

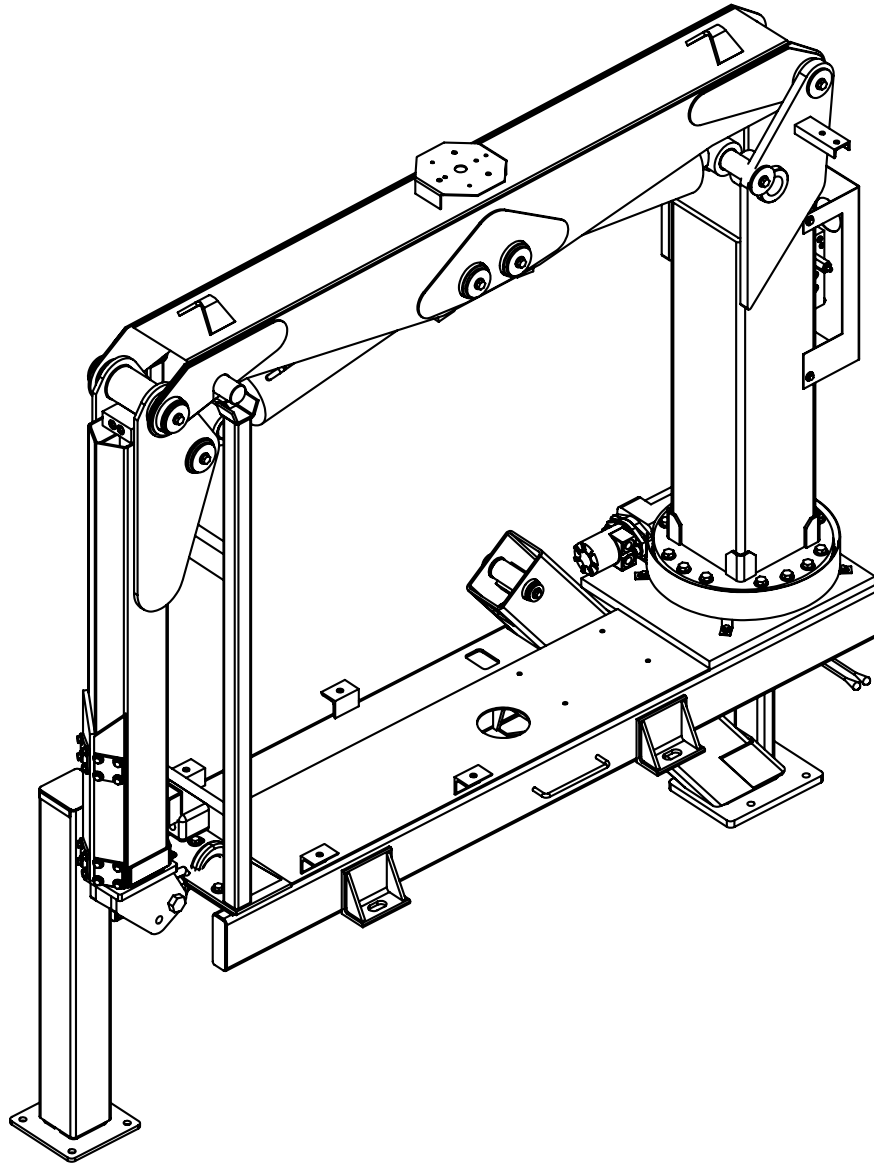


# MODEL 4500

## ARTICULATING CRANE

### OWNERS' MANUAL

Installation • Assembly Drawings • Parts



**Stellar Industries, Inc.**

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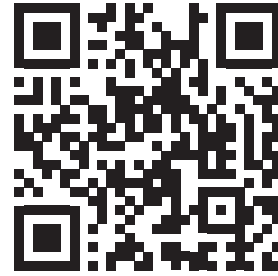
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Rev 1  
PN 37809

# P65 Warning / Serial Tag Location

## WARNING

Operating, maintaining, and servicing a Stellar product may expose you to chemicals including, but not limited to, engine exhaust, carbon monoxide, phthalates, and lead. These chemicals are known to the State of California to cause cancer and birth defects (or other reproductive harm). To keep your exposure to a minimum, be sure to avoid breathing exhaust and service your Stellar product in a well-ventilated area while wearing gloves or washing your hands frequently. For more information, go to [www.P65Warnings.ca.gov/passenger-vehicle](http://www.P65Warnings.ca.gov/passenger-vehicle).



[www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

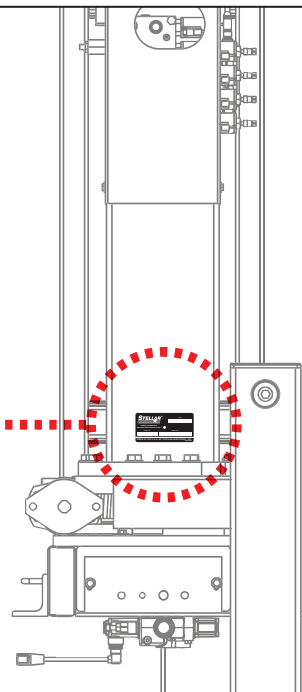
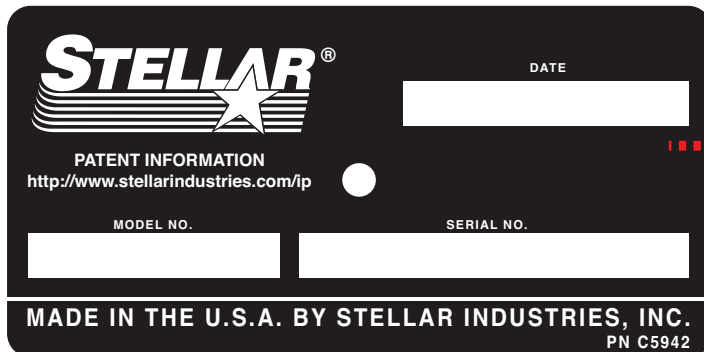
## NOTICE

### *Cold Weather Performance*

*Although clear data on cold weather performance from every steel manufacturer is not available for all types and thicknesses of steel, Stellar Industries is confident that the weldments on our products will operate to 100% of their intended purpose to temperatures down to -40° F / C.*

*It is recommended if Stellar manufactured equipment needs to be used in temperatures below -40° F / C, the operator should pull the unit into a climate-controlled area and allow the weldments to warm up to and then maintain a temperature above this level.*

## Serial Tag Location



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# Introduction

A copy of this manual is provided with every crane and can be found in the hard plastic manual case that is installed on the chassis. A copy of this manual shall remain with the crane at all times.

Throughout the manual, three signal words will be used to bring attention to important items:

## **NOTICE**

A *NOTICE* signal word indicates a practice not related to physical injury.

## **⚠ WARNING**

A *WARNING* signal word indicates a hazardous situation which, if not avoided, could result in death or serious injury.

## **⚠ DANGER**

A *DANGER* signal word indicates a hazardous situation which, if not avoided, will result in death or serious injury.

Information contained within this manual does not cover operation, maintenance, or troubleshooting. Please refer to the Small OTR Crane Manual for details on these items.

This manual is not binding. Stellar Industries, Inc. reserves the right to change, at any time, any or all of the items, components, and parts deemed necessary for product improvement or commercial/production purposes. This right is kept with no requirement or obligation for immediate mandatory updating of this manual.

If more information is required or technical assistance is needed, or if you feel that any part of this manual is unclear or incorrect, please contact the Stellar Customer Service Department by phone at 800-321-3741 or email at [service@stellarindustries.com](mailto:service@stellarindustries.com).

**For Technical Questions, Information, Parts, or Warranty, Call Toll-Free at  
800-321-3741**

Hours: Monday - Friday, 8:00 a.m. - 5:00 p.m. CST

Or email at the following addresses:

**Technical Questions, and Information**

[service@stellarindustries.com](mailto:service@stellarindustries.com)

**Order Parts**

[parts@stellarindustries.com](mailto:parts@stellarindustries.com)

**Warranty Information**

[warranty@stellarindustries.com](mailto:warranty@stellarindustries.com)

# Chapter 1 - Specifications

## Chapter Contents

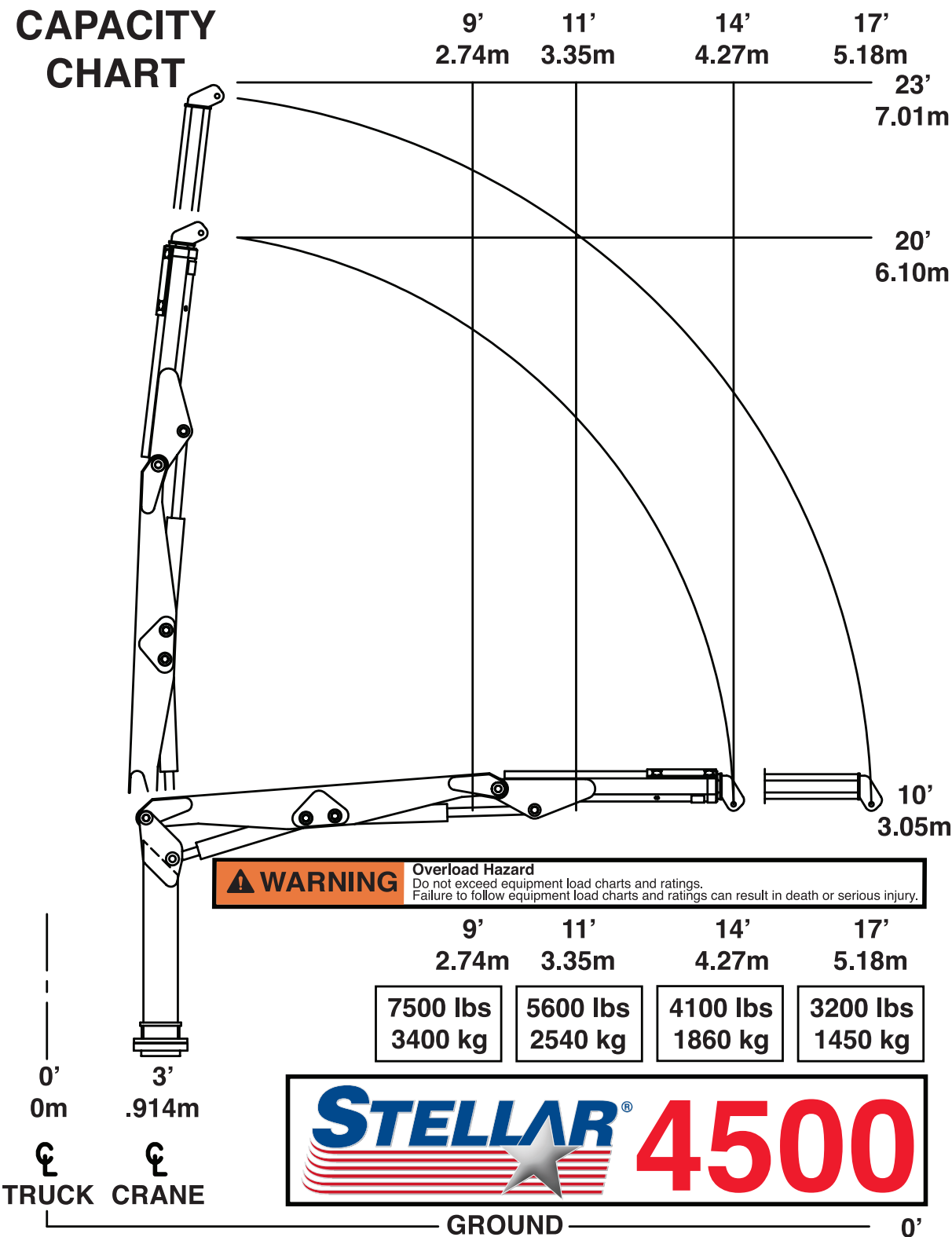
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# Specifications

<b>SPECIFICATIONS SHEET- MODEL 4500 CRANE</b>	
CRANE RATING:	45,000 FT-LBS (6.22 <i>tm</i> )
STANDARD BOOM LENGTH:	11' (3.35 <i>m</i> ) FROM CL OF CRANE
	14' (4.27 <i>m</i> ) FROM CL OF TRUCK
BOOM EXTENSION:	HYDRAULIC 32" (81.2 <i>cm</i> )
MAXIMUM HORIZONTAL REACH:	14' (4.27 <i>m</i> ) FROM CL OF CRANE
	17' (5.18 <i>m</i> ) FROM CL OF TRUCK
MAXIMUM VERTICAL LIFT:	20' (6.10 <i>m</i> ) FROM TRUCK FRAME
STOWED HEIGHT:	71" (180.3 <i>cm</i> )
MOUNTING SPACE REQUIRED:	26" (66.04 <i>cm</i> )
APPROXIMATE SHIPPING WEIGHT:	2,400 LBS (1,090 <i>kg</i> )
CONTROLS:	PROPORTIONAL RADIO CONTROLS STANDARD FOR ALL FUNCTIONS
<b>CYLINDER SPECIFICATIONS:</b>	
INNER LIFT CYLINDER:	5 1/2" (14.0 <i>cm</i> ) BORE WITH INTEGRAL PILOT OPERATED COUNTERBALANCE VALVES.
OUTER LEFT CYLINDER:	5 1/2" (14.0 <i>cm</i> ) BORE WITH INTEGRAL PILOT OPERATED COUNTERBALANCE VALVES.
EXTENSION CYLINDER:	3" (7.62 <i>cm</i> ) BORE WITH INTEGRAL PILOT OPERATED COUNTERBALANCE VALVES.
ROTATION:	290 DEGREE POWER (WORM GEAR)
LIFTING CAPACITIES:	7,500 LBS @ 9' (3,400 <i>kg</i> @ 2.74 <i>m</i> )
	3,200 LBS @ 17' (1,450 <i>kg</i> @ 5.18 <i>m</i> )
POWER SUPPLY REQUIRED:	PTO & PUMP
	(5.0 <i>gpm</i> @ 2,800 PSI)
	(18.9 <i>lpm</i> @ 193 Bar)

# Capacity Chart - Decal PN 20038

## CAPACITY CHART



**⚠ WARNING** Overload Hazard  
Do not exceed equipment load charts and ratings.  
Failure to follow equipment load charts and ratings can result in death or serious injury.

0' 0m  
3' .914m  
TRUCK CRANE

**STELLAR® 4500**

190 STATE STREET GARNER, IA 50438  
PHONE: (800) 321-3741 FAX: (641) 923-2812 20038 - Rev B

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# Chapter 2 - Installation

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# General Installation

This chapter is designed to serve as a general guide for the installation of a Stellar 4500 Crane on a Stellar Service Body. Each installation is considered unique so certain portions of this chapter may or may not apply to your direct application. If a question should arise during the installation process, please contact Stellar Customer Service at (800) 321 3741.

This crane is designed for use with a Stellar Service Body installed on a vehicle that meets the minimum chassis requirements of the crane. It is the installer's responsibility to assure that the crane is mounted on a platform that will support the maximum crane rating of this crane.

**⚠ WARNING** Do not install this crane on a body not capable of handling the loads imposed on it. Failure to do so may result in serious injury or death.

**NOTICE** When installing welder units to the service bodies, it is highly recommended that a surge protector is installed on the chassis batteries to protect the crane radio receiver, wiring and other electronic devices from an unexpected electrical spike or surge. Failure to do so could result in extensive damage to the service body and crane electrical circuit.

## Installer Notice

According to Federal Law (49 cfr part 571), each final-stage manufacturer shall complete the vehicle in such a manner that it conforms to the standards in effect on the date of manufacture of the incomplete vehicle, the date of final completion, or a date between those two dates. This requirement shall, however, be superseded by any conflicting provisions of a standard that applies by its terms to vehicles manufactured in two or more stages.

Therefore, the installer of Stellar<sup>®</sup> Cranes and Bodies is considered one of the manufacturers of the vehicle. As such a manufacturer, the installer is responsible for compliance with all applicable federal and state regulations. They are required to certify that the vehicle is in compliance with the Federal Motor Vehicle Safety Standards and other regulations issued under the National Traffic and Motor Vehicle Safety Act.

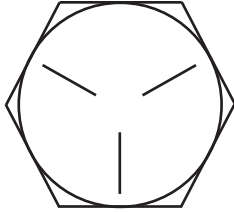
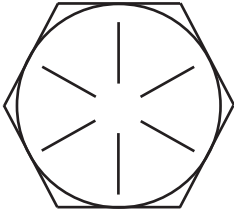
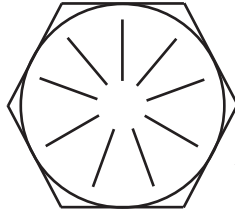
Please reference the Code of Federal Regulations, title 49 - Transportation, Volume 5 (400-999), for further information, or visit <http://www.gpoaccess.gov/nara/index.html> for the full text of Code of Federal Regulations.

## Installation Overview

1. Locate mounting brackets and clamp to chassis. Consider the clearance between the cab/body and crane.
2. Set crane on chassis and check for interferences.
3. Using mounting bracket as a guide, mark holes to be drilled into truck frame.
4. Remove mounting brackets and drill holes.
5. Mount brackets using specified size Grade 8 bolts, flast washers, and nyloc nuts.
6. Lower crane onto mounting brackets.
7. Mount crane using specified size Grade 8 bolts, flat washers, and nyloc nuts.
8. Connect pressure and return lines per hydraulic kit.
9. Connect (+12V) Power and ground wires inside crane box.
10. Check reservoir for oil and fill if necessary.
11. Operate crane several cycles.

**SEE APPROPRIATE MOUNTING KIT DRAWINGS.**

## Torque Data Chart

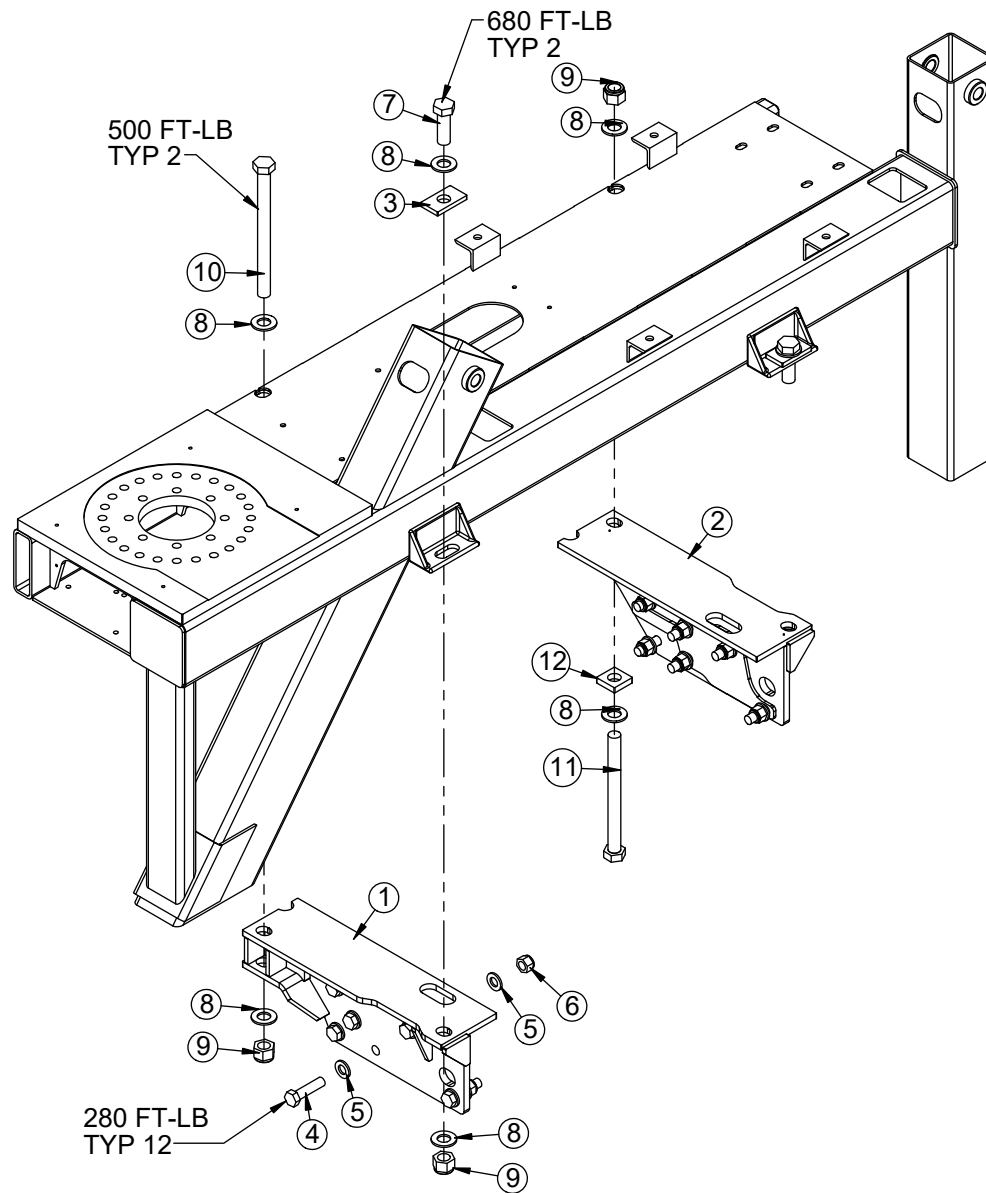
		GRADE 5		GRADE 8		GRADE 9
						
SIZE (DIA-TPI)	BOLT DIA (INCHES)	PLAIN (FT-LB)	PLATED (FT-LB)	PLAIN (FT-LB)	PLATED (FT-LB)	PLATED (FT-LB)
5/16-18	0.3125	17	13	25	18	22
3/8-16	0.3750	31	23	44	33	39
7/16-14	0.4375	49	37	70	52	63
1/2-13	0.5000	75	57	105	80	96
9/16-12	0.5625	110	82	155	115	139
5/8-11	0.6250	150	115	220	160	192
3/4-10	0.7500	265	200	375	280	340
7/8-9	0.8750	395	295	605	455	549
1-8	1.000	590	445	910	680	823
1 1/8-7	1.1250	795	595	1290	965	1167
1 1/4-7	1.2500	1120	840	1815	1360	1646
1 3/8-6	1.3750	1470	1100	2380	1780	2158
1 1/2-6	1.500	1950	1460	3160	2370	2865

**NOTE:**

When using the torque data in the chart, the following rules should be observed:

- Bolt manufacturer's particular specifications should be consulted when provided.
- Flat washers of equal strength must be used.
- All torque measurements are given in foot-pounds. To convert to inch-pounds, multiply by 12.
- Torque values specified are for bolts with residual oils or no special lubricants applied.
- Torque values for socket-head capscrews are the same as for grade 8 capscrews.
- Do not use these values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.
- Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade.
- Fasteners should be replaced with the same or higher grade. If higher grade fasteners are used, these should only be tightened to the strength of the original.
- Tighten plastic insert or crimped steel-type lock nuts to approximately 110 percent of the dry torque values shown in the chart below, applied to the nut, not to the bolt head. Tighten toothed or serrated-type lock nuts to the full torque value. *Note: "Lubricated" means coated with a lubricant such as engine oil, or fasteners with phosphate and oil coatings. "Dry" means plain or zinc plated without lubrication. Tighten lubricated bolts to approximately 80% of dry bolts.*

# Mounting Kit - F550 2017- Present - PN 87478



# Mounting Kit - F550 2017-Present - PN 87478 Parts List

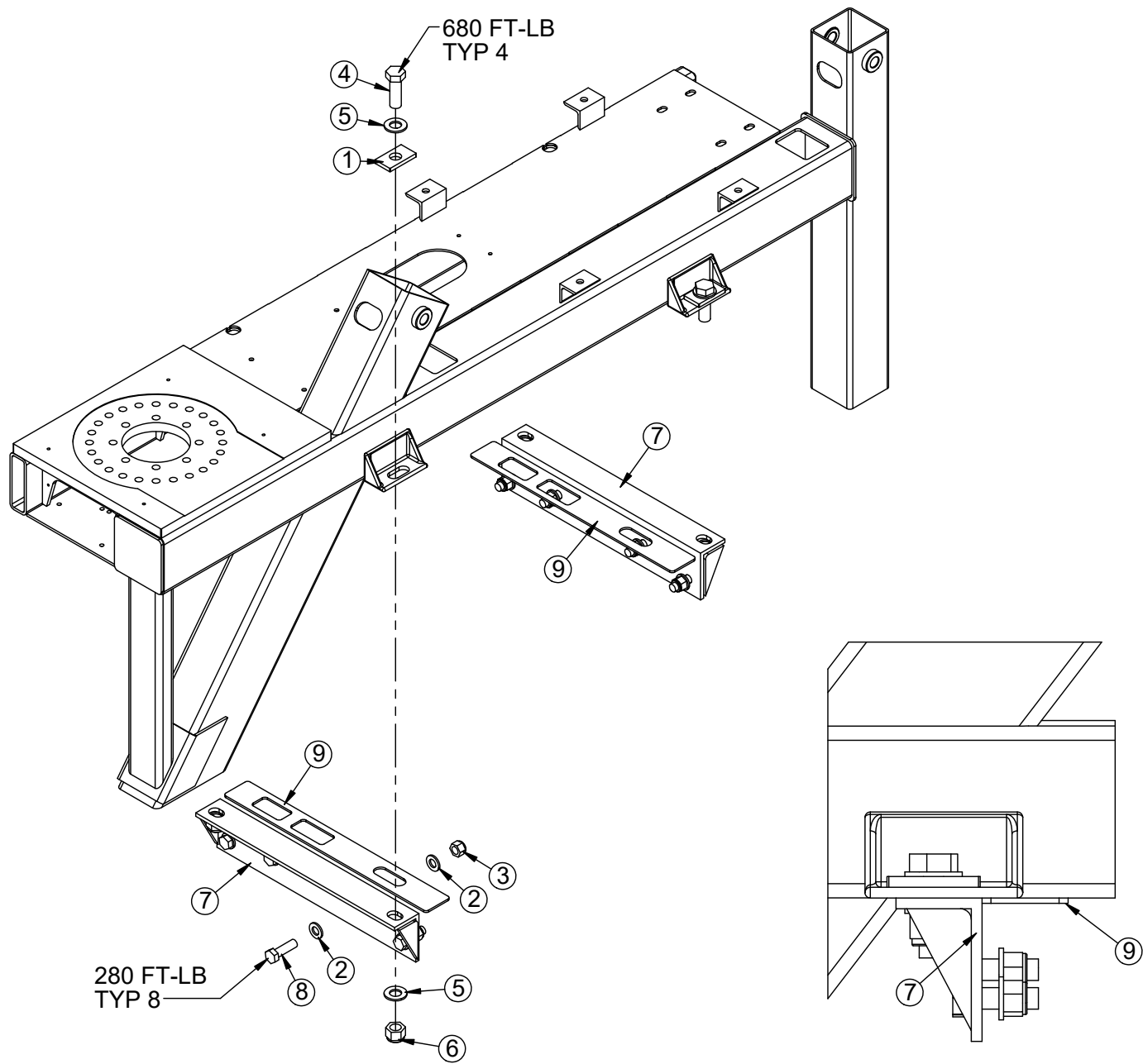
## PN 87478

ITEM	PART	DESCRIPTION	QTY
1	86938	TIE DOWN 4500 F550 SS	1
2	87471	TIE DOWN 4500 F550 CS	1
3	56180	TIE DOWN PLATE 4500 PC BLACK	2
4	C1028	CAP SCR 0.75-10X3.00 HHGR8	12
5	C6219	WASHER 0.75 SAE FLAT YELLOW GR8	24
6	C0538	NUT 0.75-10 HHGR8 NYLOC	12
7	5199	CAP SCR 1.00-8X3.00 HHGR8	2
8	6538	WASHER 1.00 SAE FLAT YELLOW GR8	8
9	6294	NUT 1.00-8 HHGR8 NYLOC	4
10	85505	CAP SCR 1.00-8X12.00 HHGR8	1
11	87569	CAP SCR 1.00-8X11.00 HHGR8	1
12	87570	PLATE SPACER 0.50X2.00X2.00 PC BLACK	1

REV. B

**NOTE:**  
**CRANE BASE SHOWN FOR REFERENCE.**

# Mounting Kit w/Module - F550 2017 - Present - PN 31040

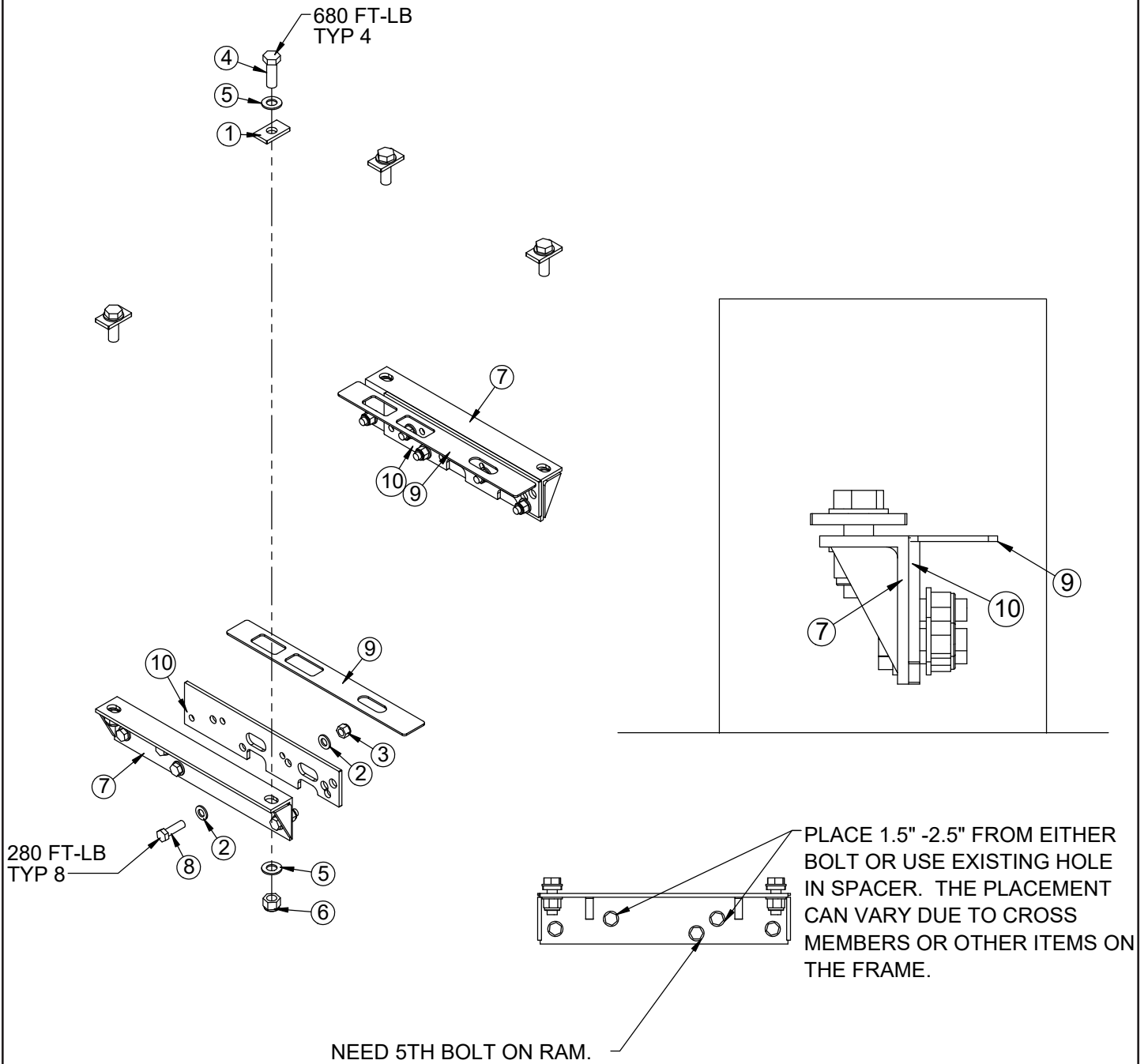


# Mntg Kit w/Module- F550 2017 - Present PN 31040 Parts

PN 31040			
ITEM	PART	DESCRIPTION	QTY
1	56180	TIE DOWN PLATE 4500 PC BLACK	4
2	C6219	WASHER 0.75 SAE FLAT YELLOW GR8	16
3	C0538	NUT 0.75-10 HHGR8 NYLOC	8
4	5199	CAP SCR 1.00-8X3.00 HHGR8	4
5	6538	WASHER 1.00 SAE FLAT YELLOW GR8	8
6	6294	NUT 1.00-8 HHGR8 NYLOC	4
7	31038	TIE DOWN 4500 STRAIGHT FRAME PC BLACK	2
8	58681	CAP SCR 0.75-10X2.50 HHGR8	8
9	58192	SPACER INST KIT 3200/4500	2

**NOTE:**  
**CRANE BASE SHOWN FOR REFERENCE.**  
**CRANE SITS BETWEEN MODULE AND BODY.**

# Mounting Kit - Ram - PN 87375



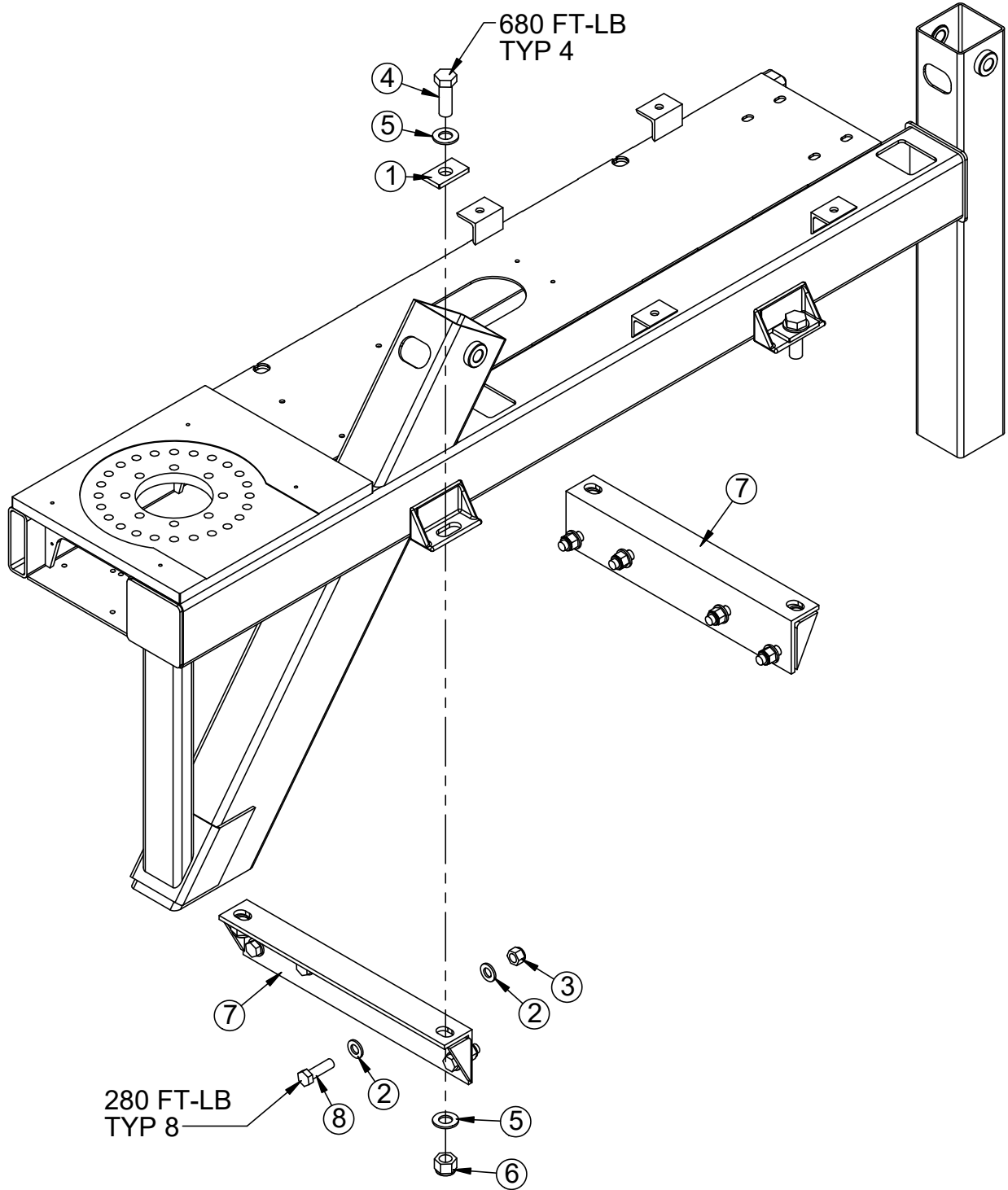


# Mounting Kit - Ram - PN 87375 Parts List

PN 87375			
ITEM	PART	DESCRIPTION	QTY
1	56180	TIE DOWN PLATE 4500 PC BLACK	4
2	C6219	WASHER 0.75 SAE FLAT YELLOW GR8	20
3	C0538	NUT 0.75-10 HHGR8 NYLOC	10
4	5199	CAP SCR 1.00-8X3.00 HHGR8	4
5	6538	WASHER 1.00 SAE FLAT YELLOW GR8	8
6	6294	NUT 1.00-8 HHGR8 NYLOC	4
7	31038	TIE DOWN 4500 STRAIGHT FRAME PC BLACK	2
8	58681	CAP SCR 0.75-10X2.50 HHGR8	10
9	58192	SPACER INST KIT 3200/4500	2
10	48670	SPACER CRANE MNT W/32 DODGE 08 MY PC BLACK	2
REV. A			

**NOTE:**  
**CRANE BASE SHOWN FOR REFERENCE.**

# Mounting Kit - Straight Frame - PN 87377



# Mounting Kit - Straight Frame - PN 87377 Parts List

PN 87377			
ITEM	PART	DESCRIPTION	QTY
1	56180	TIE DOWN PLATE 4500 PC BLACK	4
2	C6219	WASHER 0.75 SAE FLAT YELLOW GR8	16
3	C0538	NUT 0.75-10 HHGR8 NYLOC	8
4	5199	CAP SCR 1.00-8X3.00 HHGR8	4
5	6538	WASHER 1.00 SAE FLAT YELLOW GR8	8
6	6294	NUT 1.00-8 HHGR8 NYLOC	4
7	31038	TIE DOWN 4500 STRAIGHT FRAME PC BLACK	2
8	58681	CAP SCR 0.75-10X2.50 HHGR8	8
INITIAL RELEASE			

**NOTE:**  
**CRANE BASE SHOWN FOR REFERENCE.**

# Hydraulic Installation

Never modify or alter any of the equipment, whether mechanical, electrical, or hydraulic, without Stellar Industries' approval.

**⚠ WARNING** Do not touch or grab any hoses that could be under pressure. Release system pressure before attempting to make adjustments or repairs.

Do not attempt service or repair when PTO is engaged.

Disassemble and assemble hydraulic components on a clean surface.

Clean all metal parts in a nonflammable cleaning fluid. Then lubricate all components to aid in assembly.

**⚠ WARNING** Hydraulic fluid expands when heated. This raises the pressure in an unventilated tank. Release the tank pressure before removing the cap completely. Failure to do so may cause the oil to shoot out of the tank very rapidly and cause severe burns.

**⚠ WARNING** Do not rely on the hydraulic fluid to support the boom or crane. If hydraulic fluid escapes, the boom or crane can fall immediately. Make sure the ground or blocking is supporting the boom before performing any maintenance or repair.




**NOTICE** Contaminants in a hydraulic system affect operation and will result in serious damage to the system components. Dirty hydraulic systems are a major cause of component failures.

If evidence of foreign particles is found in the hydraulic system, flush the system.

When installing metal hydraulic tubes, tighten all fittings finger tight. Then, in order, tighten the fittings at the rigid end, the adjustable end, and the mounting brackets. After tubes are mounted, install the hoses. Connect both ends of the hose with all fittings finger tight. Position the hose so it does not rub the machine or another hose and has a minimum of bending and twisting. Tighten fittings in both couplings.

Due to manufacturing methods, there is a natural curvature to a hydraulic hose. The hose should be installed so any bend is with this curvature.

**⚠ WARNING**

**HYDRAULIC FLUID HAZARDS**

- High pressure fluid leak will pierce skin.
- Release pressure before working on system.

**STAND CLEAR OF POTENTIAL HIGH PRESSURE HYDRAULIC FLUID LEAKS**

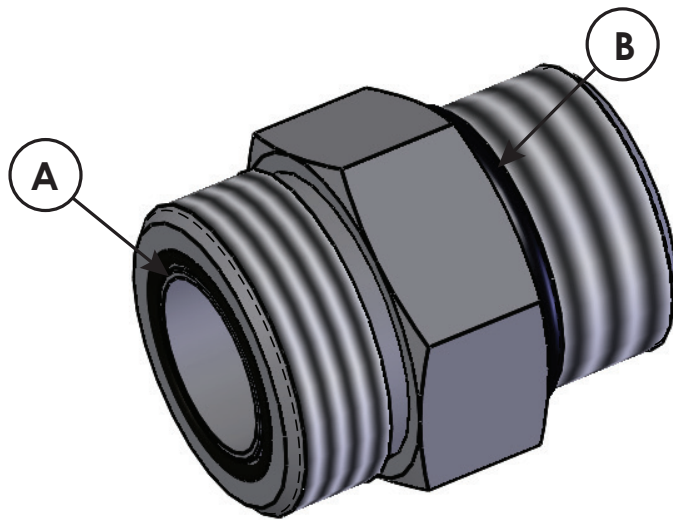
- Wear sturdy gloves and goggles. Detect leaks with wood or cardboard. NEVER use fingers.
- Fluid injected in skin will injure or kill and must be surgically removed by trained doctor immediately or gangrene will result.

**BURN HAZARD**

- Oil temperatures may exceed 120°F (35°C).
- Do not touch hydraulic system.
- Hot surface can burn.

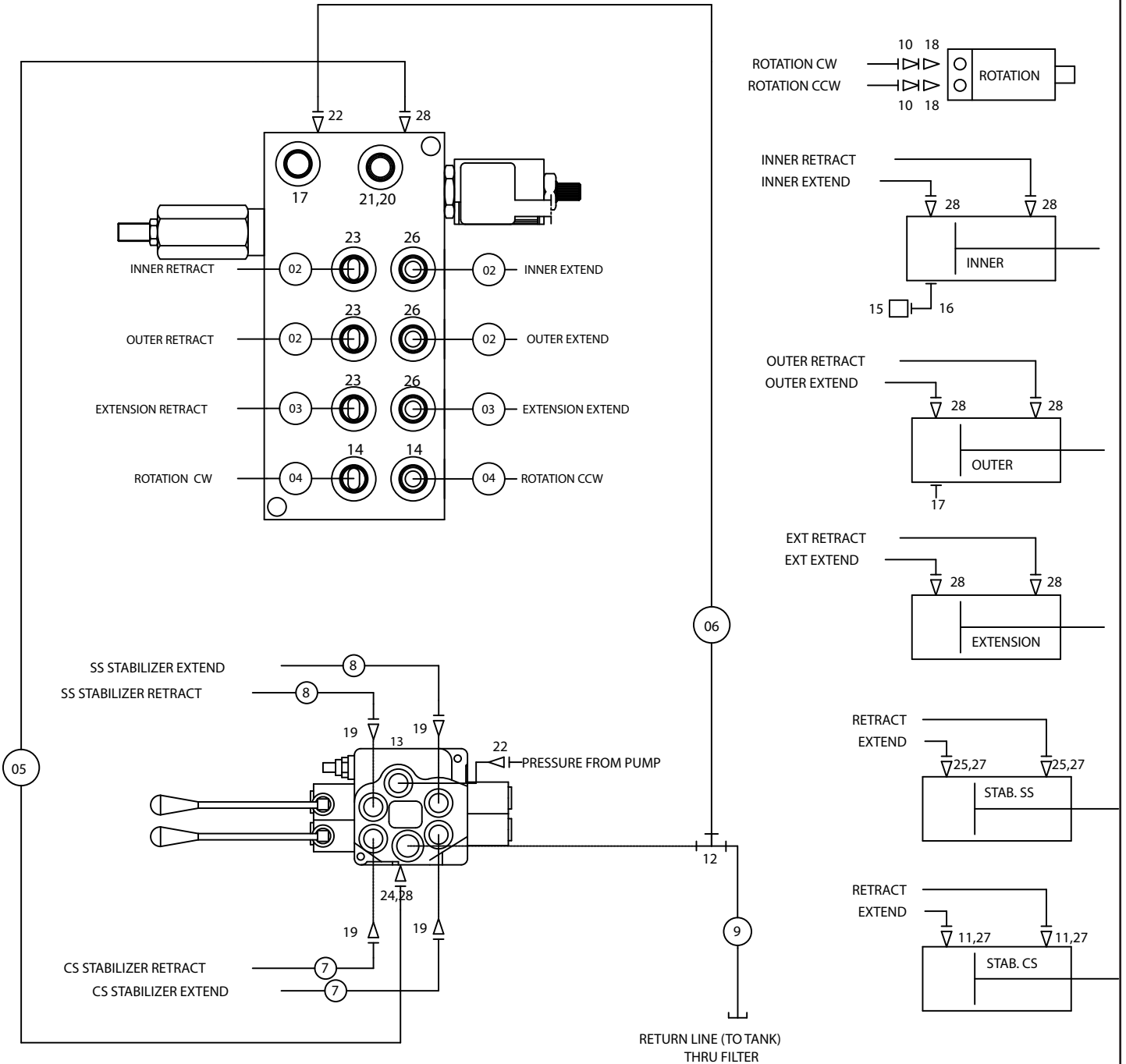
**CHECK HYDRAULIC HOSES, TUBES, AND PIPES DAILY.**

## Face Seal / O-Ring Size Chart



Hose Size	Fitting Size	Face Seal (A) Stellar® PN	O-ring Boss (B) Stellar® PN
1/4"	#4	C2027	D1245
3/8"	#6	C2028	D1246
1/2"	#8	C2029	D1247
5/8"	#10	32223	D1248
3/4"	#12	D1244	D1249
1"	#16		D1250

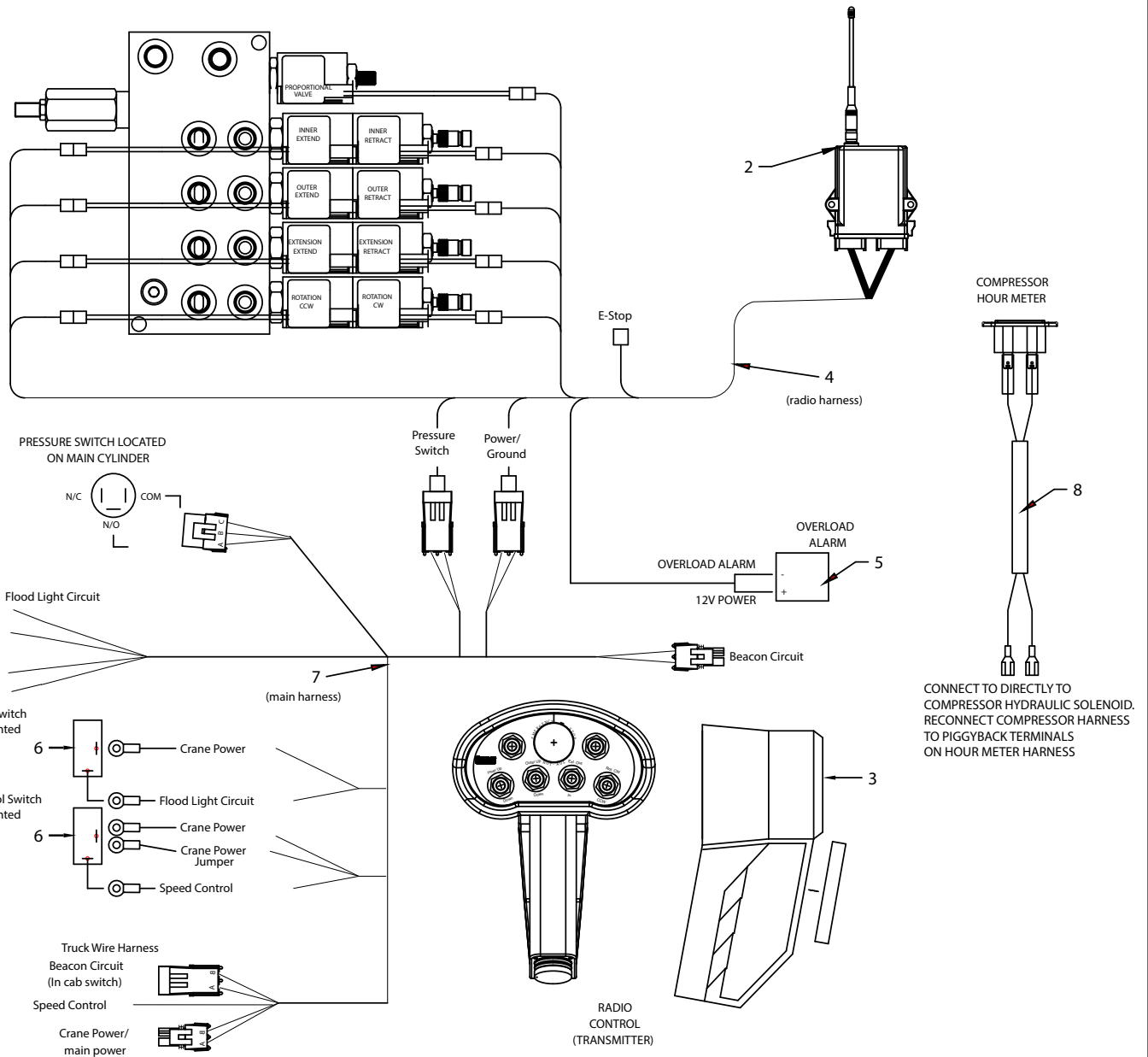
# Hydraulic Kit - PN 20441



# Hydraulic Kit - PN 20441 Parts List

PN 20441			
ITEM	PART	DESCRIPTION	QTY
01	20443	HOSE KIT 4500	1
02	12999	HOSE .38 X 72.00	4REF
03	20444	HOSE .38 X 124.00	2REF
04	4536	HOSE .25 X 153.00	2REF
05	13287	HOSE .38 X 90.00	1REF
06	13288	HOSE .50 X 91.00	1REF
07	13286	HOSE .25 X 92.00	2REF
08	13285	HOSE .25 X 90.00	2REF
09	13289	HOSE .50 X 76.00	1REF
10	C4922	FTG 4-6 MFS-MORB STRAIGHT	2
11	D1291	FTG 4-4 MFS-MORB STRAIGHT	2
12	7350	FTG 8-8-8 MFS-MAORB-MFS TEE	1
13	D1535	FTG 8 MORB PLUG HOLLOW HEX	1
14	3338	FTG 4-6 MFS-MAORB 90	2
15	49315	SWITCH PRES OVERLD CD-11C-2900R/WD	1
16	3861	FTG 6-6 MAORB-FORB 90	1
17	C4961	FTG 6 MORB PLUG HOLLOW HEX	2
18	C1111	FTG 10-6 MORB-FORB REDUCER	2
19	12160	FTG 4-8 MFS-MORB STRAIGHT	4
20	6397	GAUGE OIL LF 2.5 0-5000 CBM	1
21	D1430	FTG 6-4 MORB-FP STRAIGHT	1
22	1554	FTG 8-8 MFS-MORB STRAIGHT	2
23	C0338	FTG 6-6 MFS-MAORB 90	3
24	C0885	FTG 8-6 MORB-FORB REDUCER	1
25	57285	FTG 4-4 MFS-MORB STRAIGHT LONG	2
26	25361	FTG 6-6 MFS-MAORB 90 LONG	3
27	D1314	FTG 4-4 MFS-FFSS 90	4
28	0279	FTG 6-6 MFS-MORB STRAIGHT	8
REV. G			

# Control Kit - PN 52257

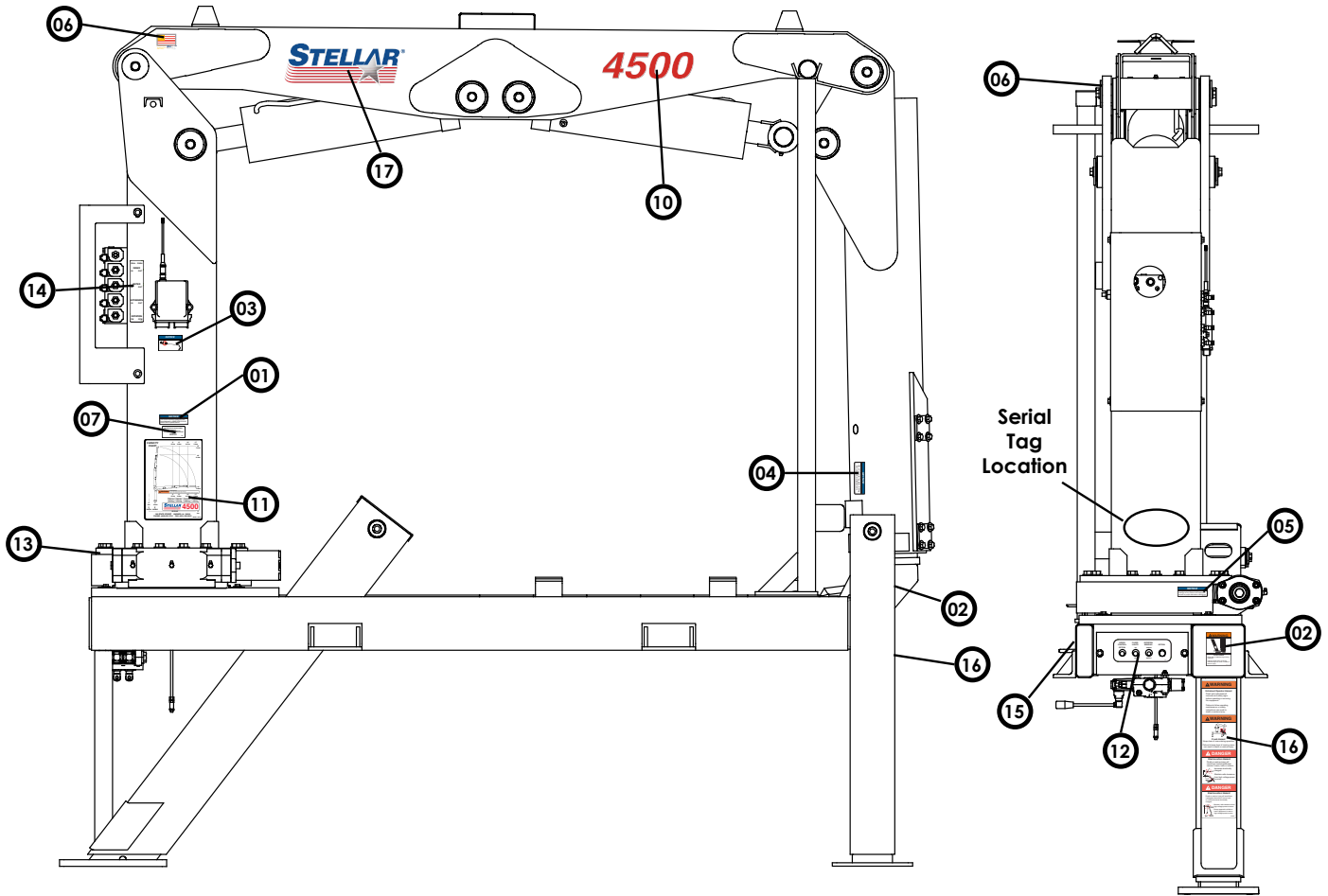




# Control Kit - PN 52257 Parts List

PN 52257			
ITEM	PART	DESCRIPTION	QTY
01	38992	RADIO SYSTEM 6 FUNCTION	1
02	34103	RECEIVER (PART OF 1)	1REF
03	88454	TRANSMITTER (PART OF 1)	1REF
04	50921	WIRE HARNESS - RADIO	1
05	78246	OVERLOAD ALARM	1
06	C4815	SWITCH TOGGLE ON/OFF	2
07	19076	WIRE HARNESS - CRANE	1
08	115324	HOUR METER ASM TS CRANE CPRSR	1
REV. C			

# Decal Placement - PN 20054



**INDUSTRIES INC.**  
**TIRE SERVICE DECAL KIT**

FOR

**4500 - PN 20054**

**DECALS IN BOLD ARE NOT SHOWN - PLACE ON BODY**

General Tire Crane Decal Kit - PN 85362				
Item No.	PN	Description	Location	QTY
01	15172	DECAL ASME/ANSI B30.22/B30.5	Crane Mast	1
02	C4795	DECAL DANGER FOOT	Stabilizers - CS & SS	2
03	73929	DECAL RADIO PRESSURE WASHER NOTICE	Crane Mast	1
04	16973	DECAL USE STELLAR APPROVED ATTACHMT	Main Boom - Both Sides	2
05	9188	DECAL WORM GEAR LUBRICATION	Crane Base	1
06	35234	MADE IN THE USA - STELLAR	Crane Mast - Both Sides	2
07	4214	DECAL CONTACT STELLAR	Crane Mast	1
<b>08</b>	<b>C4545</b>	<b>DECAL DANGER ELECTROCUTION</b>	<b>Four Corners of the Body</b>	<b>4</b>
<b>09</b>	<b>C5910</b>	<b>DECAL STELLAR LOGO 4.00X9.50 PRE-MASKED</b>	<b>Body - Optional</b>	<b>3</b>

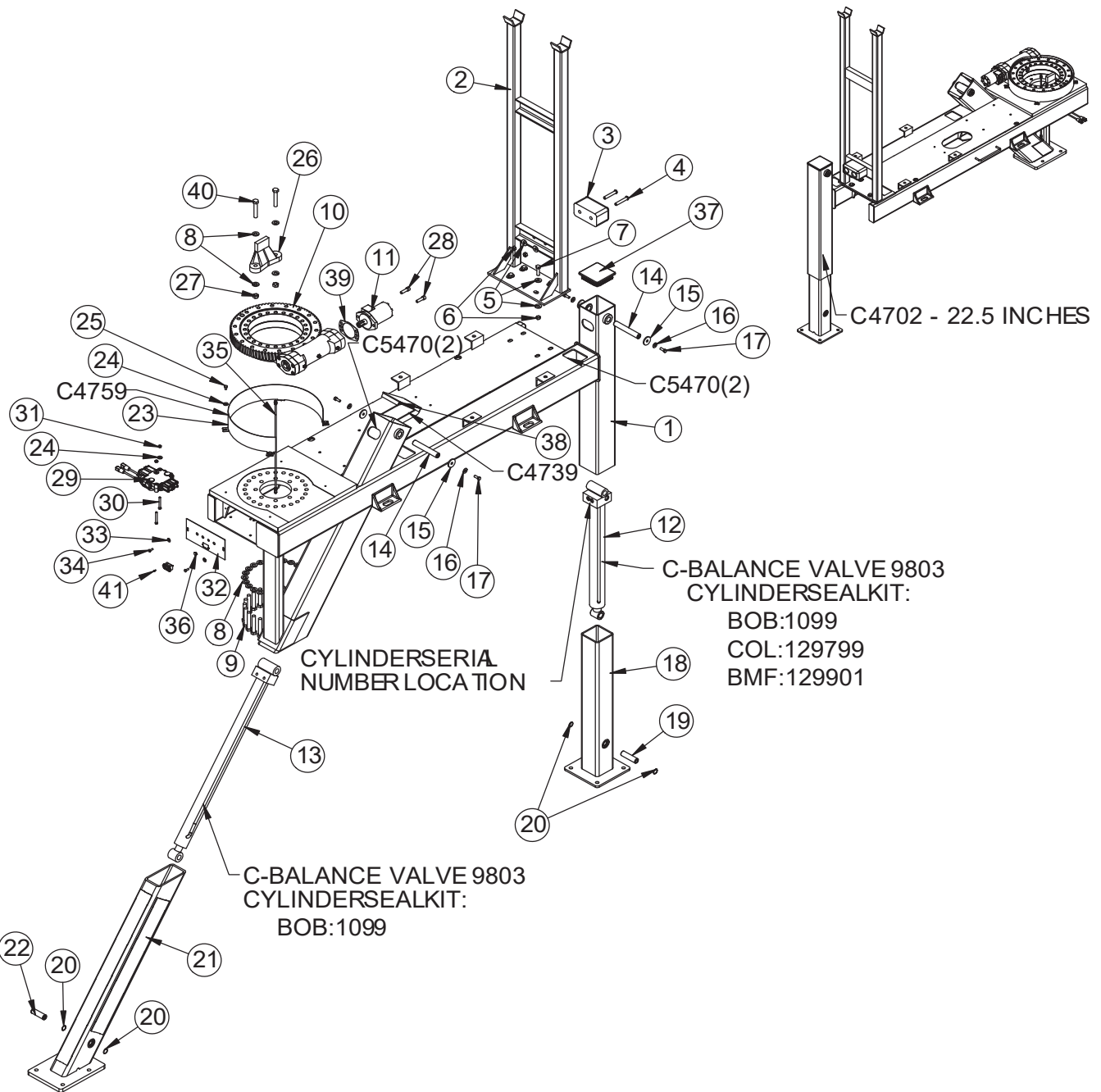
4500 Decal Kit - PN 85365				
Item No.	PN	Description	Location	QTY
10	54592	DECAL 4500 ID PRE-MASKED	Main Boom - Both Sides	2
11	20038	DECAL CAPACITY 4500	Crane Mast/Reservoir	2
12	4158	DECAL 3200 PANEL	Crane Control Center	1
13	4188	DECAL ROTATIONAL ALIGNMENT	Crane Base	1
14	41331	DECAL VB CONTROL TIRE CRANE	Crane Mast	1
15	13036	DECAL CRANE OUTRIGGER	Crane Base	1
16	85504	DECAL WARNING PLACARD SMALL	Stabilizers CS & SS	2
17	53850	DECAL STELLAR LOGO 4X11.5 PRE-MASKED	Main Boom - Both Sides	2

# Chapter 3 - Assembly Drawings

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# Base Assembly - PN 20049



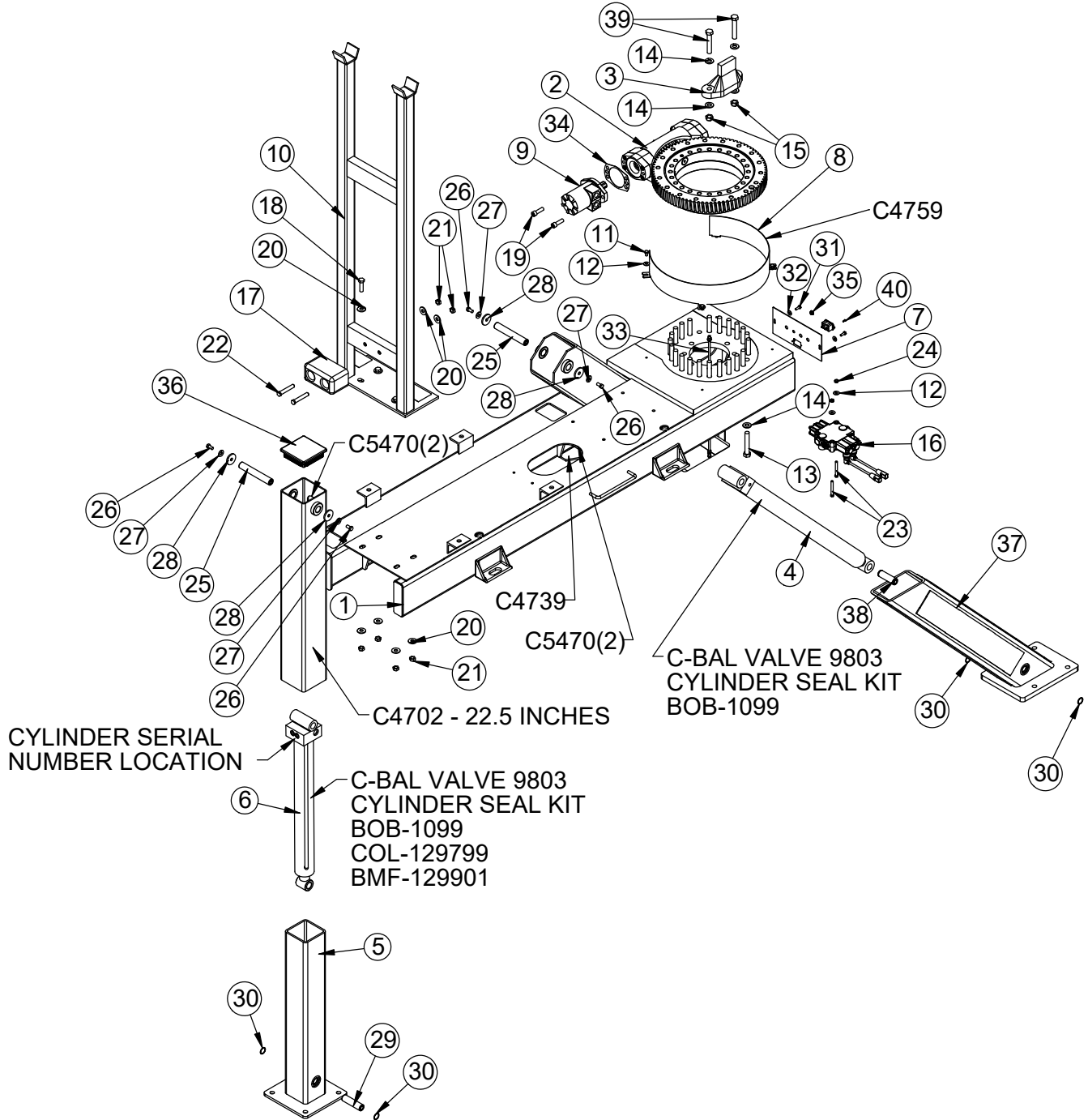
**NOTE:**  
TRIM EDGE IS NOTED BY IT'S PART NUMBER.

# Base Assembly - PN 20049 Parts List

PN 20049			
ITEM	PART	DESCRIPTION	QTY.
1	19894	BASE 4500	1
2	12648	SADDLE 2200/3200A PC WHITE	1
3	3945	BUMPER DOCK 3X3.38X6	1
4	0504	CAP SCR 0.50-13X3.00 HHGR5	2
5	0352	WASHER 0.50 USS FLAT ZINC	10
6	C6106	NUT 0.50-13 HHGR5 NYLOC	6
7	0500	CAP SCR 0.50-13X1.75 HHGR5	4
8	C5902	WASHER 0.63 SAE FLAT YELLOW GR8	27
9	11692	CAP SCR 0.63-11X3.75 HHGR8 W/RED PATCH	23
10	69743	BEARING SWING DRIVE 14 IN KINEMATICS	1
11	D1453	MOTOR HYD EATON 101-2493	1
12	3783	CYLINDER 2.00X18.75 PAINTED BLK	1
13	D0773	CYLINDER 2.00X25.50	1
14	11688CR	PIN 1.00X6.31D&T ZC	2
15	9320	PIN CAP 0.44X1.75X0.19 YZ	4
16	C6353	WASHER 0.38 FLAT GR8	4
17	9843	CAP SCR 0.38-16X0.75 HHGR8	4
18	4816	OUTRIGGER LEG CS 6000	1
19	D0977CR	PIN 1.00X3.75 ZC	1
20	3875	SNAP RING 1.00 INTERNAL	4
21	4817	OUTRIGGER LEG SS 6000	1
22	4912CR	PIN 1.00X3.25 SR ZC	1
23	44596	GUARD TTB 3200/4500 CRANE LZR PC BLK	1
24	0343	WASHER 0.31 USS FLAT ZINC	6
25	0484	CAP SCR 0.31-18 X 0.50 HHGR5	4
26	4074	STOP ROTATION 3200 CASTING PC BLACK	1
27	24868	NUT 0.63-11 HHGR8 NYLOCK ZY	2
28	62484	CAP SCR 12MMX40MM SH	2
29	61040	VB 2 SECT W/PB HYDROCONTROL	1
30	0489	CAP SCR 0.31-18X2.50 HHGR5	2
31	0342	NUT 0.31-18 HH NYLOC	2
32	4082	PLATE SWITCH MTG 3214 PC BLACK	1
33	0340	WASHER 0.25 FLAT	2
34	0479	CAP SCR 0.25-20X0.75 HHGR5	2
35	104018	HARDWARE KIT BASE ASM 30IN GREASE LINE	1
36	7341	PLUG 0.50 NICKEL PLATED	1
37	53569	PLUG PLASTIC 5.00X5.00 SQ-5	1
38	30490	CAP ASM OUTRIGGER SLANT	1
39	21151	GASKET MOTOR 008-10056-1	1
40	D1312	CAP SCR 0.63-11X3.50 HHGR8	2
41	18611	SCREW #6-32X0.38 HH MACH SELF TAP	2

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# Base Assembly (19K GVW Version) - PN 56172



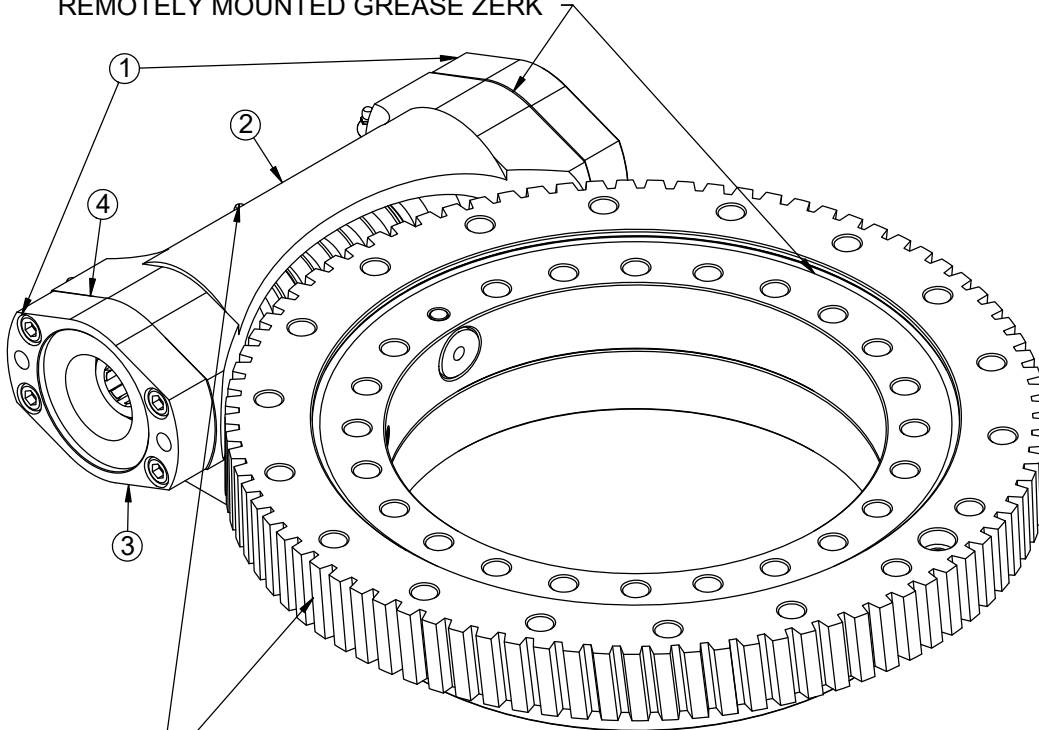
# Base Assembly (19K GVW Version) - PN 56172

PN 56172			
ITEM	PART	DESCRIPTION	QTY
1	56173	BASE 4500 19K GVW	1
2	69743	BEARING SWING DRIVE 14 IN KINEMATICS	1
3	4074	STOP ROTATION 3200 CASTING PC BLACK	1
4	D0773	CYLINDER 2.00X25.50	1
5	3778	OUTRIGGER 3200	1
6	3783	CYLINDER 2.00X18.75 PAINTED BLK	1
7	4082	PLATE SWITCH MTG 3214 PC BLACK	1
8	44596	GUARD TTB 3200/4500 CRANE LZR PC BLK	1
9	D1453	MOTOR HYD EATON 101-2493	1
10	12648	SADDLE 2200/3200A PC WHITE	1
11	0484	CAP SCR 0.31-18 X 0.50 HHGR5	4
12	0343	WASHER 0.31 USS FLAT ZINC	6
13	11692	CAP SCR 0.63-11X3.75 HHGR8	23
14	C5902	WASHER 0.63 SAE FLAT YELLOW GR8	27
15	24868	NUT 0.63-11 HHGR8 NYLOCK ZY	2
16	61040	VB 2 SECT W/PB HYDROCONTROL	1
17	3945	BUMPER DOCK 3X3.38X6	1
18	0500	CAP SCR 0.50-13X1.75 HHGR5	4
19	62484	CAP SCR 12MMX40MM SH	2
20	0352	WASHER 0.50 USS FLAT ZINC	10
21	C6106	NUT 0.50-13 HHGR5 NYLOC	6
22	0504	CAP SCR 0.50-13X3.00 HHGR5	2
23	0489	CAP SCR 0.31-18X2.50 HHGR5	2
24	0342	NUT 0.31-18 HH NYLOC	2
25	11688CR	PIN 1.00X6.31D&T ZC	2
26	9843	CAP SCR 0.38-16X0.75 HHGR8	4
27	C6353	WASHER 0.38 FLAT GR8	4
28	9320	PIN CAP 0.44X1.75X0.19 YZ	4
29	D0977CR	PIN 1.00X3.75 ZC	1
30	3875	SNAP RING 1.00 INTERNAL	4
31	0479	CAP SCR 0.25-20X0.75 HHGR5	2
32	0340	WASHER 0.25 FLAT	2
33	104018	HARDWARE KIT BASE ASM 30IN GREASE LINE	1
34	21151	GASKET MOTOR 008-10056-1	1
35	7341	PLUG 0.50 NICKEL PLATED	1
36	53569	PLUG PLASTIC 5.00X5.00 SQ-5	1
37	56176	OUTRIGGER LEG 4500 19K GVW	1
38	4912CR	PIN 1.00X3.25 SR ZC	1
39	D1312	CAP SCR 0.63-11X3.50 HHGR8	2
40	18611	SCREW #6-32X0.38 HH MACH SELF TAP	2
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# Gear Bearing - PN 69743

USE EP2 LITHIUM COMPLEX GREASE, STELLAR PN 78090  
ON WORM BEARINGS AND BEARING RACE

GREASE MAIN BEARING RACE THROUGH  
REMOTELY MOUNTED GREASE ZERK



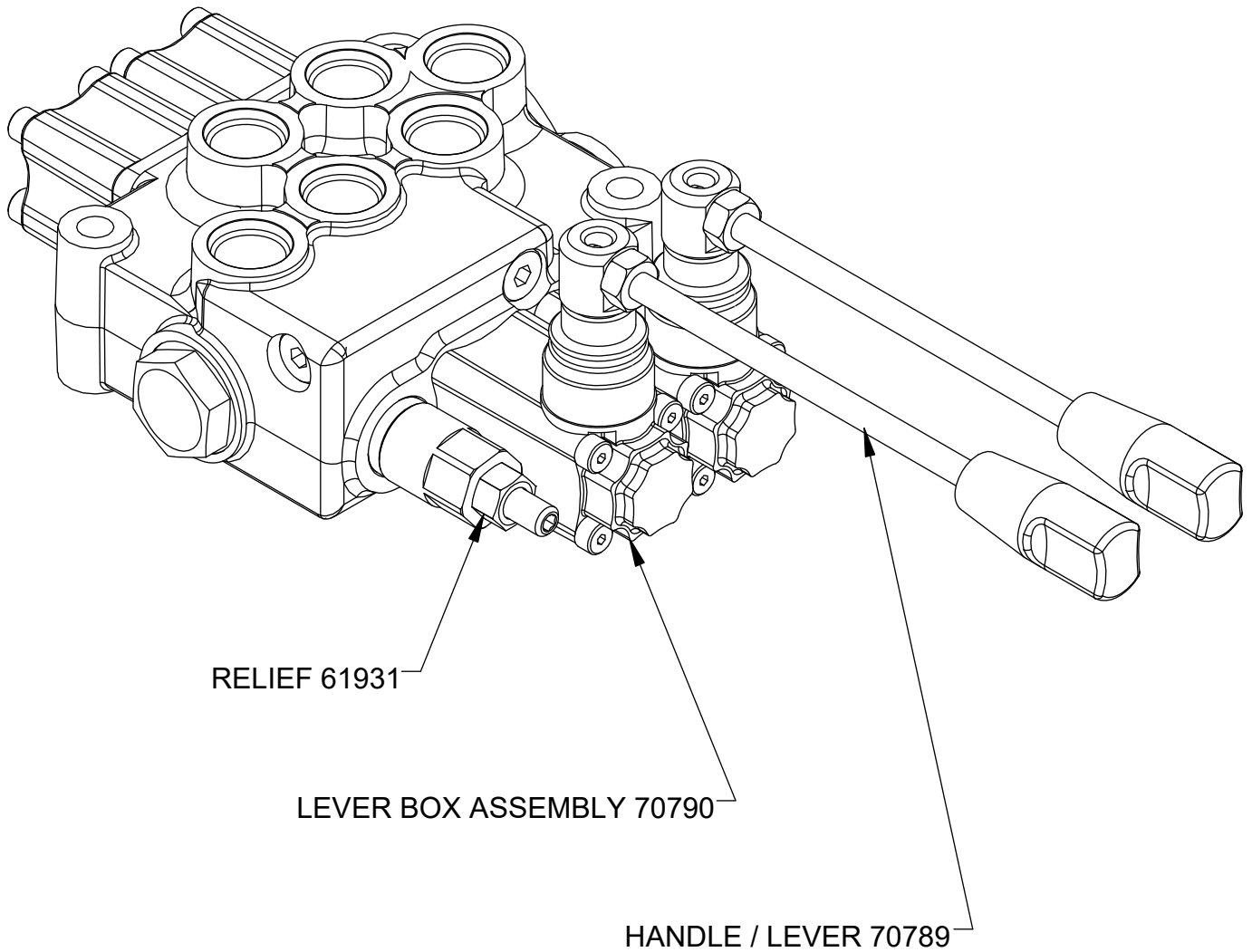
USE MOLY GREASE 936SF HEAVY, STELLAR PN 4460  
ON WORM AND BEARING GEAR TEETH

## PN 69743

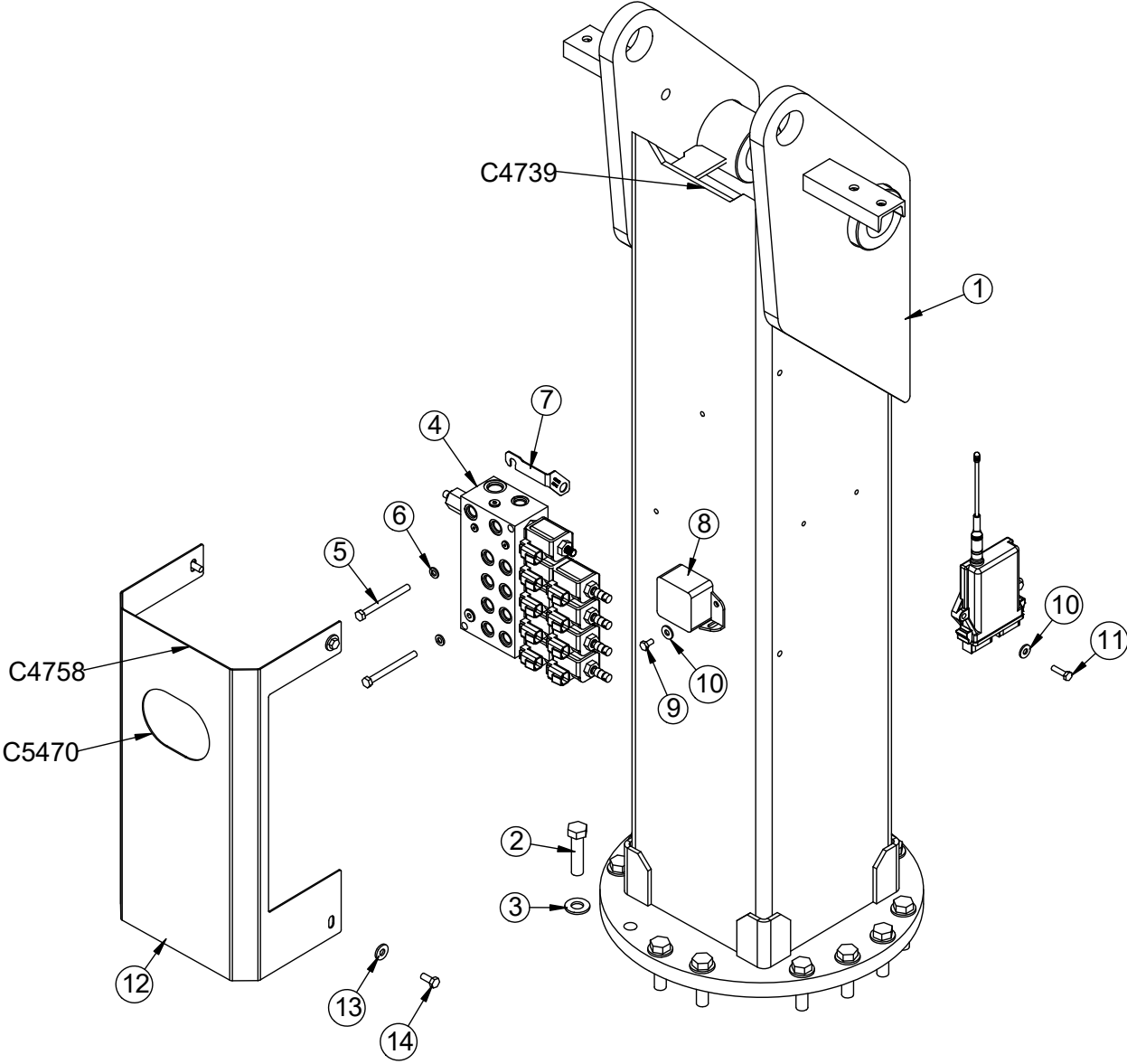
ITEM	PART	DESCRIPTION	QTY
1	67866	BEARING AND SEAL KIT 9IN/14IN/17IN TTB KNMTS AFTER 2006	1
2	77740	WORM 3200 W14B02 AFTER 2006 KNMTS	1
3	67864	END CAP 9IN/14IN/17IN/25IN KNMTS AFTER 2006	1
4	67863	SHIM KIT 6000 KINEMATICS W17B02 AFTER 2006	1



# Stabilizer Valve Bank - PN 61040



# Mast Assembly - PN 20050



# Mast Assembly - PN 20050 Parts List

## PN 20050

ITEM	PART	DESCRIPTION	QTY
1	19889	MAST 4500	1
2	66838	CAP SCR 0.63-11X2.50 HHGR8 W/RED PATCH	14
3	C5902	WASHER 0.63 SAE FLAT YELLOW GR8	14
4	44530	VB 4 SECT W/PROP STER8GPM DEUTSCH	1
5	0490	CAP SCR 0.31-18X3.50 HHGR5	2
6	0522	WASHER 0.31 LOCK	2
7	85930	STRAP VALVE RETAINING	1
8	78246	BACKUP ALARM 87 DECIBEL	1
9	0478	CAP SCR 0.25-20X0.50 HHGR5	2
10	0340	WASHER 0.25 USS FLAT	4
11	0480	CAP SCR 0.25-20X1.00 HHGR5	2
12	59803	GUARD VB COVER 4500 PC BLACK	1
13	0343	WASHER 0.31 USS FLAT	4
14	0420	CAP SCR 0.31-18X0.75 HHGR5	4

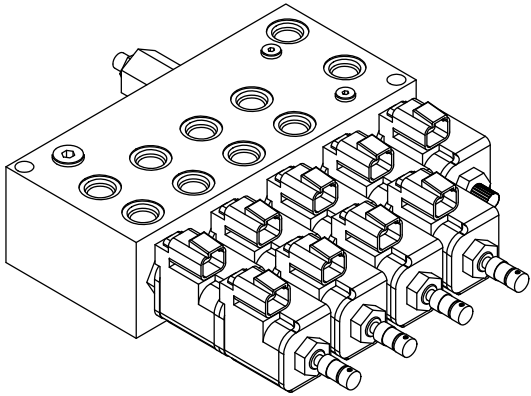
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## ITEMS NOT SHOWN

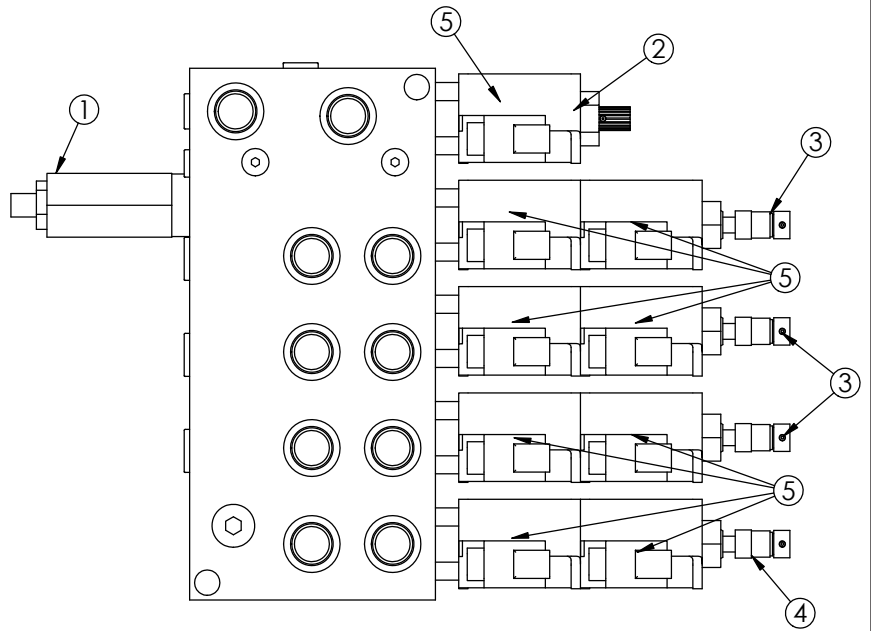
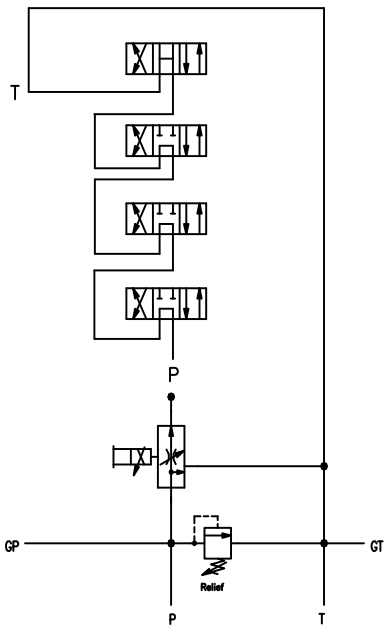
PART	DESCRIPTION	QTY
C5470	LOOM SPLIT 0.38 CORRUGATED POLYETHYLENE	14 IN
C4758	TRIM EDGE 0.06X0.56 AL	10 IN
C4739	TRIM EDGE 0.38X0.63 AL	5 IN

**NOTE:**  
**RADIO RECEIVER, ALARM, & STRAP SHOWN FOR REFERENCE.**

# Valve Bank - PN 44530



HYDRAULIC SCHEMATIC



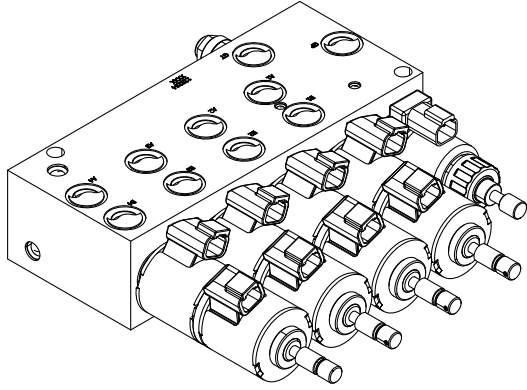
# Valve Bank - PN 44530 Parts List

PN 44530				
ITEM	PART	DESCRIPTION	QTY	TORQUE
1	25367	RELIEF VALVE 24685/24690	1	37 FT-LB
	25368	SEAL KIT 25367		
2	24960	VALVE FLW CTRL PRP/JP04C3150N 0-8	1	20-22 FT-LB
	25369	SEAL KIT 24960/25381		
3	25371	VALVE SOLND 3 POS 4 WAY TAND G04571	3	25 FT-LB
4	25372	VALVE SOLND 3 POS 4 WAY OPEN G04591	1	25 FT-LB
	25373	SEAL KIT 25371/25372		
5	44532	COIL 12VDC DUETSCH CAP012H	9	3 FT-LB

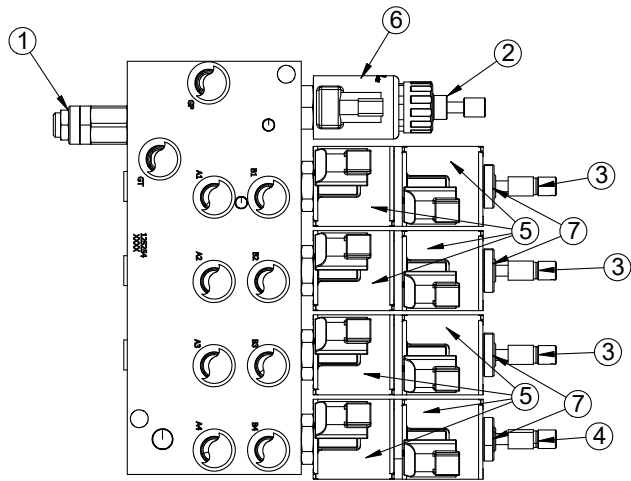
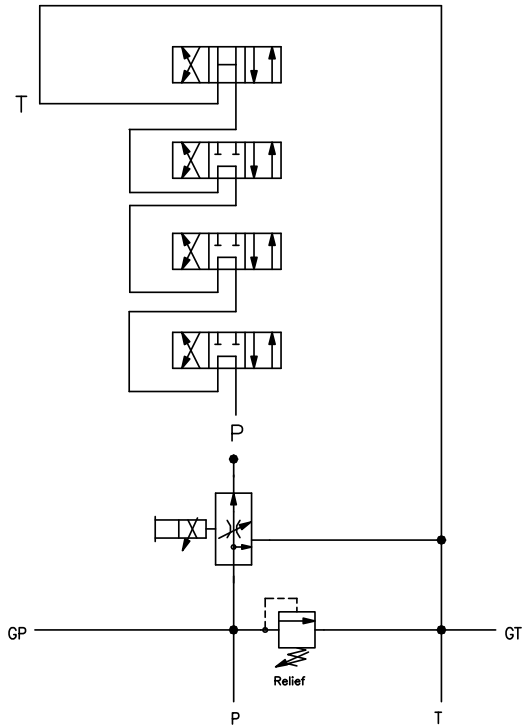
**NOTE:**

**PART NUMBERS 24960 & 25371 DO NOT INCLUDE COIL PART NUMBER 44532**

# Valve Bank (Alternate)- PN 125254



## HYDRAULIC SCHEMATIC

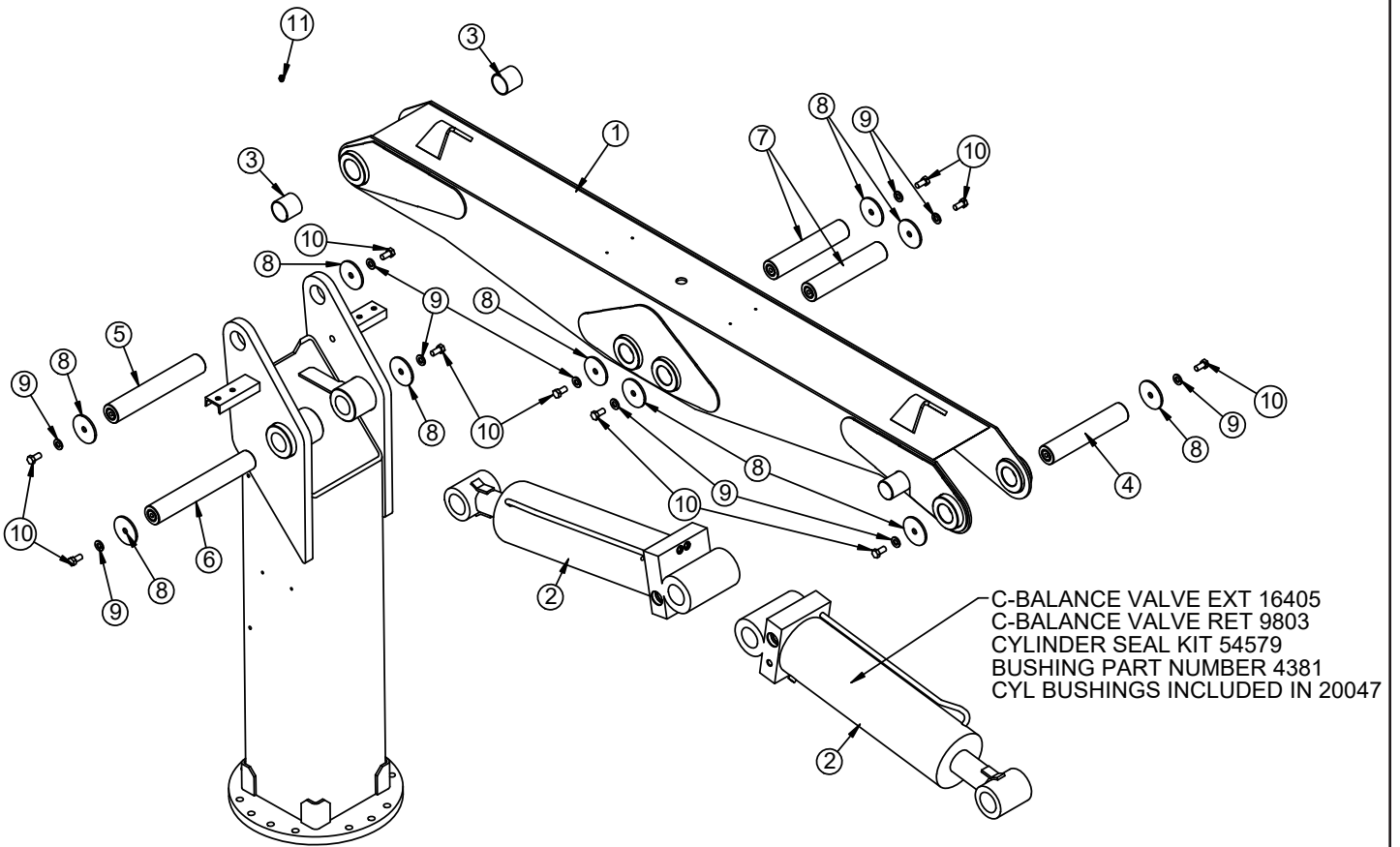


# Valve Bank (Alternate) - PN 125254 Parts List

## PN125254

ITEM	PART	DESCRIPTION	QTY	TORQUE
1	125946	VALVE RELIEF 125254	1	37 FT-LB
	126271	SEAL KIT 125946		
2	125255	VALVE FLW CTRL PRP 0-8 GPM DEL	1	20-22 FT-LB
	126270	SEAL KIT 125255		
3	125256	VALVE SOLND 3 POS 4 WAY 8GPM TANDEM DEL	3	25 FT-LB
4	125257	VALVE SOLND 3 POS 4 WAY 8GPM OPEN DEL	1	25 FT-LB
	126269	SEAL KIT 125256/125257		
5	125947	COIL 12VDC DEUTSCH DEL	8	3 FT-LB
6	125948	COIL 12VDC DEUTSCH PROP DEL	1	3 FT-LB
7	134698	NUT COIL RETAINING DELTROL SIZE 10	4	3 FT-LB

# Main Boom Assembly - PN 20051



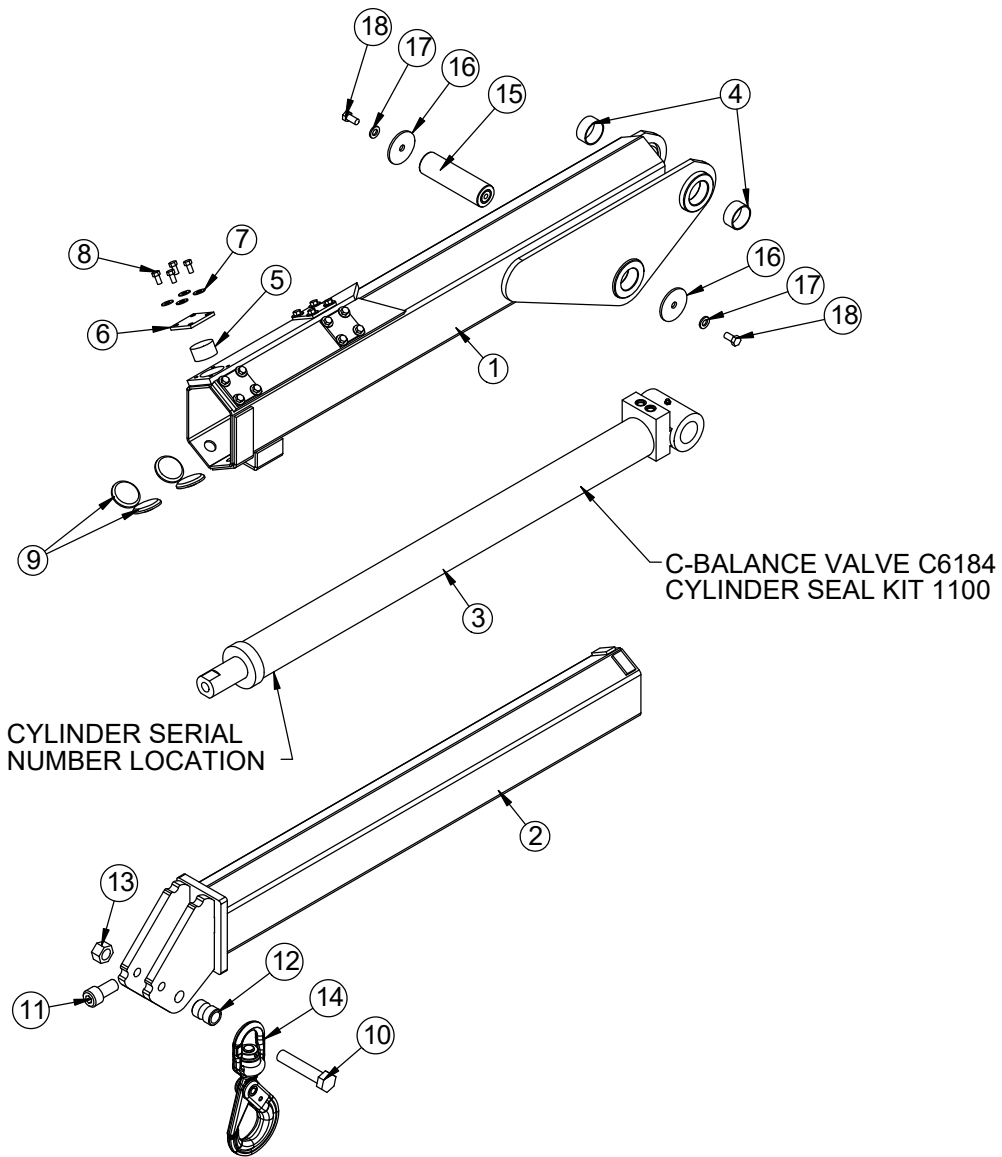


# Main Boom Assembly - PN 20051 Parts List

PN 20051			
ITEM	PART	DESCRIPTION	QTY
1	19887	INNER BOOM 4500 CRANE	1
2	20047	CYLINDER 5.50X16.00	2
3	4381	BUSHING 32DXR32 2.00X2.00 GARLOCK	2
4	20043CR	PIN 2.00X10.38 D&T ZC	1
5	20042CR	PIN 2.00X12.13 D&T ZC	1
6	11849CR	PIN 2.00X13.38 D&T ZC	1
7	89408CR	PIN 2.00X9.88 D&T ZC	2
8	5145	PIN CAP 0.56X3.00X0.19 YZ	10
9	D0790	WASHER 0.50 FLAT GR8	10
10	10172	CAP SCR 0.50-13X1.00 HHGR8 ZY	10
11	C1592	ZERK 1/8 NPT STRAIGHT	1

**NOTE:**  
**MAST SHOWN FOR REFERENCE.**

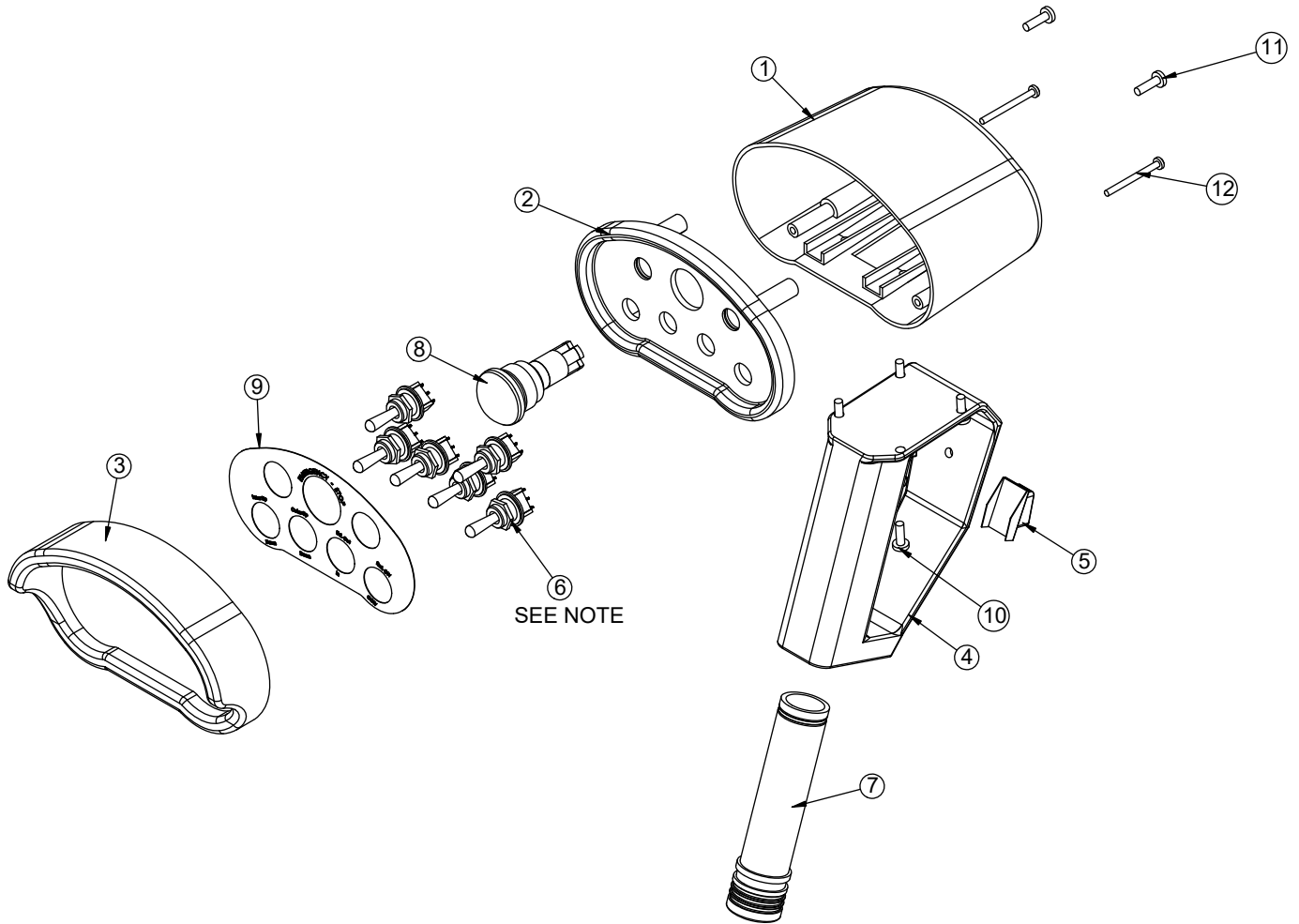
# Extension Boom Assembly - PN 20052



# Extension Boom Assembly - PN 20052 Parts List

PN 20052			
ITEM	PART	DESCRIPTION	QTY
1	19882	OUTER BOOM 4500	1
2	19876	EXT BOOM 4500	1
3	4658	CYLINDER EXT 60 SERIES	1
4	8819	BUSHING QSI-3235-16	2
5	9363	WEAR PAD 1.12X2.00 RND NYLATRON	4
6	9361PC	PLATE WEAR PAD COVER 3200	4
7	C6353	WASHER 0.38 FLAT GR8	16
8	9843	CAP SCR 0.38-16X0.75 HHGR8 (TRQ 33 FT/LBS)	16
9	6252	WEAR PAD 0.34X2.50 RND NYLATRON	4
10	4541	CAP SCR 1.00-8X5.00 HHGR5	1
11	21154	CAP SCR 1.00-8X2.00 SHGR8 ZY	1
12	4485CR	BUSHING HOOK 3200 ZC	1
13	0991	NUT 1.00 HH NYLOC	1
14	133522	HOOK 6.7 TON SWIVEL W/ BEARING SELF LOCKING	1
15	14190CR	PIN 2.00X6.88 D&T ZC	1
16	5145	PIN CAP 0.56X3.00X0.19 YZ	2
17	D0790	WASHER 0.50 FLAT GR8	2
18	10172	CAP SCR 0.50-13X1.00 HHGR8 ZY	2
REV. D			

# Radio Remote - PN 88454



# Radio Remote - PN 88454 Parts List

PN 88454			
ITEM	PART	DESCRIPTION	QTY
1	20088	CONTROL HANDLE HOUSING 4 FCTN HET	1
2	34107	CONTROL HANDLE FACE PLT 6 FCTN H2	1
3	24385	GUARD RADIO SWITCH 4 FCTN	1
4	35447	CONTROL HANDLE GRIP W/TRIGGER HT H2	1
5	24958	RUBBER BOOT TRIGGER GUARD HET	1
6	22600	SWITCH TOGGLE HET RADIO 63019300	6
7	35441	BATTERY TUBE AA HETRONIC RADIO	1
8	16975	SWITCH E STOP ASM HETRONIC RADIO	1
9	34111	DECAL CONTROL HANDLE H2 6FCTN TS	1
10	38475	SCREW 4MMX12MM PHMS PH	4
11	36156	SCREW 4MMX14MM PHMS PH	2
12	29460	SCREW 3MMX35MM PHMS PH	2
REV. INITIAL RELEASE			

**NOTE:**

**P/N'S 25999 & 24958 ARE OPTIONAL COVERS FOR THE SWITCHES AND TRIGGER.  
BACK UP CABLE FOR TRANSMITTER - PART NUMBER 35916.**





Subject to Change without Notification.  
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