STAHL

8000 Series Owner's Manual

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8000 SERIES OWNER'S MANUAL

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FOR THE LOCATION OF YOUR NEAREST DISTRIBUTOR CALL 330-264-7441

- It is YOUR responsibility to maintain and operate this crane safely -

The following words and symbols will be used in your owner's manual:

- ! DANGER! Indicates immediate danger and that special precautions are necessary.
- ! CAUTION! Warns against potential hazards or cautions against unsafe practices.

Your **STAHL** crane is designed to meet all applicable government safety standards. Warranty will be voided if the crane is misused due to:

- Overloading
- Abuse
- Lack of (or improper) maintenance
- Unauthorized modification

! CAUTION!

Operate your 8000 crane within the lifting capacities specified. Exceeding the lifting capacity for a given boom length can cause tipping or structural failure. Only the **STAHL** "New Machinery and Equipment" warranty shown on the last page of this manual is valid with this crane. No other warranty—verbal, written, or implied—is valid with this crane. Treat your **STAHL** crane with respect and service it regularly. These two things can add up to a safer working environment and longer equipment life.

! CAUTION!

Note locations of Danger, Caution, and Lift Capacity decals on the 8000 crane. Read and understand each of these before attempting to operate the crane. If any of these labels are missing or cannot be read, contact your **STAHL** distributor for immediate replacement.

GENERAL SAFE OPERATING PRACTICES

ALWAYS inspect your crane daily, prior to use, for malfunctions, defects, or misuse.

ALWAYS keep the vehicle as level as possible while loading or unloading.

ALWAYS set the vehicle emergency brake before beginning crane operations.

ALWAYS keep the load as close to the ground as possible.

ALWAYS store the crane and hook when moving the truck.

ALWAYS store the controller securely to avoid unauthorized use of the crane.

NEVER swing a load that passes over people.

NEVER operate the crane within ten feet of a power line.

NEVER exceed the rated lifting capacity. Deduct the weight of any load handling equipment from rated capacity.

NEVER leave a load suspended in the air.

NEVER use the winch to drag a load into position before lifting.

NEVER operate the crane during an electrical storm or when high wind conditions exist.

NEVER side load the boom by dragging a load from the side.

NEVER try to service or repair the crane while the crane is operating.

NEVER place yourself between the load and truck or other fixed object.

NEVER move the truck while operating the crane or with a load on the crane.

SAFETY CHECKLIST

STRUCTURAL SOUNDNESS: Inspect the unit for damaged members and loose fasteners.

CONTROLS: Make a short test for proper control and operation of all functions.

REPAIRS: Fix all problems before using your crane.

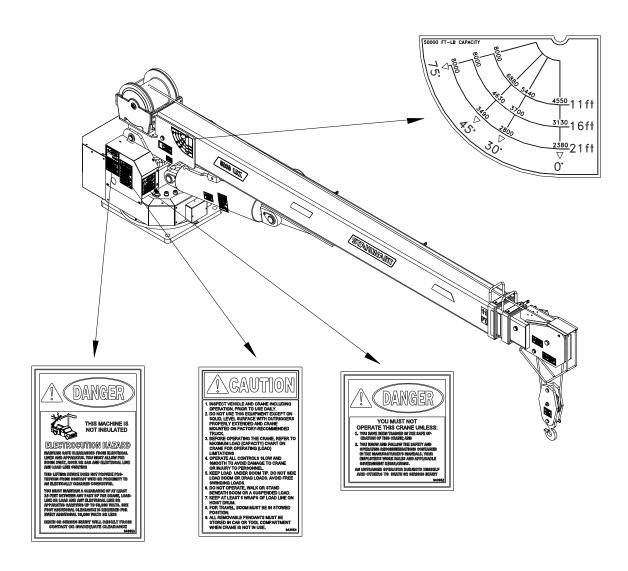
LEAKAGE: Examine all of the hydraulic lines for frays and blisters. Look for signs of lubricating or hydraulic oil

leakage.

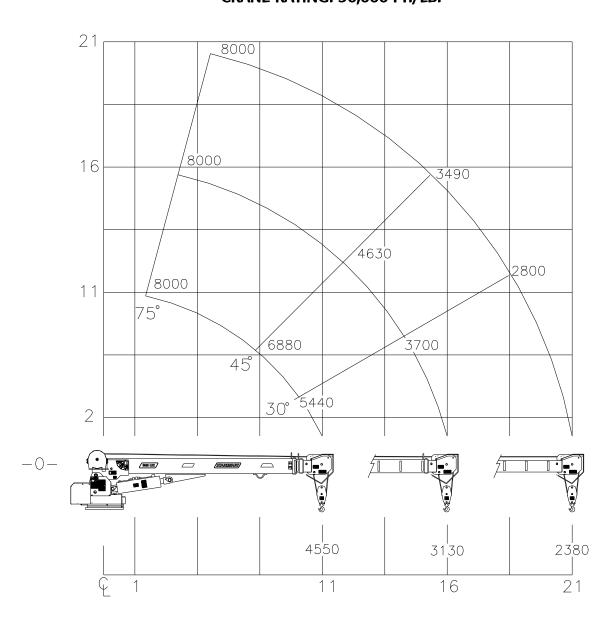
HYDRAULIC OIL SUPPLY: With the crane in a stored position, and all cylinders retracted, check oil level in the hydraulic reservoir.

DECAL PLACEMENT

Note locations of the DANGER, CAUTION, and LIFT CAPACITY decals on **STAHL** 8000 cranes. Read and understand each of these decals before attempting to operate your crane. If any decals are missing or cannot be read, contact your **STAHL** distributor for immediate replacement.



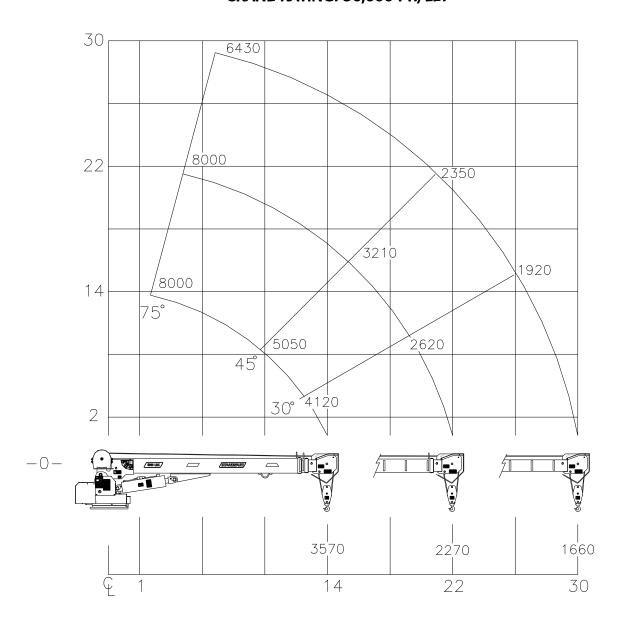
LOAD CAPACITIES 8000 LRX-20H MEASURED IN POUNDS CRANE RATING: 50,000 FT./LB.



DISTANCE IN FEET

NOTE: Load capacities are based on 85% of tipping when all outriggers are extended and have firm contact with a solid surface. Vehicles must have proper axle load distribution and crane must be mounted in accordance with manufacturer's instructions.

LOAD CAPACITIES 8000 LRX-30H MEASURED IN POUNDS CRANE RATING: 50,000 FT./LB.



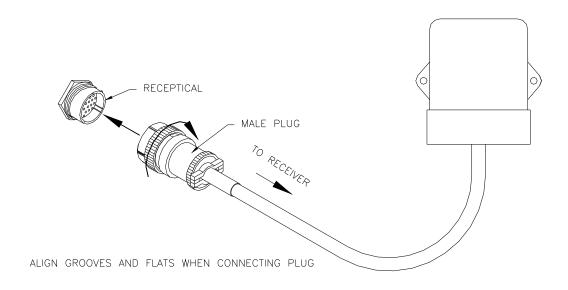
DISTANCE IN FEET

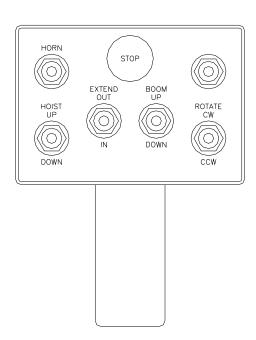
NOTE: Load capacities are based on 85% of tipping when all outriggers are extended and have firm contact with a solid surface. Vehicles must have proper axle load distribution and crane must be mounted in accordance with manufacturer's instructions.

REMOTE CONTROL

The remote control receiver plugs into a receptacle. The blue line on the male plug on receiver must line up with the flat spot on the receptacle at the base of the crane. Push the male plug onto the receptacle while turning the serrated portion of the male plug clockwise. Continue turning until the pin on the receptacle can be seen through the hole in the male plug and a "click" is felt.

There are five switches on the remote control. Each is labeled as to the function and direction. For example: To activate the winch, push up on the switch to "winch up"; push down on the switch to "winch down".





OPERATION

8000 SERIES OWNER'S MANUAL

The 8000 crane is designed to provide excellent service if operated within the maximum allowable load specifications stated on the unit's "Angle Indicator Plate" located on either side of the boom. load charts are also included on pages 6 and 7. The load information charts should be studied before operating the crane. Exceeding the stated load limit can cause tipping or structural failure. You should familiarize yourself with proper operation procedures to avoid overloading the crane. As an example: If a load of 5000 pounds were lifted at an 11' boom length at 30°, lowering the boom would cause an overload situation.

The 8000 crane is relatively simple to operate. Prior to field use, you should familiarize yourself with the controls and how the unit reacts to the controls. Practice operations should be performed with a light test weight progressing to a heavier test weight.

LIFTING OVER 4000 POUNDS

A "two-part" line must be used whenever the load is **4000 pounds** or greater. In order to "two-part" the line:

- Connect the winch cable eye to the pin on the bottom of the manually extendible boom section.
- Insert cable through the snatch block by removing the cotter pin and disassembling.
- Reassemble the snatch block. Be sure to reinsert the cotter pin in the snatch block.

You should also use a "two-part" line for loads under 4000 pounds if you want to slow down the line speed of the cable.

LOAD LIFTING

It must be understood that all load ratings are formulated on 85% of tipping. Tipping is defined as a tire breaking contact with the ground. Furthermore, all load ratings are dependent upon compliance with the following:

- The unit has been correctly installed in accordance with chassis requirements and truck body manufacturer's specifications.
- The intended operation is carried out on a level, solid surface with proper outrigger placement.

TASK PERFORMANCE

- 1. Position the 8000 crane as close to the job as possible on a firm, dry, and level surface. Avoid overhead obstruction on the work side of the unit.
- 2. Set the parking brake.
- 3. Extend and lower the outriggers until firm ground contact is made. On soft ground, use bearing pads to prevent sinking or tipping.
- 4. Run the winch line out before extending the boom.
- 5. Make sure the connection to the load is secure and will not come loose when lifting the load.

OVERLOAD PROTECTION

The 8000 crane is equipped with a counterbalance valve inside the lift cylinder to protect against overloading. In an overload condition, the boom will not elevate. Attempts to winch the load will cause a downward feathering of the boom until the overload condition is reduced. The counterbalance valve will also keep the boom from coming down in the unlikely event of a rupture to the hydraulic hoses that supply oil to the lift cylinder.

A pressure sensitive switch is also located in the lifting cylinder that can detect an overload situation. This causes a shutdown of the winch up, boom extension out, and boom lower functions, and automatically resets after the crane has been moved out of overload position.

An anti-two block feature is also provided on LRX models.

ROTATION STOP

A stop to prevent the unit from rotating continuously is located on the crane base. The stop is installed so that a full 360° plus is obtained. A stop lever is attached to the turret and extends so that it will contact the rotation stop on the base assembly. Do not remove the stop assembly. Continuous rotation will result in damage to the wiring harness and/or hydraulic hoses.

SPEED CONTROL OPERATION

The 8000 LRX is equipped with trigger activated proportional hydraulic controls. The flow control valve is located in the valve manifold block. The trigger is located on the remote control transmitter.

RELIEF VALVES

The 8000 crane requires a relief valve located at the reservoir to maintain crane operating pressure at 2850 PSI. This relief valve is not supplied unless using a **STAHL** hydraulic reservoir. It is the customer's responsibility to provide this relief valve when using a reservoir not supplied by **STAHL**. The main function of this relief valve is to prevent overloading of the system if the boom is inadvertently rotated against an immovable object, while one of the other hydraulic functions is also being used. The relief valves would not normally require adjustment, but if the correct relief valve setting is suspect, refer to the maintenance section of this manual for the proper adjustment and testing procedure.

Proper maintenance on a regular schedule is essential to keep the unit operating at peak efficiency.

LUBRICATION

Maintaining the proper lubrication schedule will vary with climate conditions and the amount of usage the unit receives. The lubrication chart below is intended to serve for a normal workload and moderate weather variance. Periods of heavy use shorten service intervals.

ITEM	WHERE	INTERVAL	LUBRICATION PRODUCT
Slewing Ring Gear	Grease Fitting	1 Month	Chevron Moly Grease #2
Worm Gear/Drive Unit	Directly on Gears	1 Month	Mobiltac "C", Shell Cardium EP Silver Streak 200, Mollube Alloy 936
Winch Cable	Surface	6 Months	Light Oil
Pulley Block Pin	Grease Fitting	6 Months	Chevron Moly Grease #2
Winch Gear	Top of Winch	1 Month	Shell Spirax Gear Oil 85W/140
Sheave Pin	Grease Fitting	6 Months	Chevron Moly Grease #2
Lift Cylinder Pins	Grease Fitting	6 Months	Chevron Moly Grease #2
Hydraulic Filter	Reservoir	6 Months	10 Micron Filter
Boom Pivot Pin	Grease Fitting	6 Months	Chevron Moly Grease #2

HYDRAULIC FLUID SPECIFICATION

Minimum viscosity specifications for hydraulic oil to be used in the crane should be Chevron AW68 or equivalent to eliminate the necessity of seasonal oil changes under normal temperature conditions. For operations in below freezing temperature, use a hydraulic fluid having a viscosity of 3000 SSU's.

Operating temperature of the hydraulic fluid should be within the range of 120°F–160°F (49°C–82°C).

NOTE: Arctic conditions present special requirements and considerations. Consult your oil supplier for the proper fluid for working under these severe conditions.

In addition to meeting the viscosity requirements, hydraulic fluid used in the system should contain the following additives:

- Anti-foam inhibitors
- Antioxidant inhibitors
- Anti-wear additives
- Rust resistant additives

PURGING AIR FROM THE SYSTEM

Air that is trapped in the cylinder will cause an erratic "bumpy" condition. To expel the air, hold the affected control open after the function has "bottomed out". Move the function in the opposite direction and again hold the control open. Attempt to operate the crane in a normal manner to determine if the air has been purged. When purging is complete, reevaluate hydraulic fluid level and add fluid if necessary.

HYDRAULIC OIL DETERIORATION

Contamination of the hydraulic oil by solvents, water, dust or other abrasives will result in premature breakdown of the oil's anti-foam, lubrication, anti-rust and viscosity properties. Periodically, a sample of the hydraulic oil in the system should be drawn off and its condition checked for breakdown. To check quality:

- 1. Place oil sample in a clean glass.
- 2. Smell oil to detect a burnt or rancid odor.
- 3. Examine the oil for a cloudy or dark color.
- 4. Allow the sample to stand for several minutes and inspect it for water, which will settle to the bottom.

When any of the results above are observed, the system should be purged to the bottom and filled with new oil.

HYDRAULIC SYSTEM PURGING

The oil should be changed after **600 hours** of operation or every **six months**, whichever comes first. The procedure for purging the system is as follows:

- 1. Locate the unit in an area that provides solid, level footing and space to accommodate the full operating range of the crane.
- 2. Stabilize the unit with the outriggers. Move the crane to either side of the truck and extend the lift cylinder.
- Drain the hydraulic fluid from the reservoir and clean the suction line filter.
- 4. Remove the reservoir return line. Refill the reservoir with Chevron AW68 or equivalent. Direct the return line into a sump waste container.
- 5. Rotate the crane 90 degrees, retract the extension boom, lower the main boom and operate the winch up and down for approximately ten seconds.
- 6. All components are now purged. Replace the return line filter cartridge and reinstall the return line to the reservoir.
- 7. Check the reservoir fluid level and add fluid to within one half inch (1/2") of the top. The boom elevation and extension cylinders must be fully retracted when refilling the reservoir.

FEATURES

Length:

- Crane Rating: 50,000-ft/lb capacity.
- Hydraulic boom extension provides reach up to 30'.
- Hydraulic winch for durable operation.
- Self-lubricating Nylatron™ bearing allows smooth operation of inner and outer booms.
- Multifunction, proportional radio remote control provides safe operation up to 500' away.
- Electrical solenoid-operated valves.

SP	ECIFICATIONS	8000 LRX-20H	8000 LRX-30H
•	Extension:	Hydraulic 11' to 21'.	Hydraulic 14' to 30'
•	Lifting Height Above Base:	19'	28'
•	Weight:	2100 lbs.	2500 lbs.

13'-3"

Width: 25"Height: 36"

Base Dimensions: 23" x 19"

Rotation System: 370° non-continuous hydraulic on turntable bearing with self-locking worm drive.

16'-3"

• Remote Control: Proportional radio remote control unit with up to of 500' range.

Winch Cable: 120' of 3/8" aircraft cable, with latch hook traveling block and down haul weight.

Rotation Speed: 1 RPM.

Boom Elevation Speed: -5° to +75° - 20 seconds.
 Boom Extension Speed: 11' to 21' - 18 seconds.
 Winch Line Speed: 60' per minute - single line.

Min. Chassis Req.: 18,000 GVWR.

HYDRAULIC REQUIREMENTS

- Crane requires 6 Gallon Per Minute at 2850 PSI.
- 18-gallon capacity hydraulic reservoir optional.
- Open centered, full pressure hydraulic system.

A hydraulic power source must be provided if an adequate system is unavailable on vehicle.

OUTRIGGER REQUIREMENT

Truck must be equipped with heavy-duty outrigger.

LIFTING CAPACITIES* 8000 LRX-20H

REACH (feet)	RETRACTED BOOM (pounds)	FIRST HYDRAULIC EXTENSION (pounds)	SECOND HYDRAULIC EXTENSION (pounds)
4	8000		
5	8000		
6	8000		
7	7140		
8	6250		
9	5560		
10	5000		
11	4550		
12		4170	
13		3850	
14		3570	
15		3330	
16		3125	
17			2940
18			2780
19			2630
20			2500
21			2380

^{*}Double line required for 4000 lb.+ loads.

LIFTING CAPACITIES* 8000 LRX-30H

REACH (feet)	RETRACTED BOOM (pounds)	FIRST HYDRAULIC EXTENSION (pounds)	SECOND HYDRAULIC EXTENSION (pounds)
4	8000		
5	8000		
6	8000		
7	7140		
8	6250		
9	5560		
10	5000		
11	4550		
12	4170		
13	3850		
14	3570		
15		3330	
16		3125	
17		2940	
18		2780	
19		2630	
20		2500	
21		2380	
22		2270	
23			2170
24			2080
25			2000
26			1920
27			1850
28			1780
29			1720
30			1660

^{*}Double line required for 4000 lb.+ loads.

SYMPTOM	PROBABLE CAUSE
Function fails to respond to controls	Pressure switch malfunctioning Low hydraulic fluid Faulty hydraulic pump Short circuit in remote control Crane not grounded to truck Solenoid in control valve malfunctioning Bad ground on control valves Circuit breakers tripped Dead battery Optional anti-two block malfunctioning
Slow down of functions speed	Relief valve set too low Low hydraulic fluid Clogged filter/strainer Pump not providing enough GPM
Boom drifts under load	Cylinder piston seals leaking Counterbalance valve defective Crane is overloaded
Boom or winch will not lift load	Restriction in hydraulic line Cylinder piston seals leaking Relief valve not set properly Pump losing prime Overload condition Filter clogged Counterbalance valve defective
Cable mis-wrap	Loose cable being wound on drum
Unusual noise during operation	Cavitation due to low hydraulic oil Load is excessive Suction line filter is clogged Relief valve set too low Relief valve defective Air in the lines
Winch motor runs but fails to wind cable	Gear train is damaged
Erratic operation of hydraulic function	Air in hydraulic system
Crane will not rotate	Low hydraulic fluid Hydraulic motor defective Bad ground on control valve
Rotation speed too fast or too slow	Flow controls set incorrectly Control valve defective

! CAUTION!

Improperly mounted cranes can injure people or damage property. These instructions describe installation of a **STAHL** crane on a typical **STAHL** service body. Contact the dealer for other service body/truck chassis combinations.

! CAUTION!

The truck chassis must be capable of safely supporting the entire chassis, body, crane, other equipment and the maximum capacity of the crane - 8000 pounds.

The 8000 crane must be installed on a truck chassis with a GVWR of at least 18,00 pounds greater than the curb weight of the complete vehicle. The curb weight is the total weight of the chassis, body, crane, and other equipment.

! CAUTION!

Never attach, change, or use unauthorized components on your **STAHL** crane. This could result in failure of the crane (and possible injuries) and voids any warranty or liability.

! CAUTION!

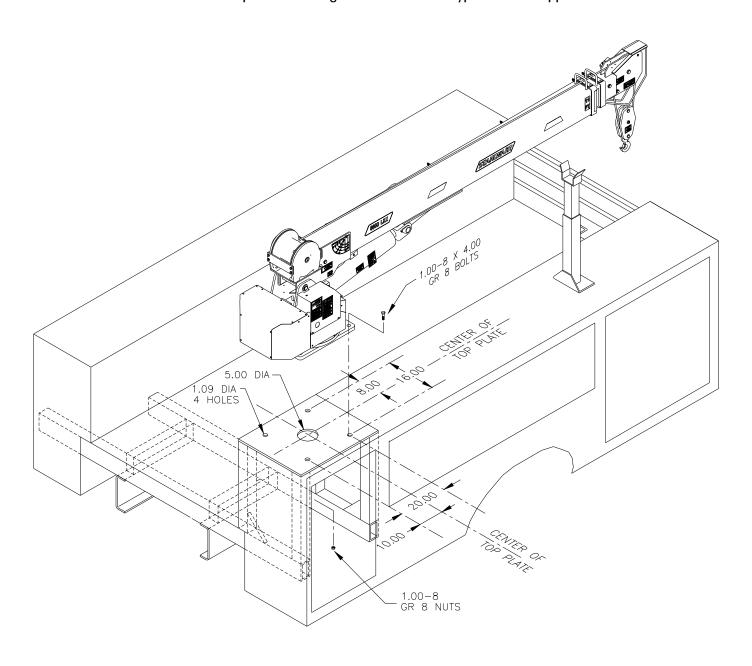
MOST SERVICE BODIES ARE NOT STRONG ENOUGH TO MOUNT A CRANE!

You must reinforce the compartment and floor before you mount the crane. Get help from the truck dealer or distributor if the **STAHL** 8000 crane is installed on a non-**STAHL** body, in another body/chassis combination or in a different location. It is recommended that a **STAHL** crane body and outriggers be used with the 8000 crane. Consult the distributor for the proper body required for your application.

! CAUTION!

Never attach, change, or use unauthorized components on your **STAHL** crane. This could result in failure of the crane (and possible injuries) and voids any warranty or liability.

- 1. Layout the mounting holes on the mounting surface (refer to figure below). Drill four (4) 1.09" diameter holes and flame cut the five-inch (5") diameter hole.
- 2. Lift the crane into position. Make sure the power lead and the two (2) hydraulic hoses are fed through the five-inch (5") diameter hole.
- 3. Bolt the 8000 crane to the mounting surface with four (4) 1.00" grade eight bolts and four (4) grade eight lock nuts. Torque the 1.00" bolts to 375 foot-pounds. Use of other than 1.00" grade eight bolts and lock nuts may result in the crane breaking loose from the mounting surface when in use.
- 4. It is necessary to support the boom in the stored position. The boom support should also have a place to secure the hook in the stored position. The figure below shows a typical boom support.



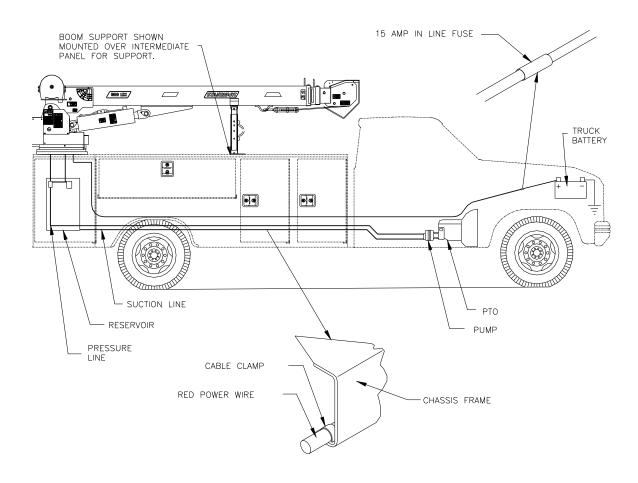
! CAUTION ! -DISCONNECT NEGATIVE BATTERY CABLE BEFORE PROCEEDING-

- 5. The 8000 crane comes with an optional pre-plumbed eighteen (18) gallon reservoir. The **STAHL** reservoir assembly comes with a suction screen, return line filter, relief valve, filler, sight gauge, strainer, tank cap and breather. The mounting of the reservoir is an integral part of tank design and will bolt directly into brackets that are preinstalled in the **STAHL** crane body in the compartment under the crane-mounting surface (RH rear compartment). Prior to mounting the tank, a three-inch (3") diameter access hole must be added to the back of the compartment for routing suction and pressure lines along with the power wire. An optional between-the-frame tank is also available
- 6. Run the power lead to the front of the truck. Locate the lead so that it will be protected. Install cable clamps to hold the wire securely in place.
- 7. Connect the power wire to the positive terminal on the vehicle battery. A 15-amp in-line fuse must be installed near the battery to protect harness from electrical shorts.
- 8. Reconnect the negative battery cable. The 8000 crane is self-grounding and does not require an additional ground cable.
- 9. The 8000 crane requires a six (6) gallon/minute flow rate at 2850 PSI to operate efficiently. It is your responsibility to choose the correct P.T.O. and pump that will suit this requirement and fit the transmission that is on the truck. The P.T.O. and pump supplier you use will offer assistance in making the correct selection.
- 10. A throttle advance should also be used to keep the engine RPM's high enough to produce the required flow and pressure. There are many types available depending on your preference. The simplest type is a vernier control cable that must be set with each use. There are other types available that will advance throttle on demand and return idle to normal automatically. These are available in both hydraulic activated and electronically activated.
- 11. Connect the hydraulic lines as shown in figure shown on the next page.

! CAUTION!

IF THE POWER WIRE IS ROUTED SO THAT IT PASSES THROUGH ANY BODY OR CHASSIS SHEET METAL, A GROMMET MUST BE USED TO PROTECT WIRES FROM BEING CUT. IF THE POWER WIRE COMES INTO CONTACT WITH A GROUNDED SURFACE, A DEAD SHORT WILL OCCUR POSSIBLY CAUSING DAMAGE TO THE CRANE, VEHICLE BATTERY OR ELECTRICAL SYSTEM.

- 12. The suction line from tank to pump should be a minimum of one-inch (1") diameter. The pressure line from the pump to the relief valve must be a minimum of one-half inch (1/2") diameter hose SAE100R2. The connection at the relief valve is a one-half inch, 37 degree (1/2"-37°) JIC male fitting. **STAHL** does not supply these two (suction & pressure) lines.
- 13. The proper length hoses are supplied with the crane for hookup to the reservoir. Both the pressure and return lines in the crane are one-half inch, 37 degree (1/2"-37°) JIC. If the reservoir is mounted in a location other than the right rear compartment, additional hoses will need to be made. The crane pressure line (running up the center to revolving connections) connects to a fitting on top of the relief valve. The crane return line (coming from the rotation valve) connects to the one-half inch (1/2") JIC fitting between the relief valve and return line filter.



12v DC HOOK-UP

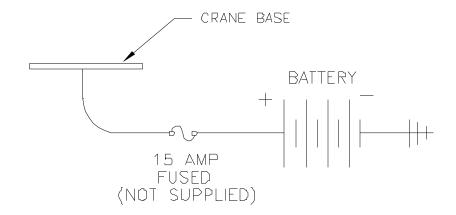


FIGURE 6

TYPICAL RESERVOIR TANK HOOK-UP

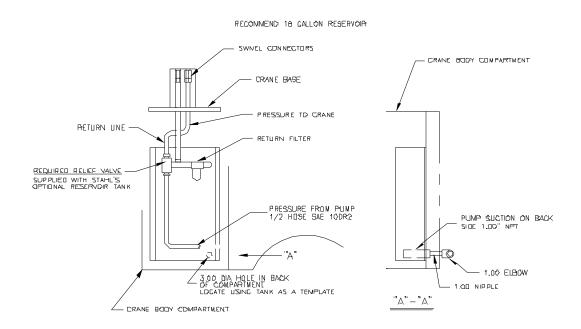
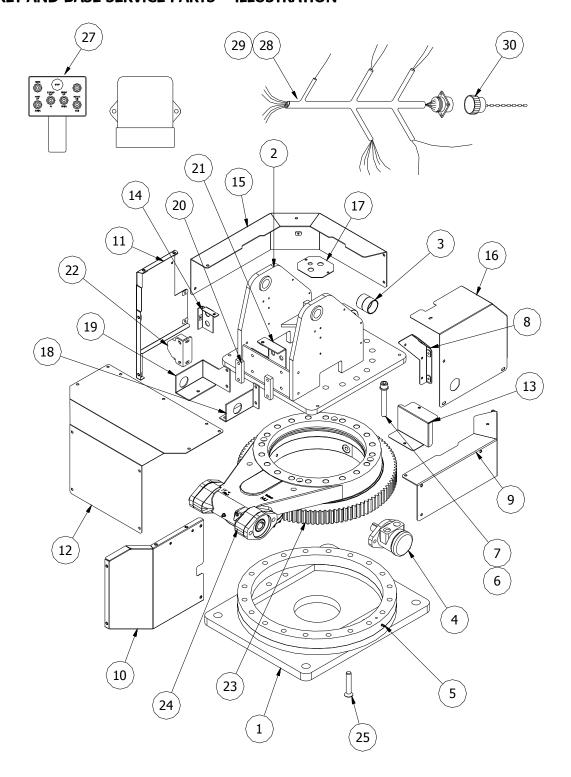


FIGURE 7

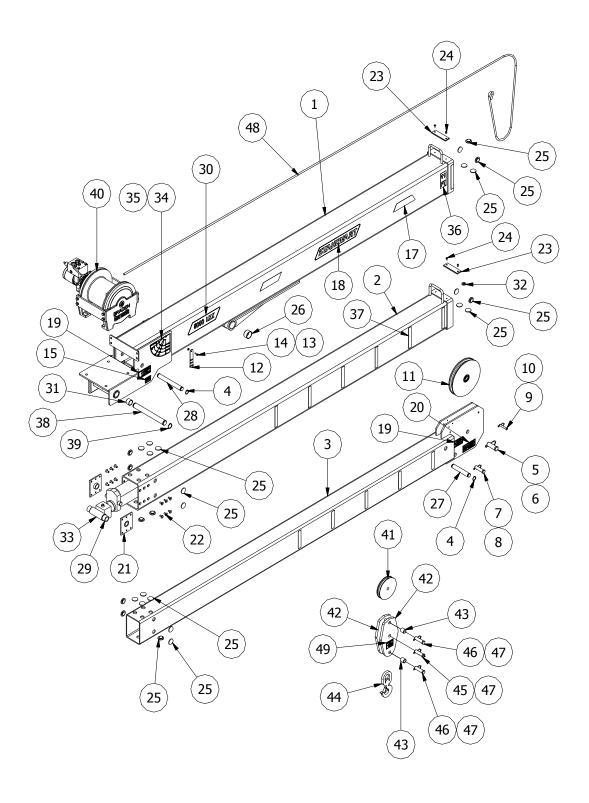
TURRET AND BASE SERVICE PARTS - ILLUSTRATION



TURRET AND BASE SERVICE PARTS - PART LIST

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	206779	BASE ASM - 8000 LRX
2	1	208157	TURRET - WELDMENT - 8000 LRX
3	2	207010	BUSHING 1.75 IDX1.938 ODX1.00L
4	1	95420-001	MOTOR-HYD , ROTATION
5	1	926535	GREASE FITTING 1/4-28
6	17	919879	LOCK WASHER 5/8 LOCK RINGS
7	17	175545	SHCS 5/8-11 X 4.50
8	1	201450	BRACKET ASM - MOUNTING
9	1	207224	COVER ASM - ROTATION - RH
10	1	207225	Guard ASM - Crane Side - Rh
11	1	207227	Guard ASM - Crane Side - Lh
12	1	207229	PANEL - REAR COVER
13	1	207230	PANEL -END - ASM
14	1	203858	Bracket asm - Tube Mounting
15	1	207223	COVER ASM - ROTATION - LH
16	1	207216	GUARD - CRANE SIDE
17	1	207199	COVER - HOSE
18	1	207177	BRACKET - VALVE MOUNTING
19	1	207198	BRACKET - VALVE MOUNTING
20	2	207350	SPACER - VALVE MOUNTING
21	1	207355	BRACKET ASM - TUBE MOUNTING
22	1	123477	ALARM - BACK-UP
23	1	95899-063	SLEWING RING - 8000 LRX
24	1	95899-062	ROTATION DRIVE - 8000 LRX
25	14	207266	FHSCS 5/8-11 X 4.50
25	4	207269	FHSCS 5/8-11 X 3.00
25	6	201046	FHSCS 5/8-11 X 3.50
26	4	919526	5/8-11 NYLON LOCK NUT GR 8
27	1	204196-02	REMOTE CONTROL
28	1	204030	HARNESS - 800OLRX CRANE
29	1	204190	HARNESS - CRANE PROPORTIONAL
30	1	95618-006	DUST CAP

BOOM ASSEMBLY SERVICE PARTS - ILLUSTRATION



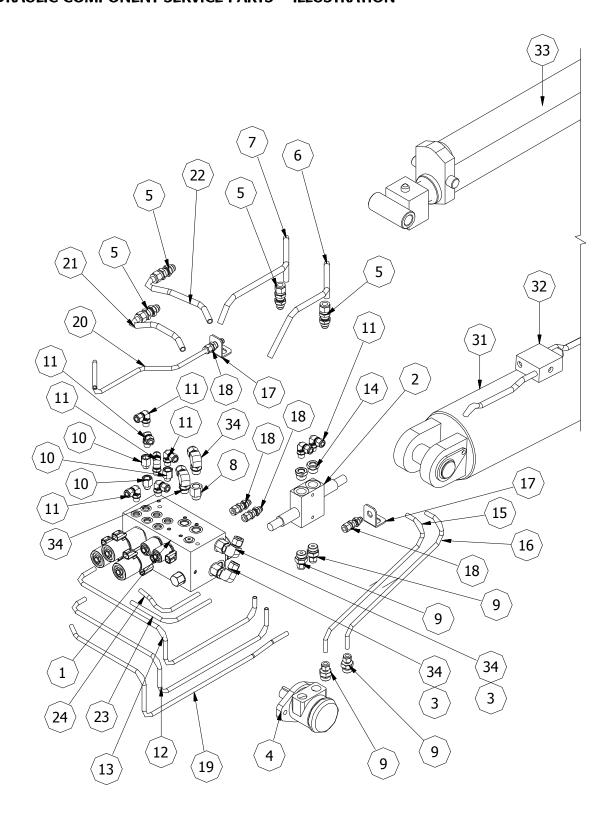
BOOM ASSEMBLY SERVICE PARTS - PARTS LIST

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	208670	BOOM ASM-MAIN-8000 LRX-20H
1	1	208156	(30FT. BOOM ONLY) BOOM ASM-MAIN-8000 LRX-30H
2	1	208665	BOOM ASM-2ND EXT-8000 LRX-20H
2	1	206766	(30FT. BOOM ONLY) BOOM ASM-2ND EXT-8000 LRX-30H
3	1	208666	BOOM ASM-3RD EXT-8000 LRX-20H
3	1	206767	(30FT. BOOM ONLY) BOOM ASM-3RD EXT-8000 LRX-30H
4	4	95456-001	SNAP-RING-1.00 SHAFT
5	1	95422-007	PIN-CLEVIS,
6	1	95424-003	PIN-COTTER
7	1	95422-002	PIN-CLEVIS, 0.75 DIA. X 2.75
8	1	95424-002	PIN-COTTER-2.68
9	1	201825	PIN-CLEVIS38 X 2.50
10	1	925063	HAIR PIN-WIRE DIA .094 X 2 5/16 LG
11	1	202445	SHEAVE - 10.00 O.D.X1.38
12	2	95480-001	ARROW
13	2	919003	HEX NUT 1/4-20
14	2	917494	HEX HD CAP SCR 1/4-20 X 3/4
15	1	3891	SERIAL TAG-STAHL-UNIVERSAL
16	2	918416	DRIVE SCREW 1/8DIA X 5/16LONG
17	4	95475-001	DECAL-STRIPES
18	2	95907-537	DECAL-STAHLWART-CRANE BOOM
19	2	201181	DANGER DECAL-BOOM
20	2	201186	DANGER DECAL - LOAD
21	2	95674-001	CYLINDER MNTG WELDMENT
22	12	917736	SCR-F.H.S.C.S. 3/8-16 X 3/4
23	2	201753	PLATE - CABLE WEAR
24	4	964049	SCR-BHC-1/4-20X1/2 SS
25	28	95899-018	PLUG-BOOM
26	2	207010	BUSHING 1.75 IDX1.938 ODX1.00L
27	1	207014	PIN - 1.00" DIA X 6.00"
28	1	207015	PIN - 1.00" DIA X 8.50"
29	2	207017	SPACER - EXTENSION CYLINDER
30	2	95785-023	DECAL-8000 LRX
31	2	201032	BUSHNG 1.25 ID X 1.42 OD X 1"
32	1	208176	PLUG - BOOM GUIDE - SN
33	1	208675	CYLINDER - EXT 8000 LRX-20H
33	1	206716	(30FT. BOOM ONLY) CYLINDER - EXT 8000 LRX-30H

BOOM ASSEMBLY SERVICE PARTS - PARTS LIST (CONTINUED)

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
34	1	208677-02	LOAD CHART- 8000 LRX - 20H
34	1	207255-02	(30FT. BOOM ONLY) LOAD CHART- 8000 LRX - 30H
35	1	208677-01	LOAD CHART- 8000 LRX - 20H
35	1	207255-01	(30FT. BOOM ONLY) LOAD CHART- 8000 LRX - 30H
36	2	208678	DECAL - 11 FT
36	2	207260	(30FT. BOOM ONLY) DECAL - 14 FT
37	1	202470	DECAL KIT - GAUGE STRIPE-10FT
37	1	207263	(30FT. BOOM ONLY) DECAL KIT - GAUGE STRIPE-16FT
38	1	207033	PIN - 1.25" DIA X 11.00"
39	2	95999-057	SNAP RING-1 1/4
40	1	206772	WINCH - BRADEN - BG4B
41	1	95861-003	SHEAVE-PULLEY BLOCK
42	2	95736-028	PLATE-SIDE, SNATCH BLOCK
43	2	95736-027	SPACER-SNATCH BLOCK
44	1	95413-003	HOOK W/CATCH - #8000
45	1	95907-198	PIN ASSEMBLY- 0.75" DIA X 2.50
46	2	95422-002	PIN-CLEVIS, 0.75 DIA. X 2.75
47	3	95424-002	PIN-COTTER-2.68
48	1	207393	CABLE W/THMBLE-8000 LRX - 120'
49	2	207394	DECAL - LIFTING CAPACITY 8000#

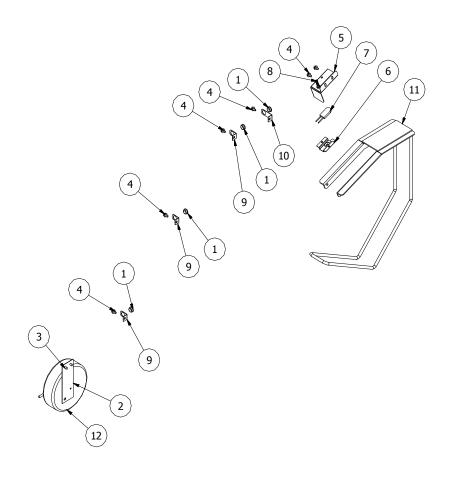
HYDRAULIC COMPONENT SERVICE PARTS - ILLUSTRATION



HYDRAULIC COMPONENT SERVICE PARTS - PARTS LIST

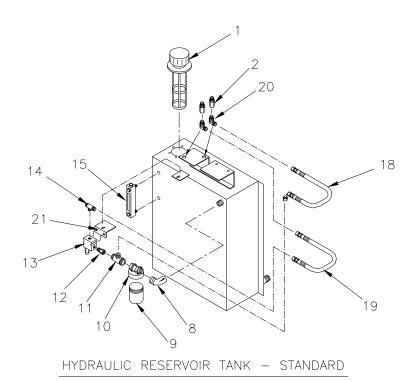
ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	203122	VAVLE - COMBO - 4 FUNCTION
2	1	95736-039	CROSS RELIEF VAVLE
3	2	203871	ADAPTER -10MOR X -8FOR
4	1	95420-001	MOTOR-HYD , ROTATION
5	4	95488-022	BULKHEAD UNION-1/2-TUBE TO 1/2-JIC MALE
6	1	207200	TUBE - PRESSURE
7	1	207201	TUBE - RETURN
8	1	203876	ADAPTER -8MOR X -8FOR
9	4	95488-011	CONNECTOR - 10 MOR X -6 TUBE FLAIRLESS
10	3	203870	ADAPTER -6MOR X -6FOR
11	8	95488-006	ELBOW -6 MOR X -6 TUBE SWAGELOK
12	1	207301	TUBE - VALVE TO ROTAION RELIEF
13	1	207303	TUBE - VALVE TO ROTATION RELIE
14	2	203873	ADAPTER -10MOR X -6FOR
15	1	207307	TUBE-ROTATION RELIEF TO MOTOR
16	1	207320	TUBE-ROTATION RELIEF TO MOTOR
17	2	201487	BRACKET - TUBE MTG
18	4	95488-005	BULKHEAD UNION-3/8 TUBE TO 3/8-JIC
19	1	207324	TUBE - BOOM LIFT
20	1	207327	TUBE - BOOM LIFT
21	1	207331	TUBE - WINCH
22	1	207333	TUBE - WINCH
23	1	207341	TUBE - EXTENSION
24	1	207344	TUBE - EXTENSION
25	2	203880	HOSE - 21" (EXTEND)
26	2	203881	HOSE - 21" (LIFT)
27	1	203884	HOSE - 21" (WINCH)
28	1	203885	HOSE - 24" (WINCH)
29	1	203892	HOSE - 34" (RETURN)
30	1	203893	HOSE - 36" (PRESSURE)
31	1	208162	CYLINDER - LIFT 8000 LRX
32	1	95723-003	PRESSURE SWITCH - 3000PSI
33	1	208675	CYLINDER - EXT 8000 LRX-20H
33	1	206716	(30FT. BOOM ONLY) CYLINDER - EXT 8000 LRX-30H
34	4	203872	ELBOW - SWGLOK -8TUBE X -8MOR

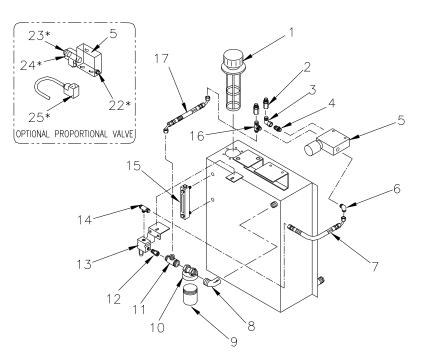
ANTI TWO-BLOCK PARTS



TEM	QUANTITY	PART NUMBER	DESCRIPTION
1	4	95493-005	BUSHING-SHORTY
2	1	95493-013	BRACKET-CORD REEL
3	2	917806	TRUSS HD M.S. 1/4-20 X 1/2
4	6	962110	HEX WASHER HD-SELF TAPPING
5	1	201524	COVER - SWITCH MOUNTING
6	1	95493-003	SWITCH - HOLDER
7	1	95493-002	SWITCH-WATERPROOF
8	1	95493-004	STRAIN RELIEF
9	3	95493-006	BRACKET BUSHING-MAIN
10	1	95493-011	BRACKET BUSHING-HYD
11	1	207272	GUIDE ASM - CABLE
12	1	95467-001	CORD REEL

HYDRAULIC RESERVOIR TANK - ILLUSTRATIONS



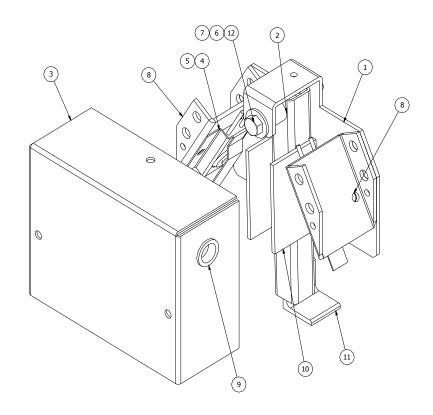


HYDRAULIC RESERVOIR TANK - WITH PROPORTIONAL CONTROL

HYDRAULIC RESERVOIR TANK - PART LIST

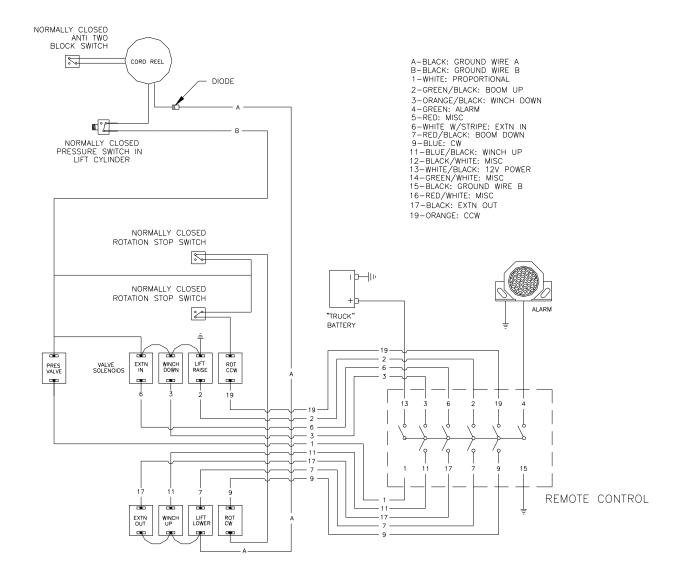
ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	938817	Breather
2	2	95488-020	Inline swivel - 1/2 JIC
3	1	938492	1/2 JIC to 1/2 JIC swivel elbow fitting
4	1	938028	1/2 JIC to 3/4-16 o-ring connection
5	1	95907-128	Proportional valve
6	1	95488-015	1/2 JIC to 3/4-16 o-ring elbow fitting
7	1	95907-204	1/2 JIC hose
8	1	938302	3/4 street elbow fitting
9	1	95636-001	Filter
10	1	95635-001	Filter housing
11	1	938283	Run tree fitting
12	1	95488-012	Adapter fitting
13	1	95736-066	Relief valve
14	1	95488-013	Run tree fitting
15	1	95907-152	Sight gauge
16	1	938281	Branch tree fitting
17	1	95907-203	1/2 JIC hose
18	1	95907-172	1/2 JIC w/90° hose
19	1	95907-135	1/2 JIC hose
20	2	95488-019	Bulkhead elbow fitting
21	1	95907-146	Valve mounting bracket
22	1	95907-220	Compensator
23	1	95907-221	Control cartage
24	1	95907-219	Coil - 12v
25	1	95907-139	Controller

ROTATIO STOP SERVICE PARTS

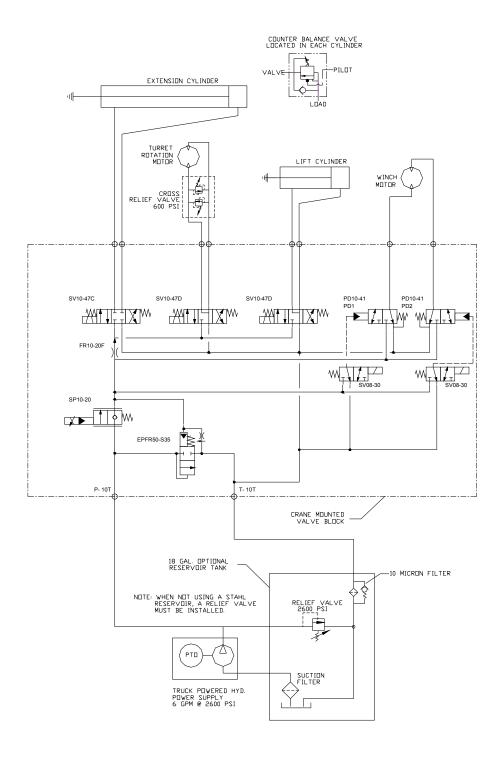


TEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	207276	BRACKET - LIMIT
2	1	207283	SPACER - COVER MOUNTING
3	1	207278	COVER - LIMIT
4	2	95493-003	SWITCH - HOLDER
5	2	95493-002	SWITCH-WATERPROOF
6	2	919865	FLAT WASHER 1/4
7	1	919702	HEX HD ESNA NUT 1/4-20
8	2	207277	SWITCH MOUNT
9	1	95493-005	BUSHING-SHORTY
10	1	207280	LEVER ASM - LIMIT SWITCH
11	1	207284	ANGLE - ROTATION STOP
12	1	917334	HHCS 1/4-20X2.25

WIRING DIAGRAM



HYDRAULIC SCHEMATIC



ONE - YEAR LIMITED WARRANTY

COVERED PRODUCTS:

- □ **STAHL** Crane One (1) year from the date of purchase by the original owner of record for s parts including the structural integrity of the crane boom assembly, turret assembly, and base plate weldment. Product(s) not made of galvaneal steel are warranted to the original owner of record for 180 days from the date of purchase.
- □ Should the warranted product rust through s will cover labor and materials to replace and/or repair defective materials and/or install new materials (solely at the discretion of s)
- ☐ The foregoing collectively constitutes the "Warranty".

ELIGIBILITY.

- ☐ This Warranty shall only apply to products listed herein and initially purchased after June 1, 1995
- Product(s) warranted must be properly maintained and serviced under the guidelines recommended in the owner's manual. The original owner must complete and submit the warranty registration card within thirty (30) days of purchase.
- This Warranty applies only when an authorized s up fitter properly installs the product, and it is used for the purpose for which it was designed.
- ☐ This Warranty is not transferable.

EXCLUSIONS

- This Warranty applies to s Cranes only and excludes all items supplied by distributors or mounting stations including, but not limited to finish paint, lettering, installation, wiring, optional parts, modifications and the like.
- □ Product(s) that have been misused, abused, altered, or intentionally damaged.

SPECIFIC "NO RUST, NO BUST" WARRANTY EXCLUSIONS

- Product(s) must have perforation in the metal. Rust in the paint or surface rust is not considered rust through.
- □ Product(s) purchased in prime paint condition.
- □ Product(s) purchased and used outside the United States and Canada.
- □ Product(s) used to carry corrosive materials.
- □ **STAHL** shall not be liable to the original owner/user or any third party for any direct or indirect, incidental or consequential damages including, but not limited to, transportation costs, lost profits, and loss of income, as a result of a vehicle being out of service.

WARRANTY CLAIMS PROCEDURE

- Claims may be handled by contacting your nearest authorized s distributor. All claims are to be filed in writing and will be administered through a **STAHL** distributor. All repairs must be authorized by s prior to any work being performed and must be done by an authorized s distributor or by a person or company pre-approved by s in writing.
- □ **STAHL** reserves the right to inspect products returned by the original owner under this Warranty to determine whether the product is covered. Inspection shall, at **STAHL**'s option, be performed at the factory, or at such other reasonable place as may be designated by s, and in such event freight for returning products shall be paid by the original owner. **STAHL** also reserves the right to require dated proof of purchase from the original owner. Unauthorized repair or replacement prior to inspection or repair or replacement not in accordance with s recommendations and procedures may void the Warranty.

DISCLAIMER OF IMPLIED WARRANTIES; LIMITATIONS OF REMEDIES:

THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, GIVEN BY S FOR THIS PRODUCT. IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY DISCLAIMED. THE PURCHASER'S REMEDIES FOR LOSS, DAMAGE, OR EXPENSE RESULTING FROM THE USE OR MISUSE OF THIS PRODUCT ARE LIMITED TO THOSE EXPRESSED IN THIS LIMITED WARRANTY.

THIS LIMITED WARRANTY GIVES PURCHASER SPECIFIC LEGAL RIGHTS, AND PURCHASER MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE. SOME STATES DO NOT ALLOW DISCLAIMERS OF OR LIMITATIONS ON IMPLIED WARRANTIES OR THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE DISCLAIMER AND LIMITATION MAY NOT APPLY TO PURCHASER

STAHL