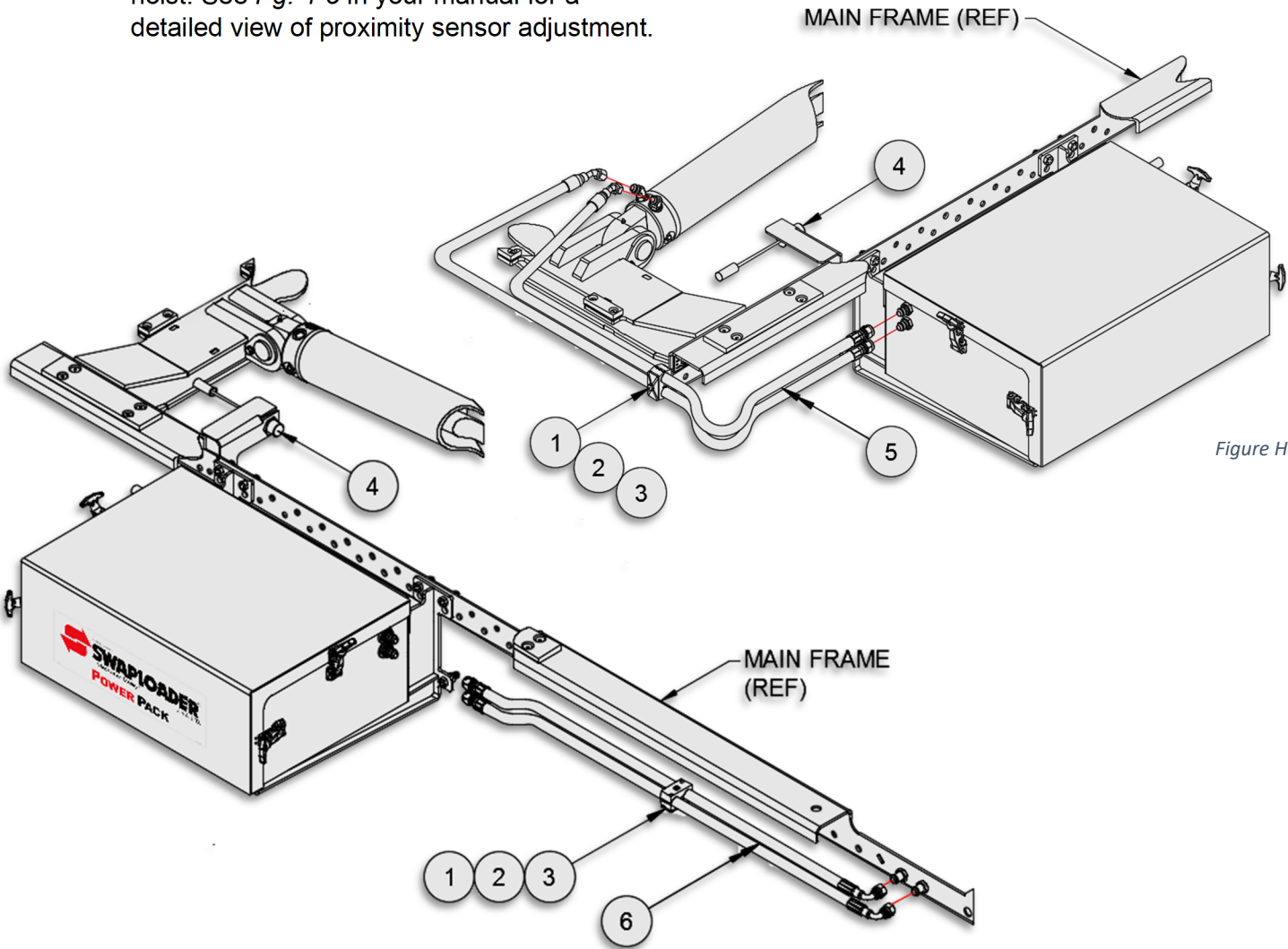
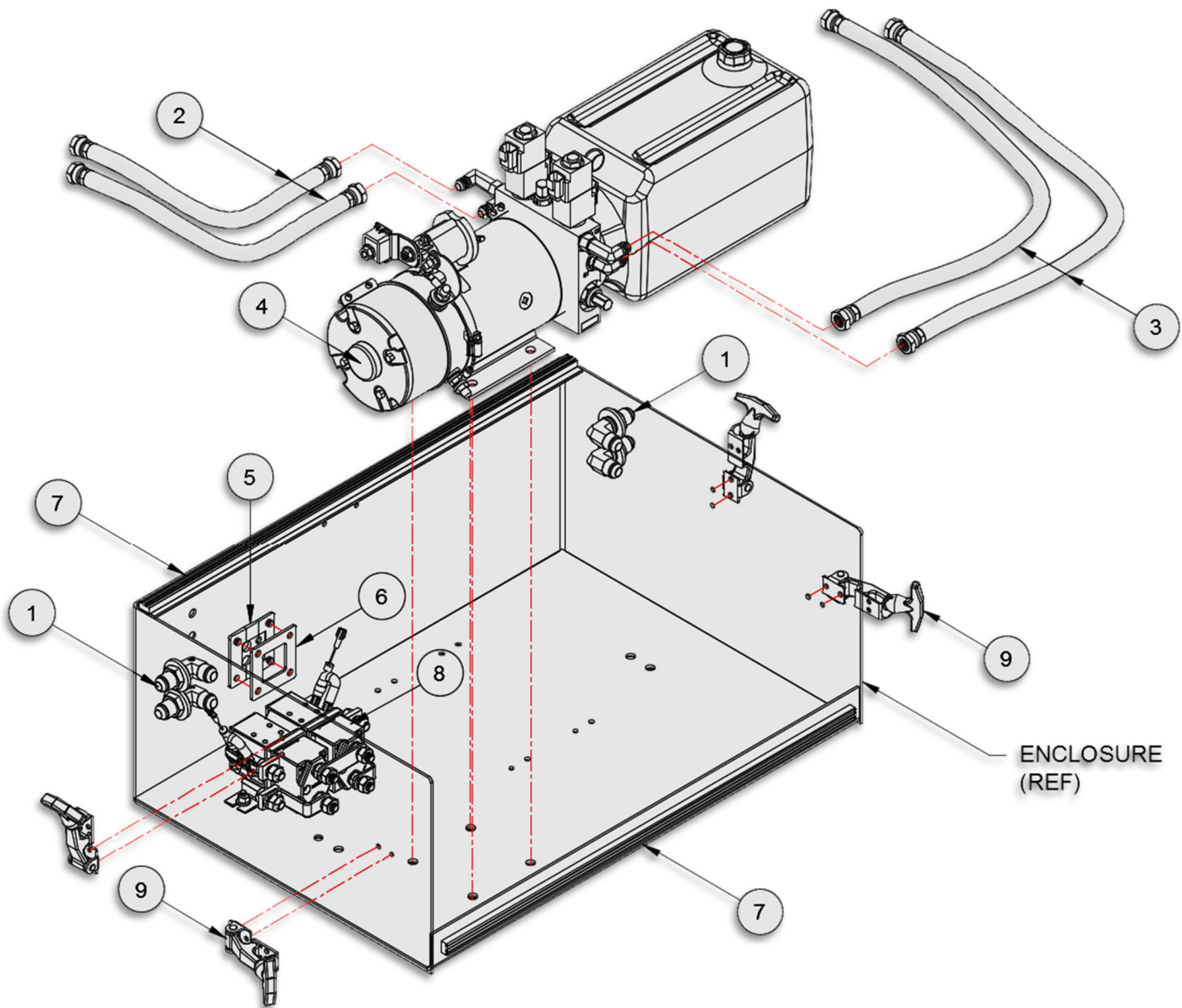


Figure H

Figure I



Power Pack- SERVICE PARTS				SL-75
ITEM	PART #	QTY	DESCRIPTION	
1	11P24	4	Adp Hyd 08MJ/08MJ 90	
2	13P68	2	Hose Assy 17.5 08-08FJ/08FJ	
3	13P69	2	Hose Assy 28 08-08FJ/08FJ	
4	22P68	1	Hyd Power Unit, 24V	
5	22P79	1	Access Gasket, Power Pack	
6	22P80	1	Access Plate, Power Pack	
7	22P81	2	Adhesive Gasket, 5/8W x 3/8H	
8	40P48	1	12V/24V Series Parallel Switch	
9	91P28	4	Draw Latch w/ Strike Plate	



**POWER PACK ELECTRICAL WIRING**

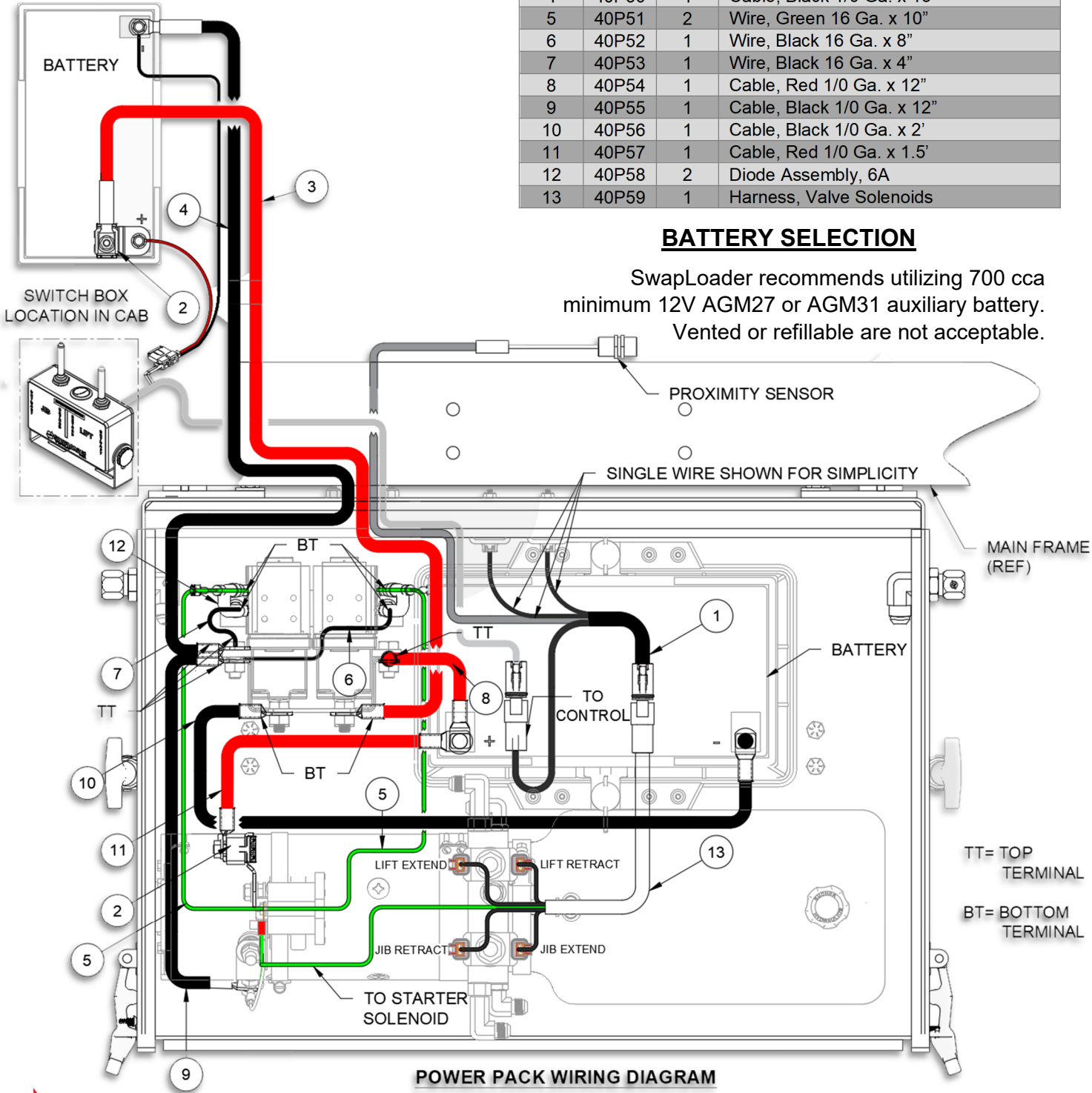
7. Locate the nearest truck battery to the Power Pack, this will be the battery the power pack will tie in to. Install the provided 350A fuse to the positive terminal of this battery.

Note: Do not connect the controller to the auxiliary battery within the Power Pack enclosure.

Hyd Hose install – Electrical Service Parts SL-75			
ITEM	PART #	QTY	DESCRIPTION
1	13P61	1	Proximity Sensor w/ Harness
2	40P47	2	Fuse Kit, 350A
3	40P49	1	Cable, Red 1/0 Ga. x 13'
4	40P50	1	Cable, Black 1/0 Ga. x 13'
5	40P51	2	Wire, Green 16 Ga. x 10"
6	40P52	1	Wire, Black 16 Ga. x 8"
7	40P53	1	Wire, Black 16 Ga. x 4"
8	40P54	1	Cable, Red 1/0 Ga. x 12"
9	40P55	1	Cable, Black 1/0 Ga. x 12"
10	40P56	1	Cable, Black 1/0 Ga. x 2'
11	40P57	1	Cable, Red 1/0 Ga. x 1.5'
12	40P58	2	Diode Assembly, 6A
13	40P59	1	Harness, Valve Solenoids

**BATTERY SELECTION**

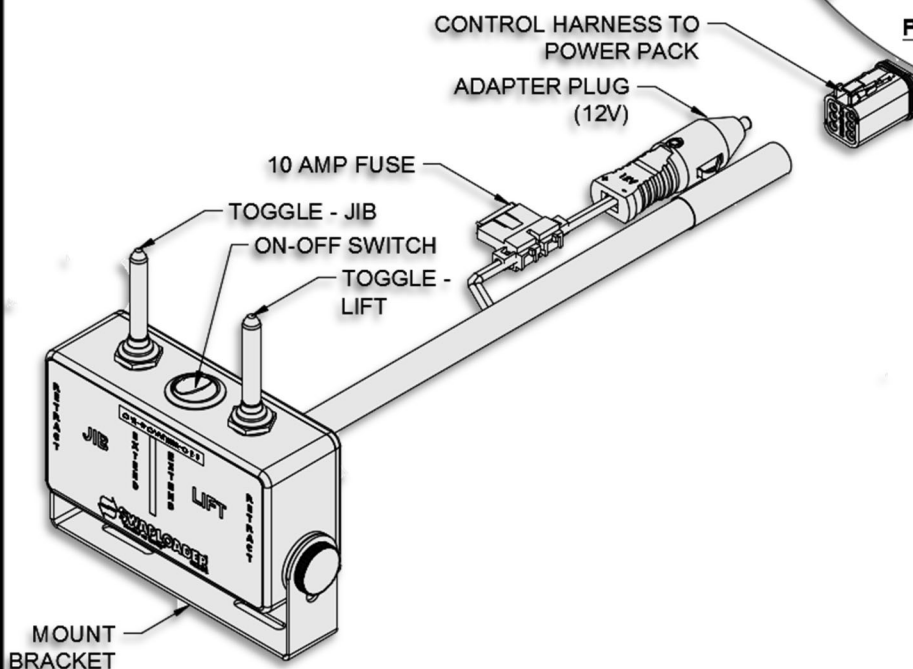
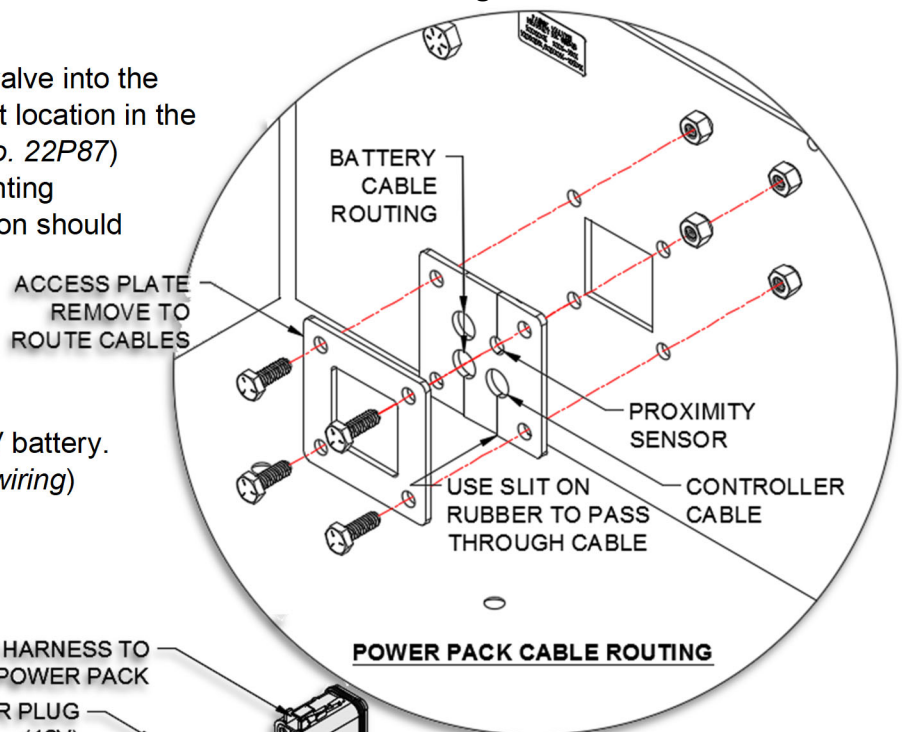
SwapLoader recommends utilizing 700 cca minimum 12V AGM27 or AGM31 auxiliary battery. Vented or refillable are not acceptable.



8. The following connections will need to be made after installing the auxiliary AGM 27 or AGM 31 battery inside of the Power Pack enclosure:
  - a. Red series parallel switch lead and red motor starter lead to the positive aux battery terminal
  - b. Connection of the male connector of proximity sensor harness (*Pt. No. 13P61*) to the valve solenoid harness (*Pt. No. 40P59*).
  - c. Connection of the female connector to the male connector of the switch box harness
  - d. Connection of the front positive series parallel flying lead to the positive terminal of the fused positive terminal on the truck battery
  - e. Connection of the left side negative series parallel flying lead to the negative terminal of the truck battery.

**Cables entering the Power Pack enclosure should be routed up into the enclosure to prevent moisture from following the cable into the enclosure. When this is not possible a cable tie should be put on the cable or harness 1/2" from entering the enclosure to divert moisture.**

9. Route control harness from valve into the truck cab. Determine the best location in the cab for the switch box (*Pt. No. 22P87*) location and install with mounting screws (included). The location should be such that the controls can be easily reached while operating the truck.
10. Insert power adapter into 12V outlet or hardwire to 12V battery. (see wiring diagram for hardwiring)



11. Route battery cables to either the front of cab or the closest battery available. The Power Pack requires 24 V to function. An additional battery will be required during install.

**EHV INSTALLATION**

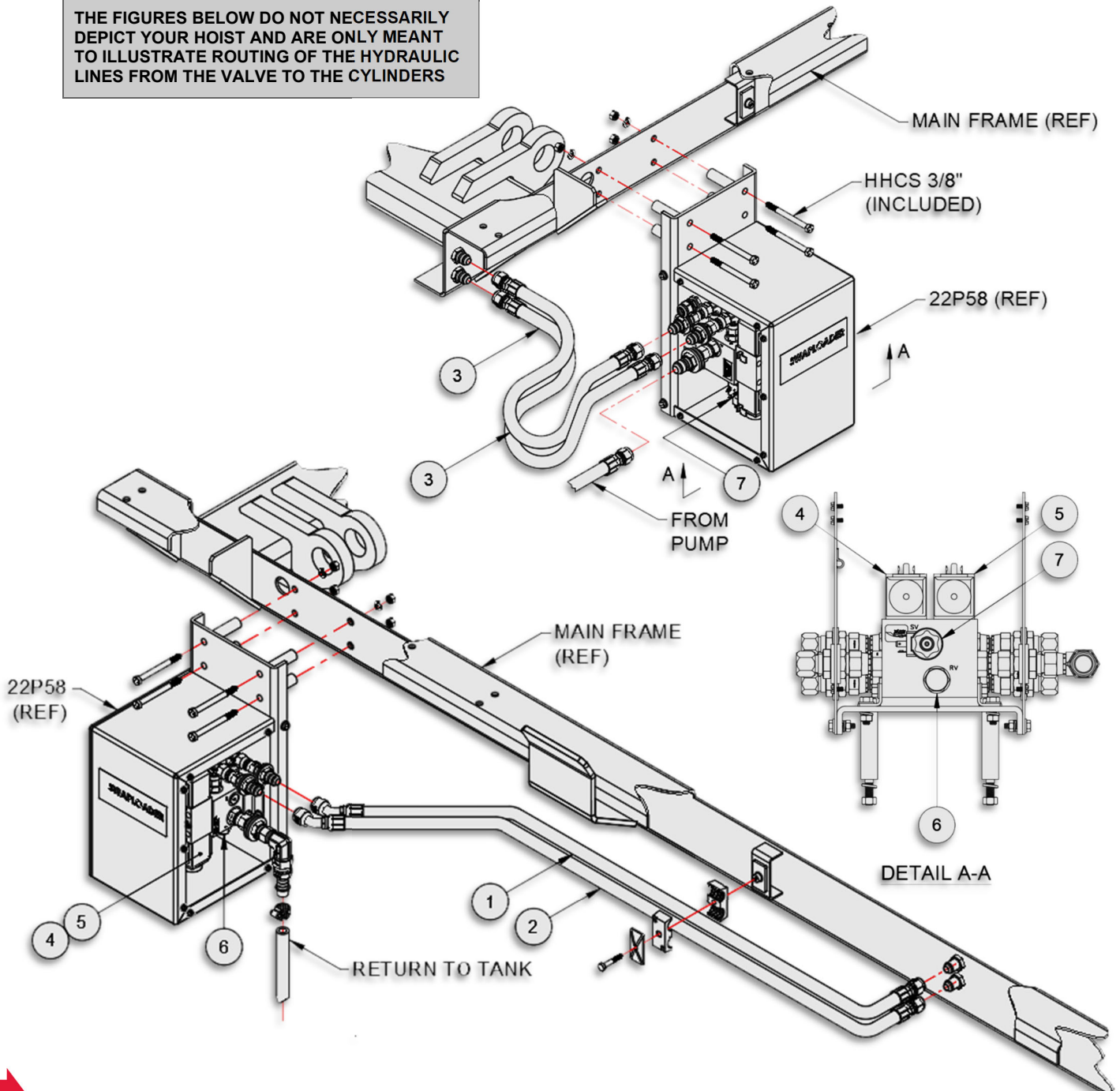
1. Review all directions and diagrams provided before starting the **Electric over Hydraulic Valve** Installation.
2. Mount the 22P58 EHV to the hoist's Main Frame and attach all hoses, hose clamp assemblies and fittings as shown on Pgs. 6-5 through 6-7 (also see Illustrations).

**NOTE:**

THE FIGURES BELOW DO NOT NECESSARILY DEPICT YOUR HOIST AND ARE ONLY MEANT TO ILLUSTRATE ROUTING OF THE HYDRAULIC LINES FROM THE VALVE TO THE CYLINDERS

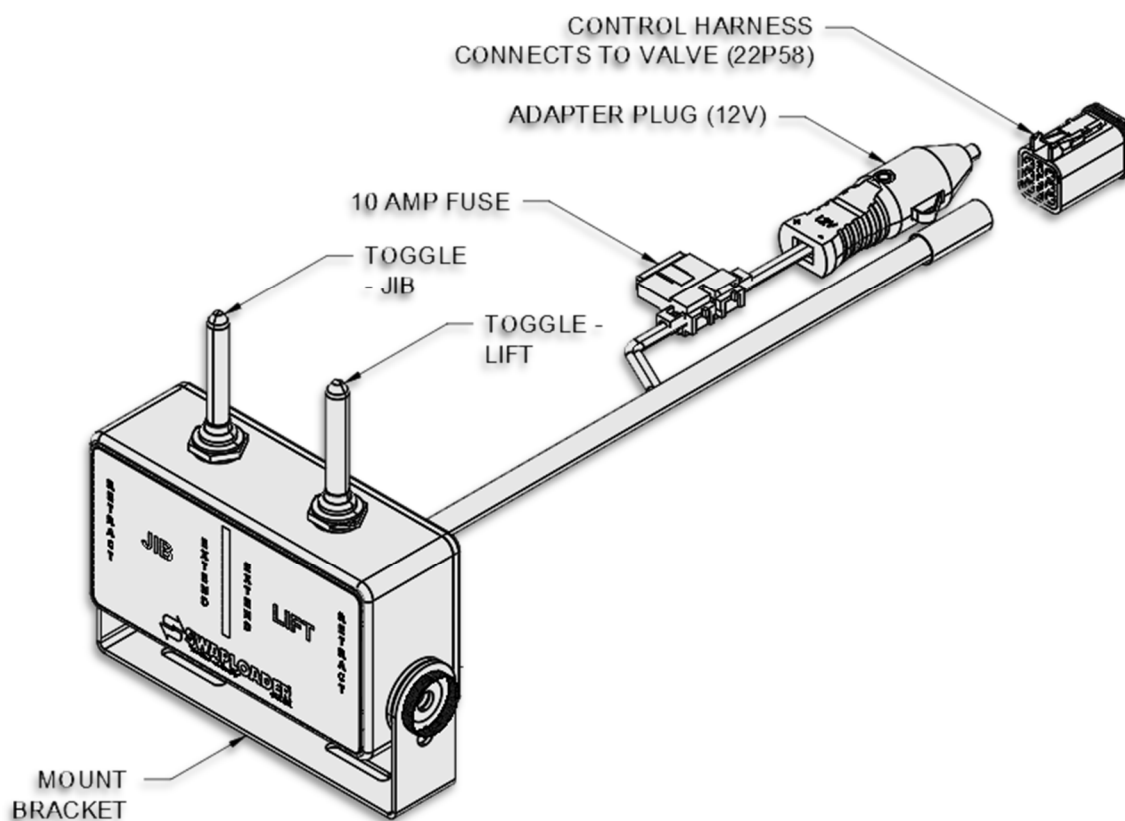
**Electric Over Hyd. Valve - SERVICE PARTS****SL-75**

ITEM	PART #	QTY	DESCRIPTION
1	13P36	1	Hose Assy 83.5 08-08FJ/08FJ45
2	13P37	1	Hose Assy 86 08-08FJ/08FJ5
3	13P62	2	Hose Assy 45 08-08FJ/08FJ
4	22P82	1	Solenoid Operated Valve, Coil
5	22P83	1	Solenoid Operated Valve, Spool
6	22P84	1	Relief Valve Cartridge (3250)
7	22P85	1	Dump Valve





3. Route control harness from valve into the truck cab. Determine the best location in the cab for the control box location and install with mounting screws (included). The location should be such that the controls can be easily reached while operating the truck.



### **P.T.O./PUMP SELECTION (for EHV option)**

The next step is to select and install a direct drive type P.T.O. to the transmission. Please contact your local truck equipment representative for the correct unit sized on the following criteria:

<b>P.T.O. Torque Rating:</b>	40 ft.-lbs. (See Note 1)
<b>Operating Pressure:</b>	3250 PSI
<b>Pump Displacement:</b>	0.85 CID
<b>Pump Flow @ Pump RPM:</b>	3.1 GPM @ 1,000 RPM
<b>Hydraulic Pump Rotation:</b>	Dependent on PTO. RH is typical on automatic transmissions with an engine rotation PTO

#### **NOTE 1:**

P.T.O. TORQUE AND POWER REQUIREMENTS ARE BASED ON THE UNIT OPERATING AT MAIN RELIEF PRESSURE. NORMAL OPERATING PRESSURE WILL BE LESS.

#### **NOTE 2:**

DO NOT OPERATE PUMP AT SPEEDS OVER 1500 R.P.M.

#### **NOTE 3:**

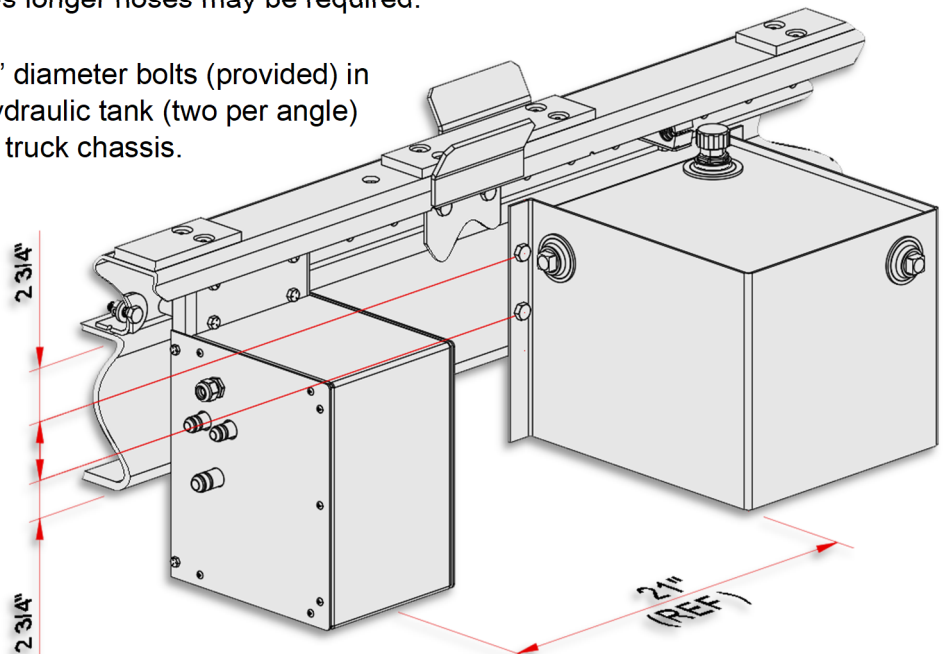
ALWAYS DISENGAGE THE P.T.O. AFTER EACH OPERATING CYCLE.

### **HYDRAULIC TANK INSTALLATION**

1. Select a location to mount the hydraulic tank. Reference the illustration below for the suggested location of the hydraulic tank to the rear of the EHV valve assembly on the left-hand side of the truck. The hydraulic hoses have been sized for the tank to be mounted in this general area. The tank can be located on the right-hand driver's side or behind the cab, if necessary, which means longer hoses may be required.

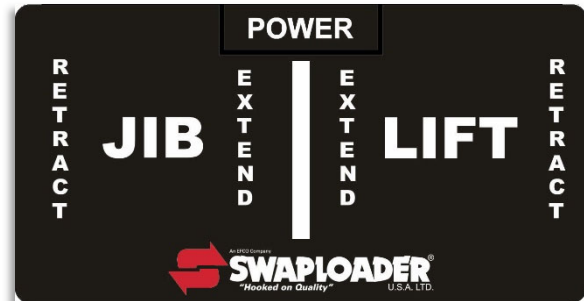
2. Drill four (4) holes for 1/2" diameter bolts (provided) in the mount angle of the hydraulic tank (two per angle) and the frame rails of the truck chassis.

Mount the hydraulic filter. Install the hydraulic return hose and the hose barb fitting between the filter and the EHV valve assembly as shown on Pg. 6-2 of the manual. The hose length can be shortened if necessary. Secure the hose to the barb fittings with the hose clamps provided.



## START UP PROCEDURE

1. Fill the hydraulic tank with hydraulic oil (see oil specification in Section IV: Maintenance.)
2. Operate the cylinders at full stroke five to ten times to bleed the air from the lines and cylinders. The cylinders were filled with oil during testing at the factory, but some seepage may have occurred during shipping and installation. Refill the hydraulic tank, if needed, during this sequence and do not let the pump run without oil.
3. Check for leaks and tighten fittings as necessary.
4. Verify the movement of the control levers corresponds to the movement of the cylinders per the figure below.
5. Install all safety decals and product decals as shown on *Pg. 1-5* after final installation and painting have been completed.
6. Fill out the Product Registration form online at <https://www.swaploader.com/warranty-registration>



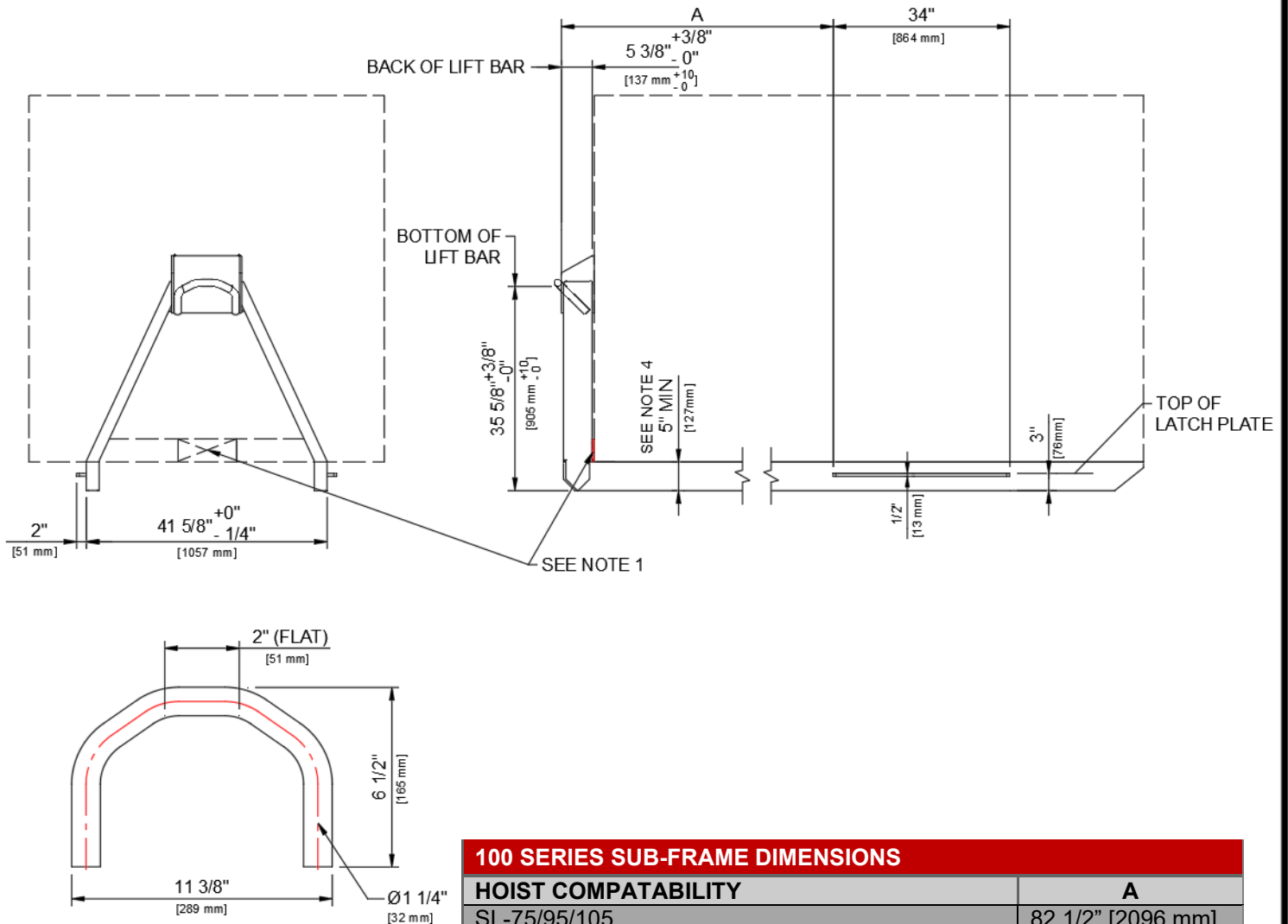
### NOTE:

FAILURE TO FILL OUT AND SUBMIT PRODUCT REGISTRATION WITHIN 15 DAYS OF INSTALLATION MAY POSSIBLY VOID THE WARRANTY.



- CAUTION** The SwapLoader hoist must be used with bodies or containers that properly fit the front hook and the rear hold-downs (see Subframe Critical Dimensions on Pg. 2-14). If possible, pick up one of the containers that will be used with the SwapLoader hoist and verify the following:
- Outside dimensions of the long sills match the guiding rollers on the hoist.
  - The front hook dimensions are correct for the hoist.
  - The rear hold-downs of the container latch into the hold-downs on the hoist.
  - Check for any interference between the container and any part of the hoist (i.e.: Hydraulic tank, hydraulic tubing or hose, hydraulic valve, etc.)

## 100 SERIES SUB-FRAME CRITICAL DIMENSIONS



### NOTE:

1. A STRUCTURAL JIB CONTACT POINT LOCATED AS LOW AS ALLOWABLE ON THE CONTAINER FRONT IS REQUIRED.
2. WELD HOOK GUARD TO BODY OR ADD STRUCTURAL SUPPORT AS NEEDED FOR THE APPLICATION.
3. THIS DRAWING PROVIDES THE CRITICAL SUB-FRAME DIMENSIONS FOR COMPATABILITY WITH THE SWAPLOADER HOOK LIFT HOIST. IT IS THE SUB-FRAME SUPPLIER'S RESPONSIBILITY TO PROVIDE A SUB-FRAME OF SUFFICIENT CAPACITY WHICH PROPERLY SUPPORTS THE BODY/CONTAINER WHEN USED WITH THE HOOK LIFT HOIST.
4. SWAPLOADER MANUFACTURED 100 SERIES A-FRAMES REQUIRE A 5 INCH LONGSILL HEIGHT.



## INSTALLATION INSTRUCTIONS – ROLLER & ROLLER MOUNT ASSEMBLY

1. Review all directions and diagrams provided before starting roller and roller mount installation.
2. Locate position for roller mount brackets (*Pt. No. 32H03*) between cross sills of the container. Rollers should be positioned as far back and as wide as possible for stability. For hoist and folding bumper clearance, do not place brackets any closer than 11" to the subframe longsill (see *Fig. A*). Also, the roller axle center line should be approximately 1-11/16" below the bottom of the subframe longsill for roller clearance (see *Fig. A*).

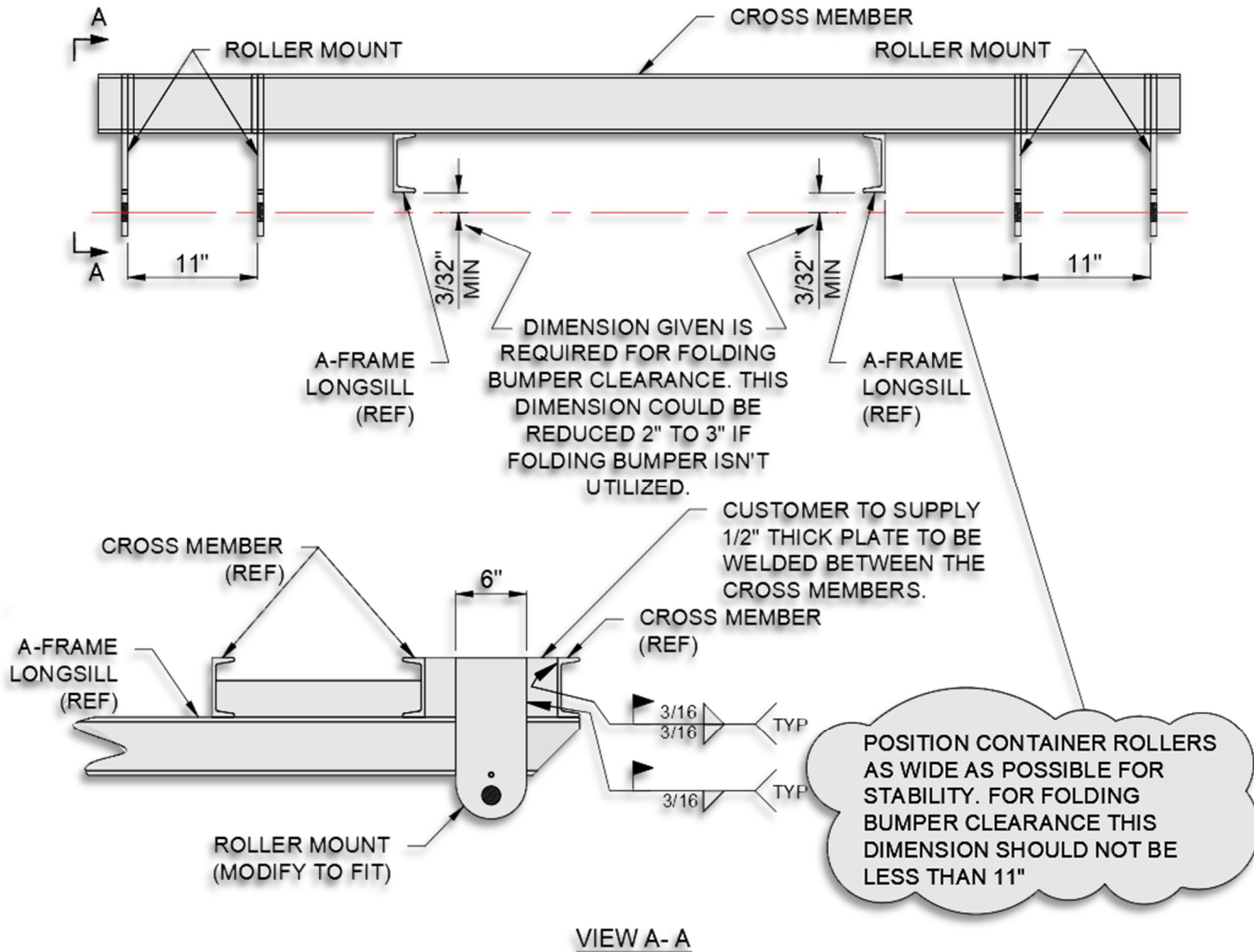


Figure A

3. Some modification to the roller mount bracket may be required for the roller mount to fit properly. If the existing container cross members are wider than 6", a fabricated support member of 1/2" plate or thicker will need to be added (see *Fig. B*).

- Once the mount brackets are located on the container, weld the roller mount brackets in place (see *Fig. A*).
- Install the roller (*Pt. No. 10H12*) between the brackets with the roller axle (*Pt. No. 10H31*) and the fasteners provided (see *Fig. C*). Grease the rollers before use.

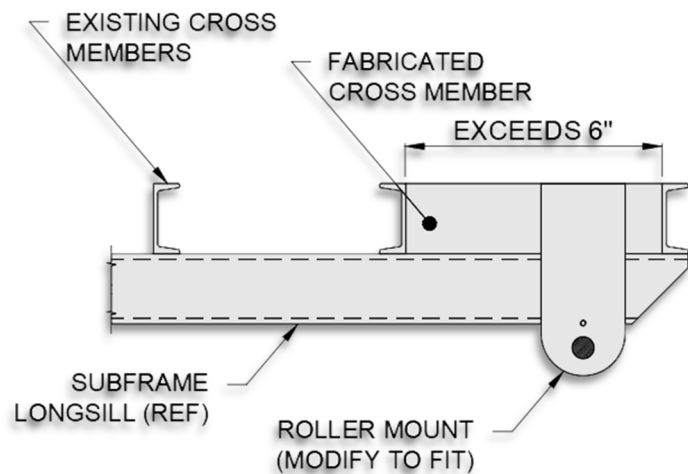


Figure B

MATERIAL LIST FOR 10H90 AND 10H91					
	ITEM	PART #	QTY	DESCRIPTION	WT-lb/ea.
10H91 →	1	32H03	4	Roller Ear	11.95
	2	10H12	2	Roller Wdmt.	39.76
	3	10H31	2	Roller Axle Wdmt.	7.28
10H90 {	4	00P62	2	3/8-16 UNC x 1 Bolt	.05
	5	90P03	2	1/8 NPT Grease Zerk	.01
	6	00755	2	3/8 Dia. Lock Washer	.01
	7	00P36	2	3/8 Dia. Washer H.T.	.10

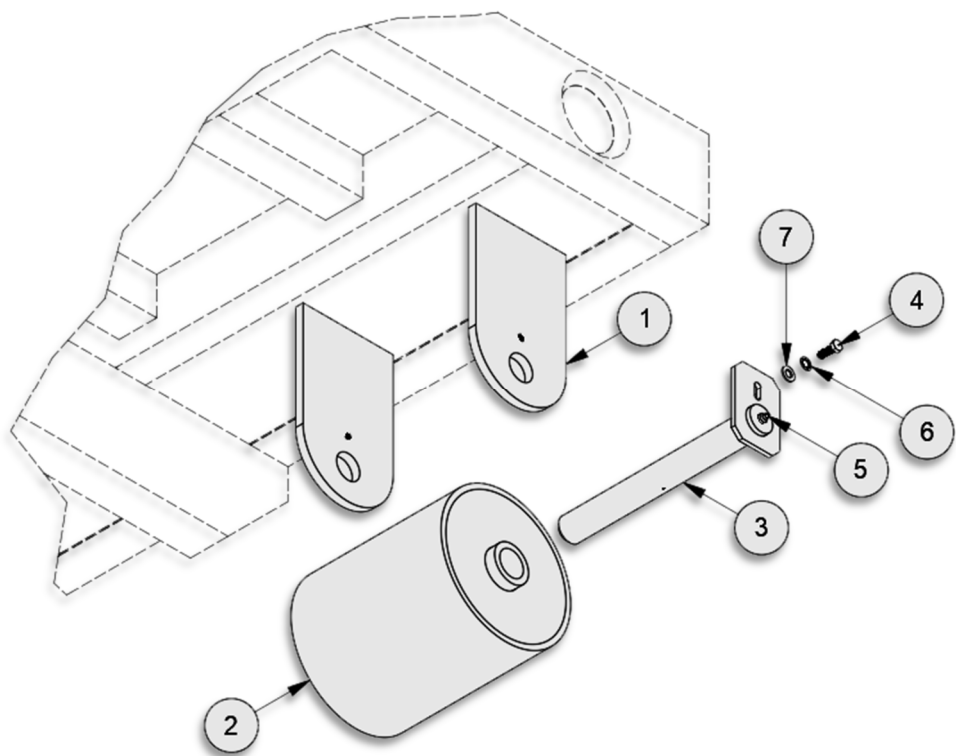


Figure C

INSTALLATION INSTRUCTIONS – TOOLBOX

1. Review all directions and diagrams provided before starting toolbox installation.
2. Position toolbox brackets (Pt. No. 10H88) on truck chassis (NOTE: toolbox has an envelope of 18"x18"x36". see Fig. A for hole dimensions).
3. Mark position of mounting holes through brackets onto truck chassis. Remove brackets and drill 9/16" dia. holes.
4. Mount toolbox brackets using fasteners provided (see Fig. A).

MATERIAL LIST FOR 10H92 OR 11H12				
ITEM	PART #	QTY	DESCRIPTION	WT-lb/ea.
1	10H88	2	18" Toolbox Bracket	11.34
2	22H71	2	Toolbox Rubber Spacer	.27
3	90P27	1	Aluminum Toolbox	50.00
3	90P37	1	Steel Toolbox	72.00
4	00784	8	1/2 Dia. Flat Head Washer	.07
5	00P15	4	1/2- 13 UNC x 1-3/4	.23
6	00P35	8	1/2- 13 UNC Lock Nut	.15
7	00P75	4	1/2- 13 UNC x 1-1/2	.12
8	00P76	2	1/2 Dia. Nylon Flat Washer	-

Note:

- Will include either (1) 90P27 aluminum toolbox or (1) 90P37 steel toolbox depending on order.
- Installation is the same for both aluminum and steel toolbox.
- Toolbox dimensions are 18" x 18" x 36".

- 
5. Position toolbox (Pt. No. 90P27 or 90P37) on brackets. (NOTE: toolbox hinge should be on the forward, bottom edge).
  6. Mark position of mounting holes through brackets onto toolbox. Remove toolbox and drill 9/16" dia. holes.
  7. Mount toolbox to brackets using fasteners provided (see Fig. A).

Figure A

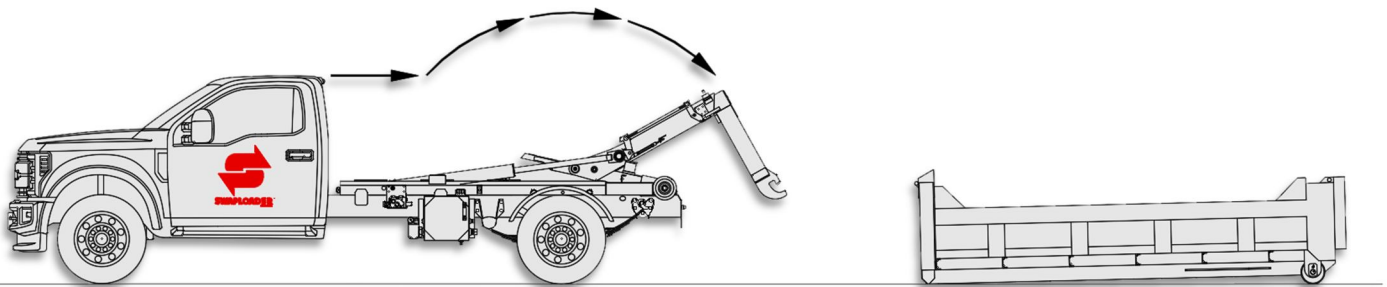
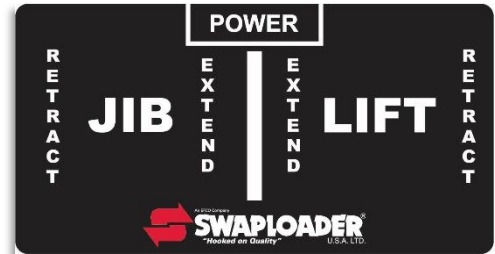
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## OPERATING INSTRUCTIONS

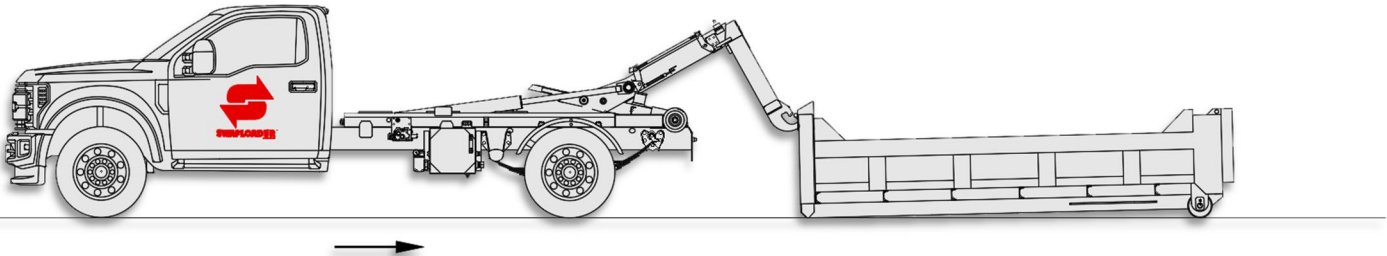
### LOADING A CONTAINER

**STEP 1.** ENGAGE THE P.T.O. (REFER TO P.T.O. MANUAL FOR OPERATION).

**NOTE:** SKIP TO **STEP 2.** IF POWERPACK INSTALLED.



**STEP 2.** TURN POWER SWITCH ON. RETRACT THE JIB (LEFT CONTROL LEVER LEFT). THEN, TILT THE ARM BACKWARD (RIGHT CONTROL LEVER LEFT).

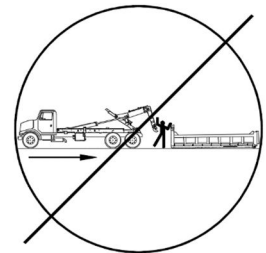


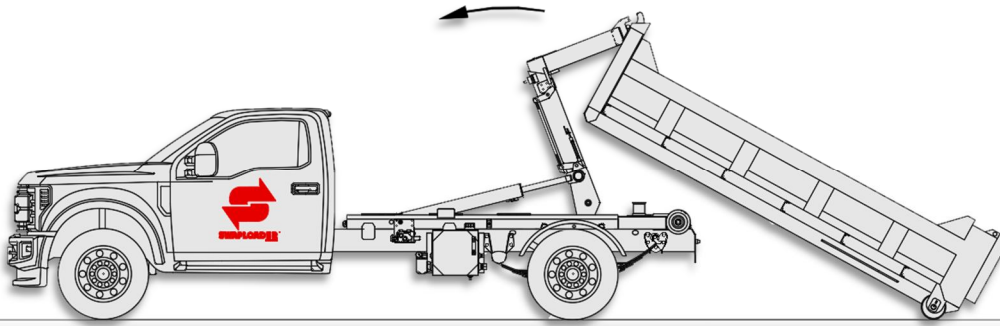
**STEP 3.** MAKE SURE THE WORK AREA IN FRONT OF THE CONTAINER IS CLEAR OF PEOPLE AND OBSTACLES. MOVE THE TRUCK BACKWARDS UNTIL THE HOOK ENGAGES THE CURVED LIFTING BAR OF THE CONTAINER. NEVER EXTEND THE JIB TO REACH THE PROPER CATCHING HEIGHT, RATHER TILT THE ARM.



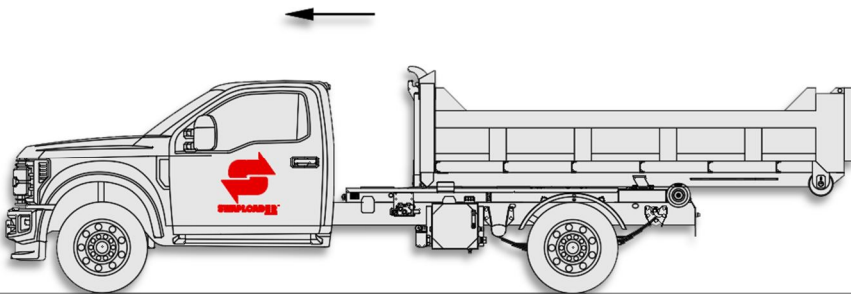
**WARNING:**

MAKE SURE WORK AREA IS CLEAR OF PEOPLE AND OBSTACLES PRIOR TO DUMPING OR UNLOADING CONTAINERS. SWAPLOADER STRONGLY RECOMMENDS THAT A BACKUP ALARM BE INSTALLED ON THE TRUCK CHASSIS. THE OPERATION OF THE HOOK HOIST IS THAT THE TRUCK IS BACKED UP TO THE BODY TO PICK IT UP AND SO THERE IS A POTENTIAL PINCH POINT BETWEEN THE BODY AND THE HOOK.



**LOADING A CONTAINER (cont'd)**

**STEP 4.** CYCLE THE ARM FORWARD (RIGHT CONTROL LEVER RIGHT), MAKING SURE THE CURVED LIFTING BAR IS SECURELY ATTACHED TO THE HOOK. RELEASE THE BRAKES OF THE TRUCK AND STEER TO CORRECTLY ALIGN THE TRUCK WITH THE CONTAINER. WATCH THE CONTAINER RAILS TO SEE THAT THEY COME TO REST CENTERED ON THE REAR ROLLERS. DO NOT EXTEND THE JIB DURING LIFTING.



**STEP 5.** WHEN THE CONTAINER IS RESTING ON THE FRAME, MOVE THE JIB FORWARD ALL THE WAY TO ENSURE THE CONTAINER IS HELD IN THE BODY LOCKS (LEFT CONTROL LEVER RIGHT).

**DUMPING:**

**STEP 1.** MOVE THE JIB FORWARD (LEFT CONTROL RIGHT) TO ENSURE THAT THE CONTAINER IS LOCKED.

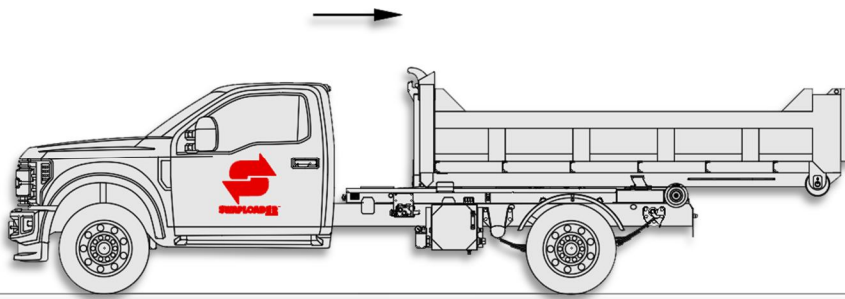
**STEP 2.** EXTEND THE MAIN LIFT CYLINDERS (RIGHT CONTROL LEFT).

**CAUTION:**

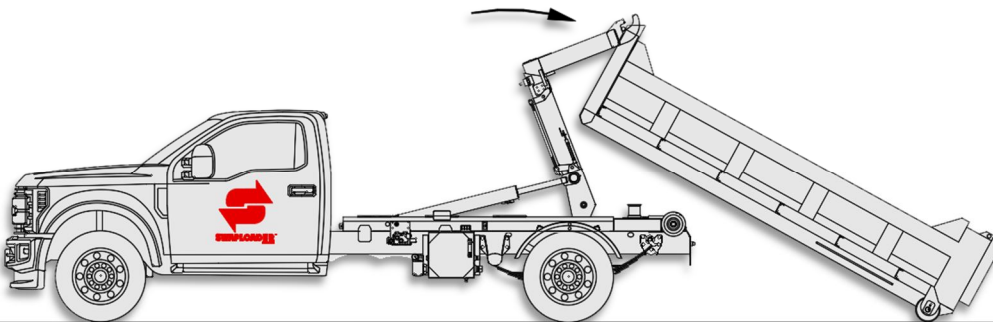
**DO NOT RETRACT THE JIB WHILE DUMPING.** RETRACTING THE JIB DURING DUMPING MAY UNLOCK THE MECHANICAL JIB LATCHES WHICH COULD ALLOW THE CONTAINER TO CRASH DOWN ONTO THE HOIST AND/OR ABRUPTLY UNLOAD.



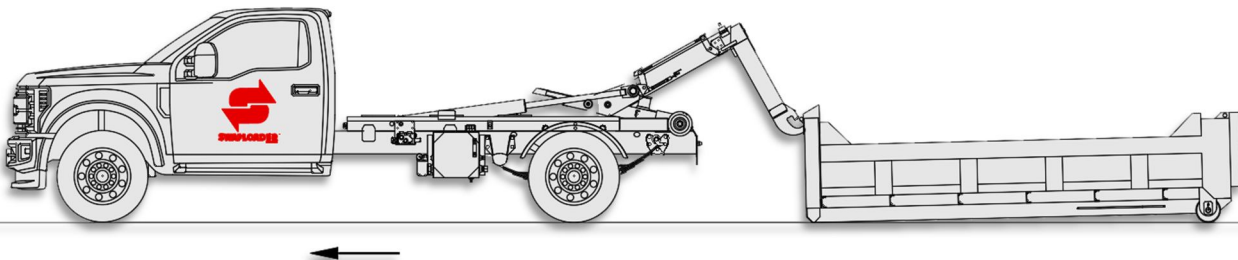
# PLACING A CONTAINER ON THE GROUND:



**STEP 1.** MOVE THE SLIDING JIB ALL THE WAY BACK (LEFT CONTROL LEFT) UNTIL MECHANICAL JIB LATCHES UNLOCK.



**STEP 2.** TILT THE ARM BACKWARDS (RIGHT CONTROL LEFT). WHEN THE CONTAINER TOUCHES THE GROUND, RELEASE THE BRAKES TO FREE THE TRUCK FOR FORWARD MOVEMENT CAUSED BY THE CONTAINER

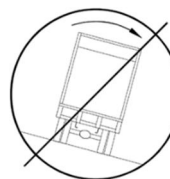


**STEP 3.** ROTATE JIB ALL THE WAY BACK UNTIL THE CONTAINER TOUCHES THE GROUND. PULL AWAY FROM CONTAINER AND ROTATE JIB BACK INTO THE TRANSPORT POSITION.



## WARNING:

1. **DON'T OVER SPEED THE PUMP 1,500 RPM MAXIMUM.**
2. **DON'T DUMP, MOUNT OR DISMOUNT BODIES ON UNEVEN GROUND.**
3. **DON'T DRIVE WITH THE HOIST IN THE DUMP POSITION OR WITH THE HOOK TILTED BACK.**

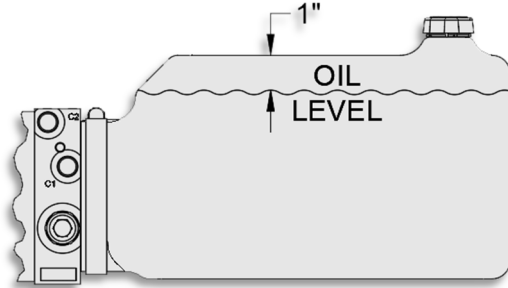


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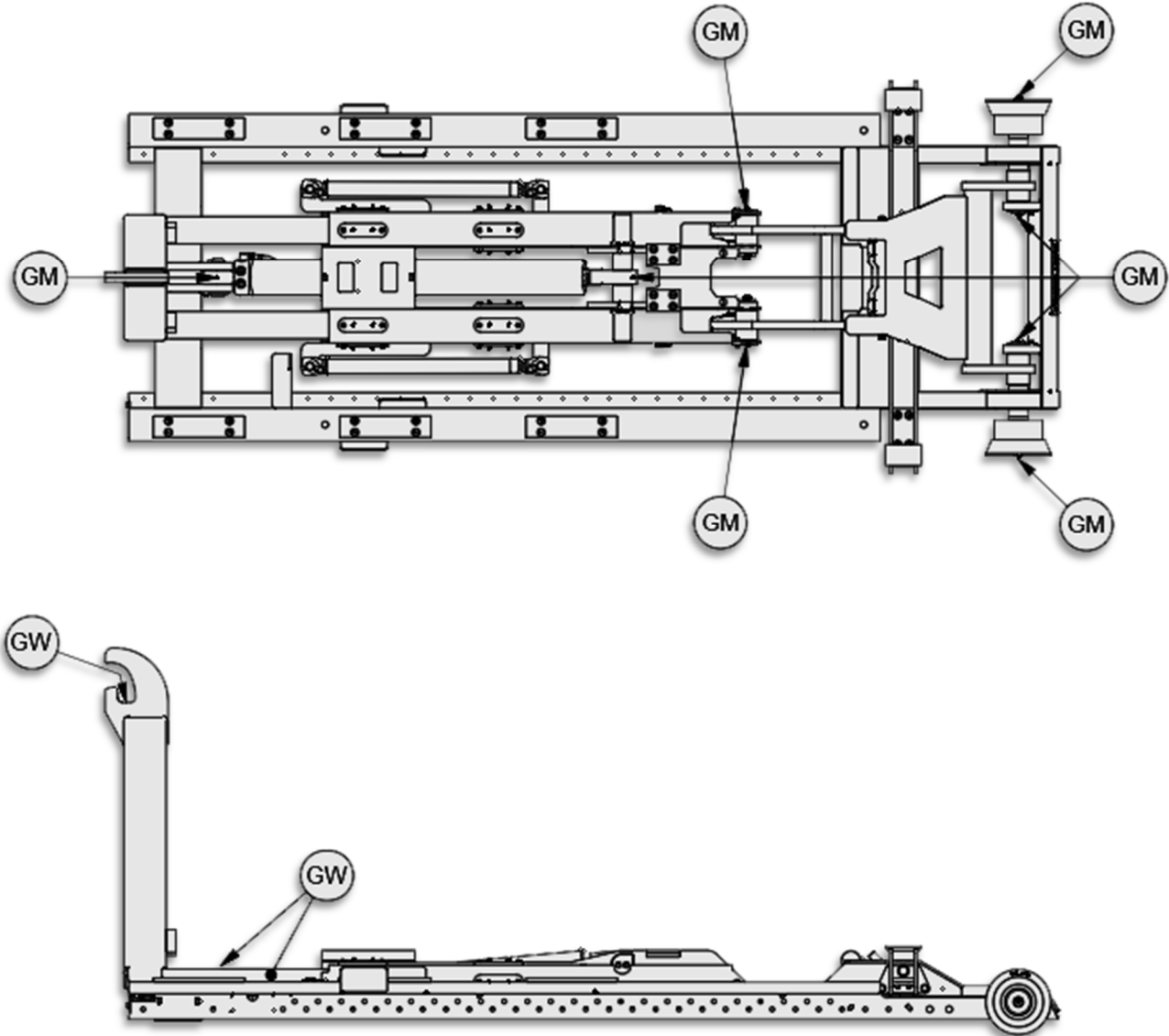


## MAINTENANCE INSTRUCTIONS

<p style="text-align: center;"><b>WEEKLY SERVICE</b> <b>(50 OPERATIONS)</b></p>	<ol style="list-style-type: none"> <li>Lubricate with grease (refer to lubrication diagram). <ul style="list-style-type: none"> <li>Lifting hook on jib.</li> </ul> </li> <li>Check hydraulic oil level. With the hoist in the transport position (lift cylinder retracted and jib cylinders retracted) the oil level in the tank should read approximately two inches below the top of the hydraulic tank (see diagram →).</li> <li>Check hydraulic hose and fittings for leaks. Also check hydraulic hose for wear. Repair and/or retighten as necessary.</li> </ol>
<p style="text-align: center;"><b>MONTHLY SERVICE</b> <b>(200 OPERATIONS)</b></p>	<ol style="list-style-type: none"> <li>Lubricate with grease (refer to lubrication diagram) <ul style="list-style-type: none"> <li>Fittings on lift cylinder (quantity: 2).</li> <li>Front pins on rear pivot joint weldment (quantity: 2).</li> <li>Fittings on rear pivot pins and rollers (quantity: 4).</li> </ul> </li> <li>Check all bolts and retighten as required.</li> <li>Check adjustments on mast lock (safety latch) mechanism. Refer to the <u>Mast Lock Inspection &amp; Adjustment Instructions</u> on Pg. 4-4 of the Maintenance section.</li> <li>Check adjustments on the proximity switch. Refer to the <u>Proximity Switch Inspection &amp; Adjustment Instructions</u> on Pg. 4-5 of the maintenance section.</li> </ol>
<p style="text-align: center;"><b>YEARLY SERVICE</b></p>	<ol style="list-style-type: none"> <li>Change hydraulic oil. On EHV applications, replace hydraulic filter element, and wash out suction strainer.</li> <li>Check pressure. Refer to the pressure check instructions on Pg. 4-6 to 4-8 of the maintenance section (pressure should be 3,250 psi minimum).</li> </ol>



# LUBRICATION DIAGRAM



LEGEND	
GW	= Grease Weekly
GM	= Grease Monthly

### **HYDRAULIC OIL SPECIFICATION**

Select an ISO grade of Premium Anti-Wear Hydraulic Oil that is optimum for your location.

<b>HYDRAULIC OIL SELECTION CHART</b>			
<b>ISO Grade</b>	<b>Ambient Temperature Range</b>		<b>Viscosity</b>
	<b>F°</b>	<b>C°</b>	<b>SUS @ 100 °F</b>
32	-10 to 85	-23 to 29	150-170
46	10 to 110	-12 to 43	195-240

#### **NOTE:**

1. ALWAYS CONSULT YOUR LOCAL HYDRAULIC OIL SUPPLIER FOR MORE INFORMATION.
2. USE CAUTION WHEN OPERATING AT OR BEYOND THE RECOMMENDED TEMPERATURE EXTREMES.
3. DO NOT OPERATE THE HOOKLIFT HOIST WHEN HYDRAULIC OIL TEMPERATURE ON TANK GAUGE EXCEEDS 160 °F (71 °C) AS DAMAGE TO HYDRAULIC COMPONENTS CAN OCCUR.

### **HYDRAULIC FILTER ELEMENT SPECIFICATION**

Mounting Thread: 1/2 NPTF  
 Filtration Rating: 10 micron (Nominal)  
 Flow Rating: 15 GPM

## **MAST LOCK INSPECTION & ADJUSTMENT INSTRUCTIONS**

All SwapLoader hook-lift hoists come with a mast lock (safety latch) assembly that is located on the bottom side of the outer tube. When the jib is extended the mast lock then engages the latch bars (forks) on the pivot joint, making the jib, outer tube, and pivot joint into a continuous member for raising the container or body up into a dump mode.

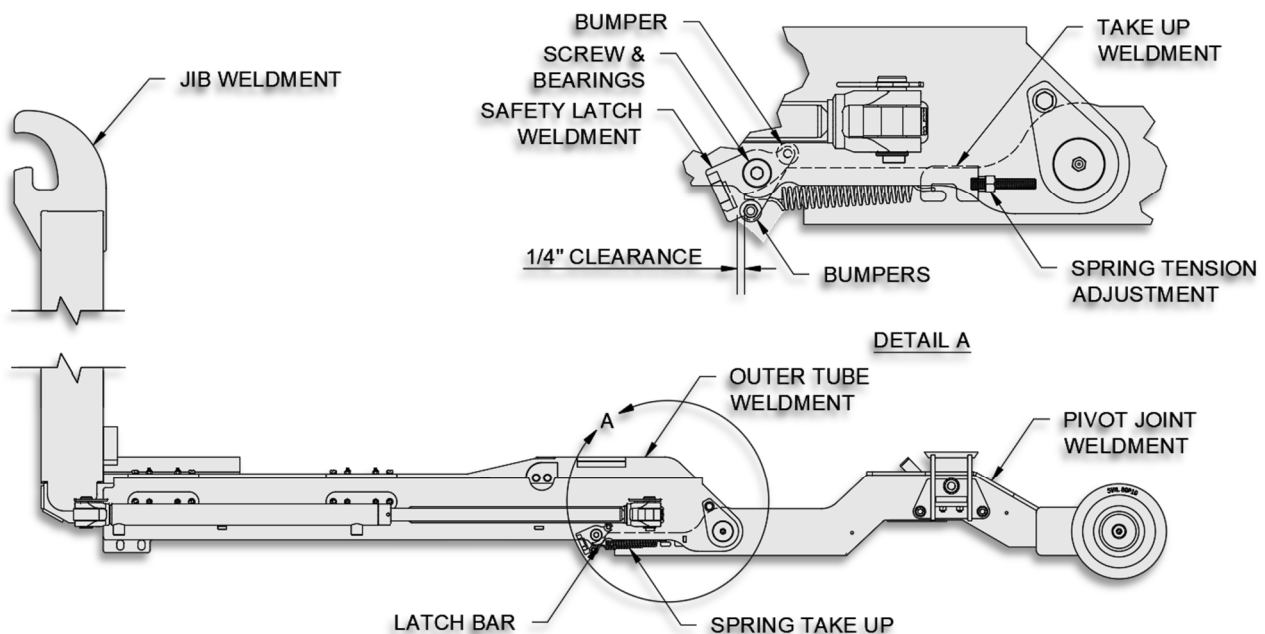
With the jib fully retracted the mast lock then disengages the latch bars on the pivot joint allowing the hook-lift to enter into the mount-dismount cycle by pivoting around the front pins of the pivot joint. A properly adjusted mast lock will function smoothly and clear the latch bars on the pivot joint approximately a  $\frac{1}{4}$ " (see illustrations below).

### **INSPECTION**

The mast lock (safety latch) assembly comes adjusted from the factory and should provide years of trouble free operation, however there may come a time when an adjustment may be required. Prior to making any adjustments, SwapLoader recommends that you begin with inspecting all mast lock components for damage or wear (see illustrations below).

Inspect the safety latch assembly; look for any missing or bent components such as bumpers, bearings, ears or screws. Repair or replace any missing or bent components prior to making any adjustment to the mast lock assembly; refer to the mast lock (safety latch) assembly drawing for proper part numbers and identification of the components (See Pg. 5-5 in the Parts Section of the manual).

### **SL-75 HOIST**

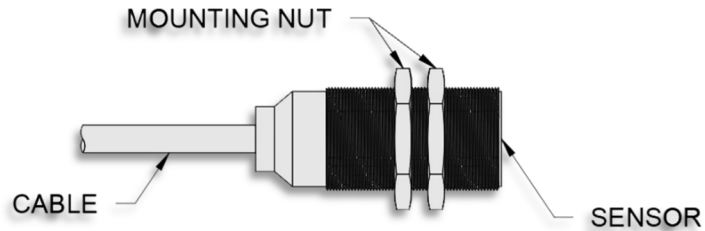


### **MAST LOCK LOCATION AND ADJUSTMENT ILLUSTRATION**

(shown with the jib retracted)

## **JIB PROXIMITY SENSOR INSPECTION & ADJUSTMENT INSTRUCTIONS**

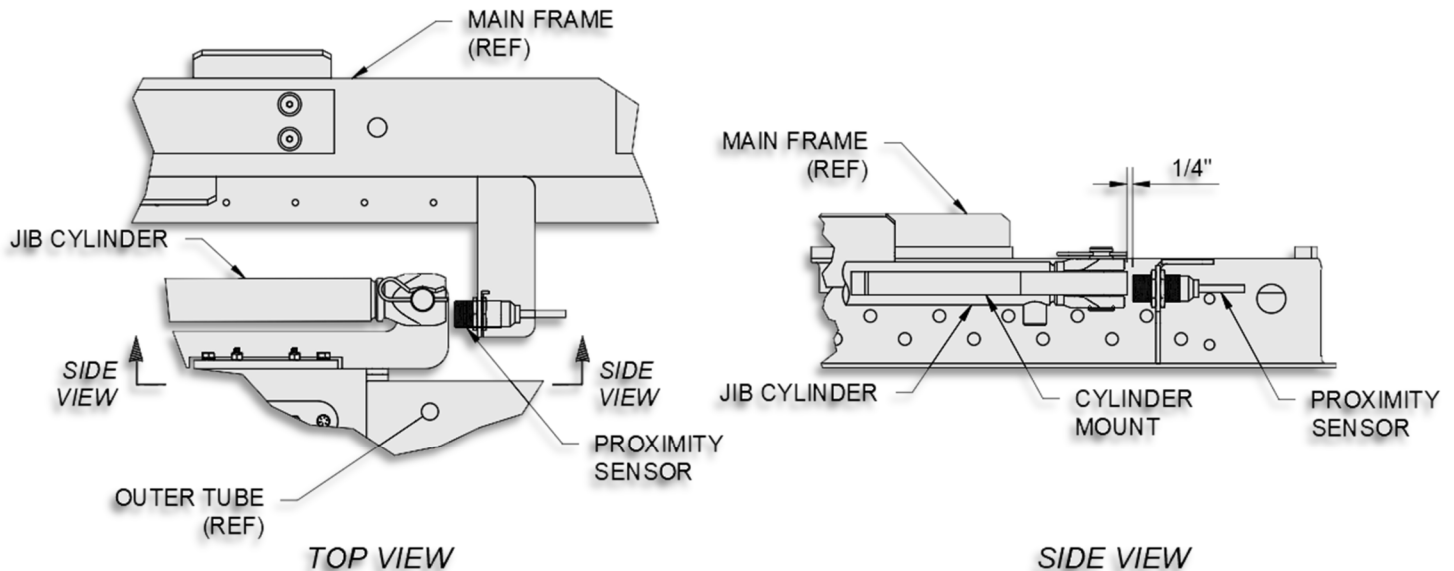
The SL-75 hoist has a proximity sensor to prevent accidental operation of the telescopic jib, while the hoist is up in a dump mode. If the jib is operational while using the lift cylinders, then an adjustment will need to be made to the jib proximity switch.



### **ADJUSTMENT**

### **PROXIMITY SENSOR ILLUSTRATION**

Should the jib proximity switch need adjustment the first step will be to loosen the mounting nuts (see illustration below). Reposition the jib proximity switch with respect to the cylinder mount making sure to leave a gap of 1/4". The jib proximity switch should not make contact with the cylinder mount. Retighten the mounting nuts.

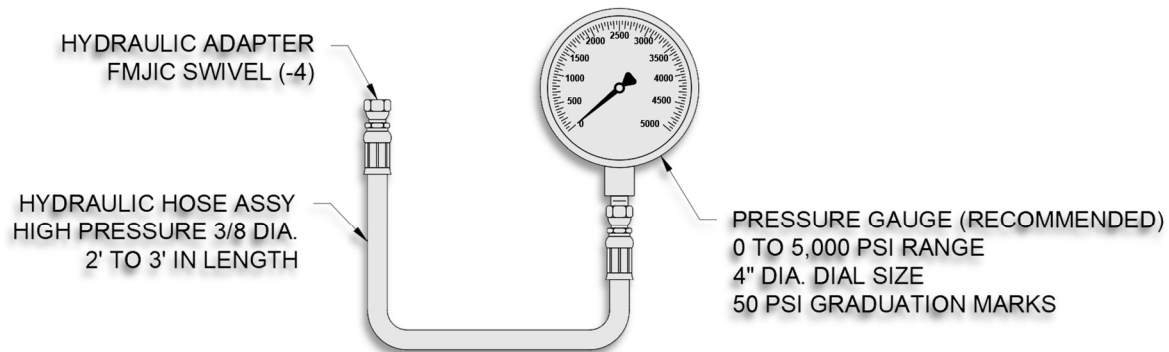


### **PROXIMITY SENSOR ADJUSTMENT ILLUSTRATION**

Please contact your SwapLoader Distributor or SwapLoader USA should you have any questions regarding this procedure.

## **PRESSURE CHECK INSTRUCTIONS**

When performing a pressure check on a SwapLoader hook-lift hoist, we recommend that you use a calibrated pressure gauge that reads pressures up to 3,500 PSI (a 0 to 5,000 PSI range gauge is recommended). As a minimum, the gauge should have 100 PSI graduation marks (50 PSI is preferred), and a 3 inch diameter dial size (4 inch dial is preferred). The pressure gauge should be outfitted with a female JIC #4 hydraulic adapter; preferably located at the end of a 3/8 inch diameter high pressure hydraulic hose that is 2 to 3 foot in length (see illustration below).

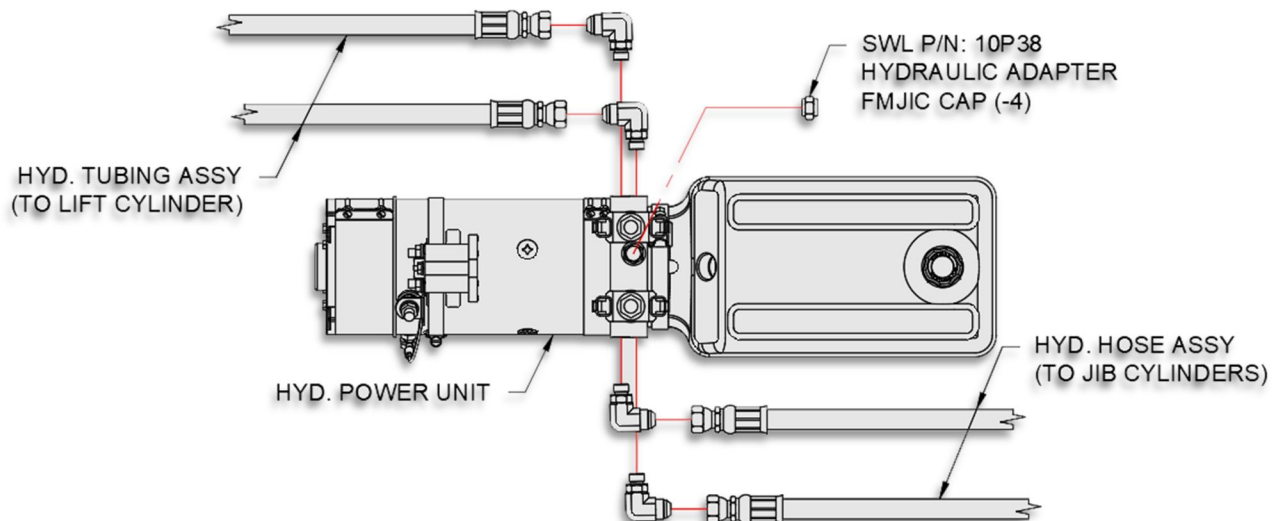


## **RECOMMENDED PRESSURE GAUGE ILLUSTRATION**

Should you not be able to source a hydraulic gauge locally, SwapLoader can provide one at a reasonable cost (Hyd. Pressure Gauge & Hose Assembly – *Pt. No. 22P10*).

## **PRESSURE CHECK STEPS (POWER PACK)**

1. Locate the female JIC #4 hydraulic cap (SWL #10P38) found on the top of the hoist hydraulic control valve (see illustration below).

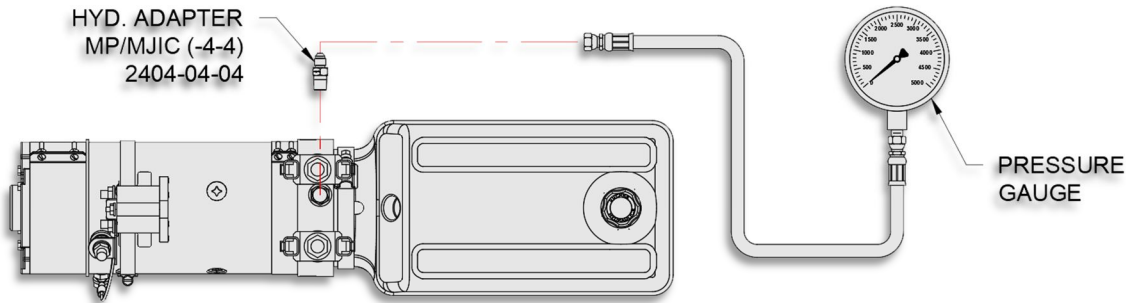


## **PRESSURE CHECK HYDRAULIC ADAPTER LOCATION ILLUSTRATION**



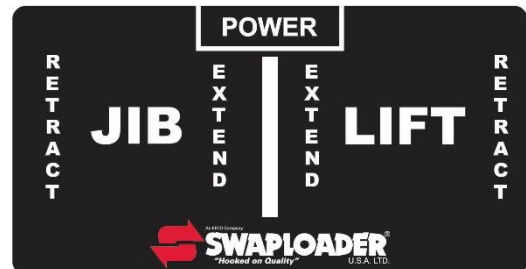
This male #4 JIC hydraulic adapter is supplied by SwapLoader, and is already installed in the hydraulic control valve at the time of the hoist installation (see the hoist parts & operations manual).

2. Remove the female JIC #4 cap and attach the pressure gauge to the hydraulic control valve (see illustration below).



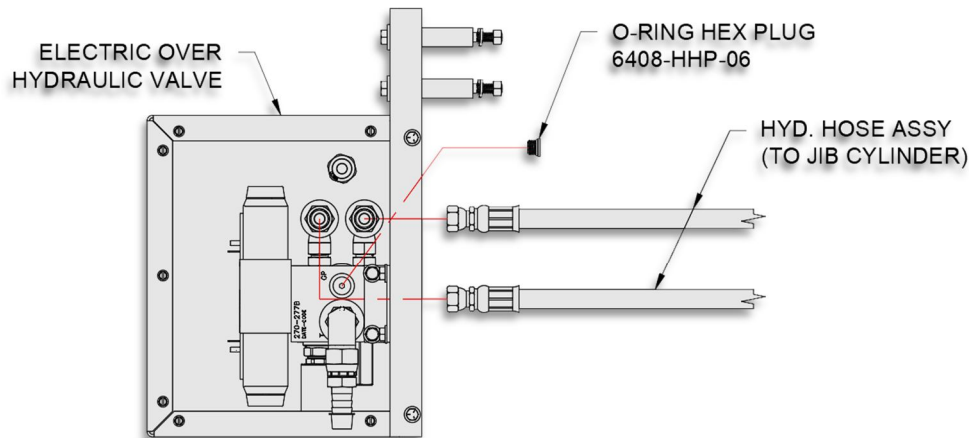
### **PRESSURE GAUGE TO HYDRAULIC ADAPTER ILLUSTRATION**

3. Start the truck.
4. Turn power switch on. Push the lift (dump) circuit lever left until the lift (dump) cylinder bottoms out (see illustration below). Continue to push the lever forward until steps 5-6 are complete.
5. Check the gauge for the maximum developed system pressure. The SL-75 should have a reading of 3,250 PSI.
6. With the pressure check complete; release all functions.

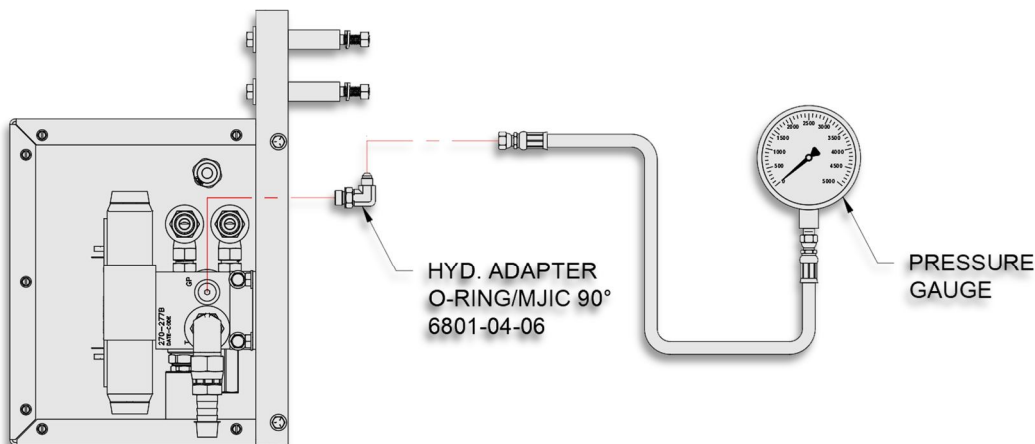


**PRESSURE CHECK STEPS (EHV)**

1. Locate the female O-Ring Hex Plug found on the top of the hoist electric over hydraulic control valve (see illustration below).

**PRESSURE CHECK HYDRAULIC ADAPTER LOCATION ILLUSTRATION**

2. Remove the O-Ring Hex Plug and attach the pressure gauge to the hydraulic control valve (see illustration below).

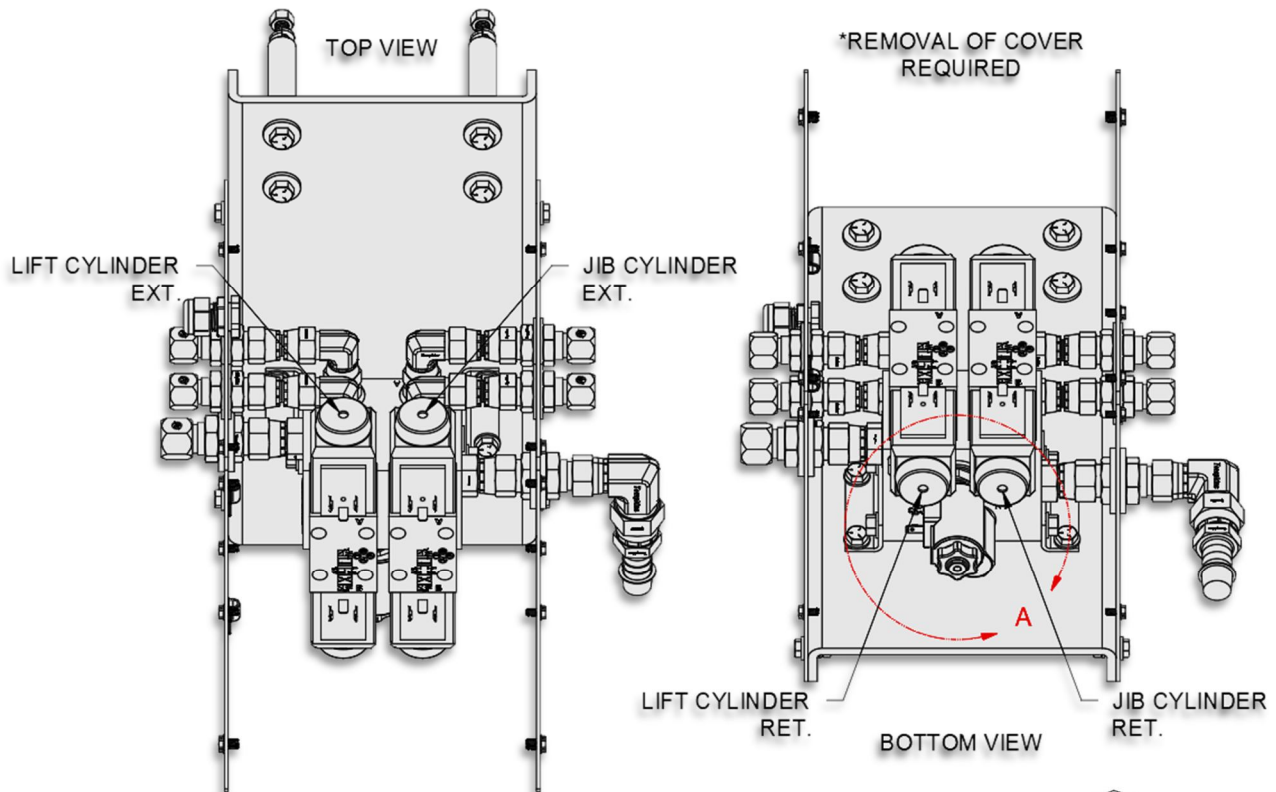
**PRESSURE GAUGE TO HYDRAULIC ADAPTER ILLUSTRATION**

3. Start the truck.
4. Push the lift (dump) circuit lever left until the lift (dump) cylinder bottoms out (see illustration on the right). Continue to push the lever forward until steps 5-6 are complete.
5. Check the gauge for the maximum developed system pressure. The SL-75 should have a reading of 3,250 PSI.
6. With the pressure check complete; release all functions.



## EHV MANUAL OVER-RIDE INSTRUCTIONS

In a situation where the hoist will not move from simply toggling the control handles, the hoist cylinders can still be moved manually using the manual over-ride button and valve spool.



- Determine which function is wished to be performed. The cables are marked showing which spool corresponds to which function. Alternatively, the figure above is labeled showing which spool performs which function.
- Press the button on the spool (hold) and then press the manual over-ride button on the bottom of the valve shown in the figure to the right.

### NOTE 1:

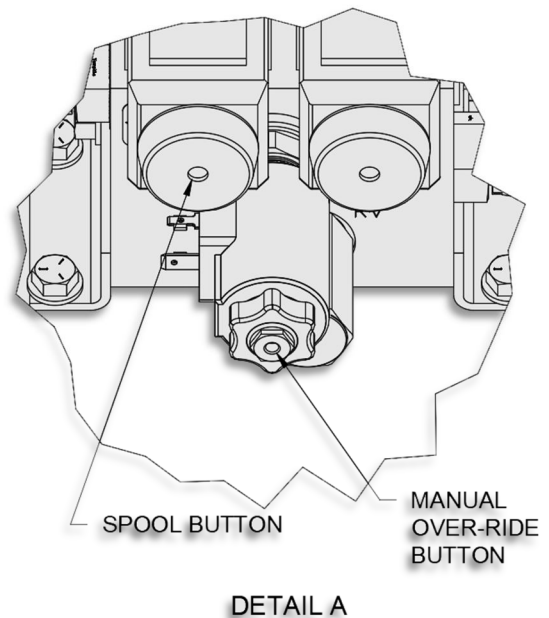
**MAKE SURE TO PRESS THE VALVE SPOOL BUTTON AND MANUAL OVER-RIDE BUTTON SIMULTANEOUSLY.**

### NOTE 2:

**A PHILLIPS SCREW DRIVER IS RECOMMENDED TO BE USED TO ASSIST IN PRESSING IN THE VALVE SPOOL BUTTON.**

### NOTE 3:

**PROPERLY WORKING PUMP & PTO IS REQUIRED TO MOVE CYLINDERS.**



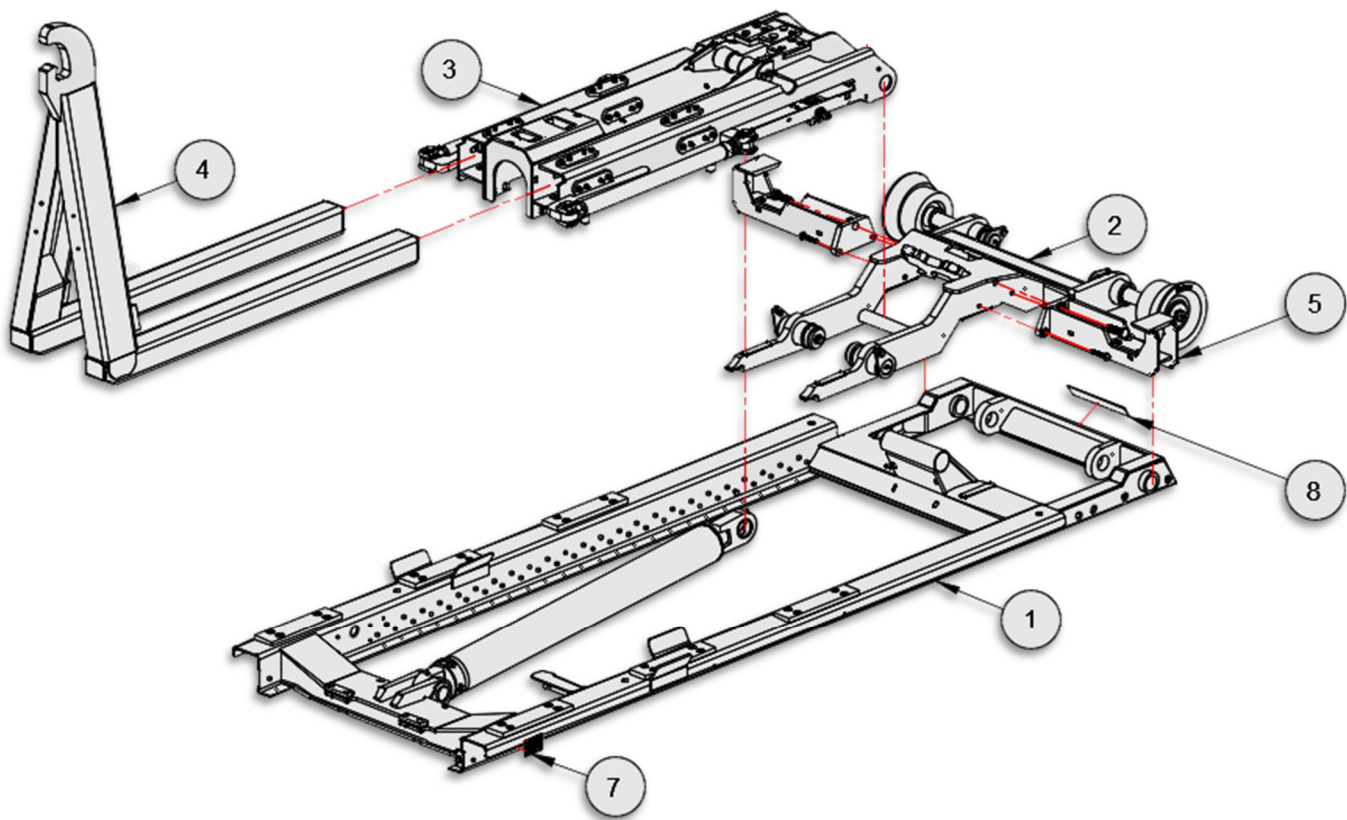
### CAUTION!

**BE CAREFUL OF YOUR SURROUNDINGS AND ANY BODIES LOADED ON HOIST WHEN MANUALLY ACTUATING CYLINDERS!**

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DISC-LOCK WASHER TORQUE SPECS	
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)
3/8	50
7/16	80
1/2	120
5/8	230
3/4	380
7/8	400
1	400

13H28 - BASE HOIST ASSEMBLY					SL-75
ITEM	PART #	QTY	DESCRIPTION	WT- lb/ea.	WT-lb/all
1	13H29	1	Main Frame Sub-Assembly	466.79	466.79
2	13H30	1	Pivot Joint Sub-Assembly	276.01	276.01
3	13H31	1	Outer Tube Sub-Assembly	271.12	271.12
4	13H32	1	Jib Weldment	179.63	179.63
5	13H33	2	Body Lock Sub-Assembly	24.76	49.52
6	91H34	1	Hyd Base Cyl Circuit	19.82	19.82
7	91P22	1	Serial Tag	0.02	.02
8	90P90	1	Name Plate Insert	0.10	0.10



**SL-75 BASE HOIST**

**DISC-LOCK WASHER  
TORQUE SPECS**

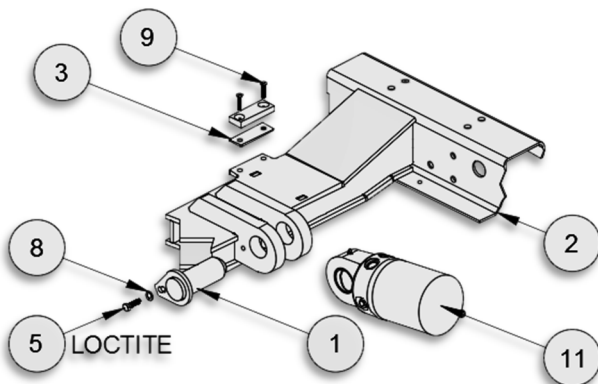
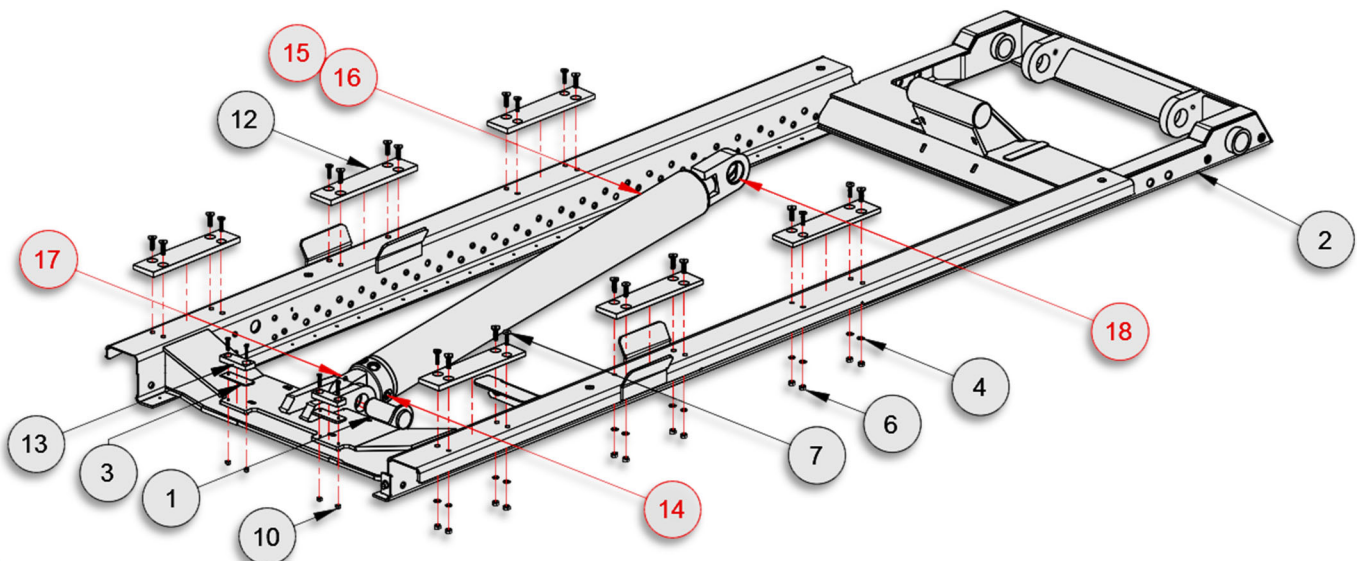
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)
3/8	50
7/16	80
1/2	120
5/8	230
3/4	380
7/8	400
1	400

**13H29 – MAIN FRAME SUB-ASSEMBLY****SL-75**

ITEM	PART #	QTY	DESCRIPTION	WT- lb/ea.	WT-lb/all
1	11H09	1	Pin, MF/Cyl 1-3/4 x 4-3/8	3.55	3.55
2	13H34	1	Main Frame Weldment	334.51	334.51
3	26H71	2	Shim, Jib Stabilizer	0.15	0.30
4	00755	24	Washer, Lock – 3/8 Dia	0.03	0.72
5	00P13	1	HHCS 3/8-16 UNC x 1-1/4 Gr8	0.10	0.10
6	00P14	24	Nut, Hex 3/8-16 UNC Gr8	0.02	0.48
7	00P68	24	FSCS 3/8-16 UNC x 1-1/4 SS	0.04	0.96
8	01P28	1	Washer, Disc Lock – 3/8 Dia Pr	0.01	0.01
9	01P62	4	FHCS 1/4-20 UNC x 1-1/4 Brass	0.01	0.04
10	01P63	4	Nut, Nylon 1/4-20 UNC Gr8	0.01	0.04
11	22P02	1	Hyd. Cylinder 4 x 2 x 38	122.90	122.90
12	90P71	6	Wear Pad, 2-3/4x1/2x11-3/4	0.63	3.78
13	91P21	2	Wear Pad, 1-1/4x1/2x3-1/2	0.08	0.16

**LIFT CYLINDER SERVICE PARTS**

14	21P11	2	Counterbalance Valve Cartridge		
15	22P03	1	Seal Kit		
16	22P04	1	Hydraulic Return Line		
17	22P30	1	Bronze Bearing		
18	22P31	1	Bronze Bearing		

**LIFT CYLINDER PIN DETAIL****MAIN FRAME ASSEMBLY**



**DISC-LOCK WASHER  
TORQUE SPECS**

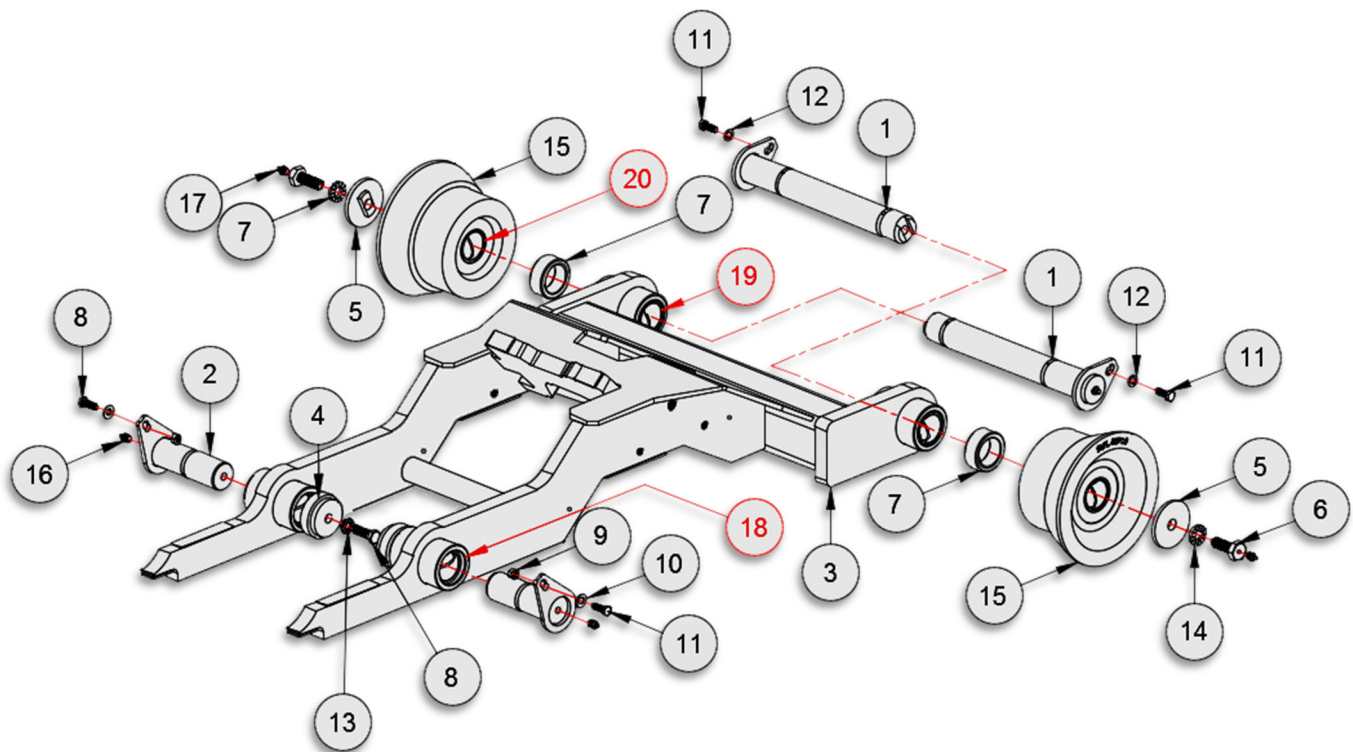
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)
3/8	50
7/16	80
1/2	120
5/8	230
3/4	380
7/8	400
1	400

**13H30 – PIVOT JOINT ASSEMBLY****SL-75**

ITEM	PART #	QTY	DESCRIPTION	WT- lb/ea.	WT-lb/all
1	11H10	2	Pin, PJ/MF 1-3/4 x 13-1/4	9.39	18.78
2	12H62	2	Pin, PJ/OT 1-3/4 x 5-3/16	3.86	7.72
3	13H35	1	Pivot Joint Weldment	174.40	174.40
4	13H41	2	Pin Cap Weldment	0.94	1.88
5	22H35	2	Pin Cap, 1/2 x 3	0.53	1.06
6	22H36	2	HHCS 5/8-11 UNC x 1-3/4 GZ	0.23	0.46
7	26H50	2	Roller Spacer	0.67	1.34
8	00P01	2	HHCS 1/2-13 UNC x 1-1/2 Gr8	0.11	0.22
9	00P34	2	Nut, Lock 3/8-16 UNC	0.02	0.04
10	00P36	2	Washer, Flat 3/8 HT	0.01	0.02
11	00P62	4	HHCS 3/8-16 UNC x 1 Gr8	0.04	0.16
12	01P28	2	Washer, Disc Lock 3/8 Dia Pr	0.01	0.06
13	01P30	2	Washer, Disc Lock 1/2 Pr	0.02	0.04
14	01P31	2	Washer, Disc Lock 5/8 Pr	0.03	0.06
15	80P10	2	Roller Assy, 6-1/4"x1-3/4ID	34.84	69.68
16	90P03	4	Zerk, Grease - 1/8 NPT	0.02	0.08
17	90P20	2	Zerk, Grease - 1/8-28 NPT	0.02	0.04

**BEARINGS**

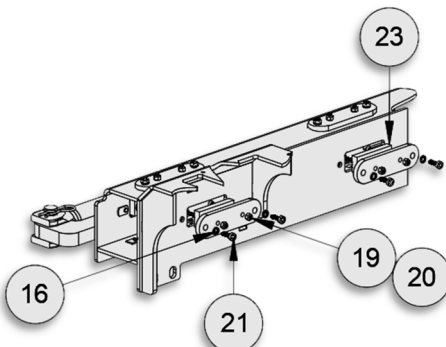
18	23H09	2	Brz Brg, 2-1/8ODx1-3/4IDx3-1/4 lg	1.09	2.18
19	23H11	2	Brz Brg, 2-1/8ODx1-3/4IDx4 lg	1.35	2.70
20	50P14	2	Brz Brg, 2-1/8ODx1-3/4IDx3 lg	1.01	2.02

**PIVOT JOINT ASSEMBLY**

**DISC-LOCK WASHER  
TORQUE SPECS**

BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)
3/8	50
7/16	80
1/2	120
5/8	230
3/4	380
7/8	400
1	400

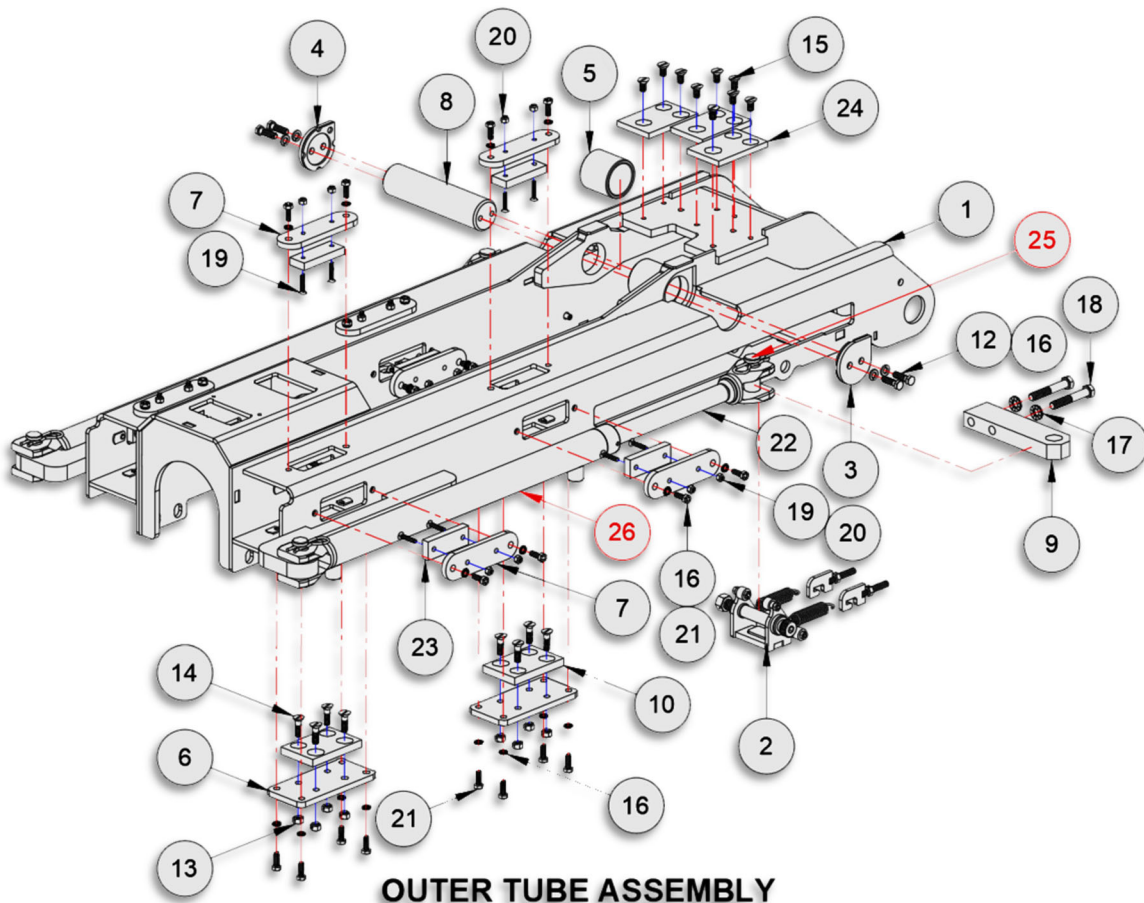
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**INSIDE WEAR PAD DETAIL****13H31 – OUTER TUBE SUB-ASSEMBLY****SL-75**

ITEM	PART #	QTY	DESCRIPTION	WT- lb/ea.	WT-lb/all
1	13H36	1	Outer Tube Weldment	181.69	181.69
2	13H42	2	Safety Latch Assembly	2.85	5.70
3	13H45	1	Pin Cap Weldment, L.H.	0.53	0.53
4	13H46	1	Pin Cap Weldment, R.H.	0.53	0.53
5	26H36	2	Cylinder Pin Sleeve	1.15	2.30
6	26H53	4	Wear Pad Plate Lg, OT	2.08	8.32
7	26H54	12	Wear Pad Plate, OT	1.05	12.6
8	26H57	1	Pin OT/Cyl 2 x 8	7.01	7.01
9	26H58	2	Jib Connection Bar	3.80	7.60
10	60H11	4	Wear Pad, 2-3/4x1/2x4-1/4	0.21	0.84
11	00837	4	Pin, Cotter 3/16 Dia x 2	0.02	0.08
12	00P13	4	HHCS 3/8-16 UNC x 1-1/4 Gr8	0.05	0.20
13	00P43	16	Nut, Nylock 3/8-16 UNC Gr8	0.02	1.76
14	00P68	16	FHCS 3/8-16 UNC 1-1/2	0.11	0.80
15	00P79	9	FHCS 3/8-16 UNC x 3/4 Brass	0.03	0.27
16	01P28	4	Washer, Disc Lock 3/8 Dia Pr	0.01	0.04
17	01P30	4	Washer, Disc Lock 1/2 Dia Pr	0.02	0.08
18	01P48	4	HHCS 1/2-13 UNC x 3 Gr8	0.19	0.76
19	01P62	24	FHCS 1/4-20 UNC x 1-1/4 Brass	0.01	0.24
20	01P63	24	Nut, Nylon 1/4-20 UNC Gr8	0.01	0.24
21	01P74	40	Nut, Nylon 1/4-20 UNC Gr8	0.01	0.24
22	22P66	2	Hyd. Cylinder 2 x1-1/8 x 20	19.29	38.58
23	91P21	12	Wear Pad, 1-1/4x1/2x3-1/2	0.08	0.96
24	91P27	3	Wear Pad, 2-3/4x3/8x4-1/4	0.16	0.48

**JIB CYLINDER SERVICE PARTS****22P66**

25	01P72	2	Clevis Pin w/ Clips	0.03	0.06
26	22P71	1	Seal Kit, Cyl (22P66)	0.10	0.10

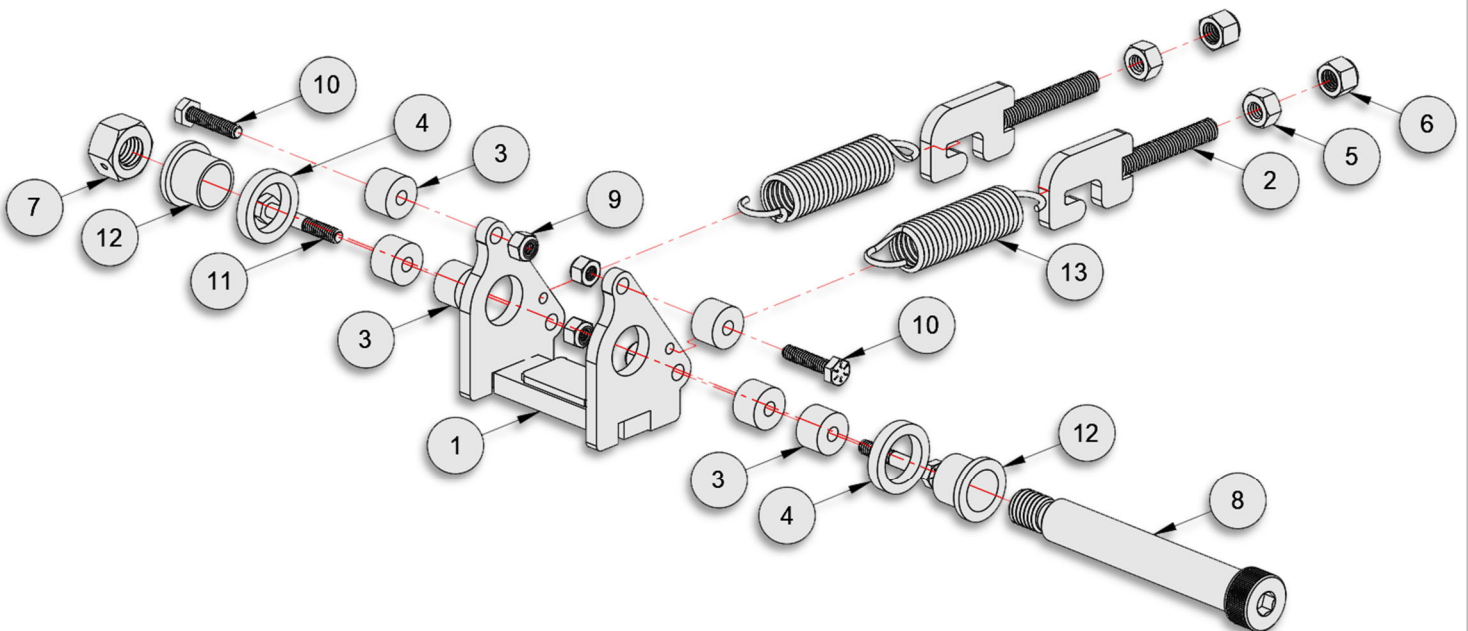
**OUTER TUBE ASSEMBLY**

**DISC-LOCK WASHER  
TORQUE SPECS**

BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)
3/8	50
7/16	80
1/2	120
5/8	230
3/4	380
7/8	400
1	400

**13H42 – SAFETY LATCH ASSEMBLY****SL-75**

ITEM	PART #	QTY	DESCRIPTION	WT- lb/ea.	WT-lb/all
1	13H43	1	Safety Latch Weldment	1.04	1.04
2	13H50	2	Take Up Weldment	0.20	0.40
3	26H61	6	Bumper, Safety Latch	0.01	0.06
4	26H62	2	Bearing Plate	0.04	0.08
5	00P14	2	Nut, Hex 3/8-16 UNC Gr8	0.02	0.04
6	00P43	2	Nut, Nylock 3/8-16 UNC Gr8	0.01	0.04
7	00P55	1	Nut, Lock 5/8-11 UNC Gr8	0.08	0.08
8	01P55	1	Shoulder Screw 5/8-11 UNC x 4-1/2	0.72	0.72
9	01P63	4	Nut, Nylock 1/4-20 UNC Gr8	0.02	0.04
10	01P75	2	HHCS 1/4-20 UNC x 1-1/8 Gr8	0.02	0.04
11	01P76	2	HHCS 1/4-20 UNC x 1-5/8 Gr8	0.03	0.06
12	50P29	2	Brz Brg, Sleeve 1-1/8ODx3/4IDx3/4	0.05	0.10
13	91P20	2	Spring, Extension .73 OD x 4 SS	0.02	0.32

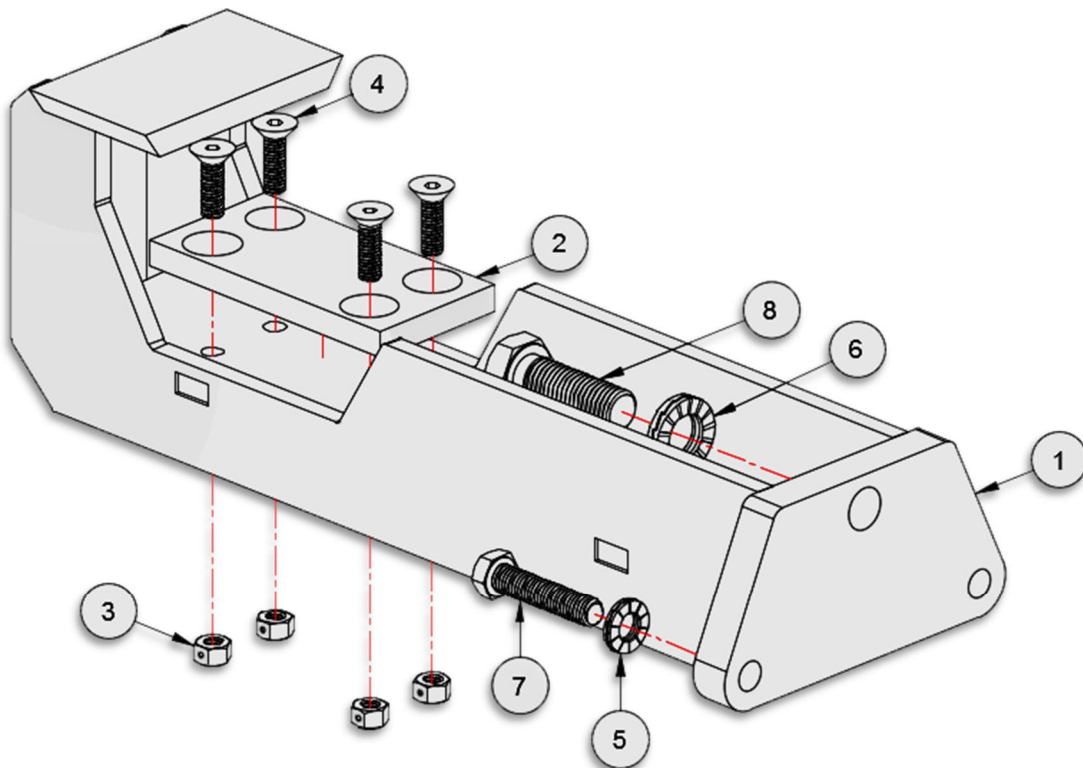
**SAFETY LATCH ASSEMBLY**

**DISC-LOCK WASHER  
TORQUE SPECS**

BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)
3/8	50
7/16	80
1/2	120
5/8	230
3/4	380
7/8	400
1	400

**13H33 – BODY LOCK ASSEMBLY****SL-75**

ITEM	PART #	QTY	DESCRIPTION	WT- lb/ea.	WT- lb/all
1	13H37	1	Body Lock Weldment	23.47	23.47
2	80H35	1	Wear Pad, 2-3/4x1/2x5-1/2	0.28	0.28
3	00P34	4	Nut, Lock 3/8-16 UNC	0.02	0.08
4	00P68	4	FSCS 3/8-16 UNC x 1-1/4 SS	0.04	0.16
5	01P30	2	Washer, Disc Lock 1/2 Dia Pr	0.02	0.04
6	01P32	1	Washer, Disc Lock 3/4 Dia Pr	0.06	0.06
7	01P69	2	HHCS 1/2-13 UNC x 2-1/4 Gr8	0.14	0.28
8	01P70	1	HHCS 3/4-10 UNC x 2-1/4 Gr8	0.39	0.39

**BODY LOCK ASSEMBLY**

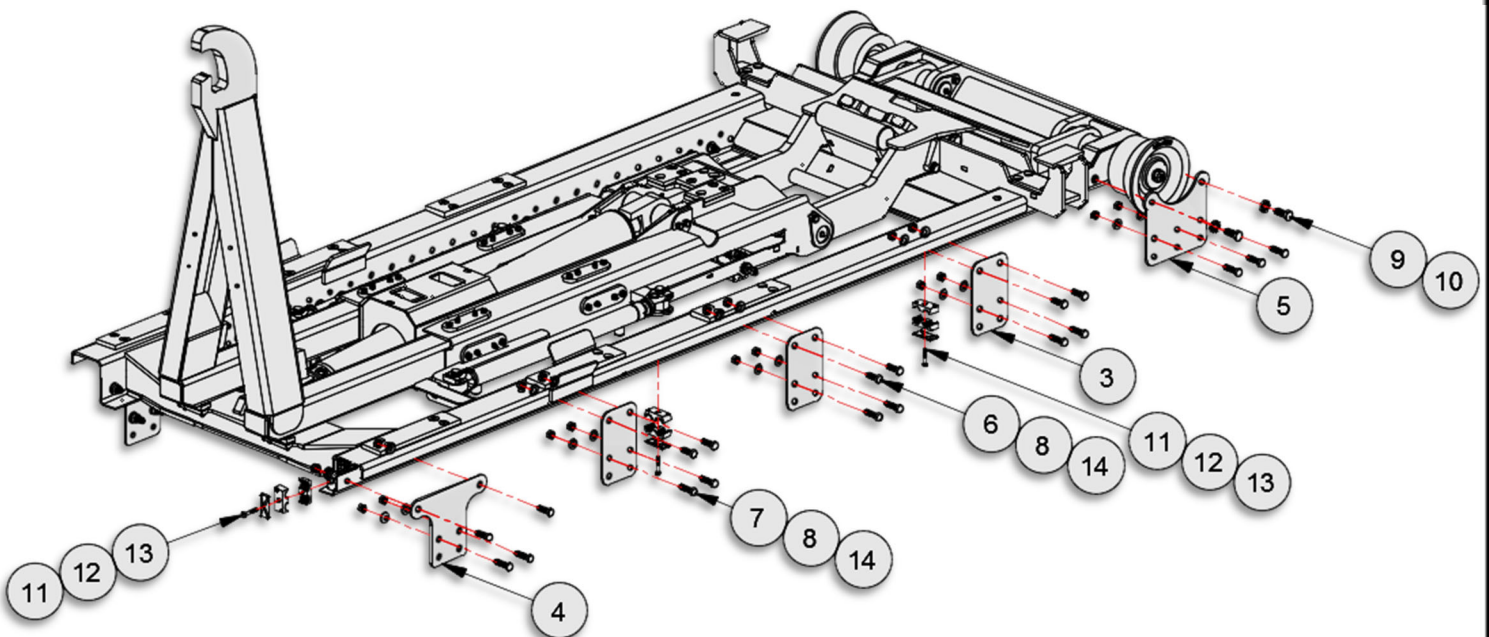
**DISC-LOCK WASHER  
TORQUE SPECS**

BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)
3/8	50
7/16	80
1/2	120
5/8	230
3/4	380
7/8	400
1	400

**13H38 – HOIST INSTALLATION KIT**
**SL-75**

ITEM	PART #	QTY	DESCRIPTION	WT- lb/ea.	WT- lb/all
1	13H39	1	Parts & Op, SL-75	1.00	1.00
2	13H40	1	Decal Assembly, SL-75	0.74	0.74
3	25H89	6	Mount Bkt, 8 1/4 x 5	2.08	16.64
4	25H91	2	Mount Bkt, 8 1/4 x 11	3.86	7.36
5	26H74	2	Mount Bkt, 8 1/4 x 9-5/16	4.26	8.52
6	00P01	16	HHCS 1/2-13 UNC x 1-1/2 Gr8	0.11	1.76
7	00P15	22	HHCS 1/2-13 UNC x 1-3/4 Gr8	0.13	2.86
8	00P35	38	Nut, Lock 1/2-13 UNC	0.04	1.52
9	00P56	4	HHCS 5/8-11 UNCS x 1-1/2	0.18	0.72
10	01P31	4	Washer, Lock, Disc 5/8 Pr	0.03	0.12
11	10P63	3	HHCS 5-16 x 1-3/4	0.04	0.12
12	10P64	3	Cover Plate, Clamp 1/2	0.10	0.30
13	10P65	3	Clamp Assy, Twin, 7/8	0.07	0.21
14	00784	38	Washer, Flat - 1/2 Dia HT	0.03	1.14

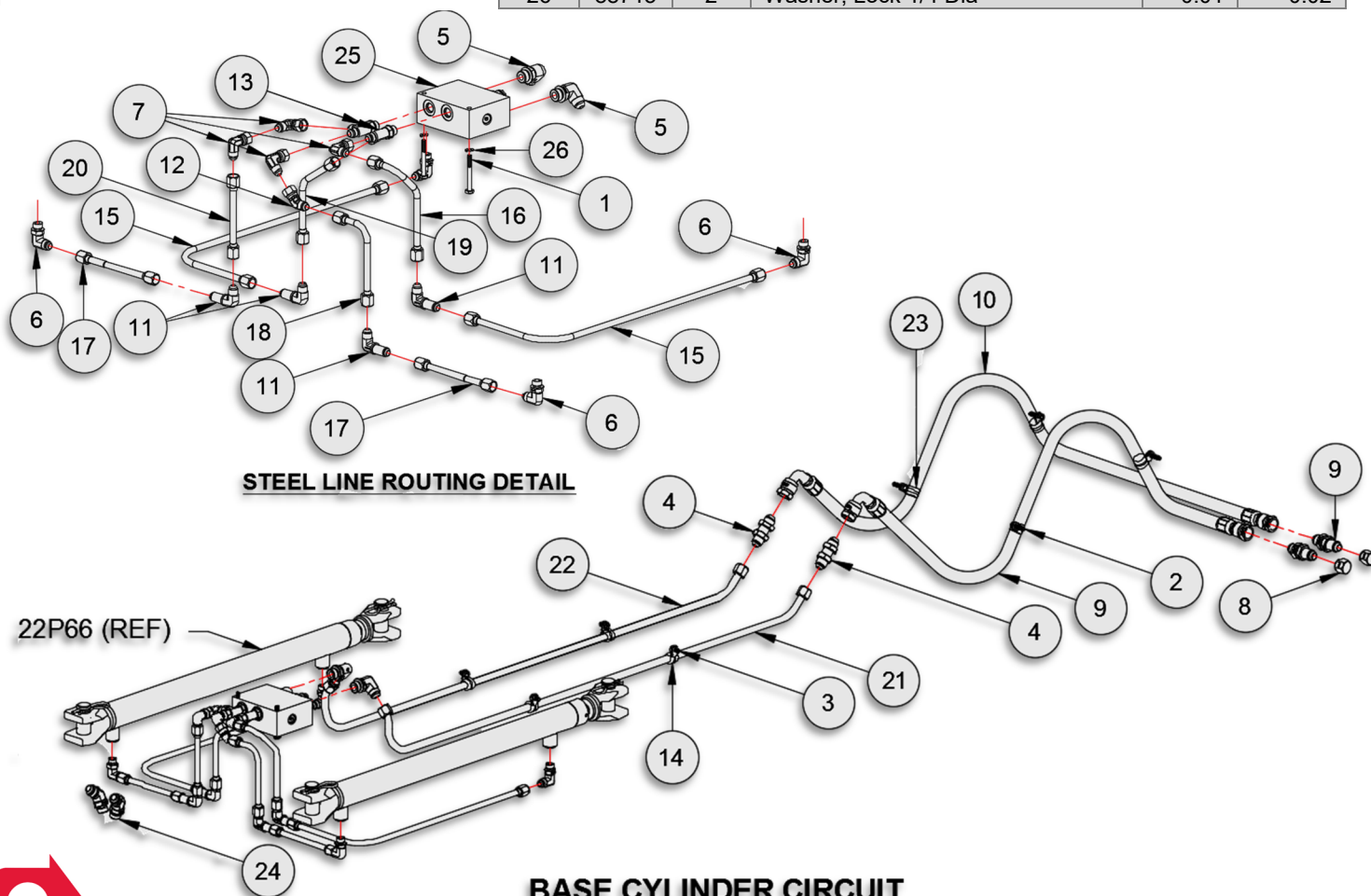
\* Item not shown.


**HOIST INSTALLATION KIT**



**91H34 – BASE CYLINDER CIRCUIT****SL-75**

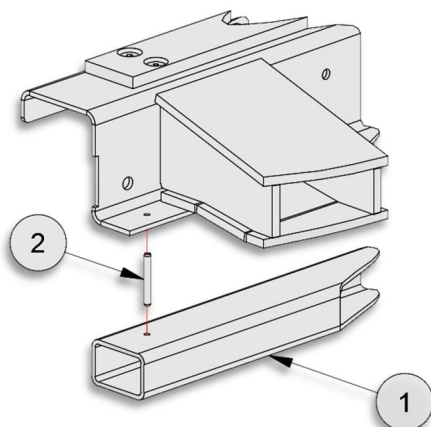
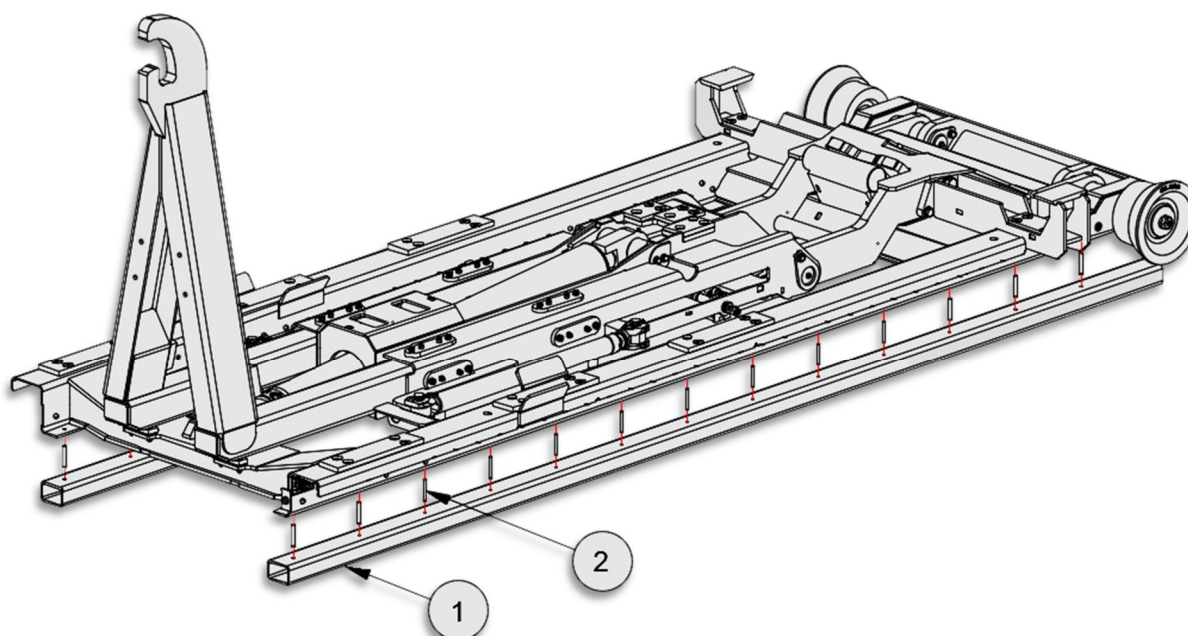
ITEM	PART #	QTY	DESCRIPTION	WT-lb/ea.	WT-lb/all
1	00P47	2	HHCS 1/4-20 UNC x 2-1/4 Gr8	0.04	0.08
2	01P56	4	HHCS 1/4-20 UNC x 1 Gr8	0.02	0.08
3	01P66	4	HHCS 1/4-20 UNC x 1/2 Gr8	0.01	0.04
4	10P43	4	Adp Hyd 08MJ/08MJ BHD	0.28	1.12
5	11P23	2	Adp Hyd 08MJ/08MB 90	0.29	0.58
6	12P49	4	Adp Hyd 06MJ/06MB 90	0.14	0.56
7	12P50	4	Adp Hyd 06MJ/06FJ 90	0.12	0.48
8	13P14	2	Adp Hyd MJIC Cap	0.03	0.06
9	13P43	1	Hose Assy 53 06-08FJ/08FJ90	1.87	1.87
10	13P44	1	Hose Assy 61 06-08FJ/08FJ90	1.87	1.87
11	13P49	4	Adp Hyd 06MJ/06MJ BHD 90	0.16	0.64
12	13P50	1	Adp Hyd 06FJ/06MJ 45	0.10	0.10
13	13P51	2	Adp Hyd 06MJ/06MJ/06MB	0.18	0.36
14	13P52	4	Hyd Hose Loop Clamp, 1/2	0.05	0.20
15	13P53	2	Hyd Tube, 3/8 x 16-1/64	0.34	0.68
16	13P54	1	Hyd Tube, 3/8 x 5-15/32	0.17	0.17
17	13P55	2	Hyd Tube, 3/8 x 5-19/32	0.14	0.28
18	13P56	1	Hyd Tube, 3/8 x -5/8	0.15	0.15
19	13P57	1	Hyd Tube, 3/8 x 5-5/16	0.15	0.15
20	13P58	1	Hyd Tube, 3/8 x 4-31/64	0.13	0.13
21	13P59	1	Hyd Tube, Extend 1/2 x 42-1/8	0.77	0.77
22	13P60	1	Hyd Tube, Retract 1/2 x 42-1/8	0.78	0.78
23	13P63	4	Hyd hose Loop Clamp, 5/8	0.05	0.20 </td
24	13P64	2	Adp Hyd 08MJ/08MB 45	0.24	0.48
25	22P67	1	Hyd Manifold, Cbal/Relief	0.98	0.98
26	88715	2	Washer, Lock 1/4 Dia	0.01	0.02





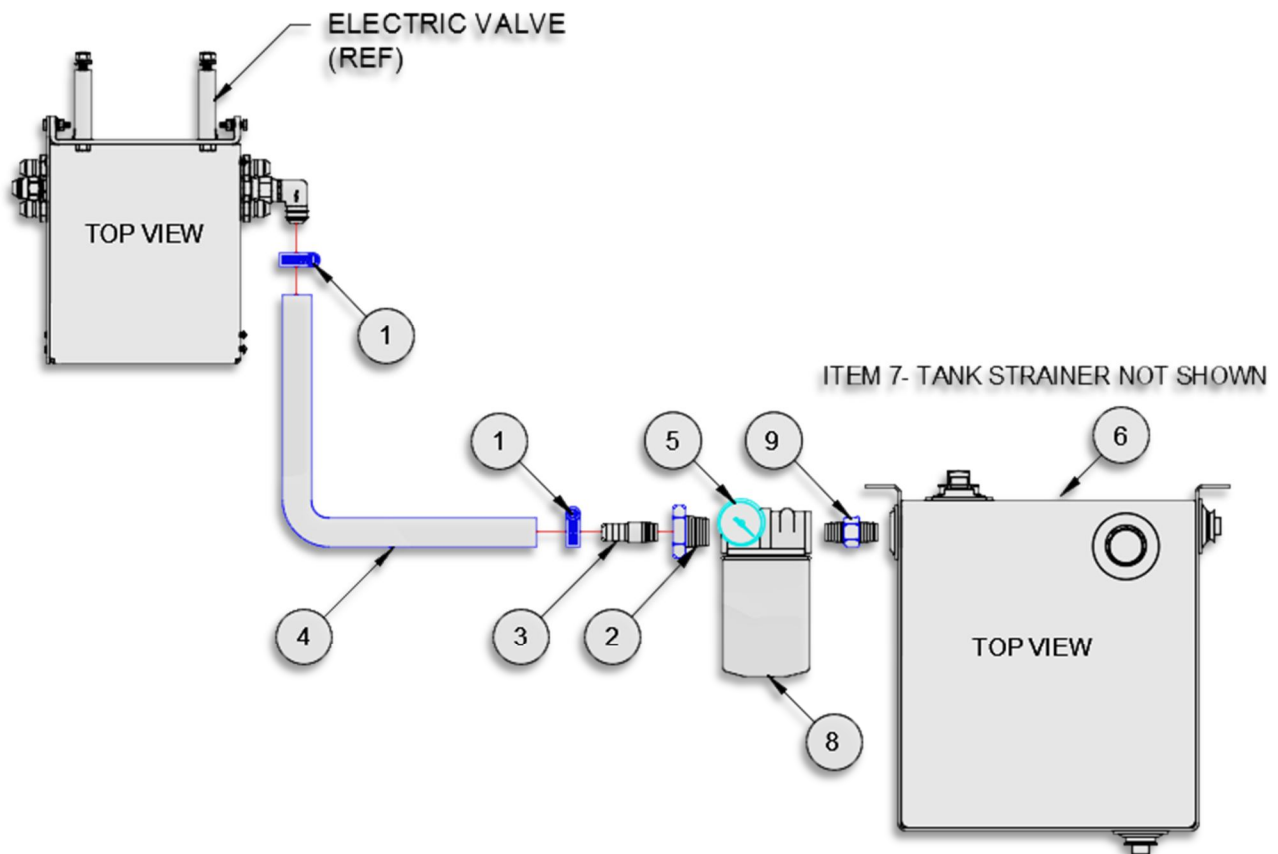
**13H49 – SPACER KIT****SL-75**

ITEM	PART #	QTY	DESCRIPTION	WT-lb/ea.	WT-lb/all
1	26H70	2	Spacer Tube, 2x3x3/16 Wa x 120	55.75	111.50
2	01P71	30	Pin, Spring	0.74	0.74

**SPRING PIN DETAIL****SPACER KIT**

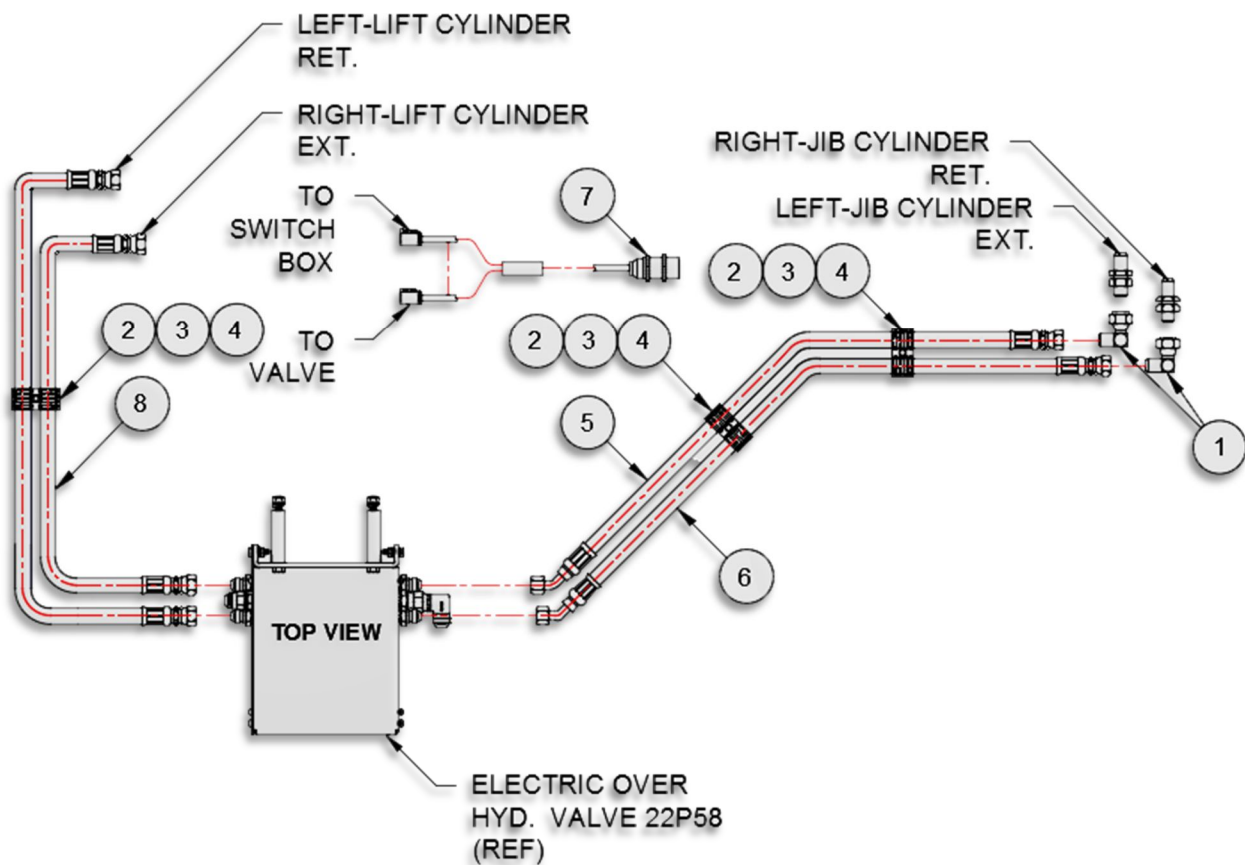
**91H36 – TANK CIRCUIT (EHV)****SL-75**

ITEM	PART #	QTY	DESCRIPTION	WT-lb/ea.	WT-lb/all
1	11P20	2	Worm Gear Clamp (HSS16)	0.10	0.20
2	12P21	1	Adp Hyd 16MP/12FP	0.30	0.30
3	12P22	1	Adp Hyd 12HB/12MP	0.30	0.30
4	12P29	1	Hose 3/4 x 24 LP	0.88	0.88
5	20P64	1	Hyd Filter Indicator	0.01	0.01
6	22P73	1	Hyd. Tank, - 7 Gallon	36.00	36.00
7	22P74	1	Tank Mounted Strainer	1.20	1.20
8	22P75	1	Hyd Filter	2.30	2.30
9	13P67	1	Adp Hyd 16MP/16/MP	0.70	0.70

**TANK CIRCUIT (EHV)**

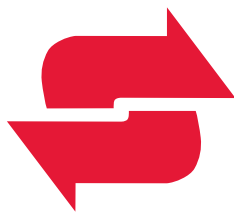
**91H35 – HOSE CIRCUIT (EHV)****SL-75**

ITEM	PART #	QTY	DESCRIPTION	WT-lb/ea.	WT-lb/all
1	10P44	2	Adp Hyd 08MJ/08FJ 90	0.30	0.60
2	10P63	3	HHCS 5/16 x 1-3/4	0.03	0.09
3	10P64	3	Cover Plate. Clamp 1/2	0.10	0.30
4	10P65	3	Clamp Assy, Twin, 7/8"	0.04	0.12
5	13P36	1	Hose Assy 83.5 08-08FJ/08FJ45	3.06	3.06
6	13P37	1	Hose Assy 86 08-08FJ/08FJ45	3.07	3.07
7	13P61	1	Proximity Switch	1.50	1.50
8	13P62	2	Hose Assy 45 08-08FJ/08FJ	1.65	1.30

**HOSE CIRCUIT (EHV)**

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