

STAHL

4000 Series Owner's Manual

As of June 2, 2010

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

Revision 6/10

- 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 4000 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 4000 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.

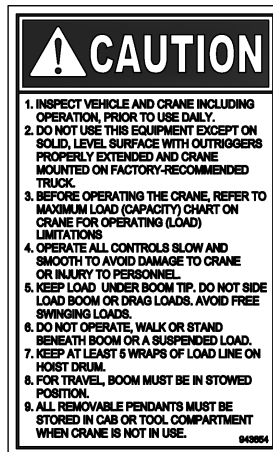
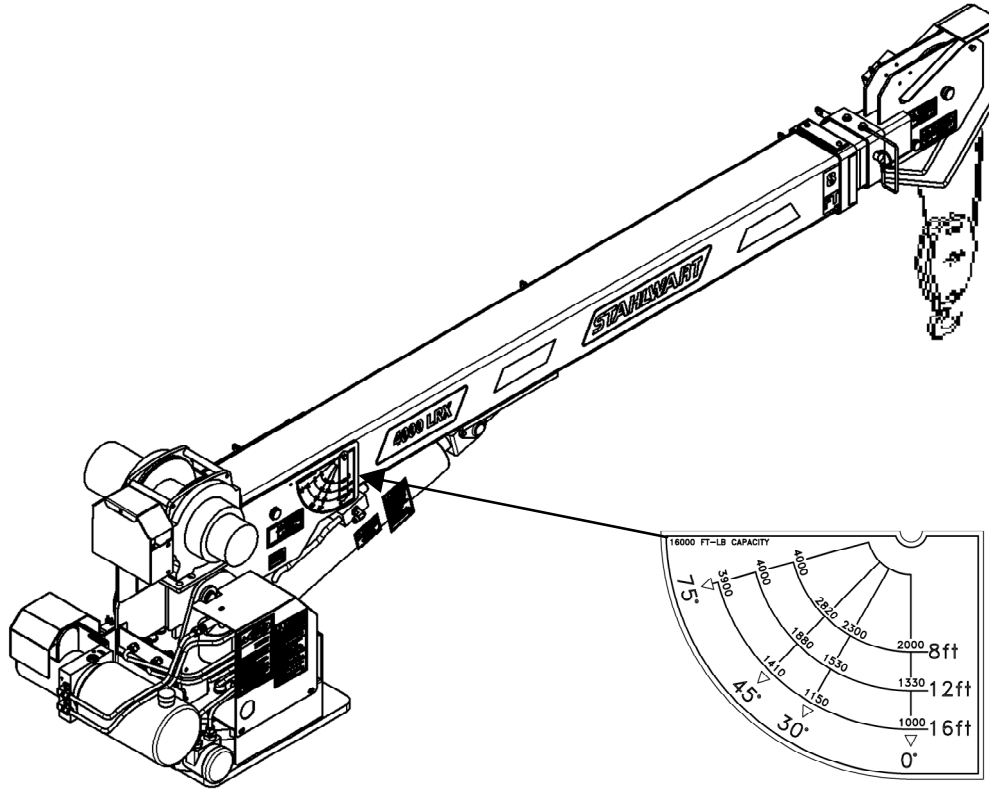
REPAIRS: Fix all problems before using your crane.

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

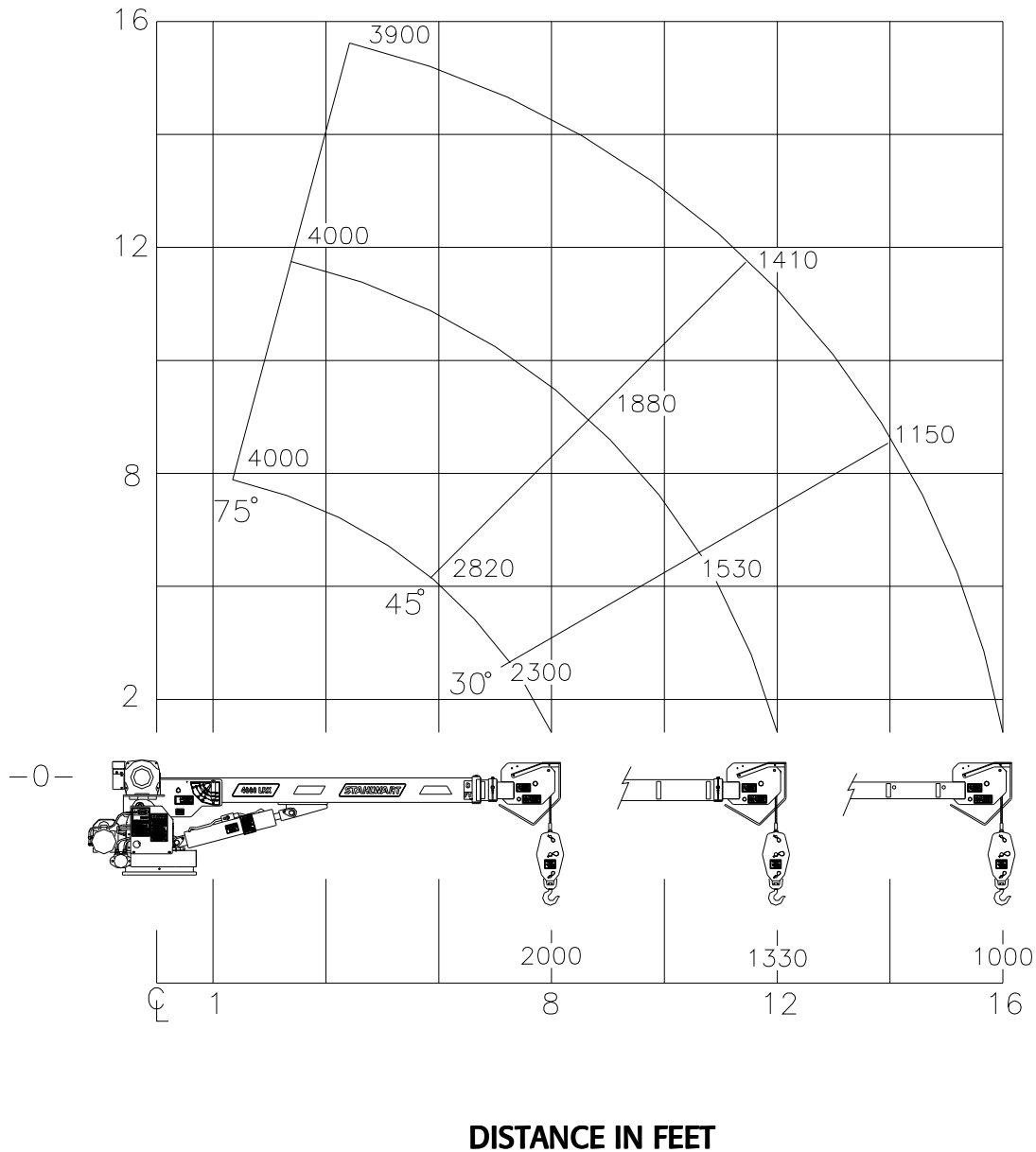
HYDRAULIC OIL SUPPLY: With the crane in a stored position, and all cylinders retracted, check oil level in the hydraulic reservoir.

DECAL PLACEMENT

Note locations of the DANGER, CAUTION, and LIFT CAPACITY decals on **STAHL** 4000 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
MEASURED IN POUNDS
CRANE RATING : 16,000 FT./LB.**

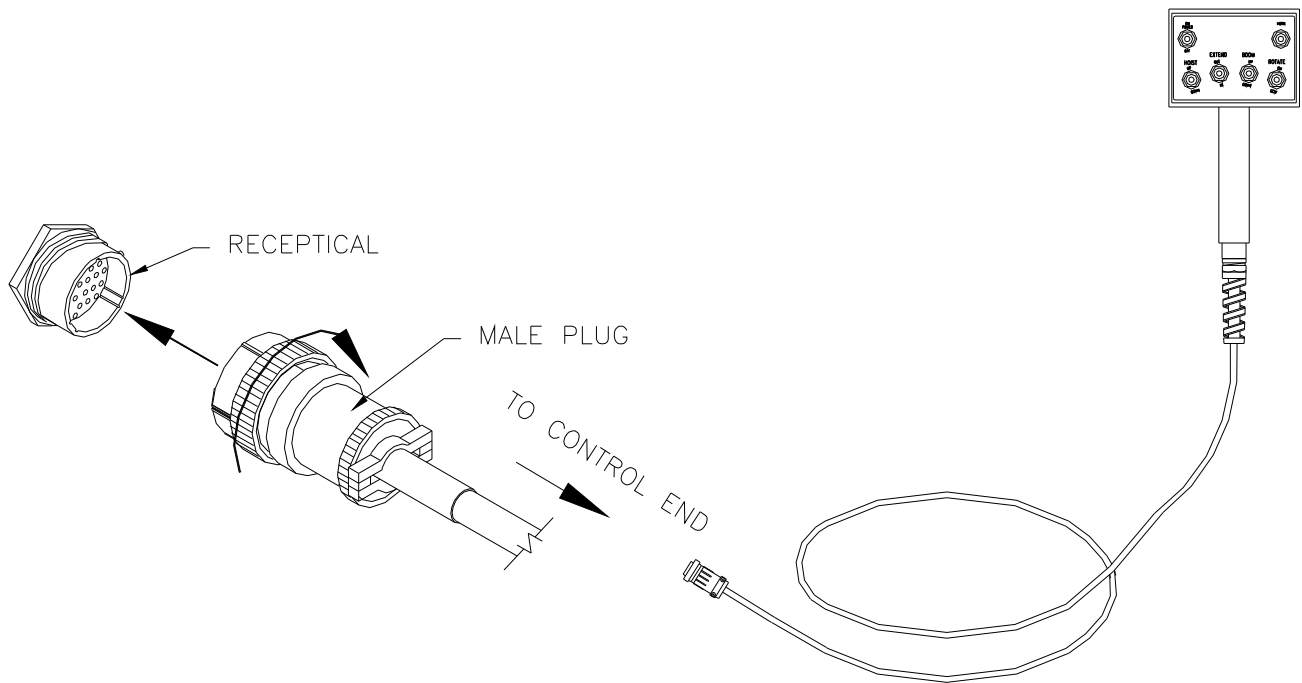


NOTE: Load capacities are based on 85% of tipping when all outriggers are extended and have firm contact with a solid surface. Vehicles must have proper axle load distribution and crane must be mounted in accordance with manufacturer's instructions.

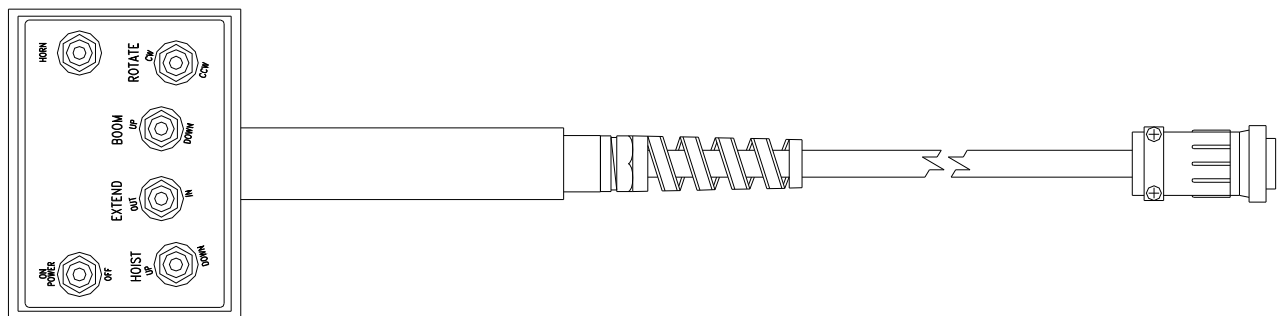
REMOTE CONTROL

The crane remote control plugs into a receptacle. The blue line on the male plug on the remote control 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 six 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".



ALIGN GROOVES AND FLATS WHEN CONNECTING PLUG



The 4000 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. A load chart is also included on page 6. 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 4000 pounds is lifted at an 12' boom length at 75°, lowering the boom would cause an overload situation.

The 4000 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 2,000 POUNDS

A "two-part" line must be used whenever the load is **2,000 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 2,000 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. Further, 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 4000 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 4000 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 located in the lifting cylinder. It can sense an overload situation. This causes a shutdown of the winch up, boom extension out, and boom elevation functions, and automatically resets after the crane has been moved out of the overload position.

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

RELIEF VALVES

The 4000 crane has a relief valve located on the hydraulic power unit. This is the main system relief. It is factory set at 2550 PSI. 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

Maintenance and 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	Grease Fitting	1 Month	Chevron Moly Grease #2
Winch Cable	Surface	6 Months	Light Oil
Pulley Block	Not Required	----	-----
The Worm and Gear Mesh	Directly on Gears	1 Month	Mobiltac "C", Shell Cardium EP Silver Streak 200, Mollube Alloy 936
Sheave Bushing	Not Required	----	-----
Cylinder Pin Bushing	Not Required	----	-----
Turret to Boom Bushing	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.

REMOTE CONTROL

The remote control is subject to corrosion and must be checked at least twice a year and more often if operated in severe, wet conditions. To check for corrosion:

1. Remove the cover plate and inspect for lack of luster. Metal should appear bright and untarnished.
2. Spray the inside of the box with an ignition sealer such as Krylon.
3. Check all connections to make sure they are tight.

FEATURES

- Crane Rating: 16,000 ft/lb capacity.
- Hydraulic extension boom provides reach up to 12' with manual boom adding an additional 4'.
- Electric winch for efficient operation.
- Self-lubricating Nylatron™ bearing allows smooth operation of inner and outer booms.
- Multifunction, removable remote control provides safe operation up to 25' away.
- Electrical solenoid-operated valves.

SPECIFICATIONS

- Extension: Electric to 12' - with manual extension to 16'.
- Lifting Height Above Base: 15'
- Weight: 905 lbs.
- Length: 115.00"
- Width: 20.00"
- Height: 28.00"
- Base Dimensions: 18.00" x 18.00" (11.75" x 14.75" bolt pattern)
- Rotation System: 360° continuous hydraulic - turntable bearing w/self locking worm drive.
- Remote Control: Lightweight remote control unit with 25' cable.
- Winch Cable: 100' of 1/4" aircraft cable, with latch hook traveling block and down haul weight.
- Rotation Speed: 1 RPM.
- Boom Elevation Speed: -5° to +75° - 15 seconds.
- Boom Extension Speed: 12' to 16' - 18 seconds.
- Winch Line Speed: 15' per minute - single line.
- Min. Chassis Req.: 10,500 GVWR.

OUTRIGGER REQUIREMENT

Truck must be equipped with Jackleg or heavy-duty outrigger.

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 - 4000 pounds.

STAHL 4000 cranes must be installed on a truck chassis with a GVWR of at least 10,500 pounds. The GVWR must exceed the curb weight of the complete vehicle by at least the rated load of the crane (4000lbs). The curb weight is the total weight of the chassis, body, crane, and other equipment. (See example below.)

GVWR = 10,500LBS

CURB WT. = BODY WT. (1200 LBS) + CRANE WT. (905 LBS) + CHASSIS WT. (3500 LBS) = 5605 LBS

GVWR (10,500 LBS) – CURB WT. (5605 LBS) = 4895 LBS > 4000 LBS

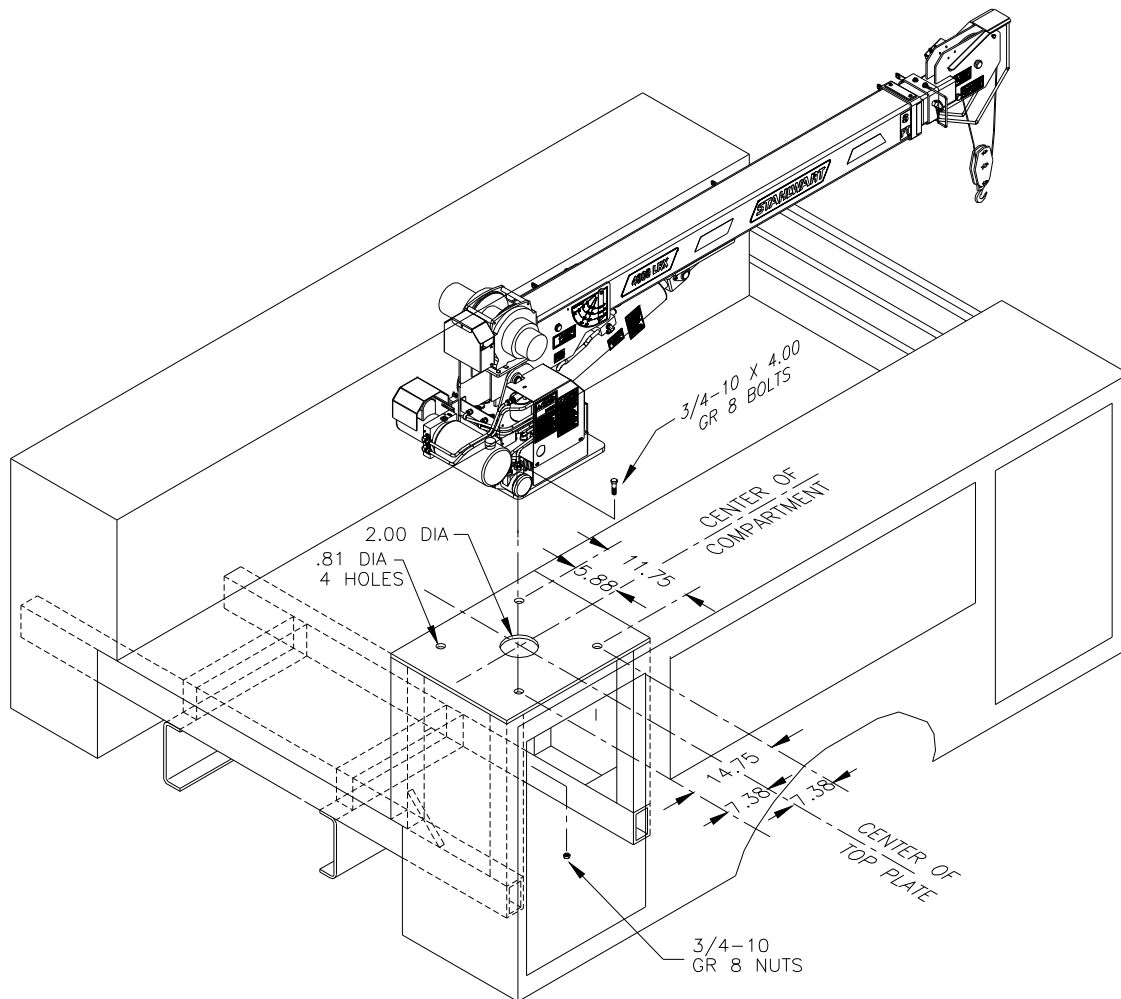
! CAUTION !

Never attach, change, or use unauthorized components on your **STAHL** crane. This could result in failure of the crane and/or 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** 4000 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 4000 crane. Consult the distributor for the proper body required for your application.

1. Layout the mounting holes on the mounting surface (refer to figure below). Drill four (4) 0.81" diameter holes and flame cut the two inch (2") diameter hole.
2. Lift the crane into position. Make sure the power lead is fed through the two inch (2") diameter hole.
3. Bolt the 4000 crane to the mounting surface with four (4) 0.75" grade eight bolts and four (4) grade eight lock nuts. Torque the 0.75" bolts to 350 foot pounds. Use of other than 0.75" grade eight bolts and lock nuts may result in the crane breaking loose from the mounting surface when in use. Additionally, star washers should be used between mounting bolts and crane mounting plate to ensure crane is grounded to body.
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.

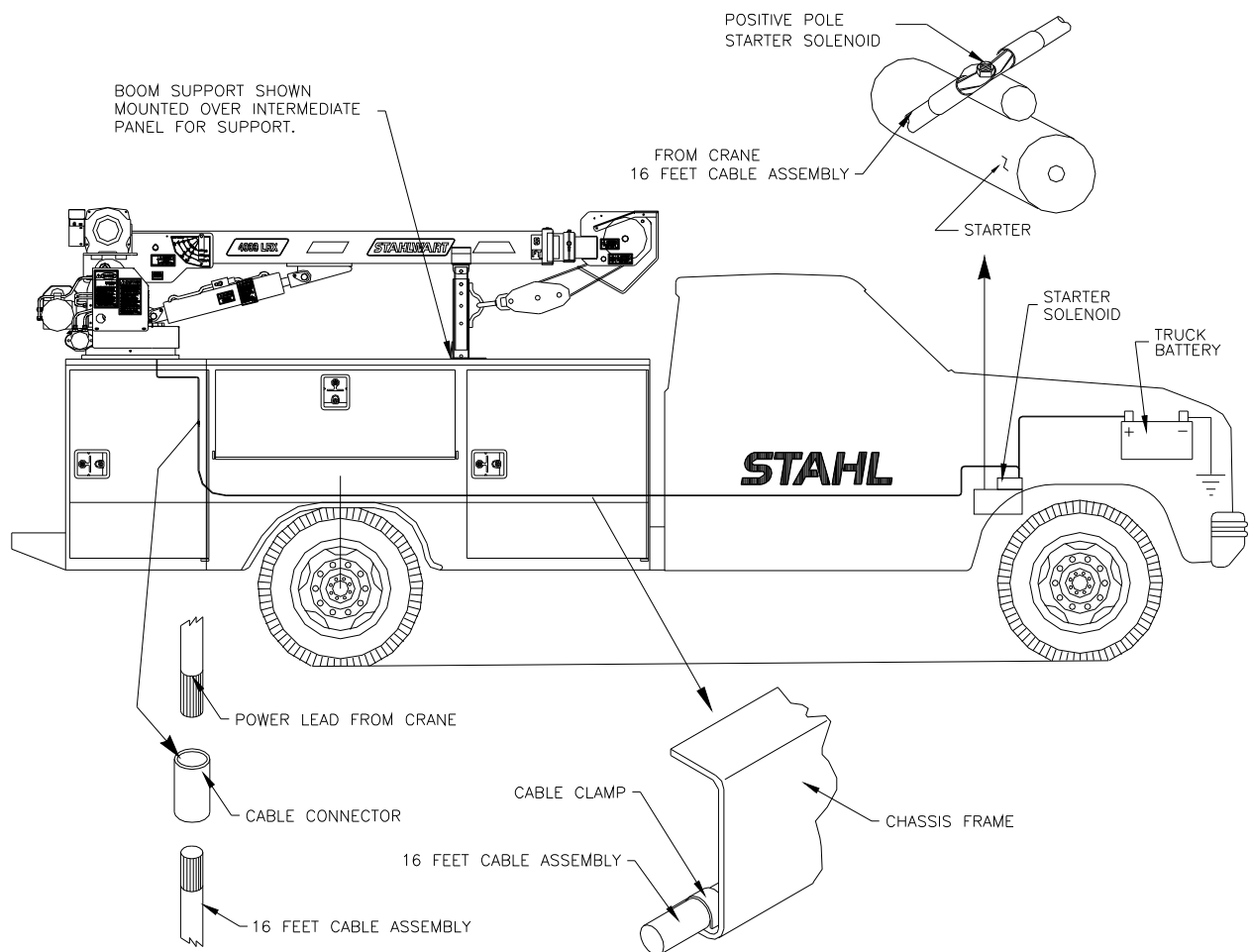


! CAUTION !**-DISCONNECT NEGATIVE BATTERY CABLE BEFORE PROCEEDING-**

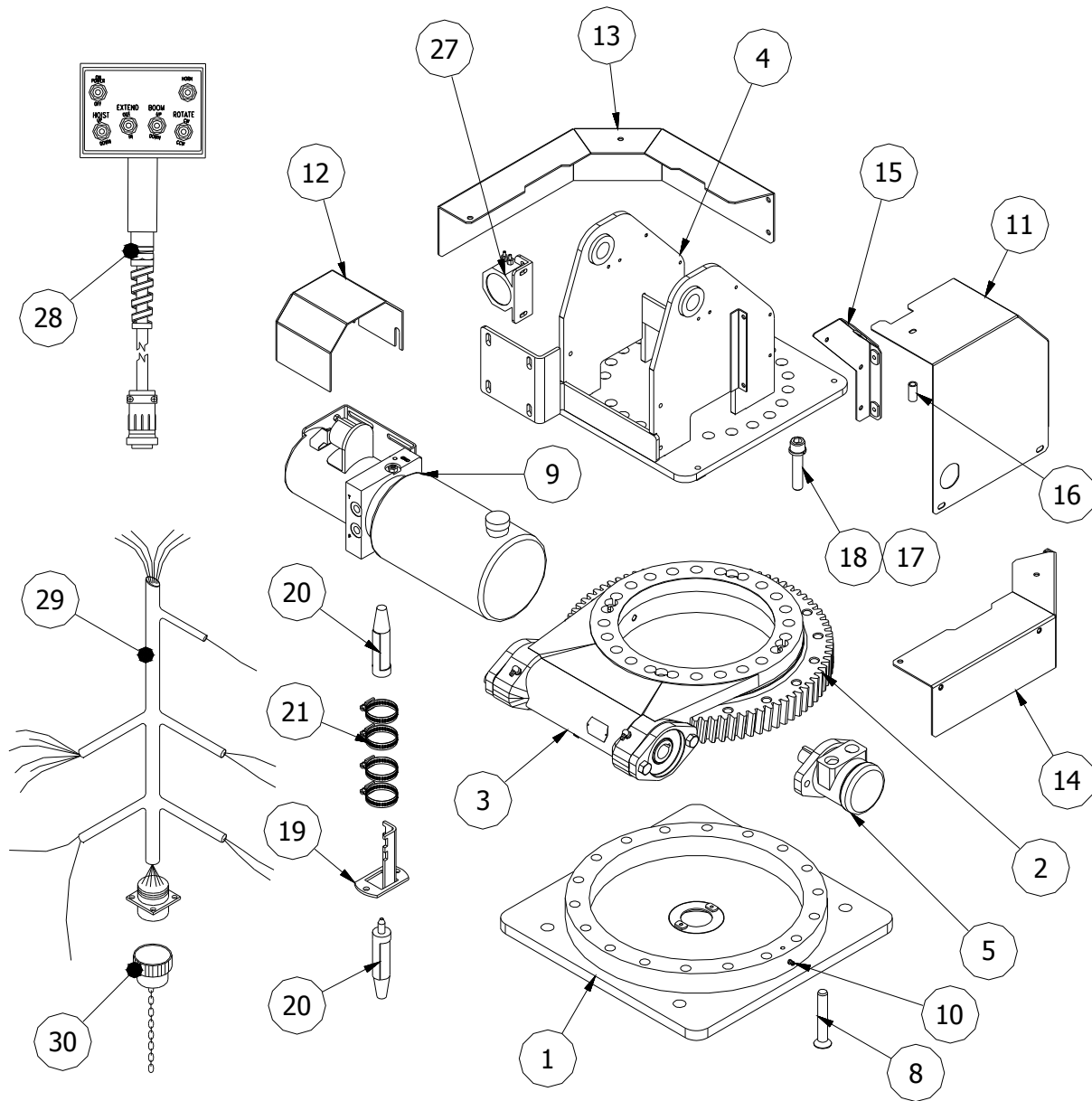
5. Run the power lead to the front of the truck. Locate the lead so that it will be protected. Install cable clamps to hold the wire securely in place.
6. Connect the power wire to the positive terminal on the vehicle battery. **A 250-amp in-line circuit breaker is required near the battery to protect harness from electrical shorts.**
7. Reconnect the negative battery cable. The 4000 crane is self-grounding and does not require an additional ground cable.

! 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.



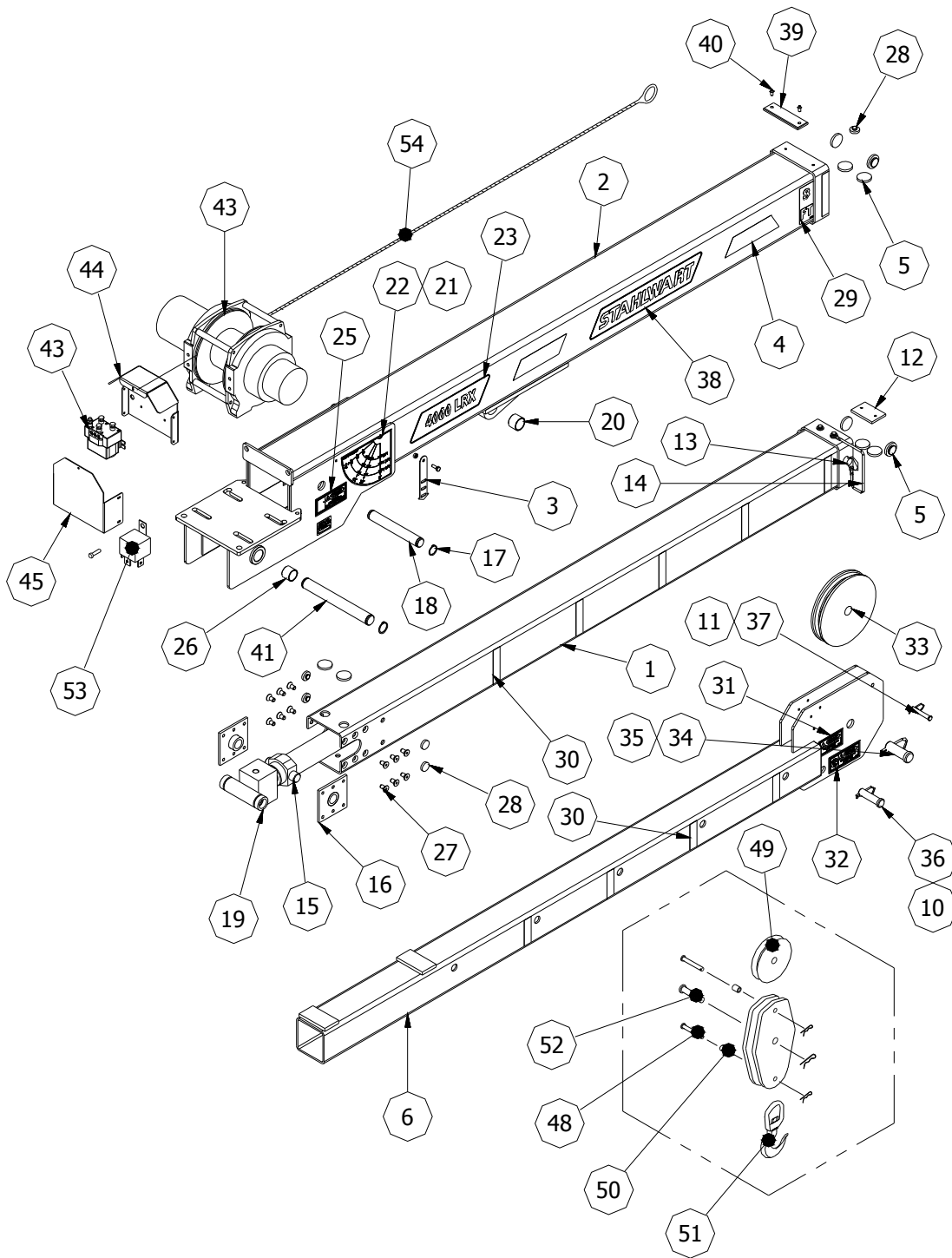
TURRET AND BASE SERVICE PARTS - ILLUSTRATION



TURRET AND BASE SERVICE PARTS - PART LIST

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	201044	MOUNTING BASE ASM - 4000#
2	1	95736-001	BEARING - ROTATION
3	1	95736-002	DRIVE - ROTATION
4	1	201041	TURRET - WELDMENT - 4000#
5	1	95420-001	MOTOR-HYD , ROTATION
6	1	201032	BUSHNG 1.25 ID X 1.42 OD X 1"
7	1	95899-037	PIN-TURRET,BOOM-1.125
8	18	201771	FHSCS 5/8-11 X 4.00
9	1	95419-001	POWER UNIT-HYD 12V - MONARCH
10	1	926535	GREASE FITTING 1/4-28
11	1	201448	GUARD - CRANE SIDE
12	1	201455	COVER - PUMP MOTOR
13	1	201442	COVER - ROTATION
14	1	201445	COVER - ROTATION - RH ASM
15	1	201450	BRACKET ASM - MOUNTING
16	1	201458	SPACER - COVER MOUNTING
17	22	919879	LOCK WASHER 5/8 LOCK RINGS
18	22	964047	SHCS 5/8-11 X 3.00
19	1	201791	POWER ROTATION WLMT, 4K CRANE
20	1	95453-001	TWECO-CONNECTOR
21	4	95457-001	CLAMP-HOSE
22	2	917954	5/16"X1/4-20X3/8 SHOULDER
23	3	960680	COPPER SOLDER LUG
24	6.00 ft	961758	CABLE 16 GA. RED
25	1	95489-001	CABLE SPLICER
26	1	201839	HARNESS - 4000# CRANE
27	1	123477	ALARM
28	1	201686	REMOTE CONTROL
29	1	201839	HARNESS - 4000# CRANE
30	1	95618-006	DUST CAP

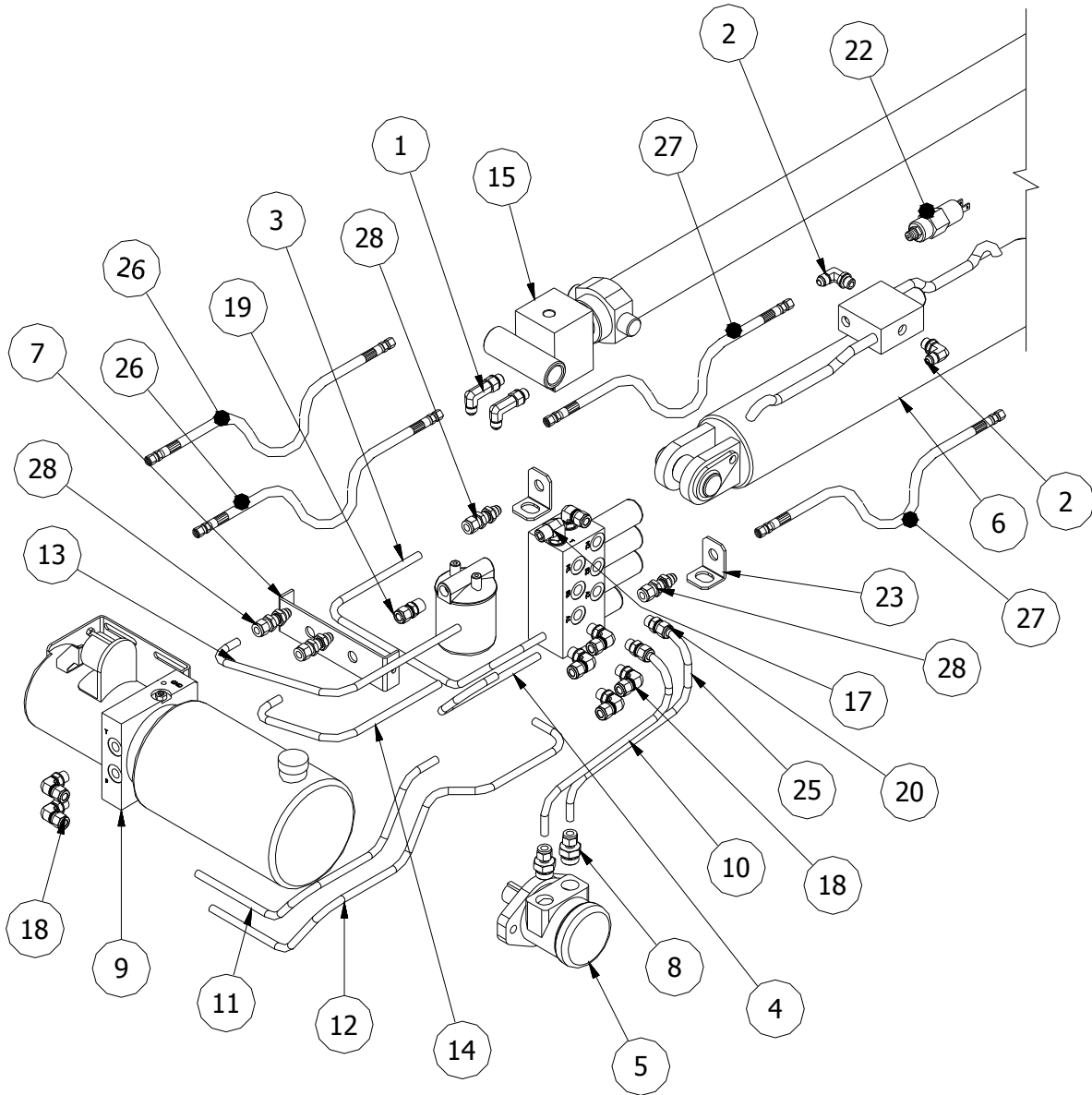
BOOM ASSEMBLY SERVICE PARTS – ILLUSTRATION



BOOM ASSEMBLY SERVICE PARTS - PARTS LIST

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	201020	HYDRAULIC BOOM ASM
2	1	201027	MAIN BOOM ASM
3	2	95480-001	ARROW
4	4	95475-001	DECAL-STRIPES
5	10	95079-001	PLUG-BOOM GUIDE
6	1	201017	MANUAL BOOM ASM
7	2	919865	FLAT WASHER 1/4
8	2	919864	1/4" LOCK WASHER
9	2	917328	HEX HD CAP SCREW #1/4-20 X 3/4
10	2	95424-002	PIN-COTTER-2.68
11	3	925063	HAIR PIN-WIRE DIA .094 X 2 5/16 LG
12	1	201028	PLATE- BOOM STOP
13	1	95208-001	PIN-LOCK .75 DIA. X 4.00 G.L.
14	1	95499-001	LANYARD-12"
15	1	200928	CYLINDER, EXT - 2.00 X 48.00
16	2	200982	CYLINDER MNTG WELDMENT
17	2	95456-001	SNAP-RING-1.00 SHAFT
18	1	201030	PIN - EXTENSION CYLINDER
19	2	201031	SPACER - EXTENSION CYLINDER
20	1	201032	BUSHNG 1.25 ID X 1.42 OD X 1"
21	1	201033-01	LOAD CHART- 4000#
22	1	201033-02	LOAD CHART- 4000#
23	2	201034	DECAL - 4000 LRX
24	2	917494	HEX HD CAP SCR 1/4-20 X 3/4
25	2	919003	HEX NUT 1/4-20
26	2	903125	BUSHING 1.125 ID X 1.28 OD X 1
27	12	917736	SCR-F.H.S.C.S. 3/8-16 X 3/4
28	7	95421-001	PLUG-BOOM GUIDE,SM
29	2	201760	DECAL - 8 FT
30	1	201757	DECAL KIT - GAUGE STRIPE
31	2	201181	DANGER DECAL-BOOM
32	2	201186	DANGER DECAL - LOAD
33	1	95861-002	SHEAVE-8.00 O.D.X1.38
34	1	95422-007	PIN-CLEVIS,
35	1	95424-003	PIN-COTTER
36	1	95422-002	PIN-CLEVIS, 0.75 DIA. X 2.75
37	1	201825	PIN-CLEVIS-.38 X 2.50
38	2	95907-537	DECAL-STAHLWART-CRANE BOOM
39	1	201753	PLATE - CABLE WEAR
40	2	964049	SCR-BHC-1/4-20X1/2 SS
41	1	95899-037	PIN-TURRET,BOOM-1.125
42	2	95168-017	SNAP-RING-1.125 SHAFT
43	1	201727	WINCH ASM - WARN DC2000 LF
44	1	201452	MOUNT - HOIST CONTACTOR
45	1	201451	COVER - HOIST CONTACTOR
46	2	201840	DECAL - LIFTING CAPACITY
47	1	201834	CABLE - 100' W/THMBL
48	2	95422-001	1/2" CLEVIS PIN
49	1	95411-001	PULLEY BLOCK SHEAVE
50	2	95428-001	SPACER
51	1	95413-001	HOOK WITH CATCH
52	2	95907-197	CLEVIS PIN WITH GREASE FITTING
53	1	963940	RELAY - 12 VOLT
54	1	201834	CABLE - W/THMBL 100 FT

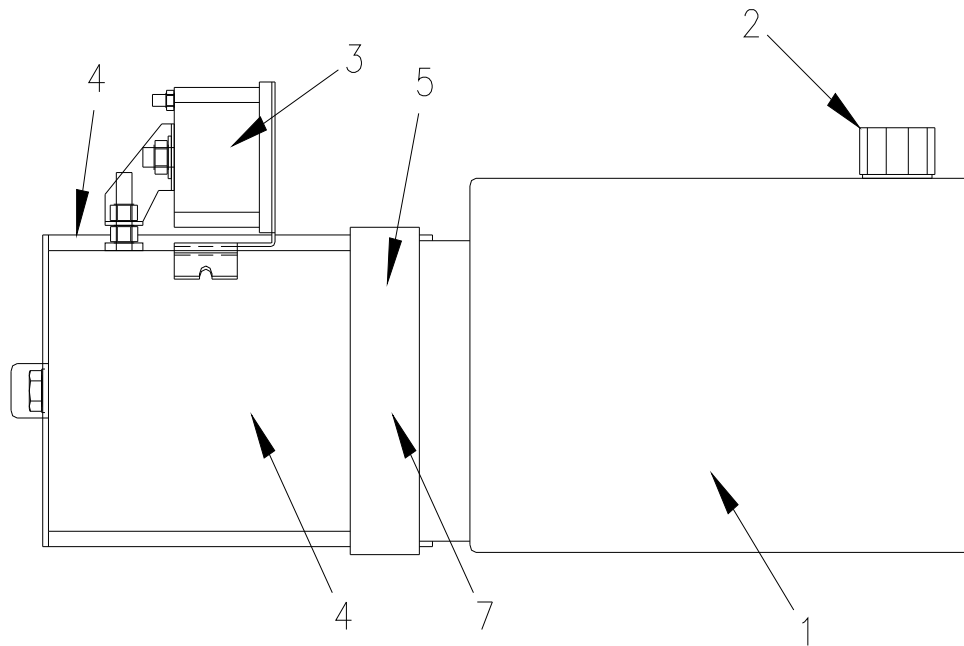
HYDRAULIC COMPONENT SERVICE PARTS - ILLUSTRATION



HYDRAULIC COMPONENT SERVICE PARTS - PARTS LIST

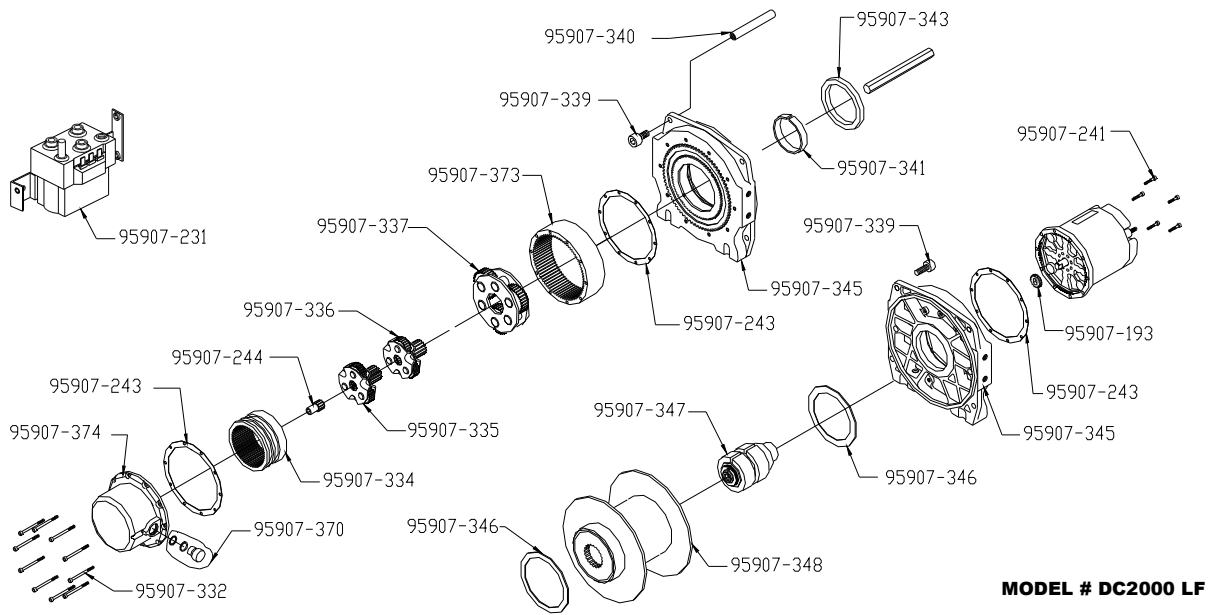
ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	2	938142	90°ELBOW-LONG #6 JIC MALE TO #
2	2	938138	90°ELBOW #6 JIC MALE TO #6 SAE
3	1	201480	TUBE - LIFT CYLINDER
4	1	201481	TUBE - LIFT CYLINDER
5	1	95420-001	MOTOR-HYD , ROTATION
6	1	200929	CYLINDER, LIFT 3.50 X 16.50
7	1	201488	BRACKET - TUBE MTG
8	2	95488-011	CONNECTOR - 10 MOR X -6 TUBE FLAIRLESS
9	1	95419-001	POWER UNIT-HYD 12V - MONARCH
10	1	201399	TUBE - ROTATION DRIVE
11	1	201469	TUBE - PUMP RETURN
12	1	201475	TUBE - PUMP PRESSURE
13	1	201477	TUBE - EXTENSION CYLINDER
14	1	201478	TUBE - EXTENSION CYLINDER
15	1	200928	CYLINDER, EXT - 2.00 X 48.00
16	1	938815	FILTER SPIN-ON ZINGA #BE-10-18
17	1	95488-009	ELBOW -6 MOR X -6 MNPT
18	7	95488-006	ELBOW -6 MOR X -6 TUBE SWAGelok
19	1	95488-004	CONNECTOR - 6 MNPT X -6 TUBE FLAIRLESS
20	2	95488-010	CONNECTOR - 6 MOR X -6 TUBE FLAIRLESS
21	1	201779	VALVE BLOCK - 3 FUNCTION W/DC
22	1	95723-001	PRESSURE SWITCH (2500 PSI)
23	2	201487	BRACKET - TUBE MTG
24	1	938814	FILTER HOUSING #50AT 10CN250
25	1	201398	TUBE - ROTATION DRIVE
26	2	203879	HOSE - EXTEND
27	2	203881	HOSE - LIFT
28	4	95488-005	BULKHEAD UNION-3/8 TUBE TO 3/8-JIC

HYDRAULIC POWER UNIT SERVICE PARTS - ILLUSTRATION PARTS LIST

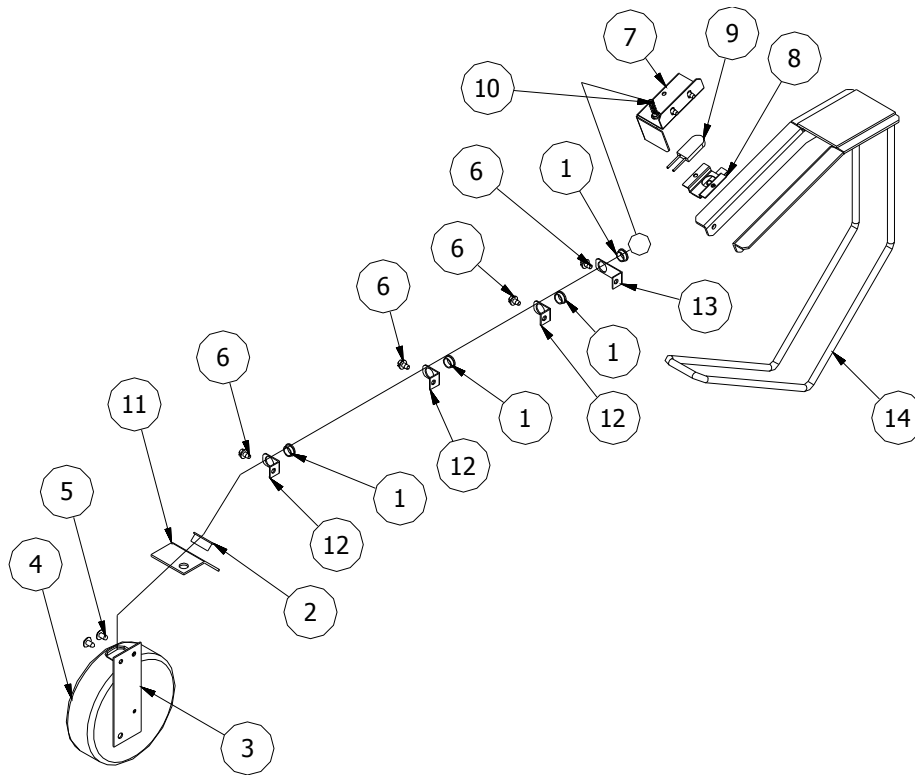


ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	95907-517	Reservoir -1 gallon
2	1	95907-519	Breather cap – reservoir
3	1	95907-518	Starter solenoid
4	1	95907-516	Motor 12 volt
5	1	95907-522	Valve manifold
6	1	95907-521	Mounting bracket
7	1	95907-520	Pump

WINCH SERVICE PARTS - ILLUSTRATION

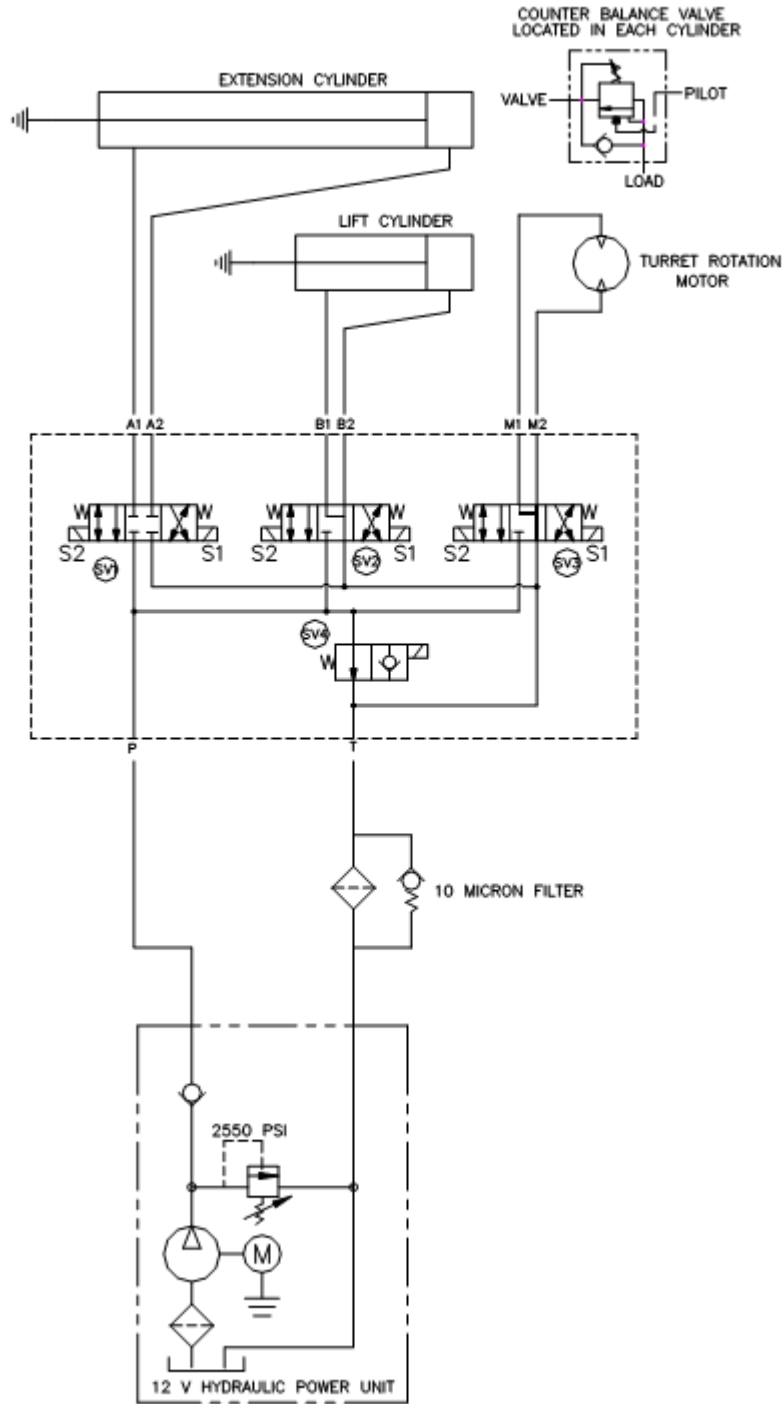


ANTI TWO-BLOCK PARTS

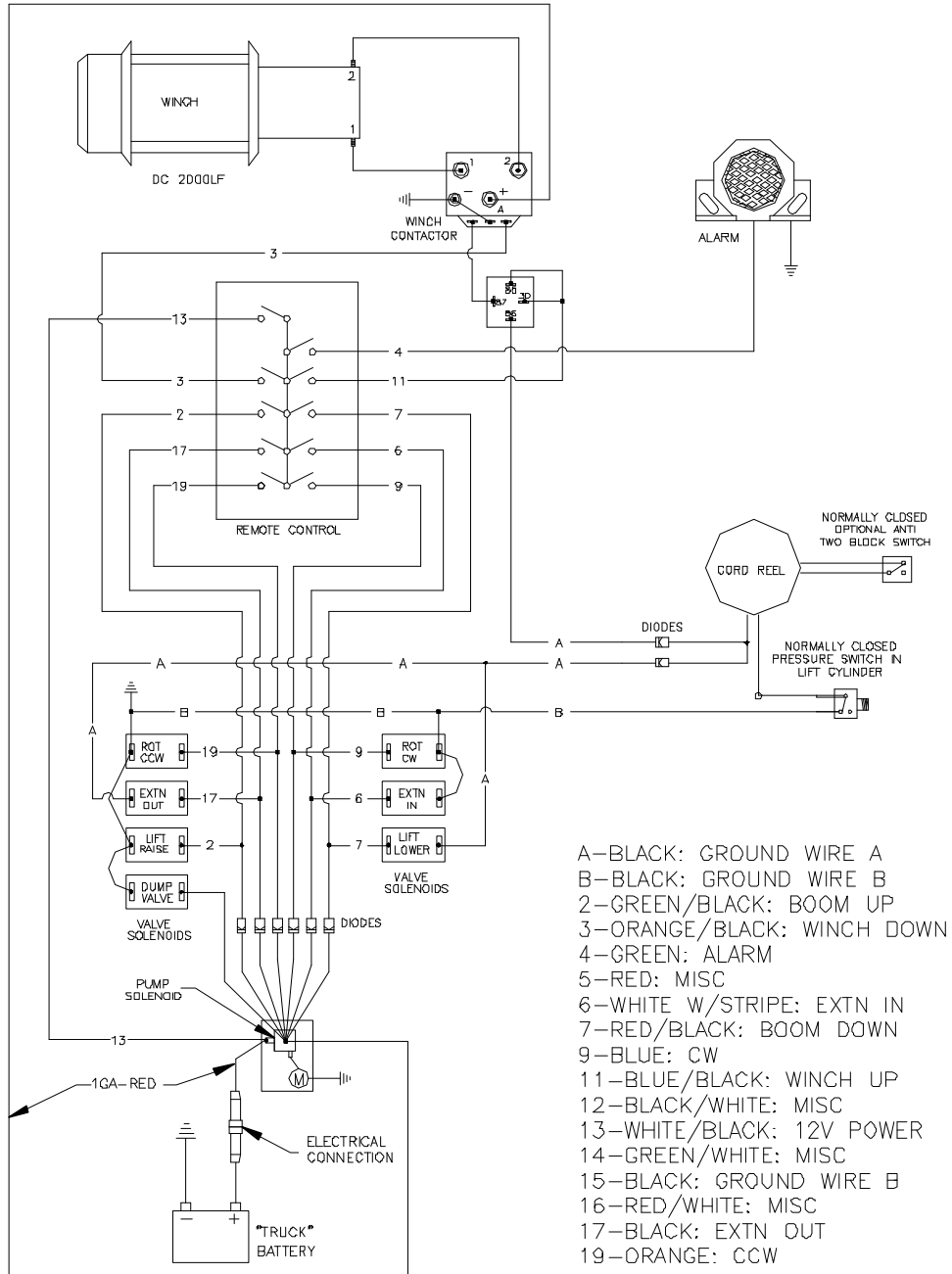


ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	4	95493-005	BUSHING-SHORTY
2	1	927204	HEYCO SNAP BUSHING 1.093/1.125 DIA
3	1	95493-013	BRACKET-CORD REEL
4	1	95467-001	CORD REEL
5	2	917806	TRUSS HD M.S. 1/4-20 X 1/2
6	6	962110	HEX WASHER HD-SELF TAPPING
7	1	201524	COVER - SWITCH MOUNTING
8	1	95493-003	SWITCH - HOLDER
9	1	95493-002	SWITCH-WATERPROOF
10	1	95493-004	STRAIN RELIEF
11	1	95493-012	BRACKET BUSHING-WINCH
12	3	95493-006	BRACKET BUSHING-MAIN
13	1	95493-011	BRACKET BUSHING-HYD
14	1	201522	GUIDE ASM - CABLE

HYDRAULIC SCHEMATIC



WIRING DIAGRAM



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