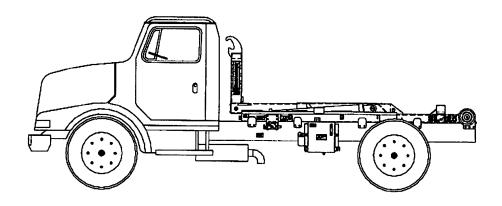


Model SL-125

Parts and Operations Manual



Hoist Serial Number:

TABLE OF CONTENTS

I. INTRODUCTION

Letter to Customer Warranty Statement Safety Suggestions

II. INSTALLATION

Initial Inspection
Hoist Installation
Controls Installation
Hydraulic Tank Installation
P.T.O. Selection
Pump Installation
Start Up Procedure

III. OPERATION

Loading a Container
Dumping a Container
Placing a Container on the Ground
Hoist Prop Operating Instructions

IV. MAINTENANCE

Weekly Service (50 Operations)
Monthly Service (200 Operations)
Yearly Service
Lubrication Diagram
Hydraulic Oil Specifications
General Maintenance Parts List

V. PARTS LIST

Final Assembly
Mainframe Subassembly
Rear Pivot Subassembly
Telescopic Jib Subassembly
Safety Latch Assembly
Manual Control Assembly, 2 Section
Final Hydraulic Assembly
Hydraulic Subassembly - Cylinder Circuit
Hydraulic Subassembly - Pump Circuit
Decal Assembly

VI. OPTIONS

Body Prop

INTRODUCTION

SWAPLOADER U.S.A., LTD.

TO THE CUSTOMER

Your new SwapLoader 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 bolt 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 serial number in the appropriate space provided on the title page. You SwapLoader dealer needs this information to give you prompt, efficient service when you order 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 improvement 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.

SWAPLOADER U.S.A., LTD. 1800 N. E. BROADWAY, BOX D DES MOINES, IA 50316-0386

LIMITED WARRANTY STATEMENT

SwapLoader U.S.A., Ltd., (SwapLoader), warrants to the original purchaser of any new SwapLoader product shipped after August 1, 1996, for a period of twenty-four (24) months from the date of installation by an authorized SwapLoader distributor or service center, that such products are free of defects in material and workmanship. SwapLoader warrants to the original purchaser of any new product shipped before August 1, 1996, for a period of twelve (12) months from the date of installation by an authorized SwapLoader distributor or service center, that such products are free of defects in material and workmanship. SwapLoader will, at its discretion, either repair the defective parts or replace them with equivalent parts, subject to the conditions below.

- Replacement or repair of parts will be provided F.O.B. SwapLoader plant, subject to any applicable federal, state or local taxes. Labor charges are covered for a period of 90 days from the date of installation by an authorized SwapLoader distributor or service center.
- Defective parts must be reported to SwapLoader within 30 days of discovery on a SwapLoader warranty claim report form.
- Warranty is valid only if the Warranty Registration card is returned within 15 days of installation of the SwapLoader hoist to SwapLoader, Des Moines, Iowa.
- Warranty shall not apply if the equipment is operated at capacities in excess of factory recommendations.
- Warranty does not apply to defects caused by accident, misuse, alteration of design, improper installation or maintenance, repair, reinstallation, or any other cause beyond the control of SwapLoader.
- Warranty as provided herein shall be the purchaser's exclusive and limited remedy, and SwapLoader shall in no event be liable for consequential or other damages.
- SwapLoader is not responsible for the removal or replacement of accessories (fenders, tool box, etc.).
- Warranty service must be performed by a distributor or service center authorized by SwapLoader to sell and/or service SwapLoader products, which will use only new or remanufactured parts or components furnished by SwapLoader U.S.A., Ltd.
- Warranty is expressly void if seal on the main relief control valve has been broken.
- Customer is responsible for any freight, labor (beyond 90 days), or transportation charges incurred to repair the unit.
- Warranty is expressly void if serial number plate or stamping is tampered with.

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 container in a 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 holddowns. The container specifications must match the hoist specifications.
- 6. Keep the containers and hoist in good working order. <u>DO NOT</u> 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 back up 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 <u>MUST</u> be unloaded prior to performing any repairs or maintenance to the hoist. Also, <u>DO NOT</u> 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. SwapLoader strongly recommends that if possible the container should be dismounted from the hoist prior to performing any maintenance to the hoist.
- 9. It is the responsibility of the owner and/or installer to insure that any additional safety devices required by state or local codes be installed on the SwapLoader Hoist and/or Truck Chassis.

INSTALLATION

INITIAL INSPECTION

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.

You should then check the hoist to insure you have received all the parts as indicated by the Packing List and the Ship Loose Box List.

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 valves to the hoist. Install the hydraulic plumbing from the valves to the hydraulic cylinders. Then install the control levers in the cab and route the cables to the control valve

3. Install the hydraulic tank, hydraulic filter, and hydraulic plumbing between the hydraulic tank and the control valve assembly.

Select and install the P.T.O. on the truck transmission. This can be 4.

done prior to mounting the hoist assembly.

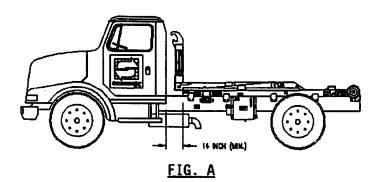
5. Install the hydraulic pump and the hydraulic plumbing from the pump to the hydraulic tank and the control valve assembly.

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 particular installation may require some additional mounts or modifications. If you have problems with your installation, please contact SwapLoader as we may be aware of another customer who has installed a SwapLoader on a similar truck chassis.

HOIST INSTALLATION TO TRUCK CHASSIS

Place the hoist assembly on the truck chassis in the position as determined by proper weight distribution calculations. See Figure A for the minimum dimension from the hoist side frame rails to the cab to ensure the jib does not extend into the cab when operated. You may need to fabricate spacers for between the truck chassis and the hoist, due to offset or stepped channels, top rivots, etc..



2. Locate the front mount bracket (Pt. No. 22H38) on the side of the truck chassis frame as indicated on drawing 10H54 (Mainframe Subassembly) in the Parts List Section. Allow for mounting of the control valve assembly and the hydraulic tank. Weld the brackets to the hoist mainframe. Note: Mainframe is made from high strength low alloy steel. Use appropriate welding process. Drill holes in the truck chassis and attach mount brackets to the chassis with the 1/2 inch diameter bolts, washers, and locking hex nuts provided. Torque to 110 ft-lbs.

You may need to modify the brackets or add shim plates to allow for the variances in width of truck frames.

3. Locate rear mount brackets (Pt. No. 22H39) and weld to the hoist mainframe. Drill truck chassis for 1/2 inch diameter bolts and install bolts, washers, and locking nuts. Torque nuts to 110 ft-lbs.

Again you may need to modify the brackets due to variance in width of truck frames or due to location of suspension hangers.

4. Mount the roller assemblies (Pt. No. 10H10) and attach the roller retainer (Pt. No. 61H41) with the tapped 7/8 inch diameter roller retainer bolt (Pt. No. 61H42) and lock washer provided (Ref. Drwg. No. 11H32 - Pivot Joint Sub Assembly). Install the grease zerk provided into the end of the bolt.

Note: Prior to any welding, consult the truck manufacturer for any special precautions that may need to be taken. Typically the batteries must be disconnected and the ground lead from the welder should be connected as close as possible to the part being welded to avoid the possibility of arcing across bearings, gears, etc..

CONTROLS INSTALLATION

- 1. Attach the valve mount bracket (Pt. No. 10H51) to the mainframe as indicated on Dwg. No. 10H09 (Final Assembly) with the fasteners provided.
- 2. Mount the control valve assembly (20P04) to the valve mount bracket as shown on Dwg. No. 90H01 (Final Hydraulic Assembly) with the fasteners provided.
- 3. Install the bulkhead adapters (Pt. No. 10P43) and the 90 degree swivel adapters (Pt. No. 10P44) into the mainframe in the 13/16 inch diameter holes on the left side as shown on Dwg. No. 90H15 (Hydraulic Subassembly Cylinder Circuit).
- 4. Install the hydraulic adapters and connect the hydraulic tubing (Pt. Nos. 10P51, 10P52, 10P53, and 10P54) to the control valve assembly as indicated on Dwg. No. 90H15. The tubing should be supported by the clamp assembly that is installed on the mainframe.
- 5. Mount the safety valve (Pt. No. 20P12) as shown on Dwg. No. 90H01. A mount bracket for the valve (Pt. No. 21H03) is provided in the Loose Parts Box and its recommended position is shown on Dwg. No. 10H54. Some modifications may be necessary due to possible interferences with the truck chassis.
- 6. Mount the rear frame hydraulic tubing (Pt. Nos. 10P55 and 10P56) in the clamp assemblies on the inside of the rear of the mainframe. Attach the hydraulic hoses from the jib cylinder (Pt. No. 10P50) to the tubing as shown on Dwg. 90H15.
- 7. Install the hydraulic adapters and connect the hydraulic hoses (Pt. No. 10P57 and 10P58) to the safety valve (Pt. No. 20P12) as shown on Dwg. 90H15. Connect the other end of the hoses to the bulkhead fitting and the hydraulic tubing as also shown on Dwg. 90H15.
- 8. Determine the best location in the cab for the control levers. The location should be such that the controls can be easily reached while operating the truck and while watching to the rear of the truck. A control lever console is provided to facilitate the mounting of the control levers.
- 9. Assemble and install the control lever console. Typically the console is fastened to the floor of the cab, and the control console is fastened to the floor of the cab, and the control cables are routed through additional holes drilled in the floor. Your particular installation may require that additional brackets be fabricated or other modifications made.

- 10. 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.
- 11. Route the cables to the control valve location and attach them to the control valve with the bonnet connection kits provided (Pt. No. 20P10) (Dwg. No. 10H50 Valve Control Lever Assembly). The control cables supplied are 84 inches long. Take proper care when routing the control cables, as a good cable path is essential for a properly 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.

HYDRAULIC TANK INSTALLATION

- 1. Select a location to mount the hydraulic tank. Reference Dwg. No. 90H01 (Hydraulic Assembly-Final) 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 inch 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 and hydraulic return hose assembly between the filter and the control valve assembly as shown on Dwg. 90H16. The hose is provided with only one fitting installed so the hose can be shortened to an appropriate length.

P.T.O. SELECTION

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

Hydraulic Pump Displacement: 2.934 CID

Main Relief Press Setting: 3250 PSI

P.T.O. Torque Required: 125 ft-1bs (See Note 1)

Power at 1500 RPM: 36 H.P. (See Note 1)

Output Flange: SAE B

Hydraulic Pump Spined Shaft Specifications: 7/8 - 13T 16/32 D.P.

Hydraulic Pump Rotation: L.H. (See Note 2)

Ratio of Pump RPM to Engine RPM: 80% to 100%

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: P.T.O. output rotation will need to be R.H. (clockwise) as viewed looking at output flange of P.T.O.

NOTE 3: Maximum speed of pump is 1500 RPM.

NOTE 4: Always disengage the P.T.O. after each operating cycle.

PUMP INSTALLATION (Reference Dwg. No. 90H16 - Hydraulic Assembly Pump Circuit)

- 1. Install pump to P.T.O. Unit. (Bolts are not provided.)
- 2. Install fittings into ports on the hydraulic pump.
- 3. Connect suction hose assembly to the hydraulic tank (1 inch I.D. hose) and route to the pump as short and straight as possible. Hose is provided with only one fitting installed, so the hose can be shortened to appropriate length. After hose has been shortened, install additional fitting provided and attach to the pump.

 NOTE: Prior to startup, this hose must be filled with oil.
- 4. Connect pressure hose assembly (1/2 inch I.D. hose) to control valve inlet and route to the pump the same as the suction line.



This hose is also provided with only one fitting, so the hose can be shortened to appropriate length. Remove the hose and shorten as required. After the hose has been shortened, lubricate the insert threads of the fitting and the I.D. of the hose. Measure 1 3/16 inches from the end of the hose and mark the hose for the socket depth. Screw hose into the socket (left-hand thread) to the depth marked on the hose. Screw insert into the socket until insert touches socket. Clean the inside of the hose assembly by either blowing clean compressed air through it or by flushing it. Install the completed hose assembly to the inlet port of the control valve assembly and the outlet port of the hydraulic pump.



5. Tie up the hoses as necessary. Be sure to route hoses clear of exhaust components and for driveshaft.

START UP PROCEDURE

- 1. Fill the hydraulic tank with hydraulic oil (see oil specification in Maintenance Section.)
- 2. Prime the pump by cracking the fitting on the suction hose at the pump. Jiggle the fitting until a solid stream of oil is coming from the fitting and retighten.
- 3. Engage the P.T.O. and run the pump 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. Adjust the safety valve stop bolt (Pt. No. 10H52 Ref. Drawing No. 10H55) so it properly depresses the safety valve when the arm is in the down position. If the safety valve is not depressed, the jib will not operate.
- 6. Verify the movement of the control levers corresponds to the movement of the cylinders.

Jib Control (Right-hand lever)
Lever back: Jib retracts
Lever forward: Jib extends
Lift Arm Control (Left-hand lever)
Lever back: Arm cylinder extends
Lever forward: Arm cylinder retracts

- 7. Install all safety decals and product decals per Drawing No. 10H59.
- 8. Fill out predelivery checklist.
- 9. Fill out warranty card.

CAUTION:

The SwapLoader hoist must be used with containers that properly fit the front hook and the rear holddowns. If possible, pick up one of the containers that will actually 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 holddowns of the container latch into the holddowns on the hoist.
- Also check for any interference between the container and any part of the hoist (i.e.: Hydraulic tank, hydraulic tubing or hose, hydraulic valve, etc.)

PREDELIVERY CHECK LIST SWAPLOADER U.S.A., LTD.

Deale	er:	Date:
I.	RECORD THE FOLLOWING	INFORMATION:
	SwapLoader Hoist:	Model No.:
	Truck Chassis:	Identification No.: GVW: CA (Cab to Axle): Distance From Center Line of Rear Axle to Rear of Hoist:
	PTO:	Make: Model: Serial No.: % of Engine RPM:
	Hydraulic Pump:	Make: Model: Serial No.:
II.	INSTALLATION TO CHASS	
	parts provided? If yes, please descri	be
	All bolts checked	d for proper tightness.
	Please include pl Be sure to inclu	hotos of the hoist installed on the truck chassis. de at least one photo from each side.
III.	CONTROLS	
	Controls easy to Movement of cont	reach from diver's seat. rols correct per installation instructions.

IV.	HYDRAULICS	INSTALLATION
	Canna	et hydraulia

	ITH ENGINE OPERATING 0 1000 RPM, RECORD THE FOLLOWING INFORMATION:
	cycle time for dump mode:
	UpSec. DownSec. Sycle time for load/unload mode:
	UnloadSec. LoadSec.
	ilter pressure PSI
	ilter pressurePSI lain pressure, controls in neutralPSI
	lain relief pressurePSI
	lain relief pressurePSI lain pressure while extending lift cylinders (bottomed out)PSI
•	PERATION
	Jib operates freely in both directions Jib cannot be extended or retracted when raised in dump position or when pivot joint is tilted in unload position. Both safety hooks are fully engaged when jib is extended. Parts and operators manuals in cab. Lubricate sliding jib and all grease zerks per installation instructions.
I.	Jib cannot be extended or retracted when raised in dump position or when pivot joint is tilted in unload position. Both safety hooks are fully engaged when jib is extended. Parts and operators manuals in cab. Lubricate sliding jib and all grease zerks per installation
Ί.	Jib cannot be extended or retracted when raised in dump position or when pivot joint is tilted in unload position. Both safety hooks are fully engaged when jib is extended. Parts and operators manuals in cab. Lubricate sliding jib and all grease zerks per installation instructions.
	Jib cannot be extended or retracted when raised in dump position or when pivot joint is tilted in unload position. Both safety hooks are fully engaged when jib is extended. Parts and operators manuals in cab. Lubricate sliding jib and all grease zerks per installation instructions. DECAL
	Jib cannot be extended or retracted when raised in dump position or when pivot joint is tilted in unload position. Both safety hooks are fully engaged when jib is extended. Parts and operators manuals in cab. Lubricate sliding jib and all grease zerks per installation instructions. PECAL All safety decals and product decals installed per Drawing 10H59.
	Jib cannot be extended or retracted when raised in dump position or when pivot joint is tilted in unload position. Both safety hooks are fully engaged when jib is extended. Parts and operators manuals in cab. Lubricate sliding jib and all grease zerks per installation instructions. PECAL All safety decals and product decals installed per Drawing 10H59.

OPERATION

OPERATING INSTRUCTIONS

During all operations of the SwapLoader, the speed of the engine should be maintained at 1,000 to 1,200 RPM, assuming the ratio of the Power Take Off is about 100%.

Depress the clutch and, after 2 seconds, switch on the P.T.O.. Then, smoothly release the clutch: the pump should be running.

LOADING A CONTAINER

- 1 Retract the jib (right control backward). Then, tilt the arm backward (left control backward).
- 2 Move the truck backwards until the hook engages the curved bar of the container. NEVER EXTEND THE JIB to reach the proper catching height, rather tilt the arm.
- 3 Tilt the arm forward (left control forward), making sure the curved bar is securely attached to the hook. Release the brakes of the truck and steer to get the truck correctly aligned with the container. Watch the container rails which must come to rest centered on the rear rollers. Do not extend the jib during lifting.
- 4 When the container is resting on the frame, move the jib forward all the way to ensure the container is locked on (right control forward).

 Disengage the P.T.O..

DUMPING

- 1 Again move the jib forward (right control forward) to ensure that the container is locked.
- 2 Extend the main lift cylinders (left control backward). 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

- 1 Move the sliding jib all the way back (right control backward) until mechanical jib latches unlock.
- 2 Tilt the arm backwards (left control backward). When the container touches the ground, release the brakes to free the truck for forward movement caused by the container.

WARNING:

1 - DON'T OVERSPEED THE PUMP - 1,500 RPM MAXIMUM.

2 - DON'T DUMP ON UNEVEN GROUND.

3 - DON'T DRIVE WITH THE CONTAINER IN THE DUMPED POSITION OR WITH THE HOOK TILTED BACK.

SL-125 7/92

HOIST PROP OPERATING INSTRUCTIONS

RAISING PROP

- Unload all cargo from body. 1.
- 2. Raise hoist and stand prop in upright position.
- 3. Lower hoist until hoist rests on top of prop.



WARNING:

1 - Do not power hoist down onto prop.

2 - Make sure prop is inserted into retaining pocket on hoist (see Dwg. No. 50H23).
3 - Do not attempt to use prop to support the hoist with a loaded container.

LOWERING PROP

1. Raise hoist and lower prop until it sets on the prop rest.



WARNING:

If the prop is not in perfect working order, it must

be repaired before using.

MAINTENANCE

WEEKLY SERVICE (50 OPERATIONS)

- 1. Lubricate with grease

 - Lifting hook on jibJib slide top, bottom, and side guides
- 2. Check hydraulic oil level
- 3. Check hydraulic hose and fittings for leaks. Also check hydraulic hose for wear. Repair and/or retighten as necessary.

MONTHLY SERVICE (200 OPERATIONS)

- 1. Lubricate with grease

 - Fittings on ar lift cylinders (quantity: 4)
 Front pins on rear pivot joint weldment (quantity: 2)
 Fittings on rear pivot and rollers (quantity: 4)
- Check all bolts and retighten as required. 2.
- 3. Check adjustments on safety lock mechanism.

YEARLY SERVICE

- Change hydraulic oil, replace hydraulic filter element, and wash out 1. suction strainer.
- Check main relief valve setting. 2.

HYDRAULIC OIL SPECIFICATIONS

Type: High Pressure (Anti-Wear) Hydraulic ISO Viscosity Grade: 46 Viscosity, SUS at 100 Degree F: 194-236

AMOCO

AMOCO AW 46

Keystone

KLC-5

ARCO

Duro AW 46

Lubriplate

HO-1

Chevron

AW Hydraulic Oil 46

Mobil

DTE 25

Cities Service

AW Hydraulic Oil 46

Phillips |

Magnus A 011 46

Conoco

Super Hydraulic Oil 46

Shell

Tellus 46

Exxon

Nuto H 46

Sun

Sun Vis 747 (821 WR)

Gulf

Harmony 46 AW

Texaco

Rando Oil HD 46

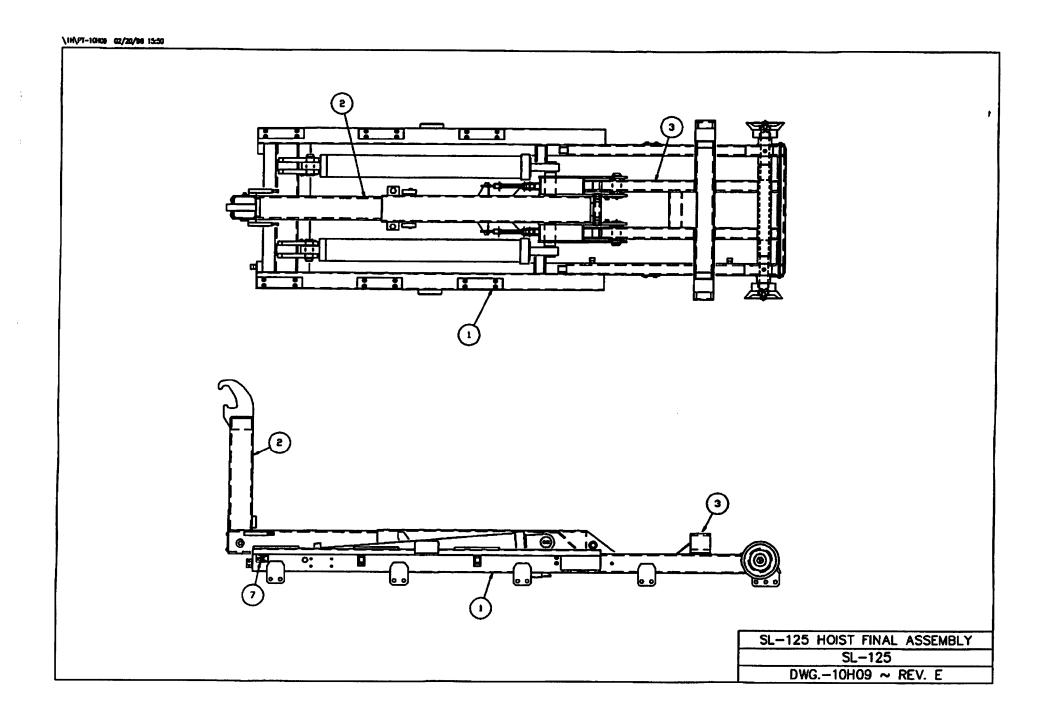
Kendall

Kenoil R & O AW-46

Union

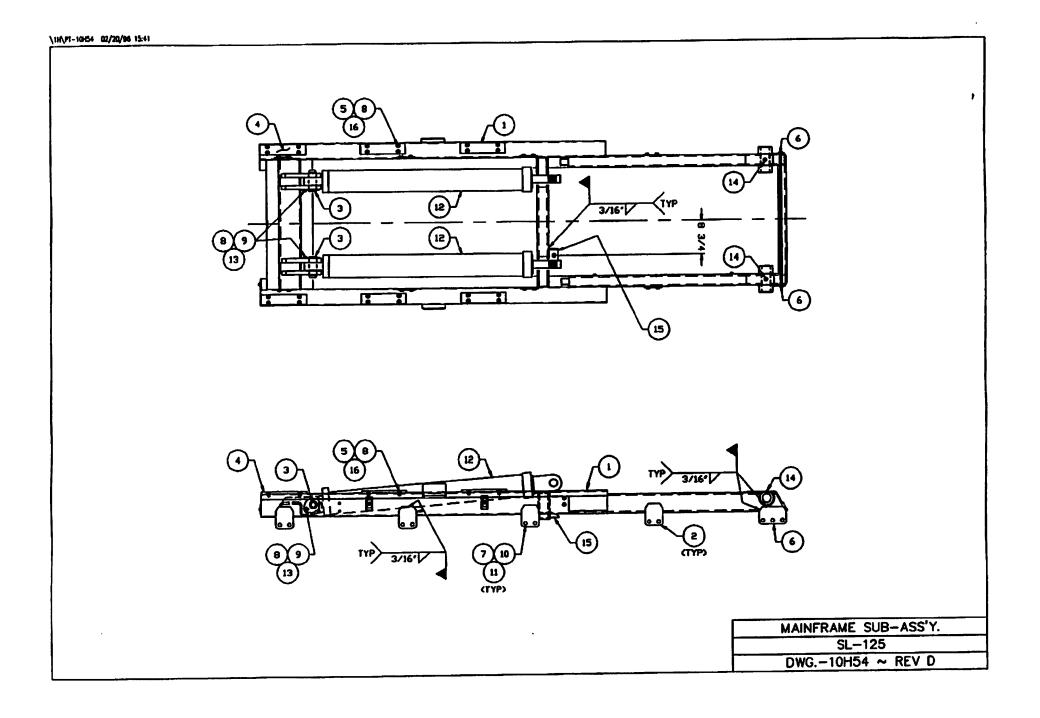
Unax AW 46

PARTS LIST

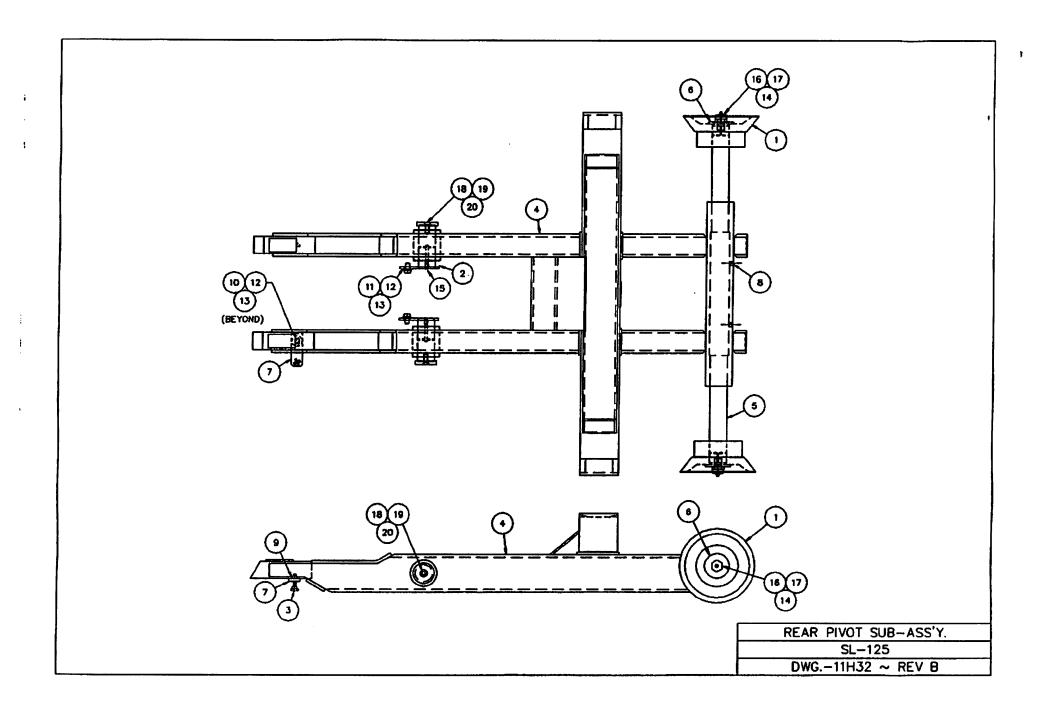


		SL	REVISION E		
ITEM	QTY.	P/N	DESCR.	WT Ib. PER EACH	REMARKS
1	ONE	10H54	MAINFRAME SUB-ASSY.	969.52	
2	ONE	10H56	TELESCOPIC JIB SUB-ASSY.	664.99	
3	ONE	11H32	PIVOT JOINT SUB-ASSY.	508.81	
4	ONE	90H01	HYDRAULIC ASSY.	176.08	NOT
5	ONE	10H59	DECAL ASS'Y	•	NOT SHOWN
6	ONE	10H86	PARTS & OPER MANUAL	-	
7	ONE	90P06	SERIAL TAG	.01	
8				•	
9					
10					
11					
12	·				
13					
14					
15					
16					
17					
18					•
19				_	
20					
21					
22					
				2319.41	TOTAL

F



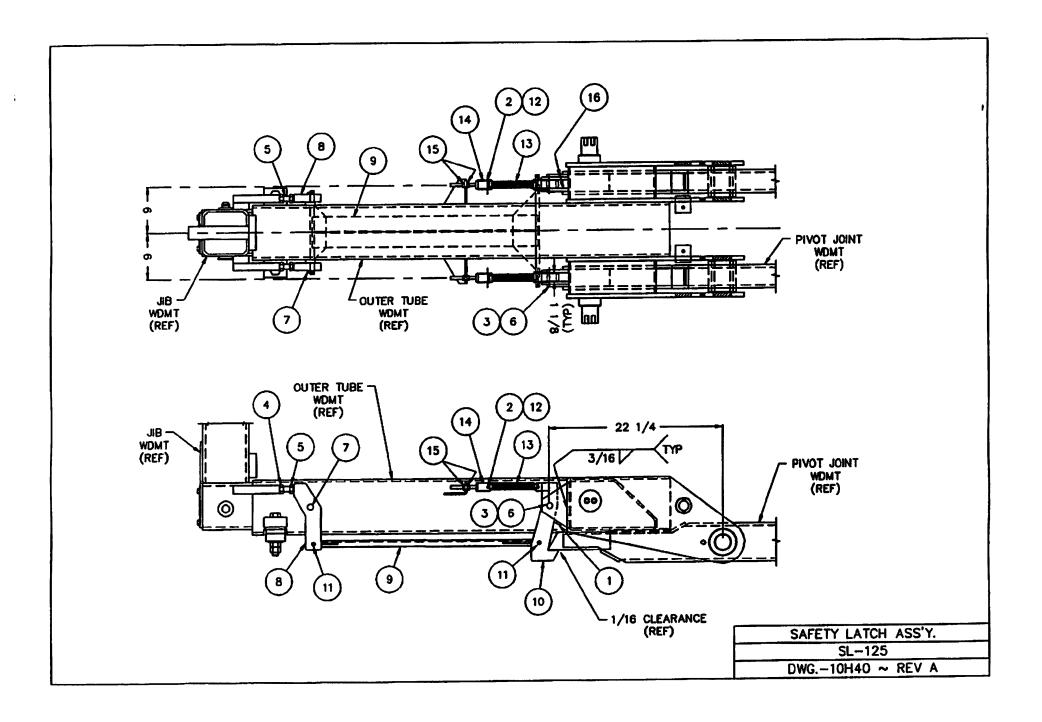
	MAINFRAME SUB-ASSEMBLY DWG10H54				REVISION D
ITEM	QTY.	P/N	DESCR	WT Ib. PER EACH	REMARKS
1	ONE	10H02	MAINFRAME WOMT	458.88	
2	8	22H38	FRONT MOUNT BRK WOMT	1.72	
3	2	10H32	MAINFRAME PIN WOMT	5.51	
4	6	61H78	12" WEAR BLOCK	.71	
5	24	00P68	3/8-16 x 1 1/4 FL HD SCR	.11	BRASS
6	2	22H39	REAR MOUNT BRACKET	2.10	
7	22	00P35	1/2-13 LOCKING HEX NUT	.15	GR-C
8	26	00755	3/8ø LOCK WASHER	.05	
9	2	00P13	3/8-16 x 1 1/4 HHCS	.13	GR-8
10	22	00784	1/20 FLAT WASHER HT	.07	F-436
11	22	00P15	1/2-13 x 1 3/4 HHCS	.23	GR-8
12	2	20P52	HYD CYL 5¢ X 40	230.00	
13	2	00P36	3/8¢ FLAT WASHER HT	.05	F-436
14	2	90P03	1/8 NPT ZERK	.01	
15	ONE	21H03	SAFETY VALVE MOUNT	.78	
16	24	00P14	3/8-16 HEX NUT	.10	GR-8
17					
18					•
19					
20					
21					
22					
		<u> </u>		969.52	TOTAL



			REAR PIVOT SUB-ASSEMBL DWG11H32	.Υ	REVISION B
ITEN	QTY.	P/N	DESCR.	WT Ib. PER EACH	REMARKS
1	2	10H10	ROLLER ASSY.	35.06	
2	2	10H11	PIVOT PIN WOMT.	6.83	
3	ONE	10H52	SAFETY VALVE STOP BOLT WOMT.	.12	
4	ONE	11H30	PIVOT JOINT WOMT.	369.57	
5	ONE	20H51	REAR PIVOT PIN	49.71	
6	2	61H41	ROLLER RETAINER	.64	
7	ONE	21H02	SAFETY VALVE STOP BAR	.61	
8	2	00P08	3/8-16 x 3/4 SOC SET SCR	.02	
9	ONE	00P14	3/8-16 HEX NUT	.10	GR8
10	ONE	00P31	1/2-13 x 1 1/4 HHCS	.20	GR8
11	2	00P09	1/2-13 x 1 HHCS	.19	GR8
12	3	00760	1/2ø LOCK WASHER	.07	
13	3	00784	1/20 FLAT WASHER HT	.07	F-436
14	2	90P20	1/4-28 ZERK STR	.01	
15	2	90P05	1/8 NPT ZERK 45°	.01	
16	2	00P66	7/80 LOCK WASHER	.11	
17	2	61H42	ROLLER RETAINER BOLT	.48	
18	2	22H76	PIVOT PIN CAP	.72	•
19	2	00P73	1/2-13 x 1 1/4 FL HD SOC SCR	.11	GR8
20	2	00P86	1/20 COUNTERSUNK	.04	
			LOCK WASHER		
21					
				509.05	TOTAL

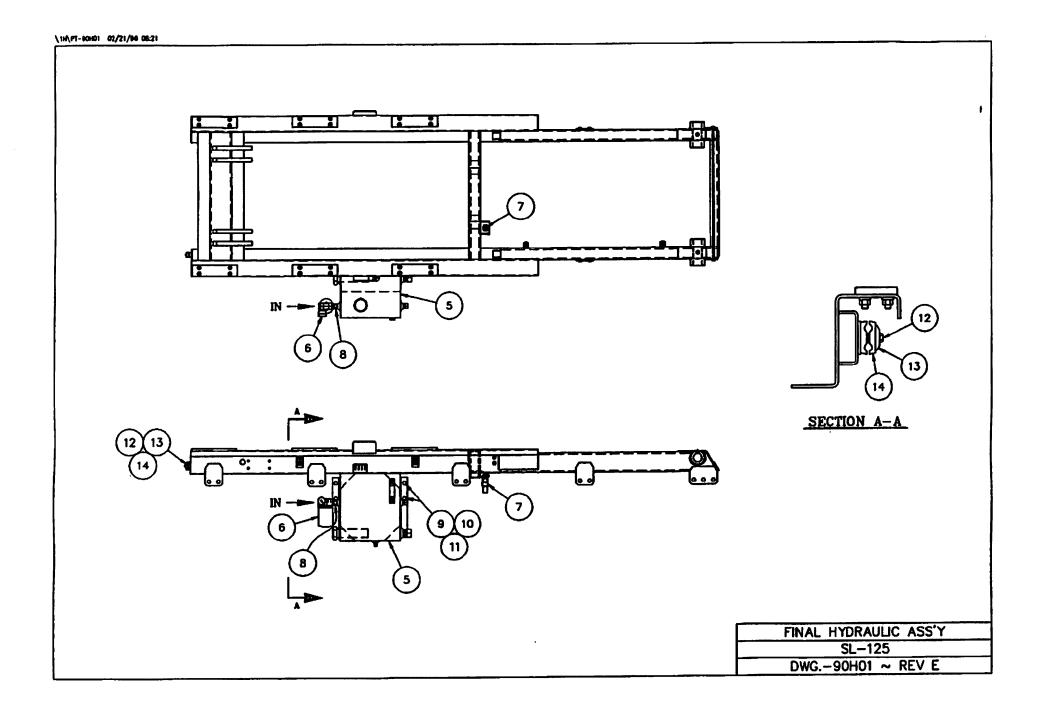
TELESCOPIC JIB SUB-ASSEMBLY DWG10H56		REVISION			
ITEM	QTY.	P/N	DESCR.	WT Ib. PER EACH	REMARKS
1	ONE	10H01	JIB WDMT	267.46	
2	ONE	10H04	OUTER TUBE WOMT	268.54	
3	ONE	10H08	1¢ CYL PIN WOMT	1.75	
4	ONE	10H40	SAFETY LATCH ASS'Y	42.06	
5	ONE	62H11	COVER PLATE	.94	
6	ONE	20H18	1 1/40 CYL PIN	2.87	
7	2	20H19	CYL RETAINER	.60	
8	2	20H21	SPACER	.19	
9	ONE	20H64	CLAMP BAR	7.76	
10	ONE	20H65	CLAMP LINER	.21	
11	2	00P03	3/8-16 x 3/4 HHCS	.04	GR-8
12	ONE	00P05	EXT RET RING FOR 10	.01	
13	ONE	00P11	5/16# X 2 ROLL PIN	.01	
14	2	00755	3/80 LOCK WASHER	.01	
15	2	00P80	3/4-10 x 5 HHCS	.81	GR-8
16	2	00P17	3/4-10 HEX NUT	.20	GR-8
17	4	00P18	5/16-18 x 1 FL HD SCR	.01	BRASS
18	4	00P32	3/8-16 x 1 1/4 SOC HD SCR	.06	GR-8.
19	2	00786	3/4¢ FLAT WASHER HT	.05	F-436
20	ONE	20P51	HYD CYL 3# X 32	66.00	
21	2	00P72	3/4-10 LOCKING HEX NUT	.20	GR-C
22					
				596.75	TOTAL

.

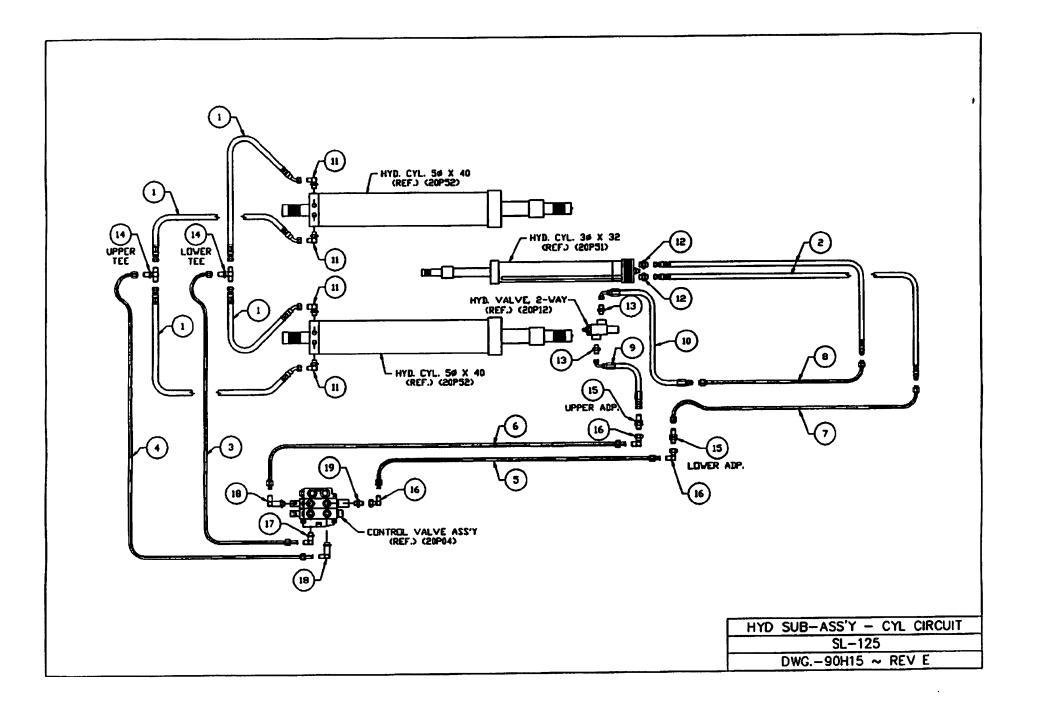


	SAFETY LATCH ASSEMBLY DWG10H40				REVISION
ITEM	QTY.	P/N	DESCR.	WT Ib. PER EACH	REMARKS
1	2	20H93	LATCH STOP	.10	
2	4	00P25	1/16ø X 3/4 COTTER PIN	.01	
3	2	00P27	1/8# X 1 1/4 COTTER PIN	.01	
4	2	00P24	5/8-11 HEX NUT	.09	GR-8
5	2	00P85	5/8-11 x 3 1/2 HHCS	.46	GR-8
6	2	00P22	3/4ø X 2 1/2 CLV. PIN	.33	
7	2	00P28	EXT RET RING FOR 3/40	.01	
8	2	20H69	release lever	4.98	
9	ONE	10H34	CONN BAR WOMT	10.60	
10	2	10H33	SAFTY LATCH WOMT	6.37	
11	4	00P26	1/8# X 1 COTTER PIN	.01	
12	4	00P23	1/4ø X 1 3/4 CLV PIN	.03	
13	2	90P04	7/8ø x 6 Spring	.38	
14	2	10H35	TAKE UP WDMT	.25	
15	4	00P14	3/8-16 HEX NUT	.02	GR-8
16	4	20H77	PIVOT SUPPORT	1.35	
17					
18					•
19					
20					
21					
22					
<u> </u>	1	*		42.24	TOTAL

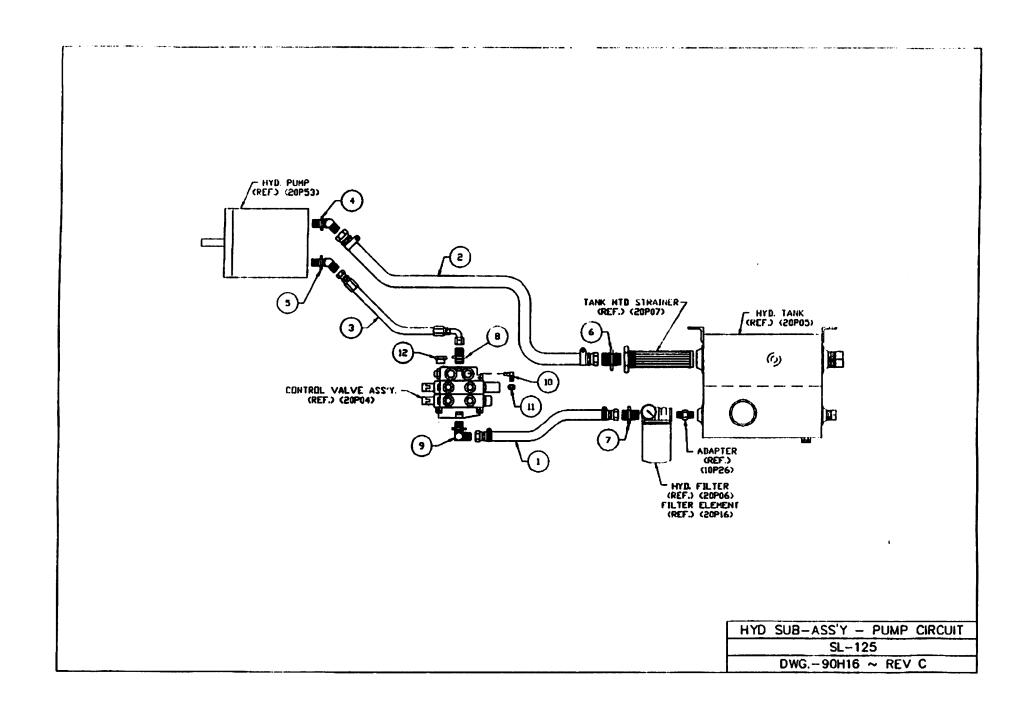
	MANUAL CONTROL ASSEMBLY DWG90H63					
ITEM	QTY.	P/N	DESCR.	WT.— Ib. Per each	REMARKS	
1	ONE	10H51	VALVE MOUNT BRACKET	8.24		
2	ONE	20P04	HYD VALVE ASS'Y	27.00		
3	2	20P08	REMOTE VALVE CONTROL HANDLE	2.80		
4	ONE	20P09	CONTROL HANDLE MOUNT CONSOLE	4.05		
5	2	20P10	BONNET CONNECTION KIT	.50		
6	2	20P15	CONTROL CABLE 84" LG	1.75		
7	4	00755	3/8# LOCK WASHER	.05		
8	4	00P13	3/8-16 x 1 1/4 HHCS	13	GR-8	
9	4	00P14	3/8-16 HEX NUT	.10	GR-8	
10	3	00P19	5/16-18 x 2 3/4 HHCS	.13	GR-8	
11	3	00P20	5/16-18 HEX NUT	.09	GR-8	
12	3	00752	5/160 LOCK WASHER	.04		
13						
14						
15						
16						
17						
18					•	
19						
20						
21						
22			·			
L		!		51.29	TOTAL	



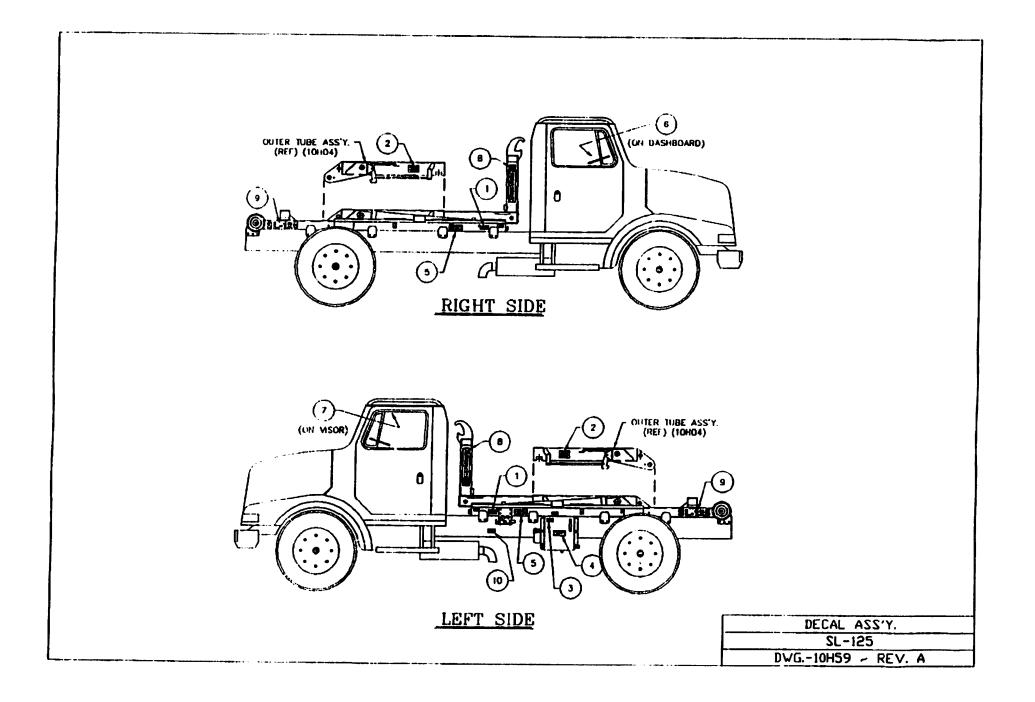
	FINAL HYDRAULIC ASSEMBLY DWG90H01				REVISION
ITEM	DWG90H01 TEM QTY. P/N DESCR. WT Ib. PER EACH		REMARKS		
1	ONE	90H15	HYD SUB-ASS'Y	30.18	NOT SHOWN
			CYL CIRCUIT		
2	ONE	90H16	HYD SUB-ASS'Y	15.33	NOT SHOWN
			PUMP CIRCUIT		
3	ONE	90H63	MANUAL CONTROL ASS'Y	51.29	NOT SHOWN
4	ONE	20P53	HYD PUMP, GEAR	18.00	NOT Shown
5	ONE	20P05	HYD TANK	54.20	
6	ONE	20P06	HYD FILTER	1.95	
7	ONE	20P12	HYD VALVE	2.30	
8	ONE	10P26	ADP, HYD PIPE NIPPLE	.70	
9	4	00P15	1/2-13 x 1 3/4 HHCS	.23	GR-8
10	4	00P35	1/2-13 LOCKING HEX NUT	.05	GR-C
11	4	00784	1/20 FLAT WASHER HT	.04	F-436
12	5	10P28	HEX BOLT 5/16# x 1 1/4	.03	HEX-T2
13	5	10P29	COVER PLATE	.10	TCP-T2
14	5	10P30	CLAMP HALF ASS'Y	.04	T2050
15					
16					
17					
18			,		
19					
20					
				176.08	TOTAL



		HYDR	AULIC SUB-ASSEMBLY - CYLINDE DWG90H15	R CIRCUIT	REVISION
ITEM	QTY.	P/N	DESCR.	WT Ib. PER EACH	REMARKS
1	4	10P49	HOSE ASS'Y 1/2 HP X 22 1/2	1.29	
2	2	10P50	HOSE ASS'Y 3/8 HP X 60	2.20	
3	ONE	10P51	HYD. TUBING — FRONT LOWER	1.83	
4	ONE	10P52	HYD. TUBING - FRONT UPPER	1.90	
5	ONE	10P53	HYD. TUBING — VALVE LOWER	2.26	
6	ONE	10P54	HYD. TUBING – VALVE UPPER	2.33	
7	ONE	10P55	HYD. TUBING — REAR LOWER	2.06	
8	ONE	10P56	HYD. TUBING - REAR UPPER	1.86	
9	ONE	11P17	HOSE ASS'Y 3/8 HP X 24	1.34	
10	ONE	11P19	HOSE ASS'Y 3/8 HP X 24	1.34	
11	4	11P23	ADP, HYD. O-RING/ M JIC STR	.30	6400-8
12	2	10P40	ADP, HYD O-RING/ M JIC STR	.30	6400-6-8
13	2	10P41	ADP, HYD M PIPE/ M JIC STR	.30	2404-6-8
14	2	10P42	ADP, HYD M JC BHD BRANCH TEE	.30	2703-LN-8
15	2	10P43	ADP, HYD M JC BHD UNION	.30	2700-LN-8
16	3	10P44	ADP, HYD M JIC/ FM JIC SWIVEL 90°	.30	6500-8
17	ONE	10P45	ADP, HYD O-RING/ M JC 90°	.30	6801-8-10
18	2	10P46	ADP, HYD O-RING/ M JIC 90° EXT	.30	6801 LL-8-10
19	ONE	11P08	ADP, HYD O-RING/ M JIC STR	.30	6400-8-10
20					
21					
22					
				30.18	TOTAL



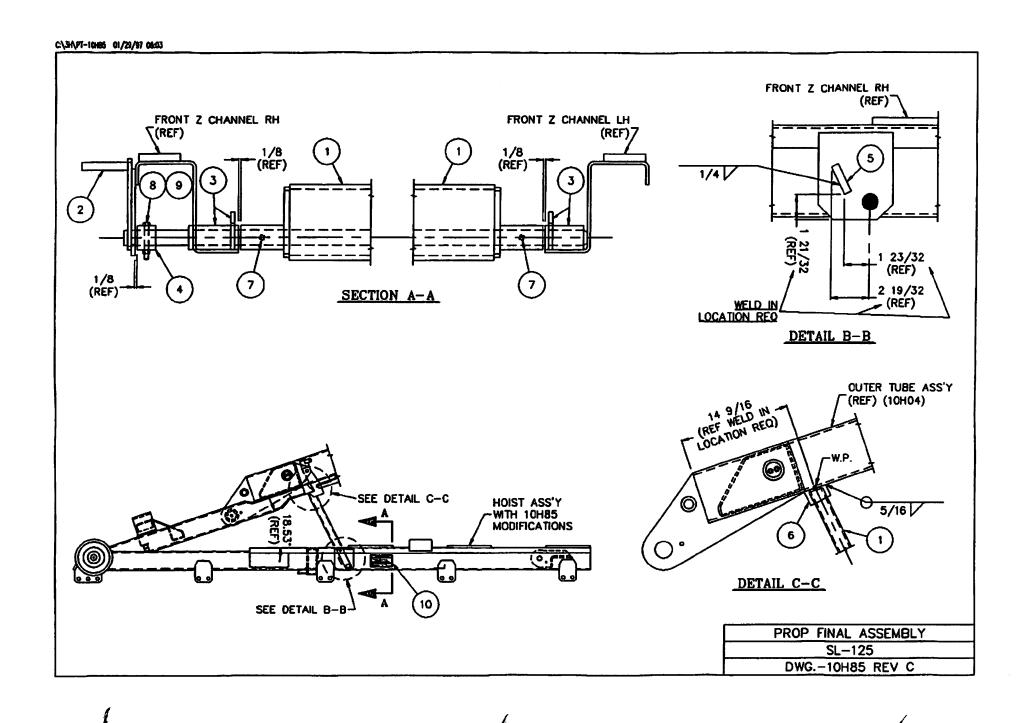
		HYD	REVISION		
ITEM	QTY.	P/N	DESCR.	WT Ib. PER EACH	REMARKS
1	ONE	11P22	HOSE ASS'Y 3/4 LP X 24	1.68	
2	ONE	10P60	HOSE ASS'Y 1 LP X 120	7.40	
3	ONE	10P61	HOSE ASS'Y 1/2 HP X 102	3.75	
4	ONE	10P31	ADP, HYD O-RING/ M JIC 45'	.30	6802-16
5	ONE	10P32	ADP. HYD O-RING/ M JIC 45°	.30	6802-10-12
6	ONE	10P33	ADP, HYD M PIPE/ M JIC STR	.30	2404-16-20
7	ONE	10P34	ADP, HYD M PIPE/ M JIC STR	.30	2404-12-16
8	ONE	10P35	ADP, HYD O-RING/ M JIC STR	.30	6400-10-12
9	ONE	10P36	ADP, HYD O-RING/ M JIC 90'	.30	6801-12
10	ONE	10P37	ADP, HYD M PIPE/ M JIC 90°	.30	2501-4-4
11	ONE	10P38	ADP, HYD JIC CAP	.10	304-C-4
12	ONE	11P44	O-RING HEX HEAD PLUG	.30	6408-12
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
				15.33	TOTAL



			DECAL ASS'Y. DWG.—10H59		REVISION
ITEM	QTY.	P/N	DESCR.	WT Ib. PER EACH	REMARKS
1	2	90P07	OPR & SERV MANUAL		
2	2	90P08	HOIST - BODY SPEC.		
3	ONE	90P09	HYD OIL SPEC		
4	ONE	90P10	HYD OIL FLAMMABLE		
5	2	90P11	HOIST FALLING		
6	ONE	90P12	LEVER CONTROL		
7	ONE	90P13	SAFTY INST		
8	3	90P14	SWAPLOADER - JIB		
9	2	90P15	SL-125		
10	ONE	90P18	RELIEF VALVE		
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
					TOTAL

OPTIONS

·



	REVISION				
ITEM	QTY.	P/N	DESCR.	WT Ib. PER EACH	REMARKS
1	ONE	10H82	CENTER PROP WOMT	33.38	
2	ONE	10H83	PROP SHAFT WOMT	9.35	
3	ONE	10H84	PROP MOD WDMT	7.28	
4	ONE	21H55	Bushing	.42	
5	ONE	21H57	CRANK STOP	.14	
6	ONE	21H58	PROP CRADLE	1.09	
7	2	00P08	3/8-16 SOC SET SCR	.02	
8	ONE	00P47	1/4-20 x 2 1/4 HHCS	.09	GR-8
9	ONE	00P51	1/4-20 LOCKING HEX NUT	.07	GR-C
10	ONE	90P52	PROP DECAL	-	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
				51.86	TOTAL

(,

		·