

PARTS & INSTALLATION MANUAL

SL-330/400



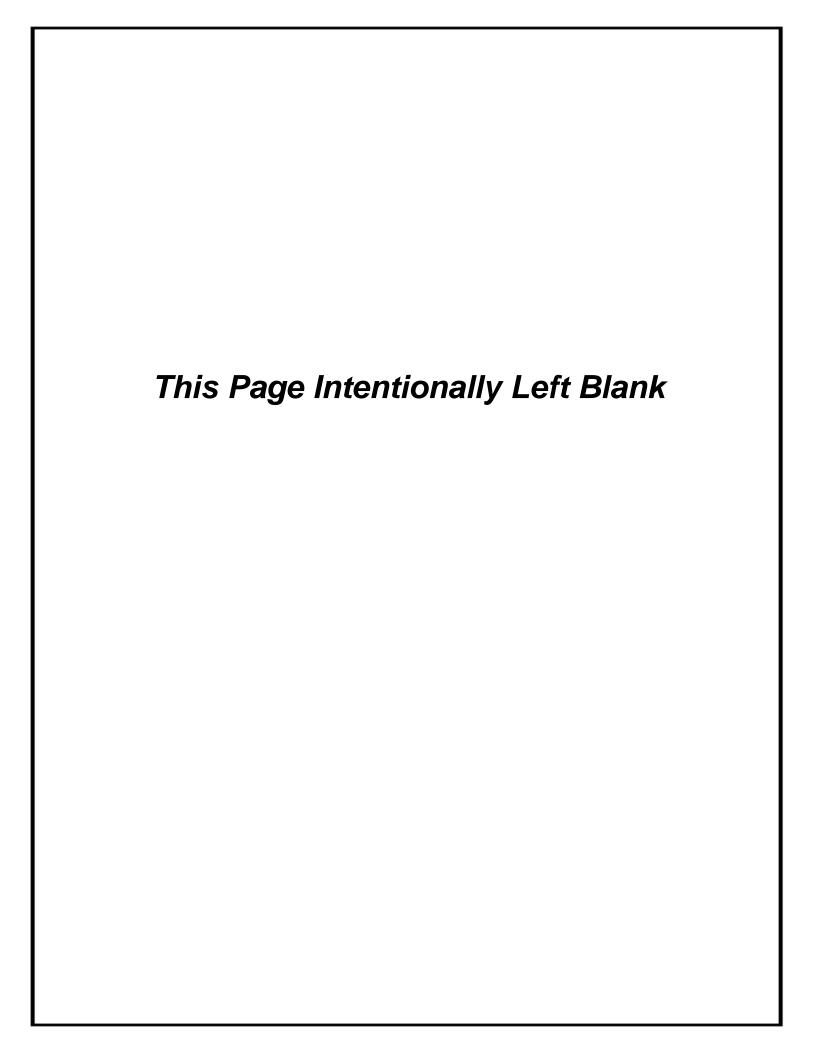
HOIST SERIAL NUMBER



TABLE OF CONTENTS

I.	INTRODUCTION	
	Letter to Customer	1-1
II.	INSTALLATION	
•••	Initial Inspection	2-1
	General Installation Procedure	
	Hoist Installation to Truck Chassis	
	Controls Installation – Manual	
	Controls Installation – Air	
	Air or Cable Control Installation w/ U-Lock (Option)	
	Pump Installation	
	Hydraulic Tank Installation	
	Start Up Procedure	
III.	PARTS PARTS	
••••	SL-330 Base Hoist w/ Fixed Jib Assembly	3-1
	SL-400 Base Hoist w/ Fixed Jib Assembly	
	SL-330 Main Frame Sub-Assembly	
	SL-400 Main Frame Sub-Assembly	
	Pivot Joint Sub-Assembly	
	Outer Tube Sub-Assembly	
	Safety Latch (Mast Lock) Sub-Assembly	
	Body Lock w/ Shelf Assembly	
	Fixed Jib Sub-Assembly	
	Hoist Installation Kit, SL-330	
	Hoist Installation Kit, SL-400	
	Base Cylinder Circuit	
	Tank Circuit	
	Pump Circuit	
	Manual Controls, 2-Section	
	Decal Assembly, SL-330	
	Decal Assembly, SL-400	
IV.	OPTIONS	
	Adjustable Jib Sub-Assembly	4-1
	Cylinder Circuit, BL 330/400 STD	
	U-Lock Assembly, HD	
	Air Control Assembly, 2-Section 400S	
	Manual Control Assembly, 3-Section 400S	
	Air Control Assembly, 3-Section 400S	
	Tank Circuit, 3-Section 330/400	





TO THE CUSTOMER:

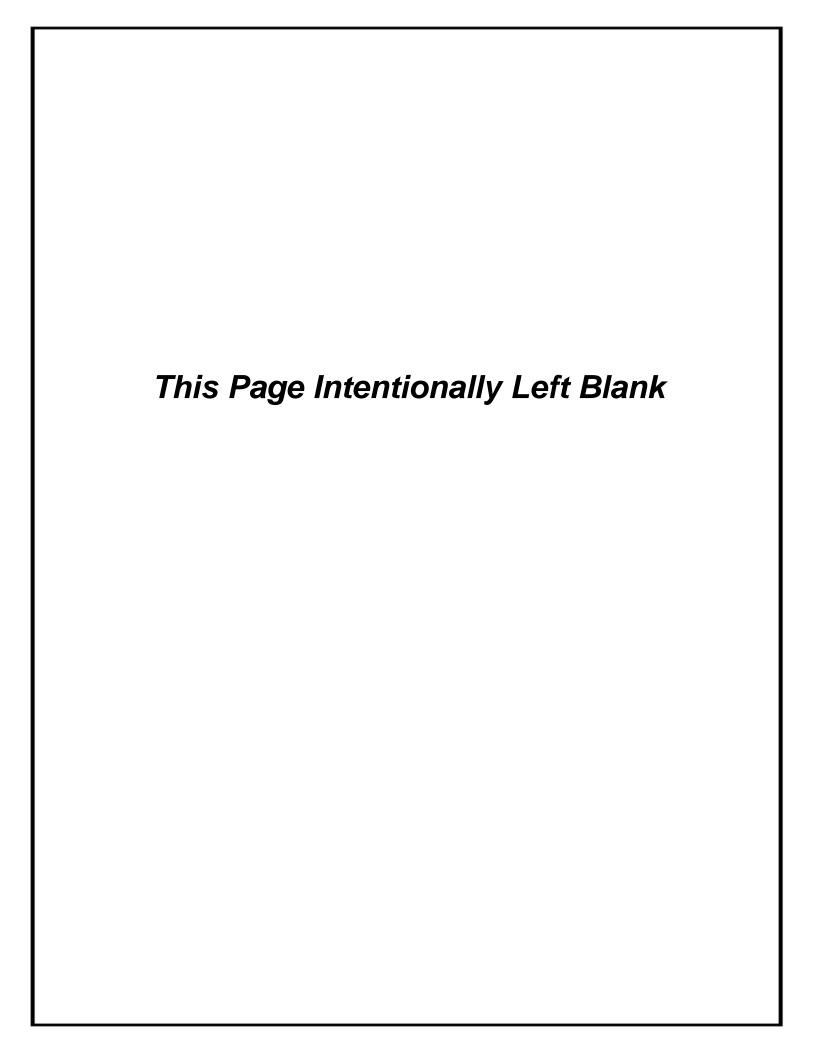
THIS MANUAL CONTAINS INSTALLATION INSTRUCTIONS TO THE TRUCK CHASSIS. ALL INSTRUCTIONS ARE RECOMMENDED PROCEDURES ONLY. THIS MANUAL ALSO PROVIDES BREAKDOWNS OF EACH SUB-ASSEMBLY APART OF THE HOIST THAT LISTS PART NUMBERS AND DESCRIPTIONS SHOULD ANYTHING NEED TO BE REPLACED ON THE HOIST. EACH SECTION IS CLEARLY IDENTIFIED SO YOU CAN EASILY FIND THE INFORMATION THAT YOU NEED. READ THE TABLE OF CONTENTS TO LEARN WHERE EACH SECTION IS LOCATED.

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.

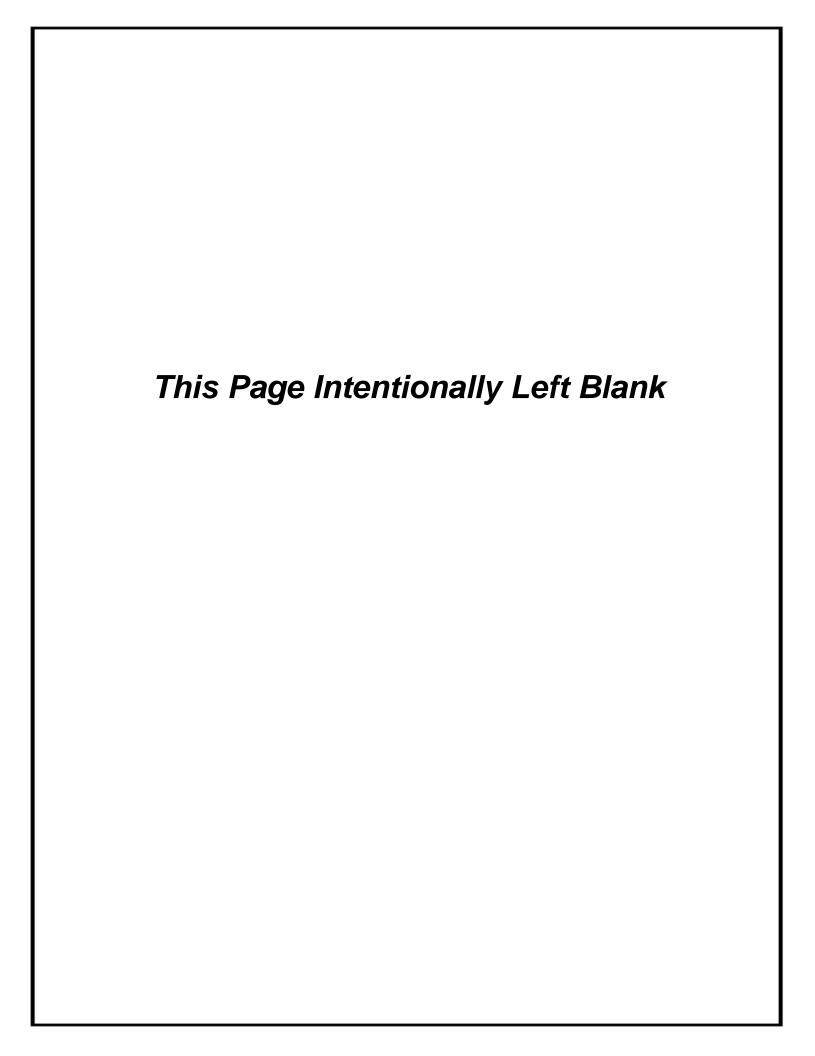
Record your SwapLoader Hoist serial number in the appropriate space provided on the title page. Your SwapLoader dealer needs this information to give prompt, efficient service when ordering parts. It pays to rely on an authorized SwapLoader Distributor for your service needs. For the location of the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

Also, included with your hoist, is a Technical Guide. This guide provides safety suggestions, technical information, operation instructions, maintenance requirements, troubleshooting, and accessory installation instructions. Please refer to the Technical Guide for any questions you may have pertained to the above.

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.



INSTALLATION





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

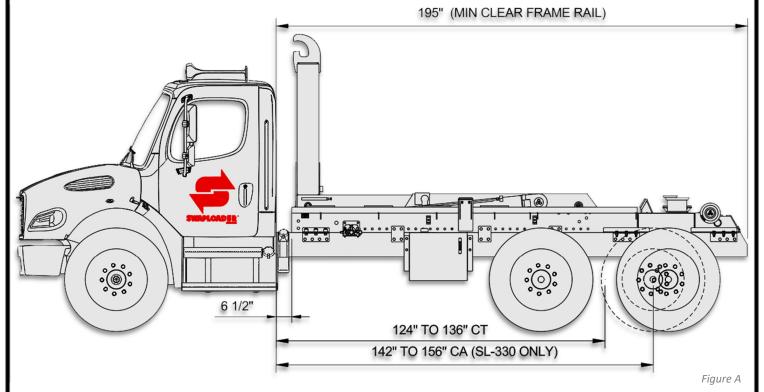
The installation of the SwapLoader on a truck chassis will generally follow these steps:

- 1. Install hoist assembly onto truck chassis.
- 2. Mount the hydraulic control valve to the hoist and install the hydraulic plumbing from the control valve to the hydraulic cylinders. Then install the control levers in the cab and route the control cables to the hydraulic control value assembly.
- 3. Install the hydraulic tank, hydraulic filter, and hydraulic plumbing between the hydraulic tank and the control valve assembly.
- 4. Select and install the P.T.O. on the truck transmission. (Note: This can be done prior to hoist installation on the truck chassis.)
- 5. Install the hydraulic pump and the plumbing from the pump to the hydraulic tank and control valve assembly.
- 6. 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-330/400 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 installing the mount brackets.



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 code 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.)

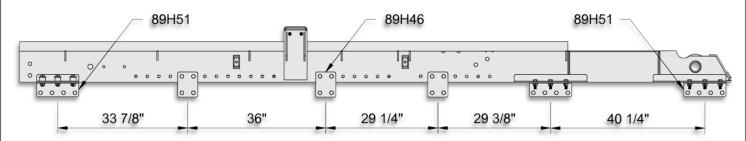


Figure B

- 2. There are two types of mount brackets used on the Model SL-330/400 hoist as indicated in Fig. B. They are Pt. Nos. 89H46, and 89H51. Locate the mount brackets on the side of the hoist as indicated in Fig. B. These dimensions are flexible because of possible interference with chassis components. When positioning the brackets allow for mounting the control valve assembly and the hydraulic tank. 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 3/4" from the top of the truck chassis rails (reference Fig. C & Fig. D). 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 21/32" diameter holes required and attach the brackets to the truck chassis with the 5/8" diameter bolts, washers, and locking hex nuts provided. Torque to 220 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.

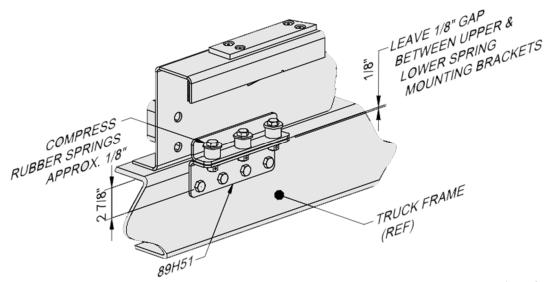
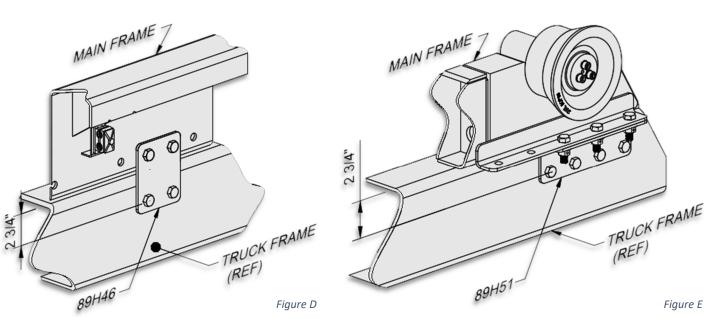
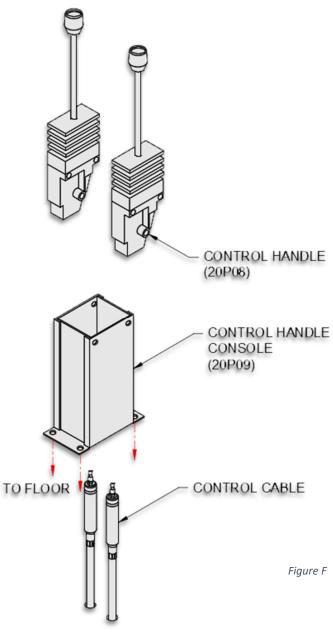


Figure C



CONTROLS INSTALLATION - MANUAL

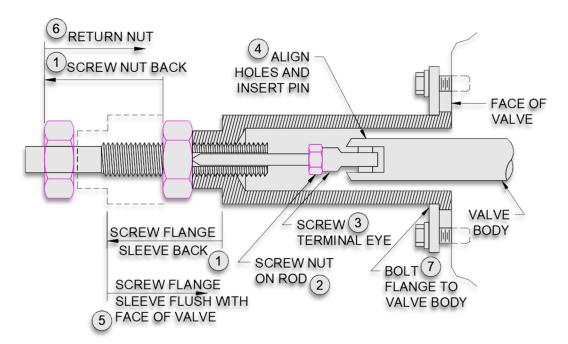
- 1. Attach the valve mount bracket (*Pt. No. 41H01*) to the main frame as indicated on *Pg. 3-15* with the fasteners provided (see *Pg. 3-11*).
- 2. Mount the hydraulic control valve assembly (*Pt. No. 20P88*) to the valve mount bracket as shown on *Pg. 3-15* with the fasteners provided.
- 3. Install the hydraulic adapters, connect the hydraulic tubing & hoses (*Pt. Nos. 12P67, 12P68, 11P98 & 11P99*) to the control valve assembly as indicated on *Pg. 5-9*. The tubing should be supported by the clamp assemblies that are provided in the Loose Parts Box (see *Pg. 3-11*).
- 4. Determine the best location in the cab for the control levers (*Pt. No. 20P08*). The location should be such that the controls can be easily reached while operating the truck. A control lever console (*Pt. No. 20P09*) is provided to facilitate the mounting of the control levers (see Pg. 3-15).
- 5. Assemble and install the control lever console (see *Fig. F*). Typically, the console is fastened to the floor of the cab, and the control cables are routed through additional holes drilled in the floor. Your installation may require that additional brackets be fabricated, or other modifications made.
- Attach the control cables to the control levers and route the cable through the holes in the cab. Install
 - the control levers in the console. Levers should be installed such that when the levers are pushed forward the control cable is extended. See *Pg. 3-15* (Manual Control Assembly) for control lever orientation.
- 7. Route the cables to the control valve location and attach them to the control valve with the bonnet connection kits provided (*Pt. No. 20P10*). See the following instruction sheet for installation procedures. The control cables supplied are 84 inches long. Your mounting may require different length control cables, which can be purchased locally or through SwapLoader. Take proper care when routing the control cables, as a good cable path is essential for a proper operating system. Keep bends in the cable path to a minimum and be as generous as possible. Under no circumstances should any bend be tighter than an 8"



radius. Protect the cable from heat above 225 degrees F. and avoid hot areas such as exhaust pipes, etc. Protect the cable from physical damages such as pinching or crushing, and do not use cable supports, which may crush or deform the cable. Allow room for flexing where the cable is attached to moving parts of the equipment, so that the cable is neither kinked nor stretched.

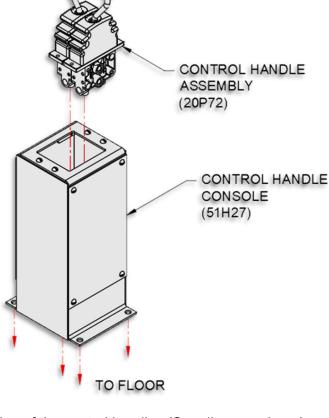
INSTALLATION PROCEDURE FOR A HYDRAULIC CONTROL CABLE TO HYDRAULIC VALVE WITH BONNET CONNECTION KIT

- 1. Turn .750-16 UNF jam nut entire length of threaded hub back over the cable. Place Flange onto Sleeve (large end first) and flange onto sleeve and turn flange adaptor / flange / sleeve assembly entire length of threaded hub back over the cable.
- 2. Turn .250-28 UNF jam nut onto cable threaded rod until it bottoms.
- 3. Place clevis of threaded rod and bottom against jam nut. Turn other .250-28 UNF jam nut onto threaded rod until it bottoms against clevis. Align clevis so it will mate with spool terminal eye and secure jam nut against clevis.
- 4. Slide the clevis onto terminal eye on spool and align the holes. Insert clevis pin through yoke and terminal eye holes and secure clevis pin with retaining ring.
- 5. Now, with the cable attached to the valve and control head, turn the flange adapter / flange / sleeve assembly back onto the threaded hub until it is flush with the valve face. When turning on the flange adapter / flange / sleeve assembly, make sure that the control head remains in the neutral position.
- 6. Tighten the .750-16 UNF jam nut against the sleeve and lock in position.
- 7. Bring flange into position on bolt assembly to valve housing.



CONTROLS INSTALLATION - AIR SHIFT (OPTION)

- Attach the valve mount bracket (See Pg. 4-4) to the main frame as indicated on Pg. 3-11 with the fasteners provided.
- Mount the hydraulic control valve assembly (*Pt. No. 20P88*) to the valve mount bracket as shown on *Pg. 4-4* with the fasteners provided. Attach air shift kits (*Pt. No. 20P95*) to the hydraulic control valve. Reference installation instructions included with the air shift kits.
- 3. Install the hydraulic adapters and connect the hydraulic hoses and tubing (*Pt. Nos. 12P67, 12P68, 11P98 & 11P99*) to the control valve assembly as indicated on *Pg. 3-13*. The tubing should be supported by the clamp assemblies that are provided in the Loose Parts Box (See *Pg. 3-11*).
- 4. Determine the best location in the cab for the control handle assembly (*Pt. No. 20P72*). The location should be such that the controls can be easily reached while operating the truck. A control handle console (*Pt. No.*)



- 51H27) is provided to facilitate the mounting of the control handles (See diagram above).
- 5. Install the air fittings and hose as shown on *Pg. 4-5* (Air Circuit Plumbing Diagram). An air pressure protection valve (*Pt. No. 20P74*) is provided so you can tap into the truck's air supply without jeopardizing the integrity of the air system. The air hose is provided in a bulk length, which you can cut to length as required for running the air lines. Take care in routing the air lines and avoid hot areas such as exhaust pipes, etc.

AIR OR CABLE CONTROL INSTALLATION w/ U-LOCK (OPTION)

The Universal Body Lock (U-Lock) can be installed with a standard 3-section valve and operated from the cab (see *Pg. 4-2* for routing). A separate indicator light and harness will be provided to be installed in the truck cab. This will notify the operator when the U-Lock has been engaged or disengaged.

1. Review all directions and diagrams provided before starting installation.

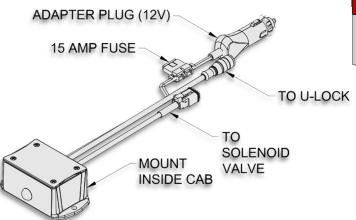
2. Mount valve to the hoist's main frame and attach all hoses, hose clamp assemblies and fittings as shown on *Pg. 4-9*.

3. Mount Indicator Light Box in the truck cab where it will be clearly visible to the operator.

Route Indicator Light and Harness (*Pt. No. 40P60*) from the truck cab to the U-Lock cylinder.

5. Hardwire or plug in provided 12V adapter for indicator light.





NOTE:

AS A SAFETY MEASURE, THE JIB CYLINDER IS DISENGAGED WHENEVER THE U-LOCK IS ENGAGED.

PUMP INSTALLATION

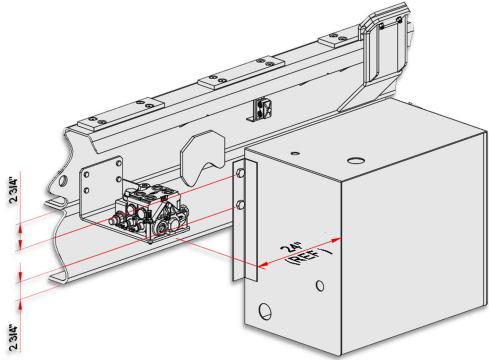
- 1. Install the hydraulic pump to the P.T.O. (Bolts are not provided).
- 2. Install the hydraulic fittings into ports on the hydraulic pump as shown on Pg. 3-14.
- 3. Connect the suction hose assembly to the hydraulic tank (1 1/2" I.D. hose) and route to the hydraulic pump in as short and straight line as possible. Be sure to route the hose clear of exhaust components and of the drive shaft. Extra hose is provided so the hose can be shortened to an appropriate length. Install the hose on the hose barb fittings at the tank and at the pump and secure with the hose clamps provided.

NOTE: Prior to startup, this hose must be filled with oil.

- 4. The pressure hose from the hydraulic pump to the control valve assembly is not supplied with the hoist as it must be made to the proper length. This hose must be purchased from a local hydraulic hose assembly supplier per the following specification:
 - a. Hose ID: 3/4 inch
 - b. Working Pressure: 3000 PSI
 - c. Hose Fitting Threads: SAE 37° (JIC) 1 1/16-12
- 5. Install the pressure hose as indicated. Tie up the pressure and suction hoses as necessary. Again, be sure the hoses are routed to avoid exhaust components and to stay clear of the drive shaft.

HYDRAULIC TANK INSTALLATION

1. Select a location to mount the hydraulic tank. Reference *Fig. G* for the suggested location of the hydraulic tank to the rear of the control valve assembly on the left-hand side of the truck. The hydraulic hoses have been sized for the tank to be mounted in this

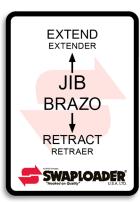


- general area. The tank can be located on the right-hand side or behind the cab, if necessary, which means longer hoses may be required.
- 2. Drill four (4) holes for 1/2" diameter bolts (provided) in the mount angle of the hydraulic tank (two per angle) and the frame rails of the truck chassis. Mount the hydraulic tank and install the hydraulic filter. Install the hydraulic return hose and the hose barb fitting between the filter and the control valve assembly as shown on *Pg. 3-13*. 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. Prime the pump by loosening the clamp on the suction hose at the pump. Pull the hose back off the fitting till the air is bled from the line. Push the hose back on the fitting and retighten the clamp.
- 3. Engage the P.T.O. and run the engine at idle (700 to 900 RPM). 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.
- 4. Check for leaks and tighten fittings as necessary.
- 5. Verify the movement of the control levers corresponds to the movement of the cylinders per the figure below.
- Install all safety decals and product decals as shown on Pg. 3-16 or 3-17 after final installation and painting have been completed.
- Fill out the Product Registration form online at <u>Truck-Mounted Product Registration -</u> <u>Swaploader</u>.





NOTE:

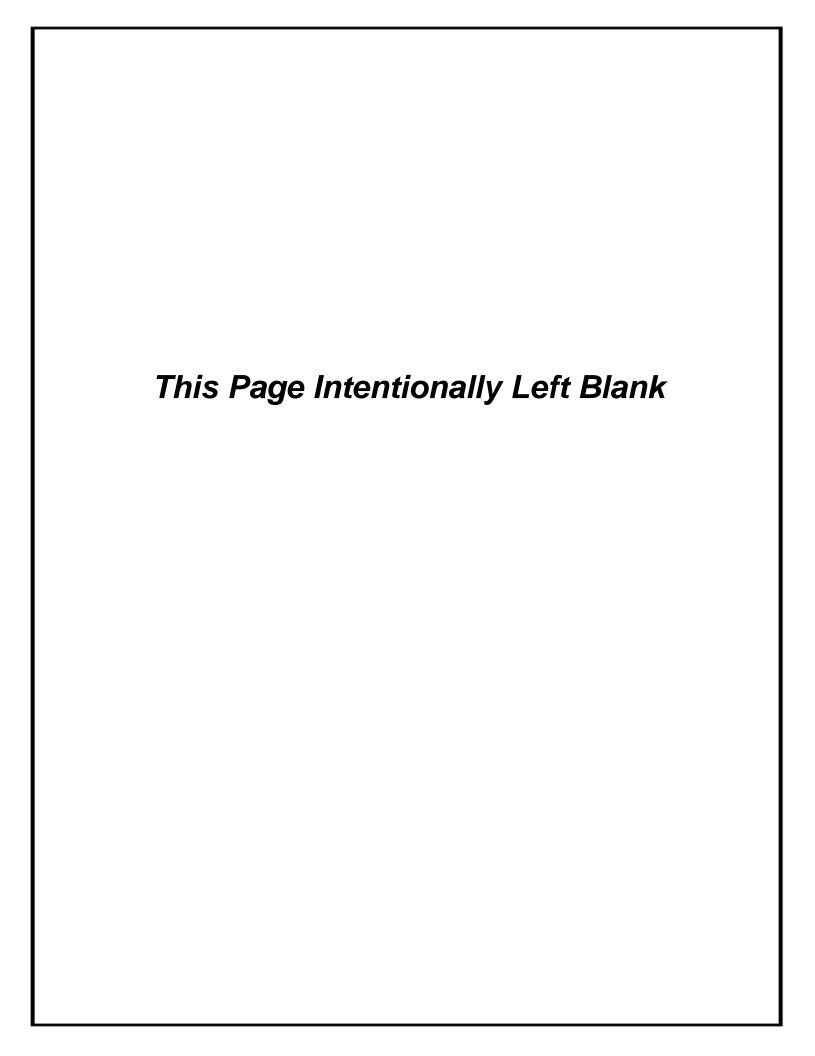
FAILURE TO FILL OUT AND SUBMIT PRODUCT REGISTRATION WITHIN 15 DAYS OF INSTALLATION MAY POSSIBLY VOID THE WARRANTY.



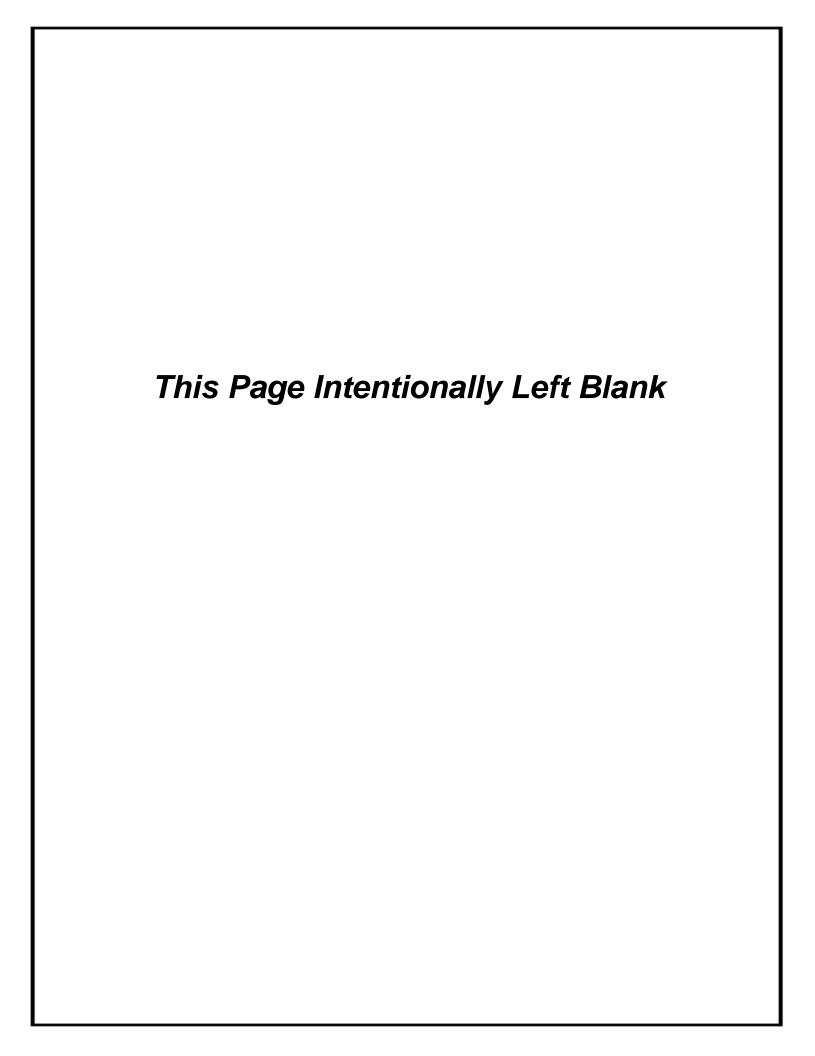
CAUTION

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 in the Technical Guide). 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.)



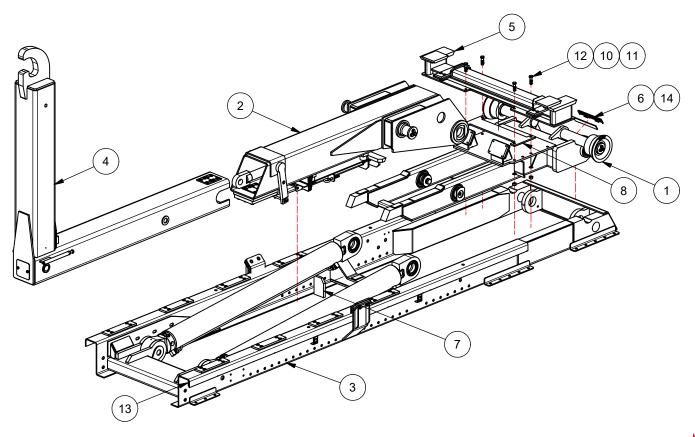
PARTS



DISC-LOCK WASHER TORQUE SPEC'S		
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)	
3/8	53	
7/16	85	
1/2	130	
5/8	258	
3/4	459	
7/8	739	
1	1108	
NOTE:		

			42H	121 - BASE HOIST ASSEMBLY	
	ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea
	1	42H02	1	PIVOT JOINT SUB-ASSY, 330/400	791.20
	2	42H04	1	OUTER TUBE SUB-ASSEMBLY	1057.38
	3	42H18	1	MAIN FRAME SUB-ASSEMBLY	2042.81
	4	43H39	1	FIXED JIB SUB-ASSY, SL-330/400	803.69
	5	43H47	1	BODY LOCK W/SHELF ASSEMBLY, 400S	178.73
	6	62H99	1	LOGO NAME PLATE, MF	0.34
	7	84H85	2	PIVOT GUIDE	4.95
	8	85H20	1	SHIM, BL 9 x 3/8 x 22-3/8	12.98
	9	91H02	1	BASE CYL CIRCUIT, 330/400	23.19
	10	00767	4	WASHER, LOCK 5/8	0.01
	11	00P24	4	NUT, HEX 5/8-11 UNC GR8	0.08
	12	01P17	4	HHCS 5/8-11 UNC x 2-1/4 GR8	0.26
	13	90P76	1	SL-330 SERIAL TAG	0.02
ĺ	14	90P90	1	NAME PLATE INSERT	0.09

^{*} ITEM NOT SHOWN

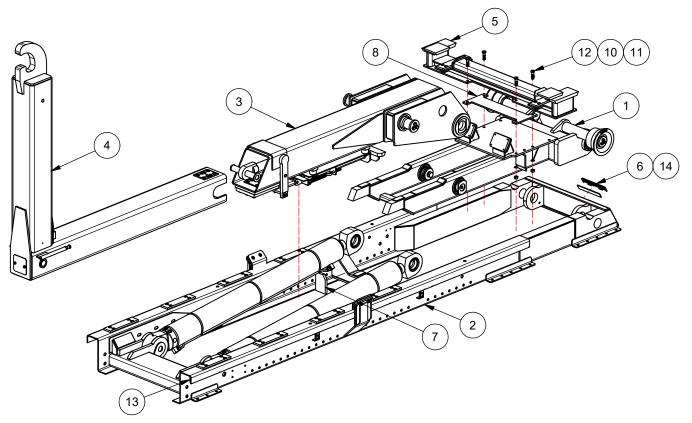


SL-330 BASE HOIST W/ FIXED JIB

DISC-LOCK WASHER TORQUE SPEC'S		
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)	
3/8	53	
7/16	85	
1/2	130	
5/8	258	
3/4	459	
7/8	739	
1	1108	
NOTE:		

	42H05 - BASE HOIST ASSEMBLY				
	ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea
	1	42H02	1	PIVOT JOINT SUB-ASSY, 330/400	791.20
	2	42H03	1	MAIN FRAME SUB-ASSEMBLY	2187.35
	3	42H04	1	OUTER TUBE SUB-ASSEMBLY	1057.38
	4	43H39	1	FIXED JIB SUB-ASSY, SL-330/400	803.69
	5	43H47	1	BODY LOCK W/SHELF ASSEMBLY, 400S	178.73
	6	62H99	1	LOGO NAME PLATE, MF	0.34
	7	84H85	2	PIVOT GUIDE	4.95
	8	85H20	1	SHIM, BL 9 x 3/8 x 22-3/8	12.98
*	9	91H02	1	BASE CYL CIRCUIT, 330/400	23.19
	10	00767	4	WASHER, LOCK 5/8	0.01
	11	00P24	4	NUT, HEX 5/8-11 UNC GR8	0.08
	12	01P17	4	HHCS 5/8-11 UNC x 2-1/4 GR8	0.26
	13	90P69	1	SL-400 SERIAL TAG	0.02
	14	90P90	1	NAME PLATE INSERT	0.09

^{*} ITEM NOT SHOWN

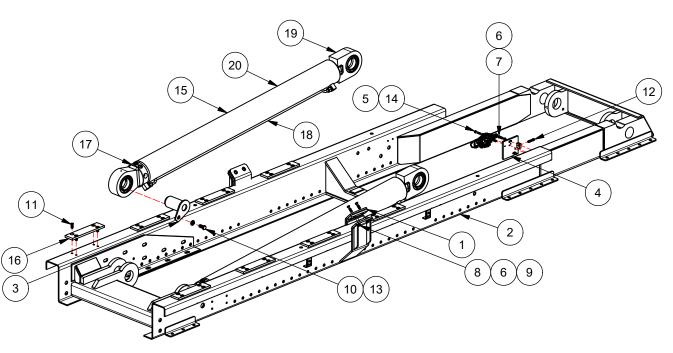


SL-400 BASE HOIST W/ FIX JIB

DISC-LOCK WASHER TORQUE SPEC'S		
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)	
3/8	53	
7/16	85	
1/2	130	
5/8	258	
3/4	459	
7/8	739	
1	1108	
NOTE:		

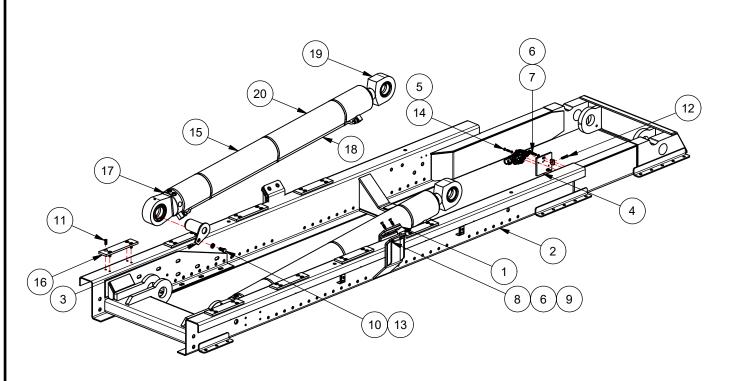
<u>IOTE:</u>	
PPLY LOCTITE 243 (BLUE)	
O ALL BOLTS	

42H18 - MAIN FRAME SUB-ASSEMBLY, SL-330				
ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea
1	41H81	2	FRONT GUIDE SHIM WDMT	4.58
2	41H87	1	MAIN FRAME WDMT, SL-330/400	1187.69
3	42H01	2	PIN, MF/CYL 3 x 5-3/4 ZP	12.53
4	42H11	1	JIB LOCKOUT MNT, 5 x 5	2.99
5	00752	2	WASHER, LOCK 5/16	0.03
6	00755	38	WASHER, LOCK 3/8	0.03
7	00P13	2	HHCS 3/8-16 UNC x 1-1/4 GR8	0.05
8	00P14	36	NUT, HEX 3/8-16 UNC GR8	0.02
9	00P44	4	HHCS 3/8-16 UNC x 1-1/2 GR8	0.06
10	00P56	2	HHCS 5/8-11 UNC x 1-1/2 GR8	0.19
11	00P68	32	FHCS 3/8-16 UNC x 1-1/4 SS	0.04
12	01P20	1	SHCS 3/8-16 UNC x 1-3/4 GR8	0.07
13	01P31	2	WASHER, DISC LOCK 5/8 PR	0.03
14	10P63	2	HHCS 5/16-18 UNC x 1-3/4 ZP	0.04
15	22P55	2	HYD CYL 5.5x2.75x60, NITRIDED	404.37
16 90P71 8 WEAR PAD, 2-3/4 x 1/2 x 11-3/4		0.63		
		SERVI	ICE PARTS PER LIFT CYLINDER	
17	21P11	2	C'BAL CART, 3700 PSI CBCA-LHN	0.35
18	21P71	1	RETURN LINE, CYL 330	2.00
19	22P15	2	HYD CYL BRG, SPH 3.00ID	6.90
20	23P11	1	SEAL KIT, LIFT CYL 330 N	0.20



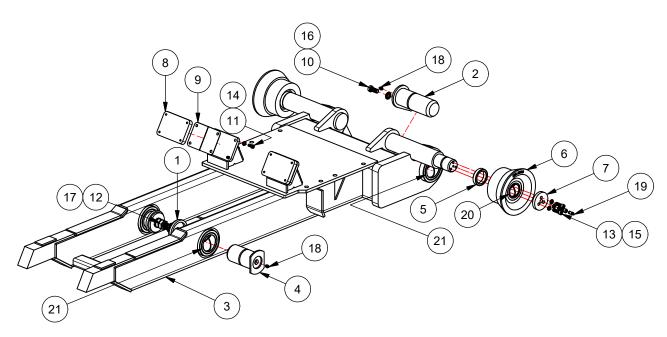
DISC-LOCK WASHER TORQUE SPEC'S		
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)	
3/8	53	
7/16	85	
1/2	130	
5/8	258	
3/4	459	
7/8	739	
1	1108	
NOTE: APPLY LOCTITE 243 (BLUE) TO ALL BOLTS.		

42H03 - MAIN FRAME SUB-ASSEMBLY, SL-400				
ITEM	PART#	QTY	DESCRIPTION WT-lb/e	
1	41H81	2	FRONT GUIDE SHIM WDMT	4.58
2	41H87	1	MAIN FRAME WDMT, SL-330/400	1187.69
3	42H01	2	PIN, MF/CYL 3 x 5-3/4 ZP	12.53
4	42H11	1	JIB LOCKOUT MNT, 5 x 5	2.99
5	00752	2	WASHER, LOCK 5/16	0.03
6	00755	38	WASHER, LOCK 3/8	0.03
7	00P13	2	HHCS 3/8-16 UNC x 1-1/4 GR8	0.05
8	00P14	36	NUT, HEX 3/8-16 UNC GR8	0.02
9	00P44	4	HHCS 3/8-16 UNC x 1-1/2 GR8	0.06
10	00P56	2	HHCS 5/8-11 UNC x 1-1/2 GR8	0.19
11	00P68	32	FHCS 3/8-16 UNC x 1-1/4 SS	0.04
12	01P20	1	SHCS 3/8-16 UNC x 1-3/4 GR8	0.07
13	01P31	2	WASHER, DISC LOCK 5/8 PR	0.03
14	10P63	2	HHCS 5/16-18 UNC x 1-3/4 ZP	0.04
15	22P56	2	HYD CYL 6x3x60 NITRIDED	476.64
16	90P71	8	WEAR PAD, 2-3/4 x 1/2 x 11-3/4	0.63
	SERVICE PARTS PER LIFT CYLINDER			
17	21P11	2	C'BAL CART, 3700 PSI CBCA-LHN	0.35
18	21P73	1	RETURN LINE, CYL 400	2.00
19	22P15	2	HYD CYL BRG, SPH 3.00ID	6.90
20	22P41	1	SEAL KIT, LIFT CYL 400/412 N	0.20



DISC-LOCK WASHER TORQUE SPEC'S		
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)	
3/8	53	
7/16	85	
1/2	130	
5/8	258	
3/4	459	
7/8	739	
1	1108	
NOTE:		

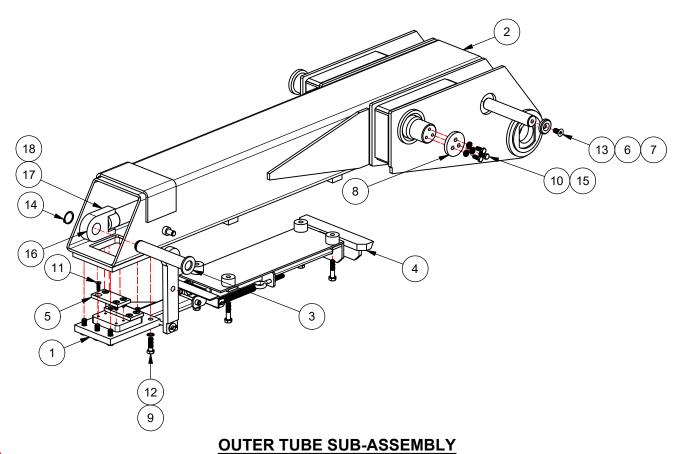
42H02 - PIVOT JOINT SUB-ASSEMBLY				
ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea
1	40H71	2	PIN CAP, 13/16 x 4 ZP	1.46
2	40H84	2	PIN, PJ/MF 3 x 8 ZP	16.97
3	41H91	1	PIVOT JOINT WDMT, SL-330/400	644.04
4	41H99	2	PIN, PJ/OT 3 x 5-7/8 ZP	11.91
5	61H94	2	SPACER, ROLLER 11/16x2-1/4 ZP	0.56
6	80P09	2	ROLLER ASSY, 6-1/4x2-1/4ID	34.12
7	85H21	2	ROLLER RETAINER, 1/2 x 3-1/4 ZP	1.05
8	89H57	2	BOLT PLATE, TUBE STOP 330/400	5.70
9	89H58	4	SHIM 3-3/32 x 22GA x 4-3/8	0.11
10	00P56	2	HHCS 5/8-11 UNC x 1-1/2 GR8	0.19
11	00P62	8	HHCS 3/8-16 UNC x 1 GR8	0.04
12	00P87	2	HHCS 1-8 UNC x 2 GR8	0.71
13	01P25	6	SHCS 7/16-14 UNC x 1-1/2 GR8	0.08
14	01P28	8	WASHER, DISC LOCK 3/8 PR	0.00
15	01P29	6	WASHER, DISC LOCK 7/16 PR	0.02
16	01P31	2	WASHER, DISC LOCK 5/8 PR	0.03
17	01P34	2	WASHER, DISC LOCK 1 PR	0.08
18	90P03	4	GREASE ZERK, 1/8-27 NPT STR	0.02
19	90P19	2	GREASE ZERK, 1/8-27 NPT LONG	0.03
			BEARINGS	
20	23H07	2	BRZ BRG, 2.25IDx3.00x2.75OD	1.71
21	50P20	4	BRZ BRG, 3.00IDx3.44x3.75OD	4.00



DISC-LOCK WASHER TORQUE SPEC'S	
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)
3/8	53
7/16	85
1/2	130
5/8	258
3/4	459
7/8	739
1	1108
NOTE:	

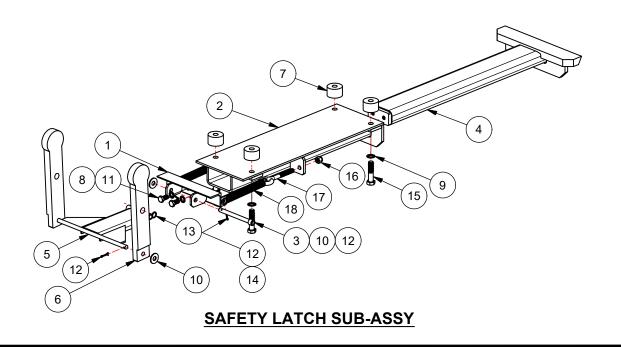
NOTE:	
APPLY LOCTITE 243 (BLUE)	
TO ALL BOLTS.	

	42H04- OUTER TUBE SUB-ASSEMBLY					
ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea		
1	40H44	1	CLAMP PLATE, 400 SERIES	30.05		
2	41H94	1	OUTER TUBE WELDMENT	684.57		
3	41H98	1	PIN, JIB/CYL 1-3/4 x 9-7/8 ZP	7.33		
4	42H08	1	SAFETY LATCH SUB-ASSY	106.03		
5	80H35	2	WEAR PAD, 2-3/4x1/2x5-1/2	0.28		
6	81H20	2	PIN CAP, 7/16 x 2-1/4	0.41		
7	82H50	1	PIN, OT/CYL 1-3/4 x 9-15/32 ZP	6.25		
8	85H14	2	PIN CAP, 1/2 x 3-3/4 ZP	1.46		
9	00767	6	WASHER, LOCK 5/8	0.01		
10	00P31	6	HHCS 1/2-13 UNC x 1-1/4	0.10		
11	00P68	8	FHCS 3/8-16 UNC x 1-1/4 SS	0.04		
12	00P69	6	HHCS 5/8-11 UNC x 2 GR8	0.23		
13	00P95	2	FHCS 5/8-11 x 1-1/4 GR8	0.11		
14	00P97	1	SNAP RING, EXT 1.75	0.12		
15	01P30	6	WASHER, DISC LOCK 1/2 PR	0.02		
16	22P54	1	HYD CYL 4x2.5x38, NITRIDED	216.00		
		SERV	ICE PARTS PER JIB CYLINDER			
17	21P17	1	C'BAL CART, 3700 PSI CBEA-LHN	0.50		
18	21P48	1	SEAL KIT, JIB CYL 330/400	0.20		

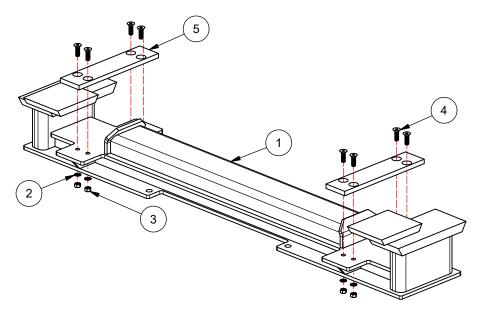


DISC-LOCK WASHER TORQUE SPEC'S		
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)	
3/8	53	
7/16	85	
1/2	130	
5/8	258	
3/4	459	
7/8	739	
1	1108	
NOTE:		

	42H08- SAFETY LATCH SUB-ASSEMBLY			
ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea
1	40H37	1	SPRING MOUNT WDMT, SL-330/400	2.88
2	40H40	1	LATCH TUBE WDMT, PL 330/400	35.78
3	40H42	1	PIN, SAFETY L 1/2 x 5-1/16	0.36
4	40H74	1	INNER TUBE WELDMENT	38.47
5	42H09	1	CONNECTION BAR WDMT, 9-1/4	4.33
6	81H51	2	RELEASE LEVER	8.42
7	85H17	4	SPACER 5/8 I.D. x 1-1/4 x 20D	0.99
8	00760	2	WASHER, LOCK 1/2	0.00
9	00767	4	WASHER, LOCK 5/8	0.01
10	00772	3	WASHER, FLAT 1/2	0.04
11	00P09	2	HHCS 1/2-13 UNC x 1 GR8	0.09
12	00P26	5	PIN, COTTER 1/8 x 1	0.00
13	00P28	2	SNAP RING, EXT 0.75	0.00
14	00P94	2	PIN, CLEVIS 3/8 x 1-1/2	0.05
15	01P49	4	HHCS 5/8-11 UNC x 2-3/4 GR8	0.30
16	01P78	2	NUT, NYLOCK 1/2-13 UNC SS	0.05
17	02P14	2	EYEBOLT 1/2-13 UNC x 4	0.48
18	90P04	2	SPRING, EXT 7/8 OD x 6 LG	0.33



	43H47- BODY LOCK w/ SHELF ASSEMBLY			
ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea
1	43H48	1	BODY LOCK WELDMENT, SHELF 400S	176.75
2	00755	8	WASHER, LOCK 3/8	0.03
3	00P14	8	NUT, HEX 3/8-16 UNC GR8	0.02
4	00P68	8	FHCS 3/8-16 UNC x 1-1/4 SS	0.04
5	90P71	2	WEAR PAD, 2-3/4 x 1/2 x 11-3/4	0.63

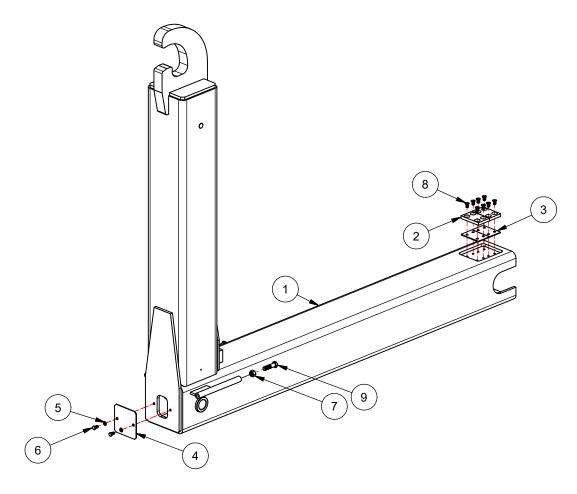


BODY LOCK W/SHELF ASSEMBLY, 400S



DISC-LOCK WASHER TORQUE SPEC'S		
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)	
3/8	53	
7/16	85	
1/2	130	
5/8	258	
3/4	459	
7/8	739	
1	1108	
NOTE: APPLY LOCTITE 243 (BLUE) TO ALL BOLTS.		

_					
I		43H39- FIXED JIB SUB-ASSEMBLY			
	ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea
	1	41H97	1	FIXED JIB WDMT 62, SL-330/400	800.47
	2	60H11	2	WEAR PAD, 2-3/4 x 1/2 x 4-1/4	0.21
	3	61H90	2	SHIM, WP 2-3/4 x 1/8 x 4-1/4	0.40
	4	62H11	1	COVER, JIB 5-1/4x11GAx5-1/4	0.92
	5	00755	2	WASHER, LOCK 3/8	0.03
	6	00P03	2	HHCS 3/8-16 UNC x 3/4 GR8	0.04
	7	00P24	2	NUT, HEX 5/8-11 UNC GR8	0.08
	8	00P79	8	FHCS 3/8-16 UNC x 3/4 BR	0.03
	9	01P09	2	HHCS 5/8-11 UNC x 2-1/2 GR8	0.28
				•	

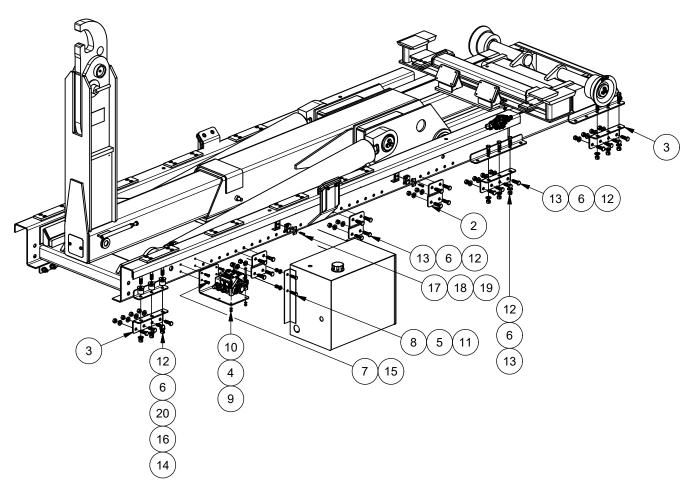


FIXED JIB SUB-ASSY, SL-330/400

DISC-LOCK WASHER TORQUE SPEC'S	
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)
3/8	53
7/16	85
1/2	130
5/8	258
3/4	459
7/8	739
1	1108
NOTE:	

	44H85 - HOIST INSTALL KIT				
	ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea
	1	42H20	1	DECAL ASSEMBLY, SL-330	0.00
	2	89H46	6	MNT BKT, 5-1/4 x 1/4 x 6-1/2	2.33
	3	89H51	6	MNT BKT, 2-7/16 x 3-3/4 x 11	4.24
	4	00752	3	WASHER, LOCK 5/16	0.03
	5	00784	4	WASHER, FLAT 1/2 ZP	0.03
	6	00785	66	WASHER, FLAT 5/8 ZP	0.05
	7	00P13	4	HHCS 3/8-16 UNC x 1-1/4 GR8	0.05
	8	00P15	4	HHCS 1/2-13 UNC x 1-3/4 GR8	0.13
	9	00P19	3	HHCS 5/16-18 UNC x 2-3/4 GR8	0.07
	10	00P20	3	NUT, HEX 5/16-18 UNC GR8	0.01
	11	00P35	4	NUT, LOCK 1/2-13 UNC GRC	0.04
	12	00P55	66	NUT, LOCK 5/8-11 UNC GR8	0.08
	13	00P69	60	HHCS 5/8-11 UNC x 2 GR8	0.23
	14	01P09	6	HHCS 5/8-11 UNC x 2-1/2 GR8	0.28
Ī	15	01P28	4	WASHER, DISC LOCK 3/8 PR	0.00
Ī	16	02P11	6	WASHER, FLAT 5/8 USS	0.09
	17	10P28	2	HHCS 5/16-18 UNC x 1-1/4 ZP	0.04
	18	10P29	2	COVER PLATE, CLAMP 7/8	0.08
	19	10P66	2	CLAMP ASSY, TWIN 5/8	0.04
	20	91P54	6	SPRING, URETHANE	0.05
*	21	91P79	1	ALL MODEL TECH GUIDE	0.00
*	22	91P95	1	PARTS MANUAL, SL-330/400	0.00

^{*} ITEM NOT SHOWN



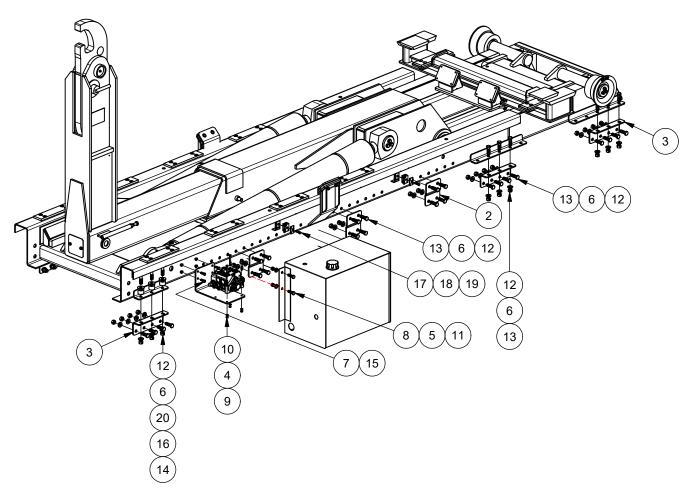


HOIST INSTALL KIT, SL-330

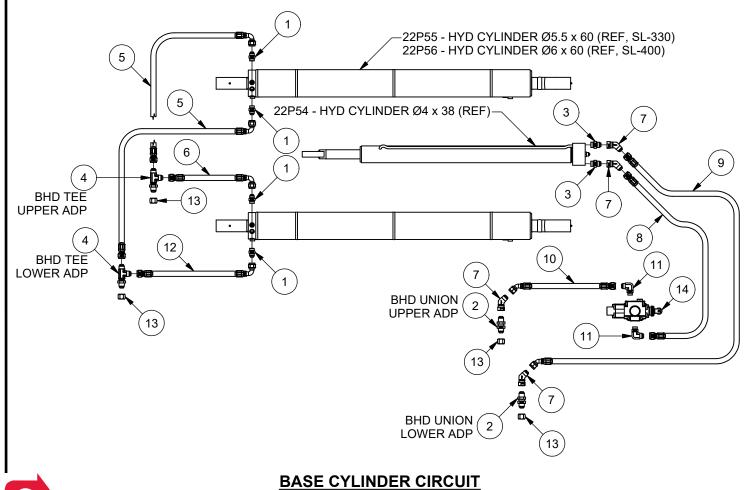
DISC-LOCK WASHER TORQUE SPEC'S		
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)	
3/8	53	
7/16	85	
1/2	130	
5/8	258	
3/4	459	
7/8	739	
1	1108	
NOTE:		

		4	4H86 - HOIST INSTALL KIT	
ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea
1	42H07	1	DECAL ASSEMBLY, SL-400	0.00
2	89H46	6	MNT BKT, 5-1/4 x 1/4 x 6-1/2	2.33
3	89H51	6	MNT BKT, 2-7/16 x 3-3/4 x 11	4.24
4	00752	3	WASHER, LOCK 5/16	0.03
5	00784	4	WASHER, FLAT 1/2 ZP	0.03
6	00785	66	WASHER, FLAT 5/8 ZP	0.05
7	00P13	4	HHCS 3/8-16 UNC x 1-1/4 GR8	0.05
8	00P15	4	HHCS 1/2-13 UNC x 1-3/4 GR8	0.13
9	00P19	3	HHCS 5/16-18 UNC x 2-3/4 GR8	0.07
10	00P20	3	NUT, HEX 5/16-18 UNC GR8	0.01
11	00P35	4	NUT, LOCK 1/2-13 UNC GRC	0.04
12	00P55	66	NUT, LOCK 5/8-11 UNC GR8	0.08
13	00P69	60	HHCS 5/8-11 UNC x 2 GR8	0.23
14	01P09	6	HHCS 5/8-11 UNC x 2-1/2 GR8	0.28
15	01P28	4	WASHER, DISC LOCK 3/8 PR	0.00
16	02P11	6	WASHER, FLAT 5/8 USS	0.09
17	10P28	2	HHCS 5/16-18 UNC x 1-1/4 ZP	0.04
18	10P29	2	COVER PLATE, CLAMP 7/8	0.08
19	10P66	2	CLAMP ASSY, TWIN 5/8	0.04
20	91P54	6	SPRING, URETHANE	0.05
21	91P79	1	ALL MODEL TECH GUIDE	0.00
22	91P95	1	PARTS MANUAL, SL-330/400	0.00

^{*} ITEM NOT SHOWN

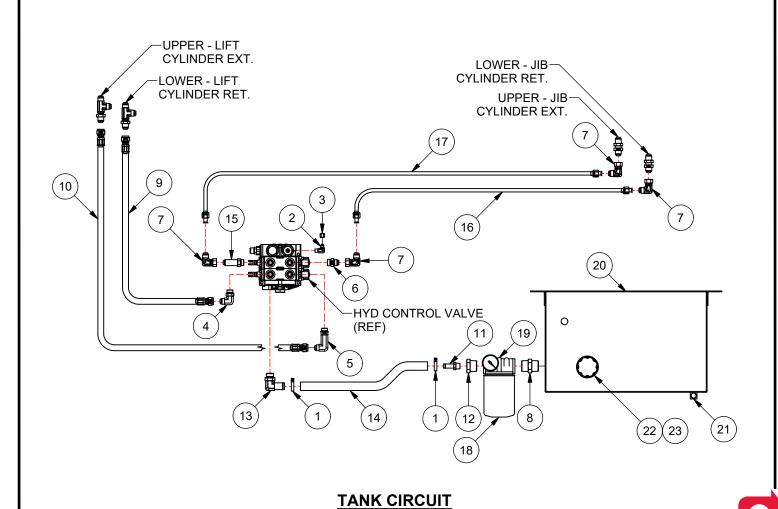


	91H02- BASE CYLINDER CIRCUIT			
ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea
1	10P39	4	ADP HYD 08MJ/08MB	0.40
2	11P02	2	ADP HYD 10MJ/10MJ BHD	0.40
3	11P06	2	ADP HYD 10MJ/10MB	0.21
4	11P27	2	ADP HYD 10MJ/10MJ/10MJ BHD	0.40
5	12P01	2	HOSE ASSY 50 08-10FJ/08FJ90	2.04
6	12P02	1	HOSE ASSY 24 08-10FJ/08FJ90	1.24
7	12P09	4	ADP HYD 10FJ/10MJ45	0.31
8	12P64	1	HOSE ASSY 91 08-10FJ/10FJ	3.90
9	12P65	1	HOSE ASSY 121 08-10FJ/10FJ45	5.00
10	12P66	1	HOSE ASSY 25.5 08-10FJ/10FJ45	1.60
11	12P69	2	ADP HYD 10MJ/08MJ 90	0.39
12	12P75	1	HOSE ASSSY 26 08-10FJ/08FJ90	1.45
13	13P15	4	ADP HYD 10FJ CAP	0.10
14	23P04	1	HYD VALVE, 2-WAY 08FB	5.25

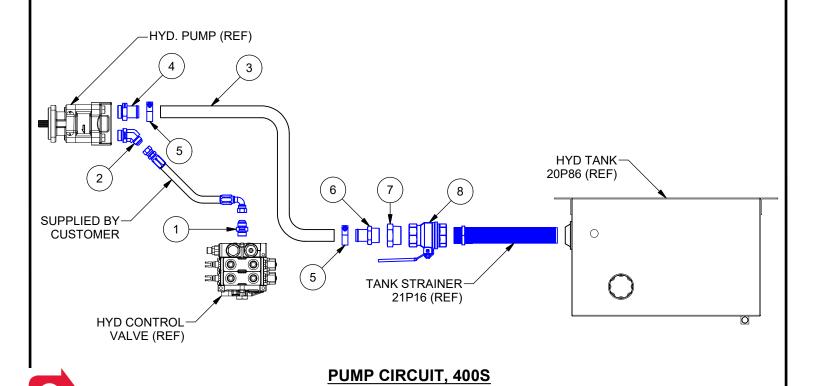


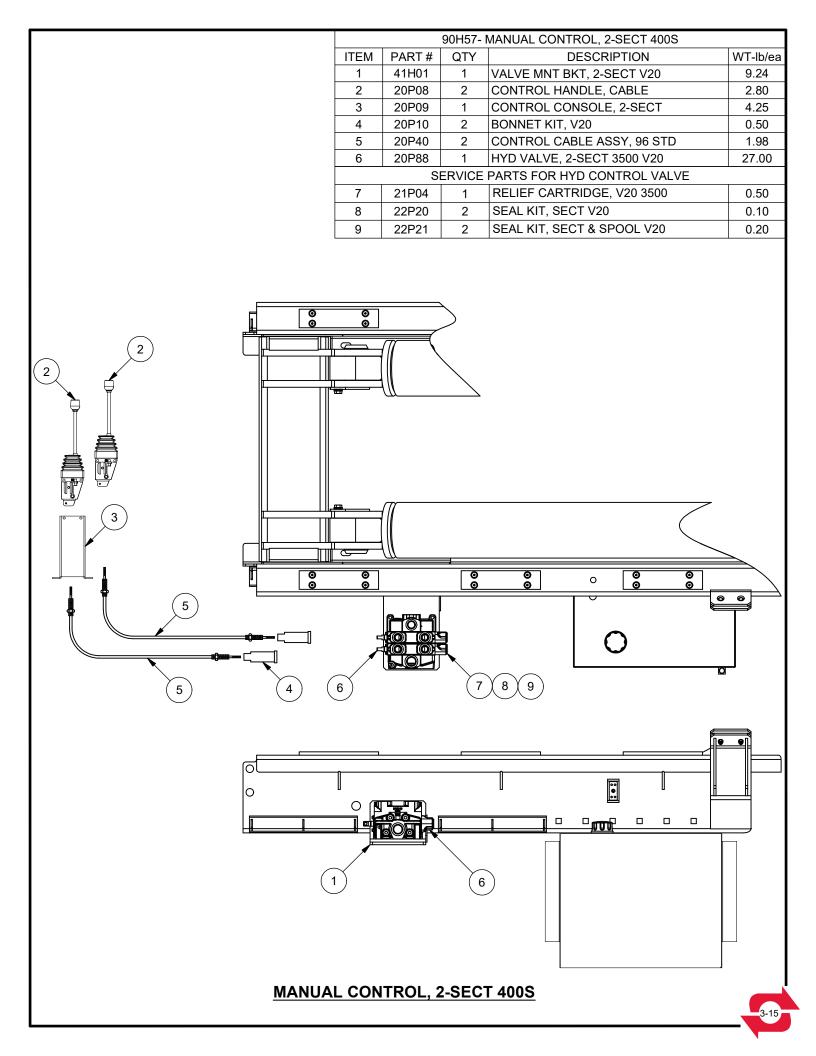


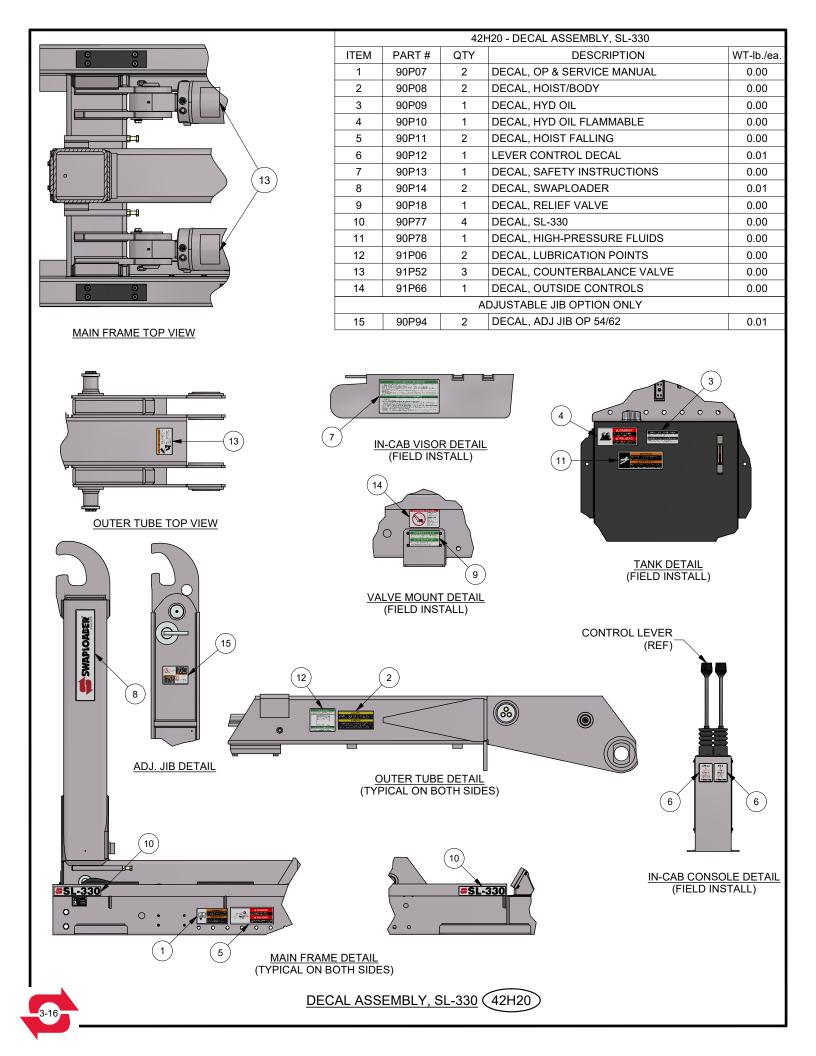
	91H03- TANK CIRCUIT, 2-SECT 330/400				
ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea	
1	10P21	2	CLAMP, T-BOLT Ø1-1/2	0.10	
2	10P37	1	ADP HYD 04MJ/04MP 90	0.30	
3	10P38	1	ADP HYD 04FJ CAP	0.10	
4	11P04	1	ADP HYD 10MJ/10MB 90	0.40	
5	11P05	1	ADP HYD 10MJ/10MB 90 LL	0.40	
6	11P06	1	ADP HYD 10MJ/10MB	0.40	
7	11P07	4	ADP HYD 10MJ/10FJ 90	0.40	
8	11P78	1	ADP HYD 20MP/20MP	0.70	
9	11P98	1	HOSE ASSY 28 08-10FJ/10FJ	1.40	
10	11P99	1	HOSE ASSY 33 08-10FJ/10FJ	1.50	
11	12P19	1	ADP HYD 16HB/16MP	0.30	
12	12P20	1	ADP HYD 20MP/16FP	0.30	
13	12P26	1	ADP HYD 16HB/12MB 90	0.60	
14	12P31	1	HOSE 1 x 30 LP	1.65	
15	12P61	1	ADP HYD 10MJ/10MB L	0.30	
16	12P67	1	HYD TUBE, LOW 5/8 x 91-3/8	3.80	
17	12P68	1	HYD TUBE, UP 5/8 x 97-1/4	4.00	
18	20P61	1	HYD FILTER ASSY, 70 GPM	4.50	
19	20P64	1	HYD FILTER INDICATOR GAUGE	0.01	
20	20P86	1	HYD TANK, 30 GALLON LS	73.00	
SERVICE PARTS FOR TANK					
21	20P96	1	SIGHT GAUGE, HYD TANK	0.70	
22	20P97	1	BREATHER CAP ASSY, HYD TANK	0.60	
23	21P16	1	HYD STRAINER, 50 GPM	2.50	

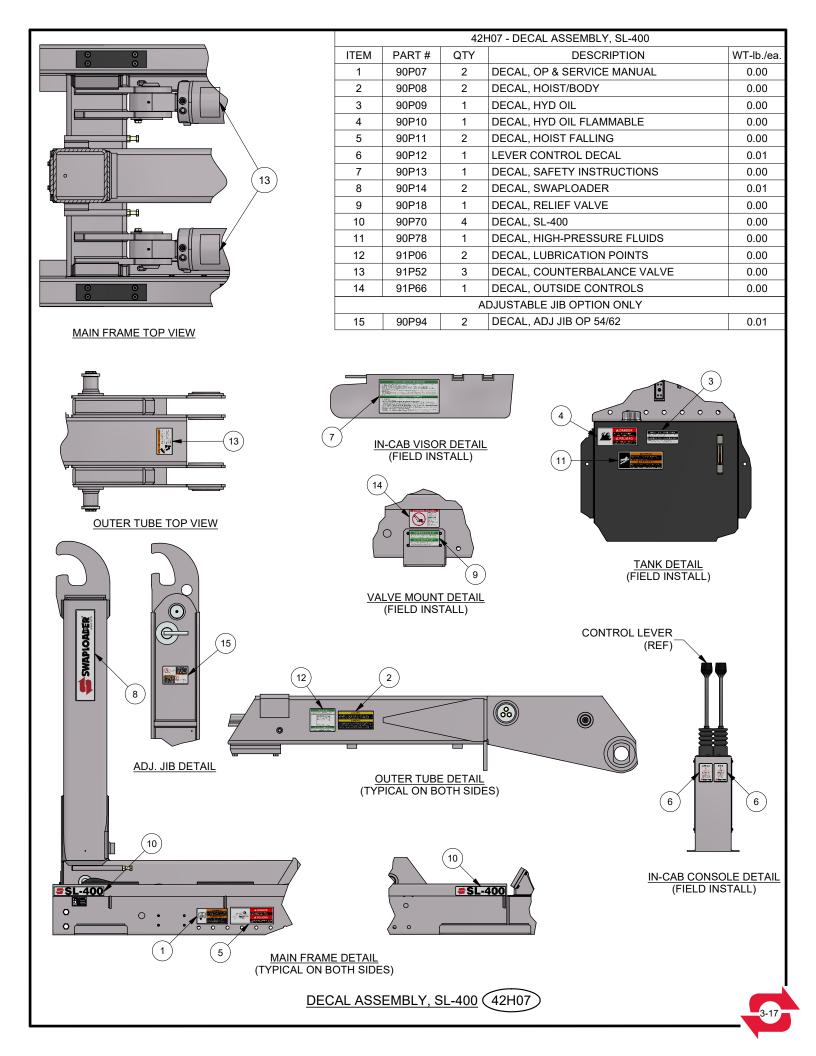


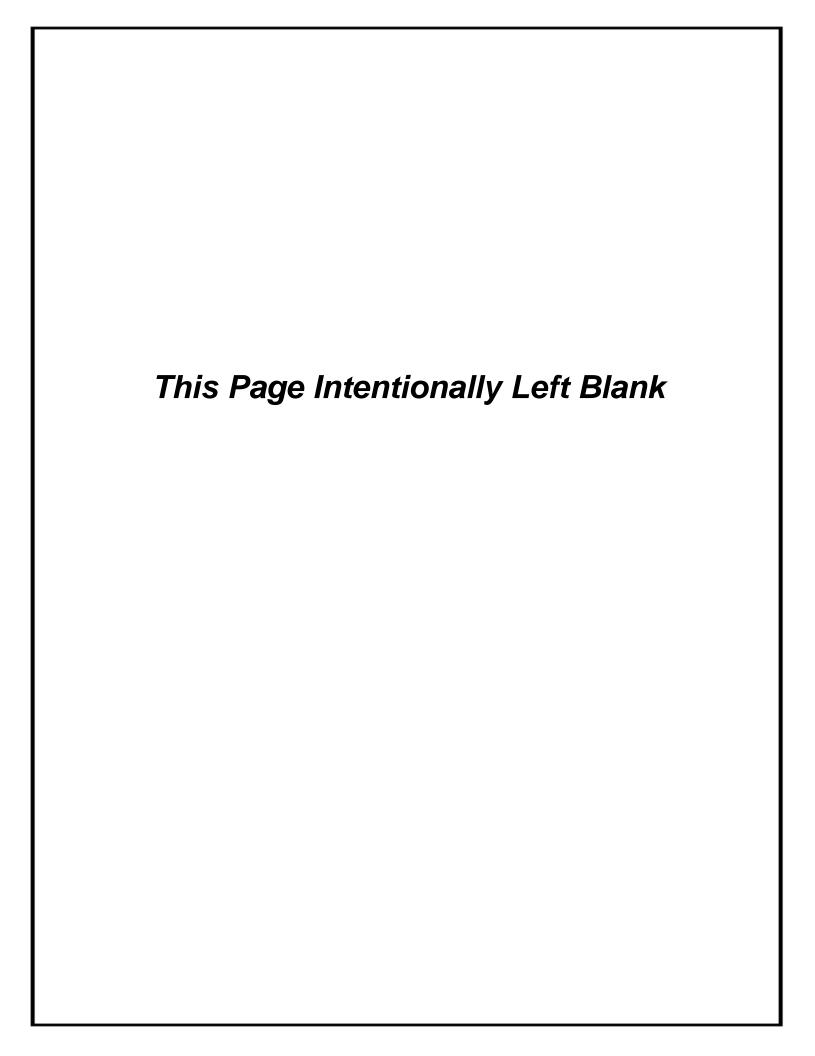
		91	H04 - PUMP CIRCUIT, 400S	
ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea
1	10P90	1	ADP HYD 12MJ/12MB	0.40
2	10P91	1	ADP HYD 12MJ/16MB 45	0.50
3	11P71	1	HOSE 1-1/2 x 120 LP	9.60
4	11P72	1	ADP HYD 24HB/20MB	0.40
5	11P77	2	CLAMP, T-BOLT Ø2	0.20
6	11P95	1	ADP HYD 24HB/24MP	0.40
7	12P48	1	ADP HYD 32MP/24FP	0.60
8	14P67	1	BALL VALVE 32FP/32FP	5.00



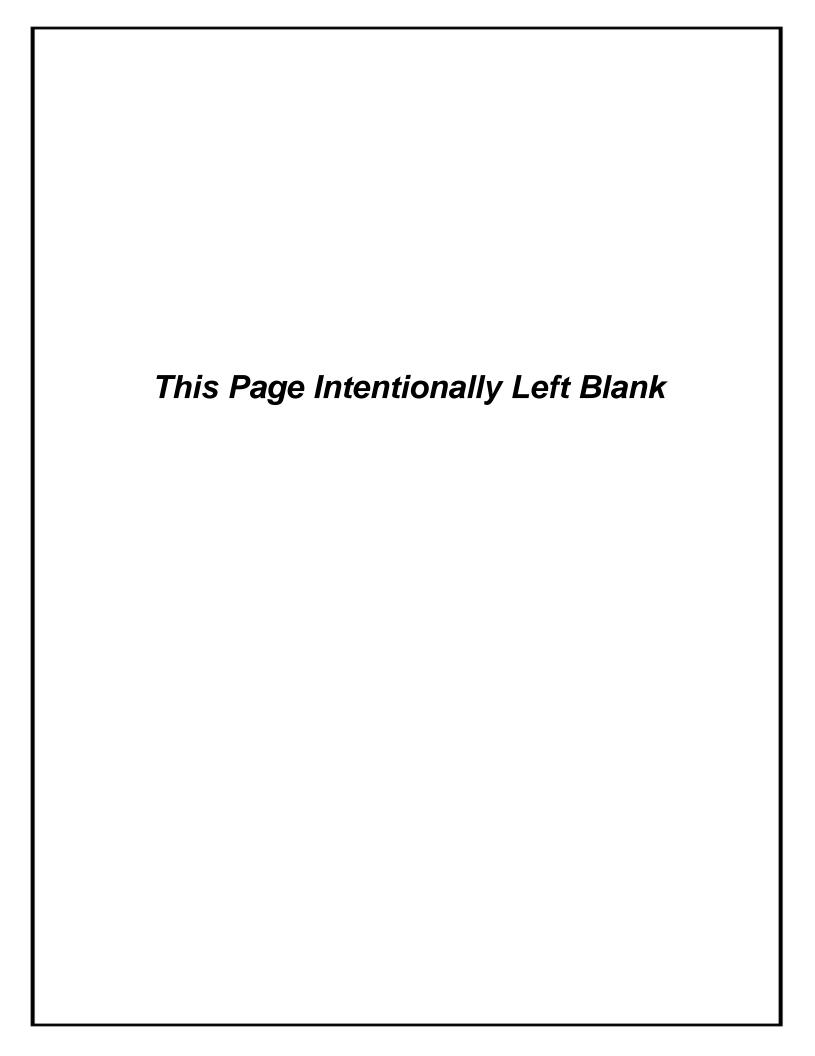






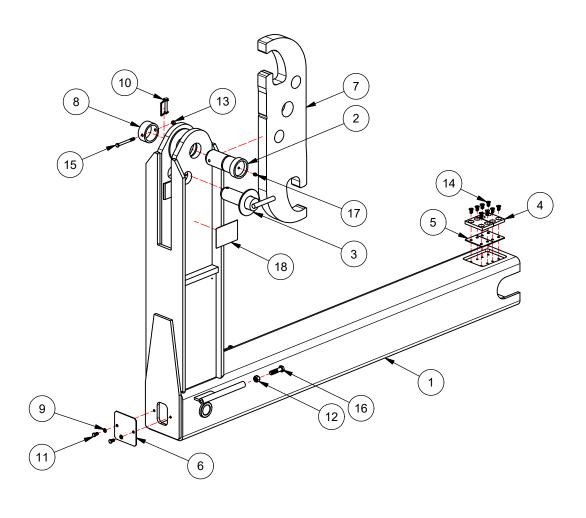


OPTIONS



DISC-LOCK WASHER TORQUE SPEC'S					
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)				
3/8	53				
7/16	85				
1/2	130 258				
5/8					
3/4	459				
7/8	739				
1 1108					
NOTE: APPLY LOCTITE 243 (BLUE) TO ALL BOLTS.					

ITEM PART # QTY DESCRIPTION WT-lb/ea 1 43H09 1 ADJ JIB WDMT 54/62, 330/400 787.09 2 43H10 1 PIN, HK PVT 2-3/4 x 5-3/8 ZP 12.34 3 43H11 1 PIN, HK LK 2-1/4 x 5-1/8 ZP 9.68 4 60H11 2 WEAR PAD, 2-3/4 x 1/2 x 4-1/4 0.21 5 61H90 2 SHIM, WP 2-3/4 x 1/8 x 4-1/4 0.40 6 62H11 1 COVER, JIB 5-1/4x11GAx5-1/4 0.92 7 86H95 1 HOOK, ADJ JIB 54/62 150.70 8 86H98 1 LOCK TUBE 1.25 9 00755 2 WASHER, LOCK 3/8 0.03 10 53586 1 SAFETY SNAP PIN, 3/8 x 2-1/2 0.14 11 00P03 2 HHCS 3/8-16 UNC x 3/4 GR8 0.04 12 00P24 2 NUT, HEX 5/8-11 UNC GRC 0.02 14 00P79 8 FHCS 3/8-16 UNC x 3/4 BR 0.03 15<		43H08 - ADJUSTABLE JIB SUB-ASSEMBLY						
2 43H10 1 PIN, HK PVT 2-3/4 x 5-3/8 ZP 12.34 3 43H11 1 PIN, HK LK 2-1/4 x 5-1/8 ZP 9.68 4 60H11 2 WEAR PAD, 2-3/4 x 1/2 x 4-1/4 0.21 5 61H90 2 SHIM, WP 2-3/4 x 1/8 x 4-1/4 0.40 6 62H11 1 COVER, JIB 5-1/4x11GAx5-1/4 0.92 7 86H95 1 HOOK, ADJ JIB 54/62 150.70 8 86H98 1 LOCK TUBE 1.25 9 00755 2 WASHER, LOCK 3/8 0.03 10 53586 1 SAFETY SNAP PIN, 3/8 x 2-1/2 0.14 11 00P03 2 HHCS 3/8-16 UNC x 3/4 GR8 0.04 12 00P24 2 NUT, HEX 5/8-11 UNC GR8 0.08 13 00P34 1 NUT, LOCK 3/8-16 UNC GRC 0.02 14 00P79 8 FHCS 3/8-16 UNC x 4 GR8 0.14 15 00P99 1 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02 <td>ITEM</td> <td>PART#</td> <td>QTY</td> <td>DESCRIPTION</td> <td>WT-lb/ea</td>	ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea			
3 43H11 1 PIN, HK LK 2-1/4 x 5-1/8 ZP 9.68 4 60H11 2 WEAR PAD, 2-3/4 x 1/2 x 4-1/4 0.21 5 61H90 2 SHIM, WP 2-3/4 x 1/8 x 4-1/4 0.40 6 62H11 1 COVER, JIB 5-1/4x11GAx5-1/4 0.92 7 86H95 1 HOOK, ADJ JIB 54/62 150.70 8 86H98 1 LOCK TUBE 1.25 9 00755 2 WASHER, LOCK 3/8 0.03 10 53586 1 SAFETY SNAP PIN, 3/8 x 2-1/2 0.14 11 00P03 2 HHCS 3/8-16 UNC x 3/4 GR8 0.04 12 00P24 2 NUT, HEX 5/8-11 UNC GR8 0.08 13 00P34 1 NUT, LOCK 3/8-16 UNC GRC 0.02 14 00P79 8 FHCS 3/8-16 UNC x 3/4 BR 0.03 15 00P99 1 HHCS 5/8-11 UNC x 2-1/2 GR8 0.14 16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02 <td>1</td> <td>43H09</td> <td>1</td> <td>ADJ JIB WDMT 54/62, 330/400</td> <td>787.09</td>	1	43H09	1	ADJ JIB WDMT 54/62, 330/400	787.09			
4 60H11 2 WEAR PAD, 2-3/4 x 1/2 x 4-1/4 0.21 5 61H90 2 SHIM, WP 2-3/4 x 1/8 x 4-1/4 0.40 6 62H11 1 COVER, JIB 5-1/4x11GAx5-1/4 0.92 7 86H95 1 HOOK, ADJ JIB 54/62 150.70 8 86H98 1 LOCK TUBE 1.25 9 00755 2 WASHER, LOCK 3/8 0.03 10 53586 1 SAFETY SNAP PIN, 3/8 x 2-1/2 0.14 11 00P03 2 HHCS 3/8-16 UNC x 3/4 GR8 0.04 12 00P24 2 NUT, HEX 5/8-11 UNC GR8 0.08 13 00P34 1 NUT, LOCK 3/8-16 UNC GRC 0.02 14 00P79 8 FHCS 3/8-16 UNC x 3/4 BR 0.03 15 00P99 1 HHCS 3/8-16 UNC x 4 GR8 0.14 16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	2	43H10	1	PIN, HK PVT 2-3/4 x 5-3/8 ZP	12.34			
5 61H90 2 SHIM, WP 2-3/4 x 1/8 x 4-1/4 0.40 6 62H11 1 COVER, JIB 5-1/4x11GAx5-1/4 0.92 7 86H95 1 HOOK, ADJ JIB 54/62 150.70 8 86H98 1 LOCK TUBE 1.25 9 00755 2 WASHER, LOCK 3/8 0.03 10 53586 1 SAFETY SNAP PIN, 3/8 x 2-1/2 0.14 11 00P03 2 HHCS 3/8-16 UNC x 3/4 GR8 0.04 12 00P24 2 NUT, HEX 5/8-11 UNC GR8 0.08 13 00P34 1 NUT, LOCK 3/8-16 UNC GRC 0.02 14 00P79 8 FHCS 3/8-16 UNC x 3/4 BR 0.03 15 00P99 1 HHCS 3/8-16 UNC x 4 GR8 0.14 16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	3	43H11	1	PIN, HK LK 2-1/4 x 5-1/8 ZP	9.68			
6 62H11 1 COVER, JIB 5-1/4x11GAx5-1/4 0.92 7 86H95 1 HOOK, ADJ JIB 54/62 150.70 8 86H98 1 LOCK TUBE 1.25 9 00755 2 WASHER, LOCK 3/8 0.03 10 53586 1 SAFETY SNAP PIN, 3/8 x 2-1/2 0.14 11 00P03 2 HHCS 3/8-16 UNC x 3/4 GR8 0.04 12 00P24 2 NUT, HEX 5/8-11 UNC GR8 0.08 13 00P34 1 NUT, LOCK 3/8-16 UNC GRC 0.02 14 00P79 8 FHCS 3/8-16 UNC x 3/4 BR 0.03 15 00P99 1 HHCS 3/8-16 UNC x 4 GR8 0.14 16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	4	60H11	2	WEAR PAD, 2-3/4 x 1/2 x 4-1/4	0.21			
7 86H95 1 HOOK, ADJ JIB 54/62 150.70 8 86H98 1 LOCK TUBE 1.25 9 00755 2 WASHER, LOCK 3/8 0.03 10 53586 1 SAFETY SNAP PIN, 3/8 x 2-1/2 0.14 11 00P03 2 HHCS 3/8-16 UNC x 3/4 GR8 0.04 12 00P24 2 NUT, HEX 5/8-11 UNC GR8 0.08 13 00P34 1 NUT, LOCK 3/8-16 UNC GRC 0.02 14 00P79 8 FHCS 3/8-16 UNC x 3/4 BR 0.03 15 00P99 1 HHCS 3/8-16 UNC x 4 GR8 0.14 16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	5	61H90	2	SHIM, WP 2-3/4 x 1/8 x 4-1/4	0.40			
8 86H98 1 LOCK TUBE 1.25 9 00755 2 WASHER, LOCK 3/8 0.03 10 53586 1 SAFETY SNAP PIN, 3/8 x 2-1/2 0.14 11 00P03 2 HHCS 3/8-16 UNC x 3/4 GR8 0.04 12 00P24 2 NUT, HEX 5/8-11 UNC GR8 0.08 13 00P34 1 NUT, LOCK 3/8-16 UNC GRC 0.02 14 00P79 8 FHCS 3/8-16 UNC x 3/4 BR 0.03 15 00P99 1 HHCS 3/8-16 UNC x 4 GR8 0.14 16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	6	62H11	1	COVER, JIB 5-1/4x11GAx5-1/4	0.92			
9 00755 2 WASHER, LOCK 3/8 0.03 10 53586 1 SAFETY SNAP PIN, 3/8 x 2-1/2 0.14 11 00P03 2 HHCS 3/8-16 UNC x 3/4 GR8 0.04 12 00P24 2 NUT, HEX 5/8-11 UNC GR8 0.08 13 00P34 1 NUT, LOCK 3/8-16 UNC GRC 0.02 14 00P79 8 FHCS 3/8-16 UNC x 3/4 BR 0.03 15 00P99 1 HHCS 3/8-16 UNC x 4 GR8 0.14 16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	7	86H95	1	HOOK, ADJ JIB 54/62	150.70			
10 53586 1 SAFETY SNAP PIN, 3/8 x 2-1/2 0.14 11 00P03 2 HHCS 3/8-16 UNC x 3/4 GR8 0.04 12 00P24 2 NUT, HEX 5/8-11 UNC GR8 0.08 13 00P34 1 NUT, LOCK 3/8-16 UNC GRC 0.02 14 00P79 8 FHCS 3/8-16 UNC x 3/4 BR 0.03 15 00P99 1 HHCS 3/8-16 UNC x 4 GR8 0.14 16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	8	86H98	1	LOCK TUBE	1.25			
11 00P03 2 HHCS 3/8-16 UNC x 3/4 GR8 0.04 12 00P24 2 NUT, HEX 5/8-11 UNC GR8 0.08 13 00P34 1 NUT, LOCK 3/8-16 UNC GRC 0.02 14 00P79 8 FHCS 3/8-16 UNC x 3/4 BR 0.03 15 00P99 1 HHCS 3/8-16 UNC x 4 GR8 0.14 16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	9	00755	2	WASHER, LOCK 3/8	0.03			
12 00P24 2 NUT, HEX 5/8-11 UNC GR8 0.08 13 00P34 1 NUT, LOCK 3/8-16 UNC GRC 0.02 14 00P79 8 FHCS 3/8-16 UNC x 3/4 BR 0.03 15 00P99 1 HHCS 3/8-16 UNC x 4 GR8 0.14 16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	10	53586	1	SAFETY SNAP PIN, 3/8 x 2-1/2	0.14			
13 00P34 1 NUT, LOCK 3/8-16 UNC GRC 0.02 14 00P79 8 FHCS 3/8-16 UNC x 3/4 BR 0.03 15 00P99 1 HHCS 3/8-16 UNC x 4 GR8 0.14 16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	11	00P03	2	HHCS 3/8-16 UNC x 3/4 GR8	0.04			
14 00P79 8 FHCS 3/8-16 UNC x 3/4 BR 0.03 15 00P99 1 HHCS 3/8-16 UNC x 4 GR8 0.14 16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	12	00P24	2	NUT, HEX 5/8-11 UNC GR8	0.08			
15 00P99 1 HHCS 3/8-16 UNC x 4 GR8 0.14 16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	13	00P34	1	NUT, LOCK 3/8-16 UNC GRC	0.02			
16 01P09 2 HHCS 5/8-11 UNC x 2-1/2 GR8 0.28 17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	14	00P79	8	FHCS 3/8-16 UNC x 3/4 BR	0.03			
17 90P03 1 GREASE ZERK, 1/8-27 NPT STR 0.02	15	00P99	1	HHCS 3/8-16 UNC x 4 GR8	0.14			
	16	01P09	2	HHCS 5/8-11 UNC x 2-1/2 GR8	0.28			
18 90P94 2 DECAL, ADJ JIB OP 54/62 0.00	17	90P03	1	GREASE ZERK, 1/8-27 NPT STR	0.02			
10 00 01 01 01 01 01 01	18	90P94	2	DECAL, ADJ JIB OP 54/62	0.00			

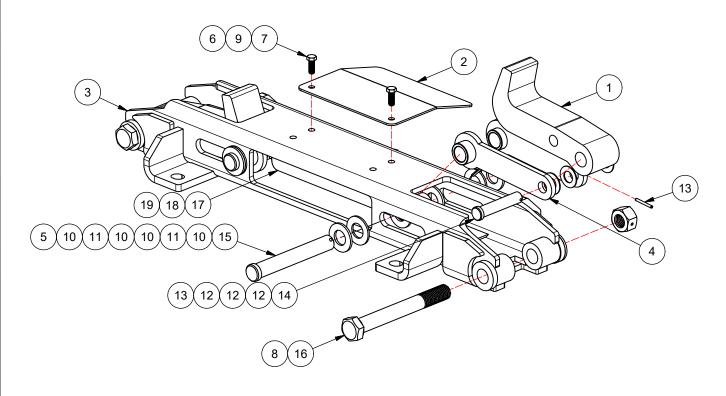


DISC-LOCK WASHER		9	1H56 - C	CYLINDER CIRCUIT, BL 330/400 STD			
TORQUE SPEC'S BOLT SAE GR 8 BOLT ASS'Y TORQUE	ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea		
SIZE ASS'Y TORQUE (FT-LBS)	1	44H79	1	U-LOCK ASSEMBLY, HD	124.57		
3/8 53 7/16 85	2	89H41	2	SHIM, BL MOUNT HD 1-1/2	13.15		
1/2 130	3	89H45	1	VALVE MOUNT BKT, SOLENOID HD	1.02		
5/8 258	4	90H74	1	NYLON HOSE SLEEVE x 60"	0.00		
3/4 459 7/8 739	5	00770	8	WASHER, FLAT 1/4	0.00		
1 1108	6	00785	8	WASHER, FLAT 5/8 ZP	0.05		
NOTE: APPLY LOCTITE 243 (BLUE) TO ALL BOLTS.	7	00P51	4	NUT, LOCK 1/4-20 UNC GR8	0.01		
TO ALL BOLTS.	8	00P55	4	NUT, LOCK 5/8-11 UNC GR8	0.08		
	9	00P85	4	HHCS 5/8-11 UNC x 3 1/2 GR8	0.38		
	10	01P41	2	HHCS 1/4-20 UNC x 2-3/4 GR8	0.04		
	11	01P56	2	HHCS 1/4-20 UNC x 1 GR8	0.02		
$\frac{1}{2}$	12	10P35	1	ADP HYD 10MJ/12MB	0.32		
	13	10P43	2	ADP HYD 08MJ/08MJ BHD	0.28		
	14	13P08	1	HOSE ASSY 23 08-10FJ/10FJ	1.21		
	15	13P14	2	ADP HYD 08FJ CAP	0.07		
	16	13P87	2	ADP HYD 08FJ/06MJ	0.10		
	17	14P01	1	ADP HYD 12MB/10FJ	0.34		
(6)	18	14P09	2	HOSE ASSY 97 06-06FJ/06FJ90	2.00		
	19	14P77	2	ADP HYD 06MJ/06MB .141 RSTR.	0.08		
2	20	23P02	1	SOLENOID VALVE, U-LOCK	2.85		
	21	91P50	2	DECAL, PINCH POINT	0.00		
	22	91P51	3	DECAL, U-LOCK ENGAGEMENT	0.00		
	23	92P31	2	DECAL, U-LOCK PATENT	0.00		
7 5 11 5 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
BHD UNION LEFT- HYD BODY LOCK EXT.	3)HAD BC	NION RIGH ODY LOCK	I - RET.				
<u>CYL</u>	<u> CIRCL</u>	JIT, BL 3	330/40	0 STD			

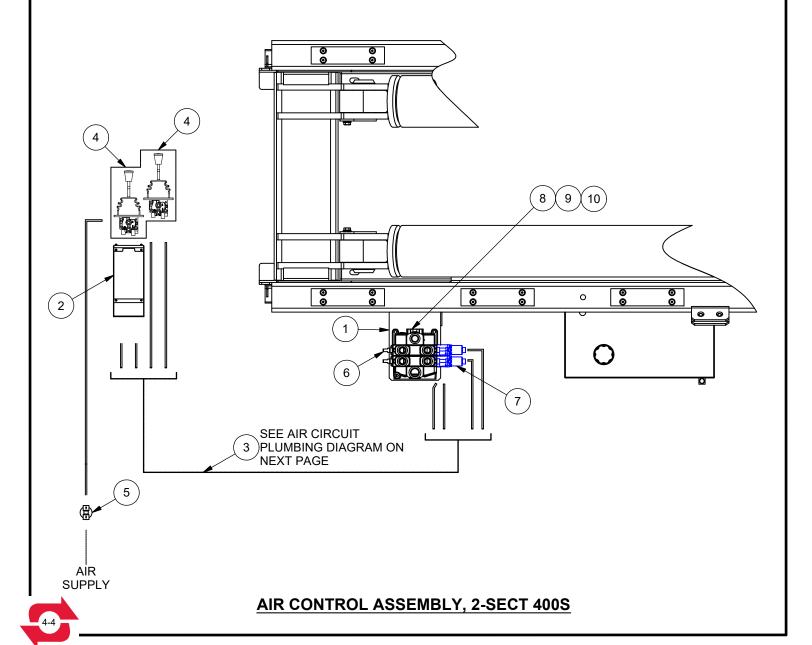
DISC-LOCK WASHER TORQUE SPEC'S					
BOLT SIZE	SAE GR 8 ASS'Y TORQUE (FT-LBS)				
3/8	53				
7/16	85				
1/2	130				
5/8	258				
3/4	459				
7/8	739				
1	1108				
NOTE:					

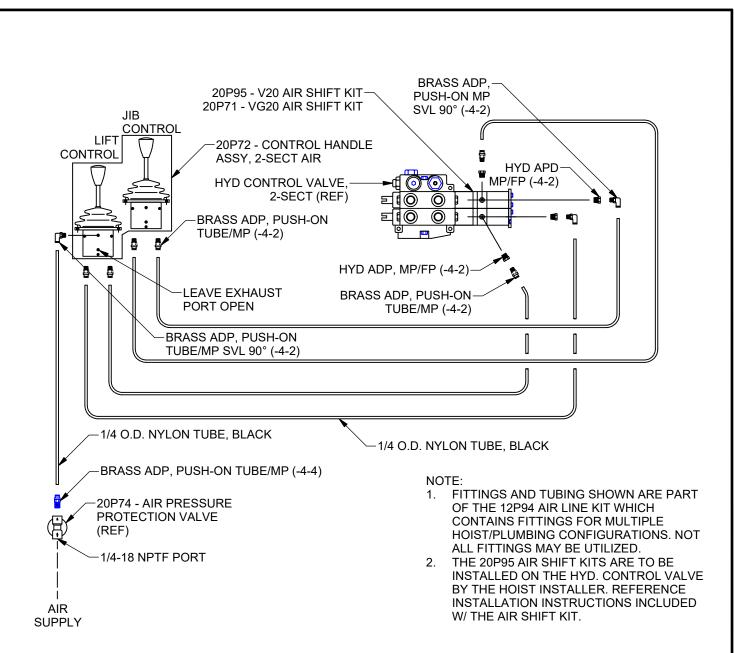
NOTE: APPLY LOCTITE 243 (BLUE) TO ALL BOLTS.

44H79 - U-LOCK ASSEMBLY							
ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea			
1	26H98	2	PRONG, U-LOCK HD	13.95			
2	27H26	1	COVER PLATE, HYD LOCK	2.43			
3	44H80	1	U-LOCK WDMT, HD	65.68			
4	44H81	4	LINKAGE WDMT, U-LOCK HD	1.89			
5	00837	2	PIN, COTTER 3/16 DIA x 2	0.02			
6	00P14	2	NUT, HEX 3/8-16 UNC GR8	0.02			
7	00P62	2	HHCS 3/8-16 UNC x 1 GR8	0.04			
8	00P67	2	NUT, LOCK 1-8 UNC GR8	0.31			
9	01P28	2	WASHER, DISC LOCK 3/8 PR	0.00			
10	01P87	10	WASHER, FLAT 1 ZP	0.10			
11	01P89	4	WASHER, FLAT 1 NYLON	0.01			
12	01P91	6	WASHER, FLAT 3/4 SS	0.02			
13	01P92	2	PIN, SLTD SPG 5/32 x 1-1/2 ZP	0.01			
14	01P95	2	PIN, CLEVIS 3/4 x 3-1/2	0.52			
15	01P96	2	PIN, CLEVIS 1 x 6-11/16	1.65			
16	02P37	2	HHCS 1-8 UNC x 8-1/2 GR8	0.27			
17	22P93	1	HYD CYL 2 x 1 x 6. HD	14.14			
	SERVICE PARTS FOR CYLINDER						
18	22P78	1	C'BAL CART, 5000 PSI CBCG-LJN	0.50			
19	23P94	1	PROXIMITY SWITCH, U-LOCK	0.10			



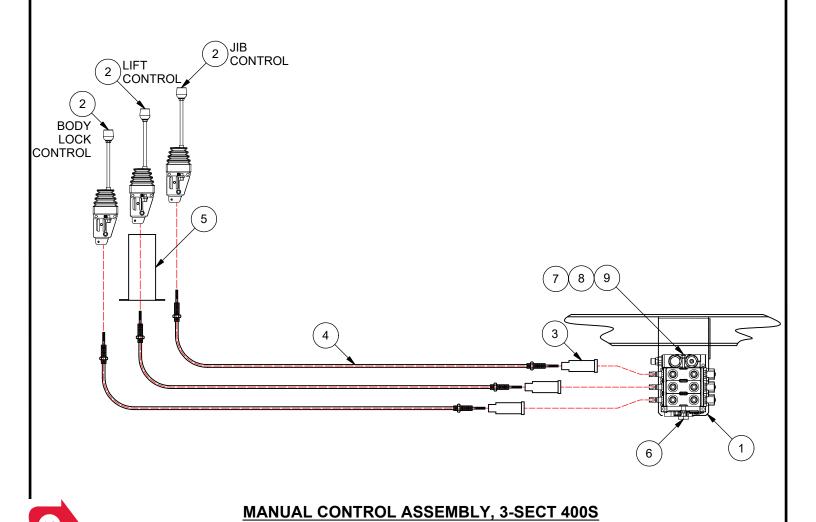
90H58 - AIR CONTROL, 2-SECT 400S						
ITEM PART # QTY			DESCRIPTION	WT-lb/ea		
1	41H01	1	VALVE MNT BKT, 2-SECT V20	9.24		
2	51H27	1	AIR CTRL CONSOLE, 2-SECT	4.20		
3	12P94	1	AIR LINE KIT	0.66		
4	20P72	1	CONTROL HANDLE, 2-SECT AIR	4.48		
5	20P74	1	AIR PRESSURE PROTECTION VALVE	0.60		
6	20P88	1	HYD VALVE, 2-Sect 3500 V20	28.00		
7 20P95 2			AIR SHIFT KIT, V20	1.40		
SERVICE PARTS FOR VALVE						
8	21P04	1	RELIEF CARTRIDGE, V20 3500	0.50		
9	22P20	22P20 2 SEAL KIT, SECT V20				
10 22P21 2 SEAL KIT, SECT & SPOOL V20				0.20		



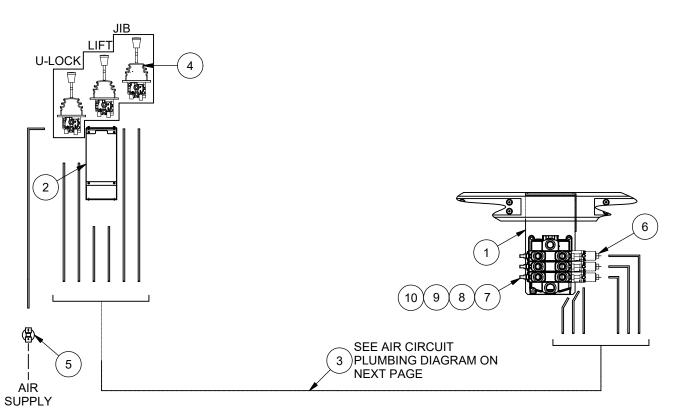


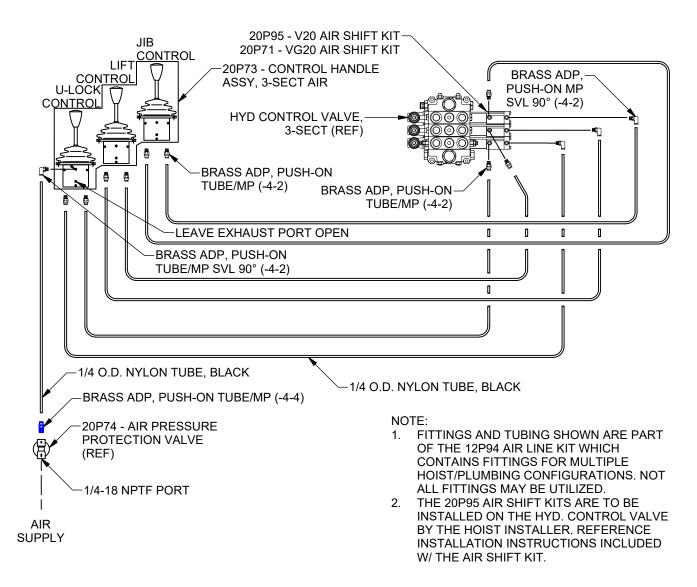
AIR CIRCUIT PLUMBING DIAGRAM, 2-SECTION

	91H64 - MANUAL CONTROL, 3-SECT 400S						
ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea			
1	41H83	1	VALVE MNT BKT, 3-SECT V20	7.80			
2	20P08	3	CONTROL HANDLE, CABLE	2.80			
3	20P10	3	BONNET KIT, V20	0.50			
4	20P40	3	CONTROL CABLE ASSY, 96 STD	1.98			
5	20P78	1	CONTROL CONSOLE, 3-SECT	4.80			
6 23P06 1		1	HYD VALVE, 3-SECT 3500 V20 WR	45.00			
	SERVICE PARTS FOR HYD CONTROL VALVE						
7	21P04	1	RELIEF CARTRIDGE, V20 3500	0.50			
8	22P20	2	SEAL KIT, SECT V20	0.10			
9	22P21	2	SEAL KIT, SECT & SPOOL V20	0.20			



91H65 - AIR CONTROL, 3-SECT 400S						
	ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea	
	1	41H83	1	VALVE MNT BKT, 3-SECT V20	7.80	
	2	51H37	1	AIR CTRL CONSOLE, 3-SECT	4.90	
	3	12P94	1	AIR LINE KIT	1.40	
	4	20P73	1	CONTROL HANDLE, 3-SECT AIR	6.72	
	5	20P74	1	AIR PRESSURE PROTECTION VALVE	0.60	
	6	20P95	3	AIR SHIFT KIT, V20	1.40	
7 23P06 1		1	HYD VALVE, 3-SECT 3500 V20 WR	45.00		
			SI	ERVICE PARTS FOR VALVE		
	8	21P04	1	RELIEF CARTRIDGE, V20 3500	0.50	
	9	22P20	3	SEAL KIT, SECT V20	0.10	
	10	22P21	3	SEAL KIT, SECT & SPOOL V20	0.20	
_					-	





AIR CIRCUIT PLUMBING DIAGRAM, 3-SECTION

			91H66	- TANK CIRCUIT, 3-SECT 330/400					
	ITEM	PART#	QTY	DESCRIPTION	WT-lb/ea				
1 91H74 2 TWIN CLAMP ASSY, 5/8-7/8 0.29									
2 10P21 2 CLAMP, T-BOLT Ø1-1/2									
3 10P37 1 ADP HYD 04MJ/04MP 90									
4 10P38 1 ADP HYD 04FJ CAP									
	5	10P36	2	ADP HYD 08MJ/08FJ 90	0.10				
6 10P45 1 ADP HYD 08MJ/08FJ 90									
8 11P04 1 ADP HYD 10MJ/10MB 90									
	9 11P05 1 ADP HYD 10MJ/10MB 90 LL								
	10	11P06	1	ADP HYD 10MJ/10MB	0.40				
	11	11P07	4	ADP HYD 10MJ/10FJ 90	0.40				
	12	11P78	1	ADP HYD 20MP/20MP	0.70				
	13	11P98	1	HOSE ASSY 28 08-10FJ/10FJ	1.40				
	14	11P99	1	HOSE ASSY 33 08-10FJ/10FJ	0.30				
	15	12P19	1	ADP HYD 16HB/16MP	0.30				
	16	12P20	1	ADP HYD 20MP/16FP	0.30				
	17	12P26	1	ADP HYD 16HB/12MB 90	0.60				
	18	12P31	1	HOSE 1 x 30 LP	1.65				
	19	12P61	1	ADP HYD 10MJ/10MB L	0.30				
	20	12P67	1	HYD TUBE, LOW 5/8 x 91-3/8	3.80				
	21	12P68	1	HYD TUBE, UP 5/8 x 97-1/4	4.00				
·	22	13P80	2	ADP HYD 08MJ/08FJ	0.30				
	23	14P13	2	HOSE ASSY 89 08-08FJ/08FJ	5.29				
	24	20P61	1	HYD FILTER ASSY, 70 GPM	4.50				
	25	20P64	1	HYD FILTER INDICATOR GAUGE	0.01				
	26	20P86	1	HYD TANK, 30 GALLON LS	73.00				
			S	SERVICE PARTS FOR TANK					
	27	20P96	1	SIGHT GAUGE, HYD TANK	0.70				
	28	20P97	1	BREATHER CAP ASSY, HYD TANK	0.60				
UPPER - LIFT	29	21P16	1	HYD STRAINER, 50 GPM	2.50				
CYLINDER EXT.				,					
LOWER - LIFT CYLINDER RET.		1	JPPER -	LOWER - JIB					
			NDER E		ŁΕΤ.				
				LEFT - HYI					
	(21)			(11) 譽 💉 / BODY LOC					
				RIGHT - HY					
H (13)					K RET.				
			$\overline{}$						
	Щ	(2	20)	$(23) \qquad (5) \qquad (22)$					
	₽ /								
CONTROL $ (3)$				22					
11 VALVE (11)	\ #								
		#	(1) (23) (1) (5)					
19		_ 							
				$\overline{}$					
	$ \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$									
(18)		, f 🚠 fr							
								47	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$									
TAN	IK CIR	<u>CU</u> IT, 3-	SECT	330/400					
		•	TANK CIRCUIT, 3-SECT 330/400						

