

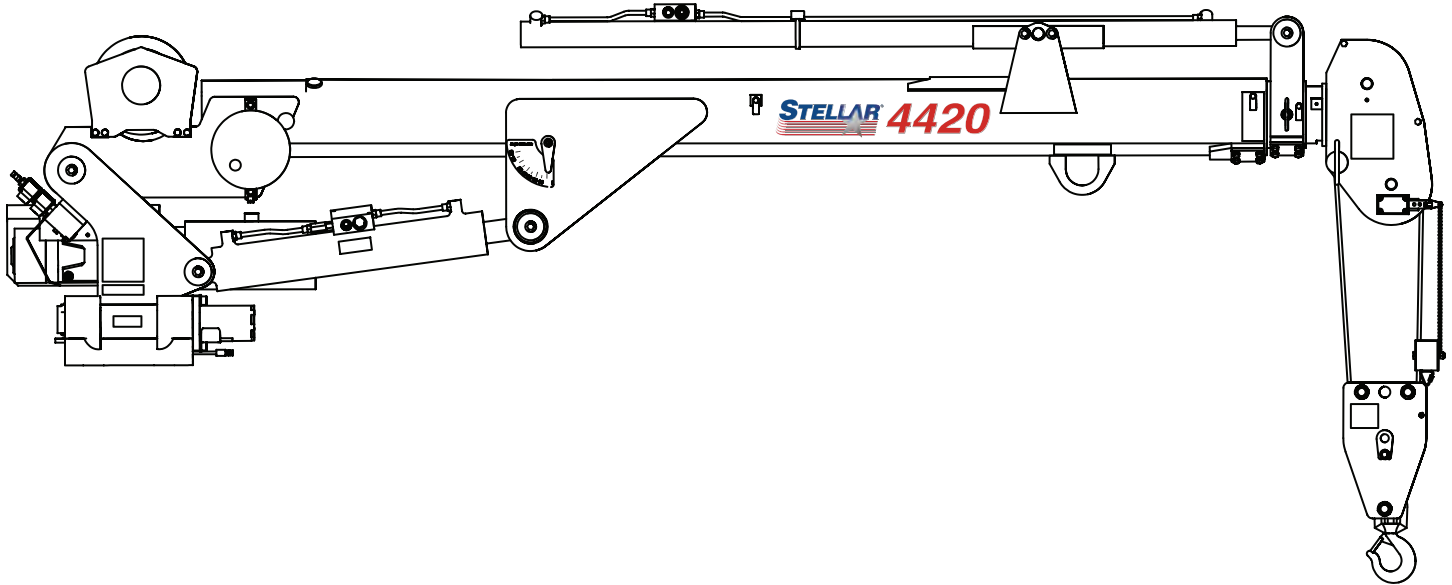


# MODEL 4420

## TELESCOPIC CRANE

### OWNERS' MANUAL

Installation • Assembly Drawings • Parts



**Stellar Industries, Inc.**

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Last Revision: 07/08/13

# 4420 Manual Revisions

Date of Revision	Section Revised	Description of Revision
June 20th, 2013	Chapter 2: Installation Chapter 4: Replacement Parts	Updated Decal Kit and Replacement Parts.

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**Technical Questions, and Information**  
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service@stellarindustries.com  
parts@stellarindustries.com  
warranty@stellarindustries.com

## About this manual

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 General EC Series 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).

# Chapter 1 - Specifications

## Model 4420 Crane SPECIFICATION SHEET

Crane Rating:	16,000 ft-lb (2.23 TM)
Standard Boom Length:	10' (3.05 m) from CL of Crane
Boom Extension:	1st stage: Hydraulic 60" (152.4 cm) 2nd stage: Manual 60" (152.4 cm)
Maximum Horizontal Reach:	20' 9" (6.32 m) from CL of Crane
Maximum Vertical Lift: (from crane base)	21' 6" (6.551 m)
Boom Elevation:	-5 to +80 degrees
Stowed Height: (crane only)	33.5" (85.1 cm)
Mounting Space Required:	18" x 15" (45.7 x 38.1 cm)
Approximate Crane Weight:	1050 lbs (475 kg)
Controls:	20' (6.1 m) cord with hand held control.
Winch Specifications	
Rope Diameter:	5/16" (.794 cm)
Line pull speed:	25 ft/min (7.62 m/min)
Max. single part line:	2000 lbs (905 kg)
Max. double part line:	4000 lbs (1815 kg)
Rotation: (worm gear)	370 degree power
Lifting Capacities:	1600 lbs @ 10' (725 kg @ 3.05 m) 800 lbs @ 20' (365 kg @ 6.10 m)
Power Supply Required:	PTO & Pump (3.0 gpm @ 2600 psi) (11.35 lpm & 179 bar)
	12 volt power unit (2.0 gpm @ 2600 psi) (7.57 lpm @ 179 bar)

\*Subject to change without notification



# Chapter 2 - Installation

## General Installation

This chapter is designed to serve as a general guide for the installation of a Stellar 4420 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.

## Installation 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.

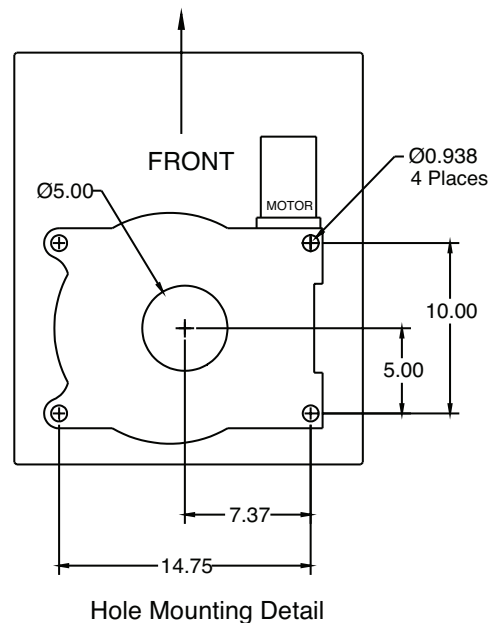
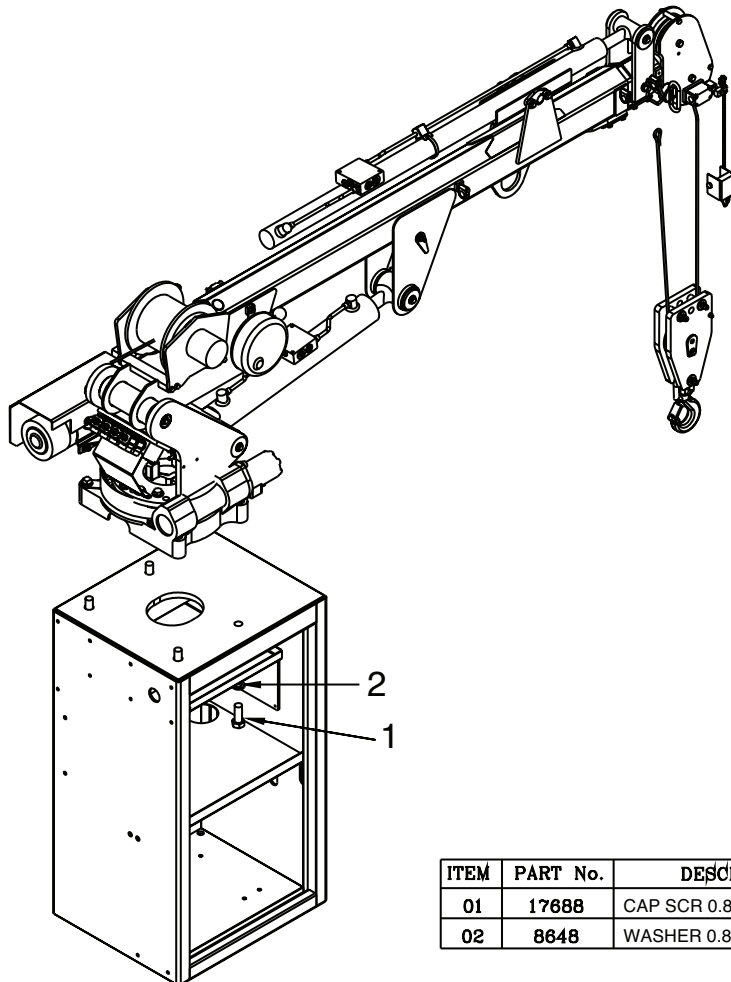
Therefore, the installer of Stellar cranes and bodies is considered one of the manufacturers of the vehicle. As such a manufacturer, the installer is responsible for compliance with all applicable federal and state regulations. They are required to certify that the vehicle is in compliance with the Federal 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. Determine that the mounting location for the 4420 crane is at least 18" x 15" (45.7 x 38.1 cm).
2. Use the detail below to drill .938" diameter holes into the mounting plate. Run tap on the threads of the base to be sure they are clean.
3. Use a crane or lifting device capable of lifting the weight of the Stellar crane. The Stellar 4420 weighs approximately 1050 lbs (475 kg). **Note: cranes are shipped with rotation positioned at 180 degrees from normal stowed travel position (See photo above).** This will allow for easy installation of the crane and permanent connection of all hydraulic and electrical components prior to repositioning into the crane saddle.
4. Connect straps or chain from the lifting device to the lifting rings on the Stellar 4420.
5. Use four (4) 7/8 x 2 1/4 #8 bolts and four (4) #8 flat washers.
6. Install a washer on each bolt.
7. Apply Loctite Thread locker #277 to the bolts.
8. Using the lifting device, lower the Stellar 4420 just above the crane compartment and start the bolts. Have someone assist in leveling the crane. **Note: the rotation motor should be to the door side of crane compartment and the boom should be extended back over the rear bumper.**
9. Secure the crane using the mounting hardware provided. **Note: longer or shorter cap screws may be required – recommended thread engagement into crane base is 1.00" – use grade 8, zinc plated cap screws only.**
10. Torque the cap screws to 454 ft-lbs.
11. Remove supporting crane.
12. Hook-up hydraulics and electrical using the schematics provided in this chapter.

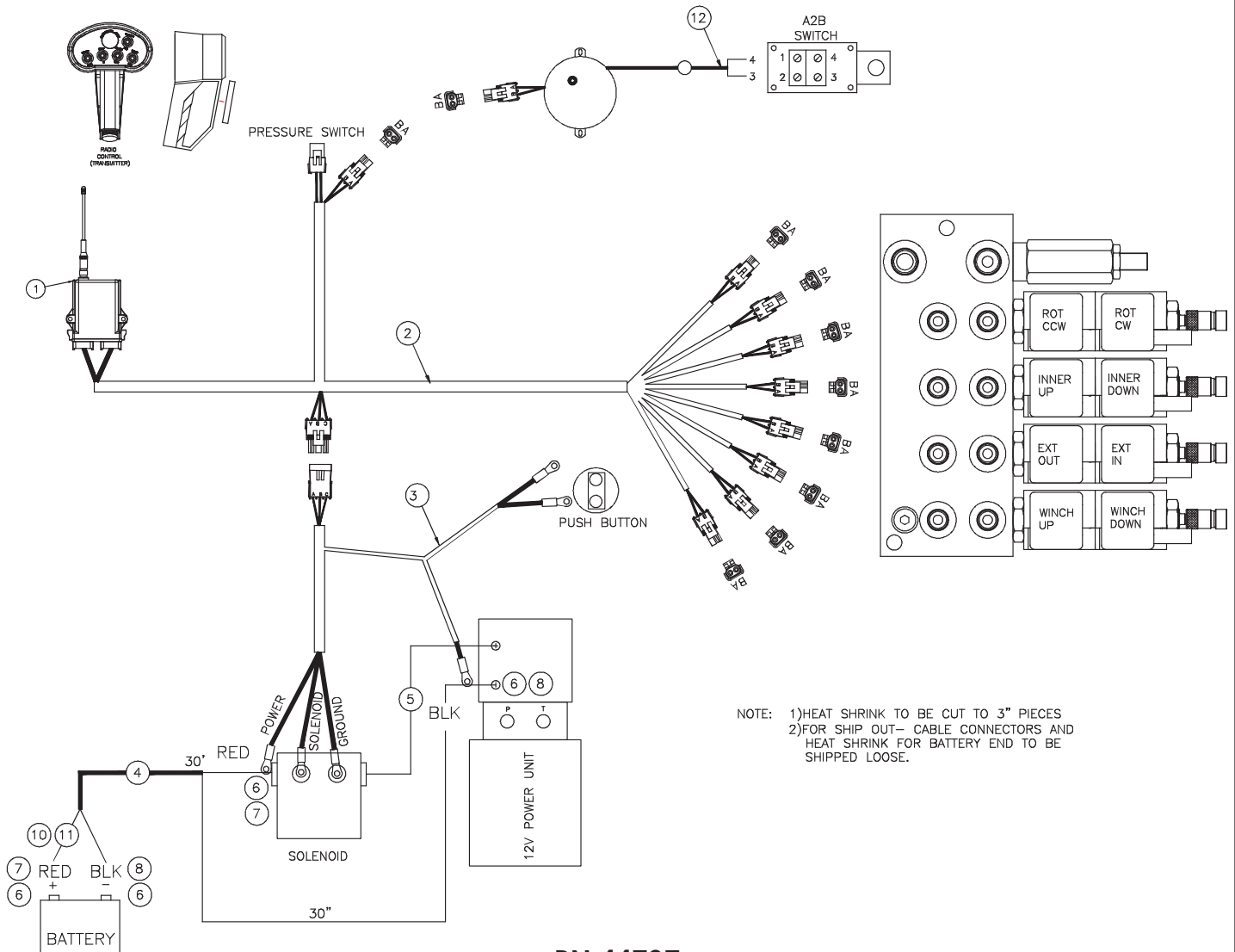
**Note: If questions should arise during any portion of this installation, please contact Stellar Customer Service at (800) 321-3741.**



ITEM	PART No.	DESCRIPTION	QTY
01	17688	CAP SCR 0.88-9x2.25 HHGR8	4
02	8648	WASHER 0.88 SAE GR8	4



# Control Kit (Radio Electrical Version) - PN 44737

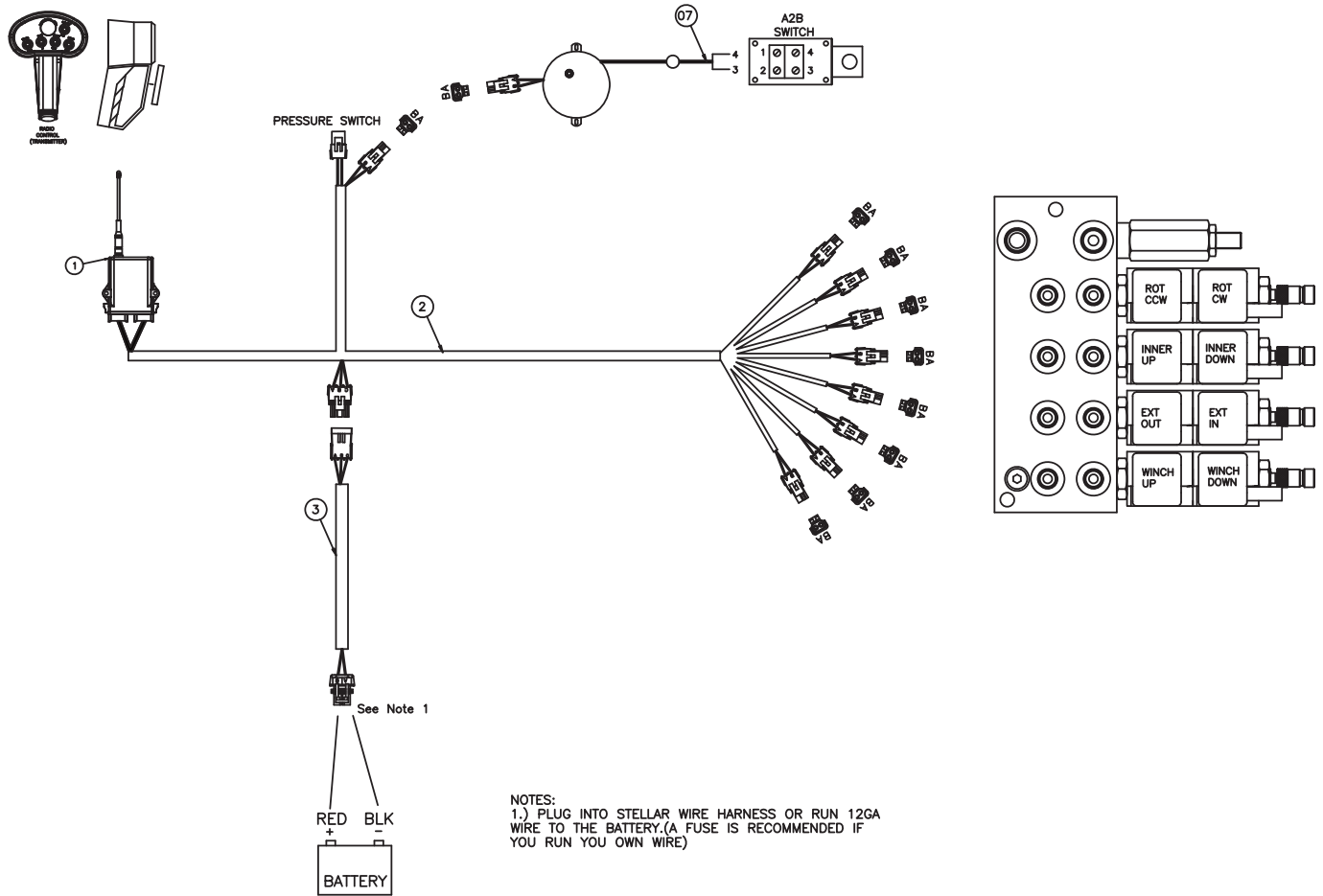


NOTE: 1) HEAT SHRINK TO BE CUT TO 3" PIECES  
 2) FOR SHIP OUT - CABLE CONNECTORS AND HEAT SHRINK FOR BATTERY END TO BE SHIPPED LOOSE.

## PN 44737

15			
14			
13			
12	10965	STRAIN RELIEF .50 NPT .20-.35 CABLE	1
11	36435	FUSE 200 AMP 46274	2
10	32523	FUSE HOLDER 46039	2
09	18472	DECAL MANUAL OPERATION 5520	1
08	15218	HEAT SHRINK 0.50 BLK (RM) 22241	6"
07	15219	HEAT SHRINK 0.50 RED (RM) 22241	6"
06	4466	TERML #1X.38 COPPER LUG	4
05	59518	WIRE HARNESS BATTERY CABLE	1
04	20466	CABLE #2 2 WIRE	32.5'
03	25887	WIRE HARNESS 3315 ELECTRIC	1
02	50923	WIRE HARNESS 3315 H2	1
01	39784	HANDLE ASSEMBLY	1
ITEM	PART No.	DESCRIPTION	QTY

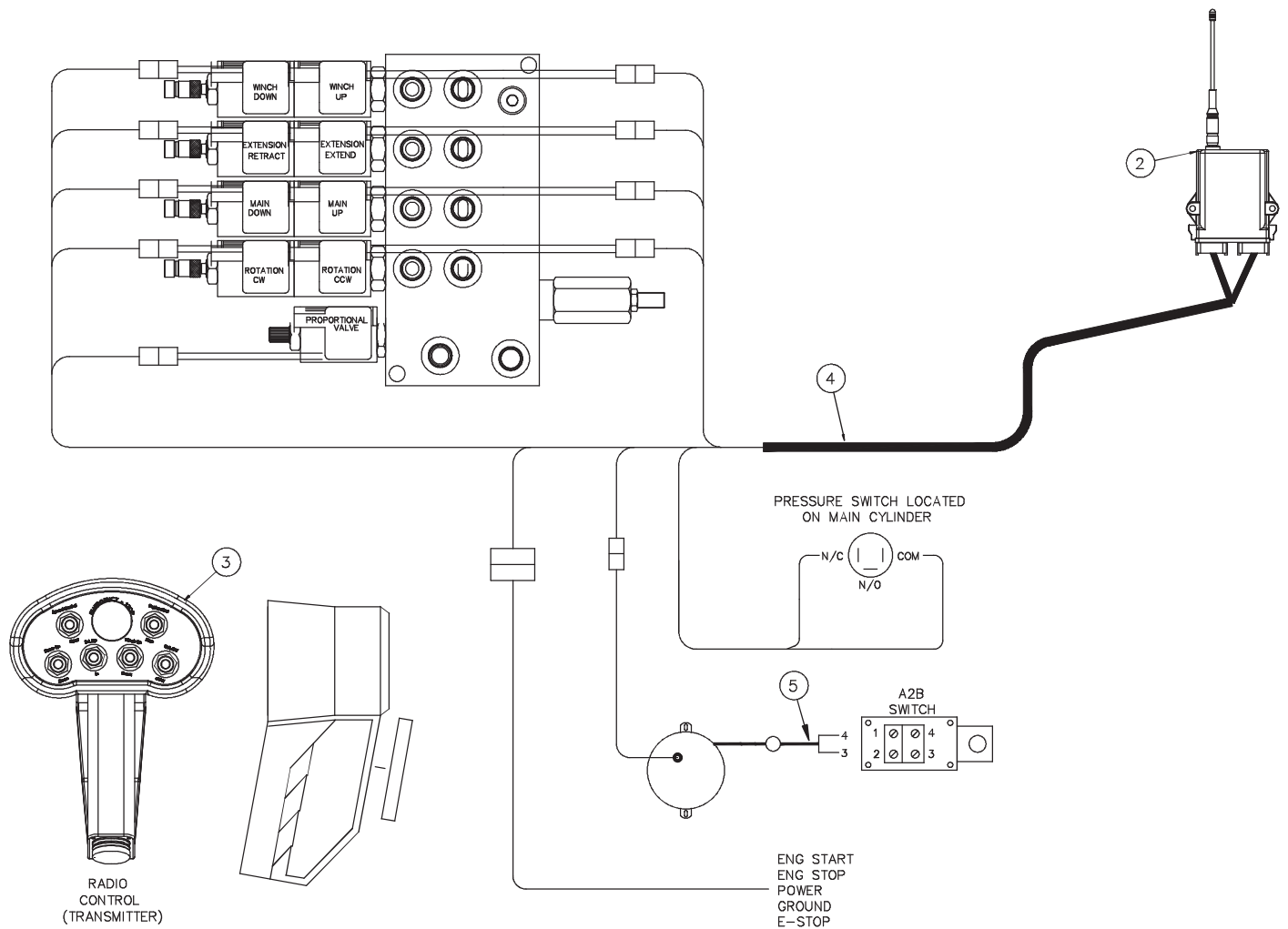
# Control Kit (Radio Hydraulic Version) - PN 44739



## PN 44739

07	10965	STRAIN RELIEF .50 NPT .20-.35 CABLE	1
06			
05			
04			
03	25888	WIRE HARNESS 3315 HYD	1
02	50923	WIRE HARNESS 3315/4420 DUETSCH	1
01	39784	RADIO CNTRL ASM 5 FCTN ON/OFF	1
ITEM	PART No.	DESCRIPTION	QTY

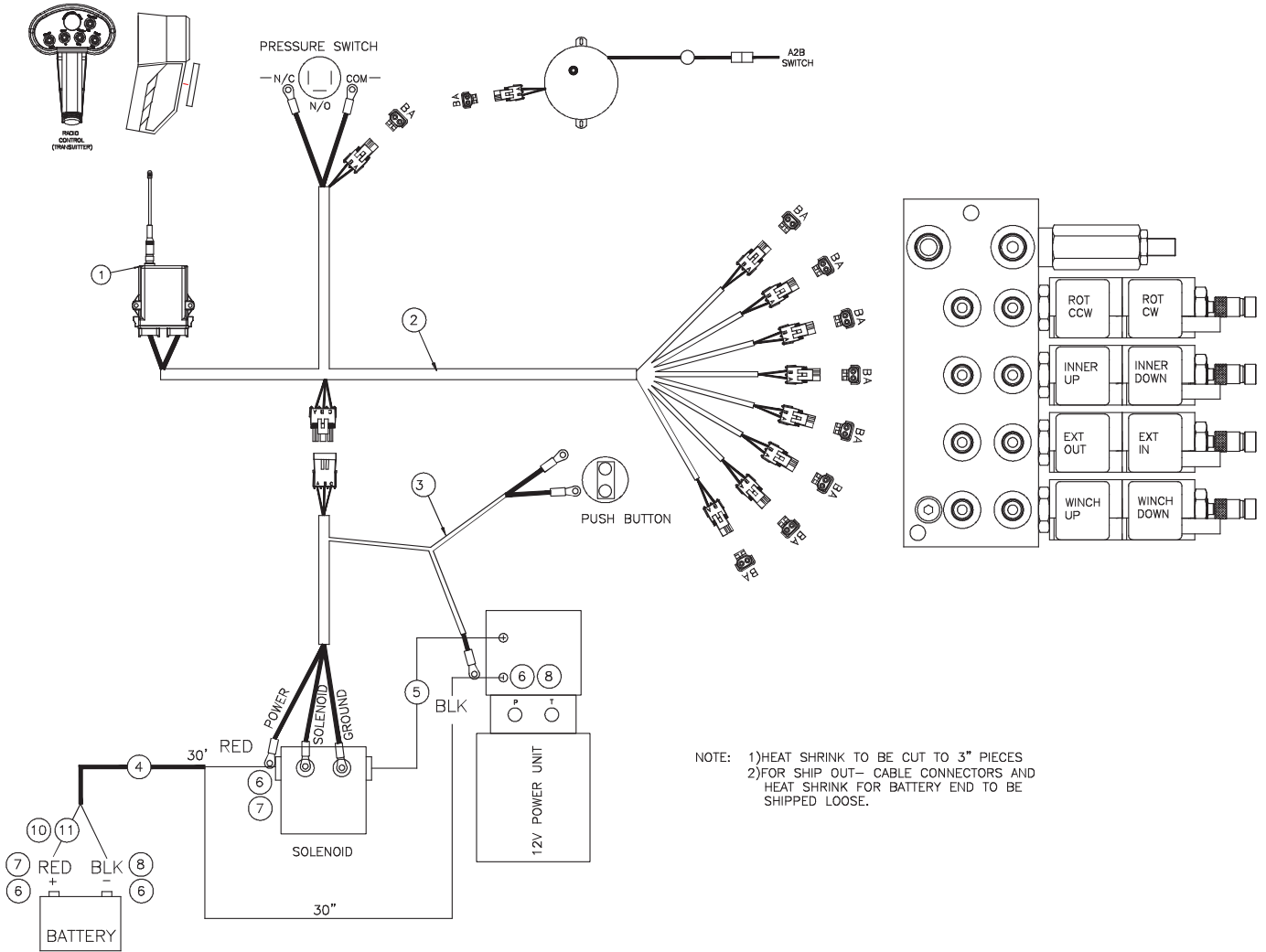
# Control Kit (Proportional Version) - PN 14035



## PN 14035

08			
07			
06			
05	10965	CABLE GROMMET	1
04	44067	WIRE HARNESS RADIO/VB	1
03	34102	TRANSMITTER – RADIO (PART OF 1)	REF
02	34103	RECEIVER – RADIO (PART OF 1)	REF
01	34101	RADIO CONTROLLER ASSEMBLY	1
ITEM	PART No.	DESCRIPTION	QTY

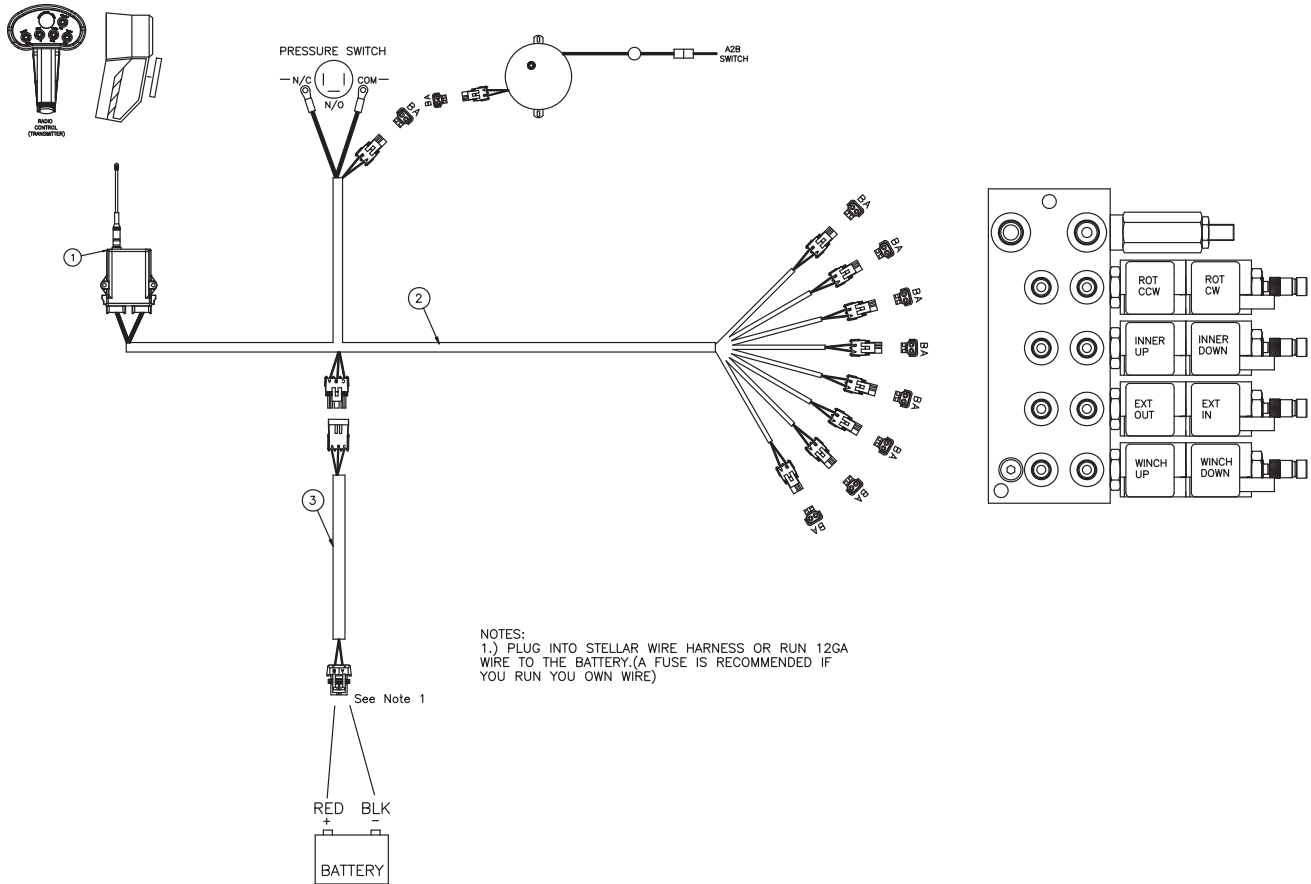
# Control Kit (Electrical Version Cradle A2B) - PN 48112



## PN 48112

14			
13			
12			
11	36435	FUSE 200 AMP 46274	2
10	32523	FUSE HOLDER 46039	2
09	18472	DECAL MANUAL OPERATION 5520	1
08	15218	HEAT SHRINK 0.50 BLK (RM) 22241	6"
07	15219	HEAT SHRINK 0.50 RED (RM) 22241	6"
06	4466	TERML #1X.38 COPPER LUG	4
05	59518	WIRE HARNESS BATTERY CABLE	1
04	20466	CABLE #2 2 WIRE	32.5'
03	25887	WIRE HARNESS 3315 ELECTRIC	1
02	50923	WIRE HARNESS 3315/4420 DEUTSCH	1
01	39784	RADIO CTRL ASM 5 FCTN	1
ITEM	PART No.	DESCRIPTION	QTY

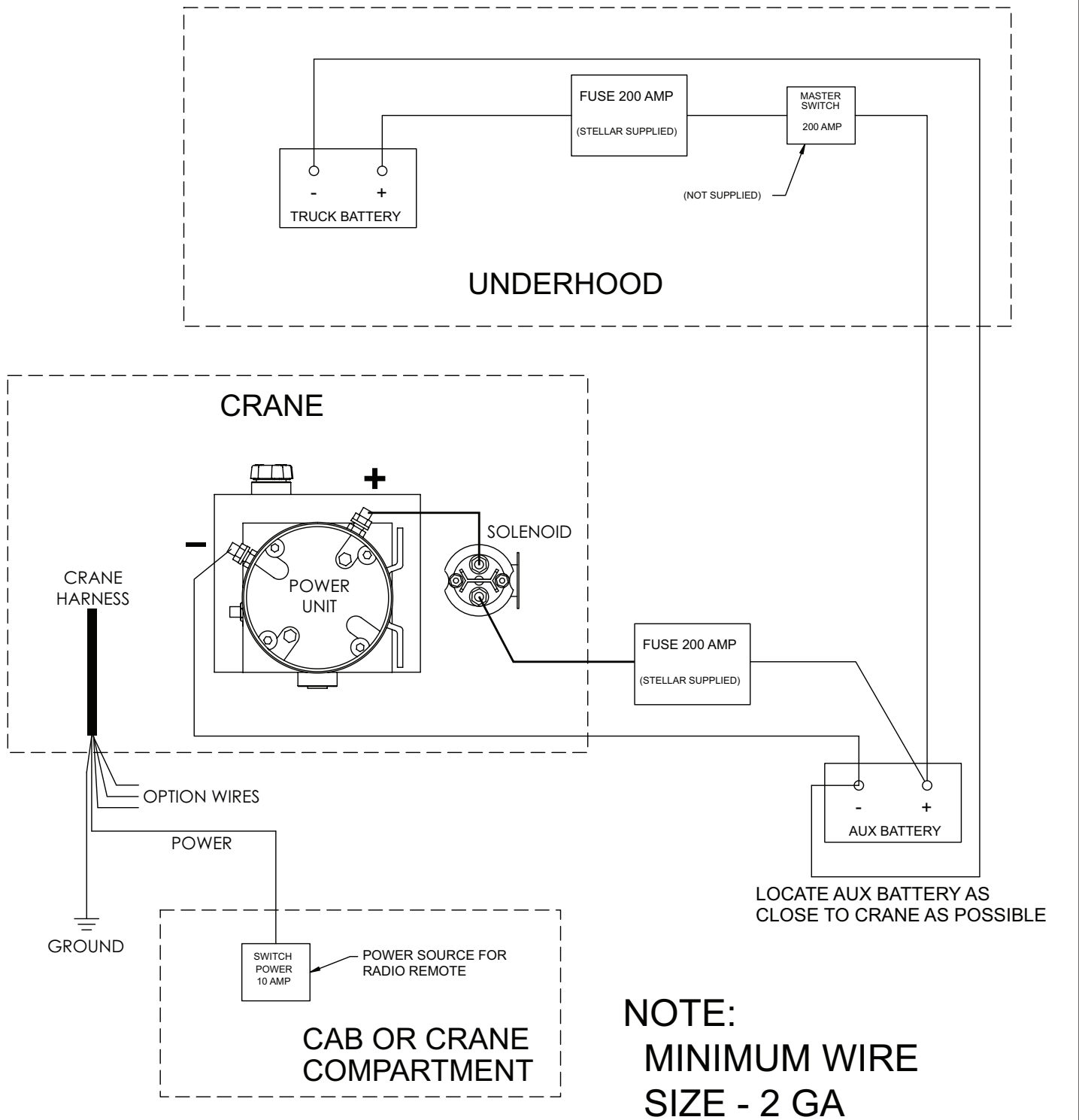
# Control Kit (Hydraulic Version Cradle A2B) - PN 48113



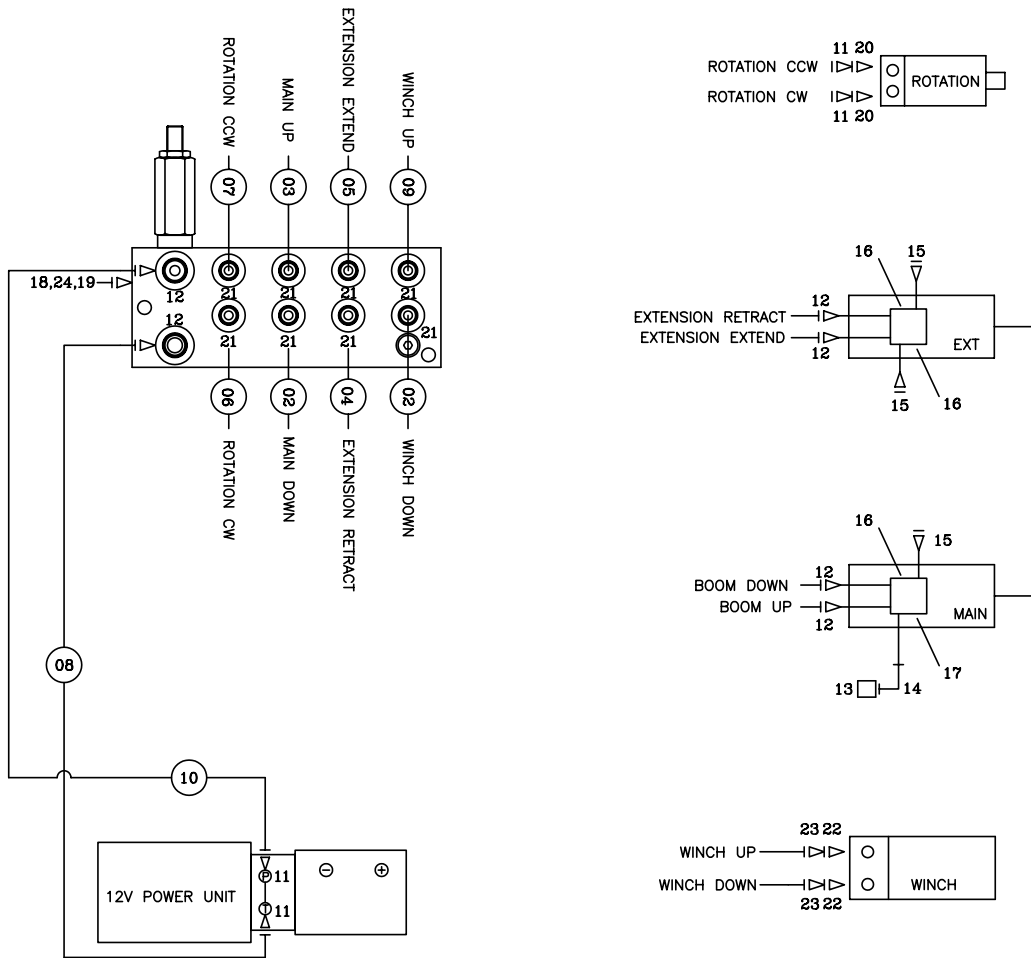
## PN 48113

06			
05			
04			
03	25888	WIRE HARNESS 3315 HYD	1
02	50923	WIRE HARNESS 3315 MULTI FUNCTION VB	1
01	39784	HANDLE ASSEMBLY	1
ITEM	PART No.	DESCRIPTION	QTY

# Wiring Diagram (Electrical Version)



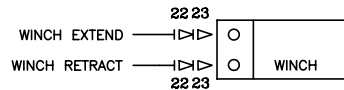
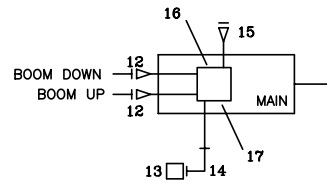
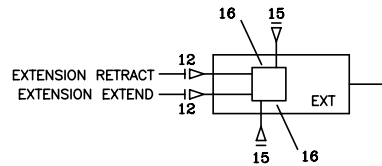
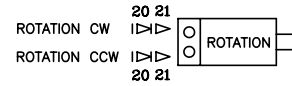
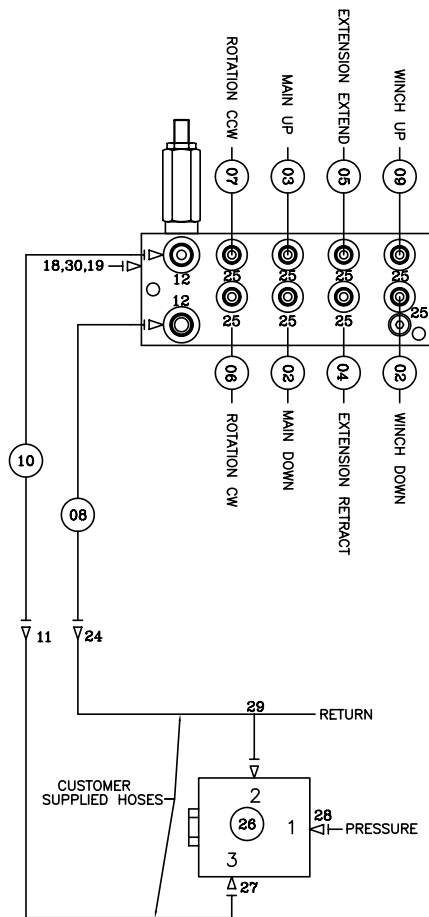
# Hydraulic Kit (Electrical Version) - PN 25882



## PN 25882

24	C5908	FTG 0.25 ML ELL	1
23	D1190	FTG ADAPT 4-6 V5OLO-S	2
22	20060	FTG ADAPT MBSPP/FSTR 3/8-6 F40HG5	2
21	D1291	FTG ADAPT 4-F5OLO-S	8
20	C1111	FTG ADAPT MSTR/FSTR 10-6 F50G5	2
19	6691	FTG MSTR/FNPT 6-1/4	1
18	6397	GAUGE OIL LF 2.5" 0-5000 CBM	1
17	11991	VALVE C-BAL PLUG	1ref
16	9803	VALVE C-BAL	3ref
15	C4961	PLUG STR HOLLOW HEX 0.38 6-HP50N	3ref
14	3861	FTG ML FM O'RING 90 DEG	1
13	49315	SWITCH PRES OVERLD CD-11C-2900R/WD	1
12	C4922	FTG ADAPT 4-6 F5OLO-S	6
11	3338	FTG MF/MSTR 90 4-6 C5OLO-S	4
10	21160	HOSE-HYD .25 X 18	1ref
09	21159	HOSE-HYD .25X 25	1ref
08	21161	HOSE-HYD .25 X 19	1ref
07	21158	HOSE-HYD .25X 34	1ref
06	15032	HOSE-HYD .25 X 35	1ref
05	13022	HOSE-HYD .25 X 73	1ref
04	25884	HOSE-HYD .25 X 71	1ref
03	25006	HOSE-HYD .25 X 27	1ref
02	13438	HOSE-HYD .25 X 26	2ref
01	25883	HOSE KIT 4420 CRANE (incl:2-11)	1
ITEM	PART No.	DESCRIPTION	QTY

# Hydraulic Kit (Hydraulic Version) - PN 25885



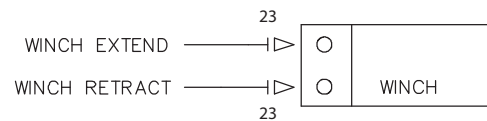
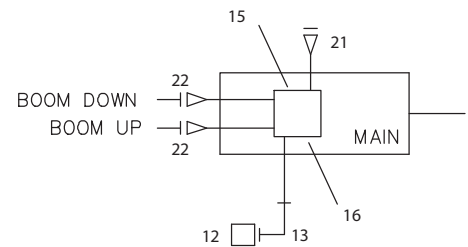
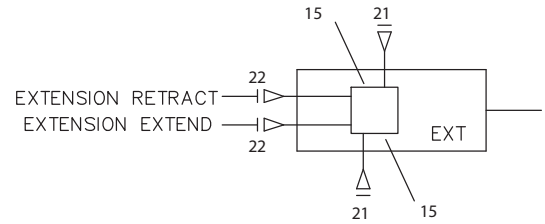
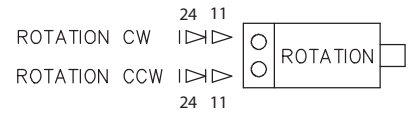
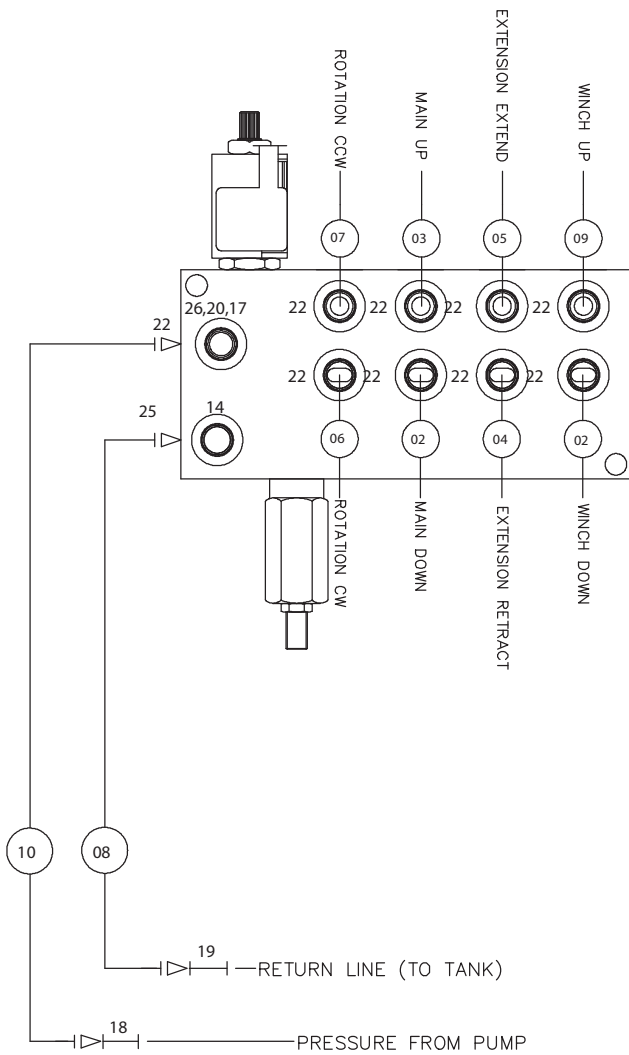
NOTE: FASTEN FLOW CONTROL(P/N 26196) IN CRANE BOX AND RUN HOSES AS SHOWN

## PN 25885

ITEM	PART No.	DESCRIPTION	QTY
30	C5908	FTG 0.25 ML ELL	1
29	C2345	FTG TEE 6-S50L0-S	1
28	C0338	FTG MF/MSTR 90 6-C50L0-S	1
27	0279	FTG ADAPT 6-F50L0-S	1
26	26196	VALVE FLW CTRL/PR FRCA-XAN-ECI-3GPM	1
25	D1291	FTG ADAPT 4-F50L0-S	8
24	12172	FTG SWIVEL 0.50 FS/FS PS81JMJM-8-8	1
23	D1190	FTG ADAPT 4-6 V50L0-S	2
22	20060	FTG ADAPT MBSPP/FSTR 3/8-6 F40HG5	2
21	3338	FTG MF/MSTR 90 4-6 C50L0-S	2
20	C1111	FTG ADAPT MSTR/FSTR 10-6 F50G5	2
19	6691	FTG MSTR/FNPT 6-1/4	1
18	6397	GAUGE OIL LF 2.5" 0-5000 CBM	1
17	11991	VALVE C-BAL PLUG	1ref
16	9803	VALVE C-BAL	3ref
15	C4961	PLUG STR HOLLOW HEX 0.38 6-HP50N	3ref
14	3861	FTG ML FM O'RING 90 DEG	1
13	49315	SWITCH PRES OVERLD CD-11C-2900R/WD	1
12	C4922	FTG ADAPT 4-6 F50L0-S	6
11	12171	FTG SWIVEL 0.38 FS/FS PS81JMJM-6-6	1
10	23182	HOSE-HYD .25 X 15	1ref
09	21159	HOSE-HYD .25X 25	1ref
08	23183	HOSE-HYD .38 X 14	1ref
07	21158	HOSE-HYD .25X 34	1ref
06	15032	HOSE-HYD .25 X 35	1ref
05	13022	HOSE-HYD .25 X 50	1ref
04	25884	HOSE-HYD .25 X 50	1ref
03	13011	HOSE-HYD .25 X 26	1ref
02	13438	HOSE-HYD .25 X 26	2ref
01	25886	HOSE KIT 4420 CRANE (incl:2-10)	1



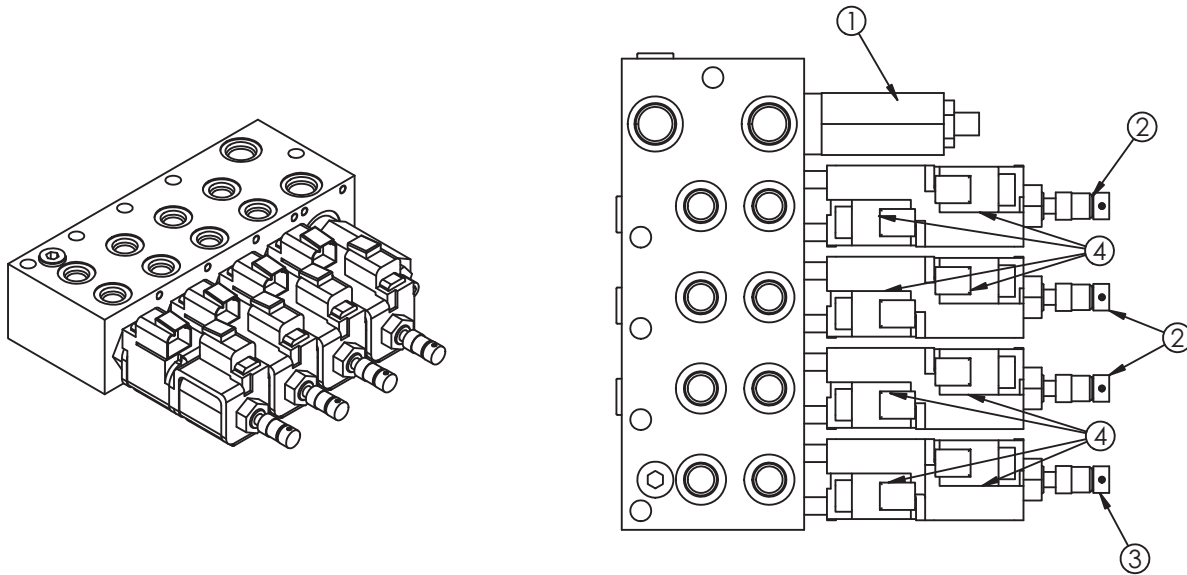
# Hydraulic Kit (Proportional Version) - PN 63024



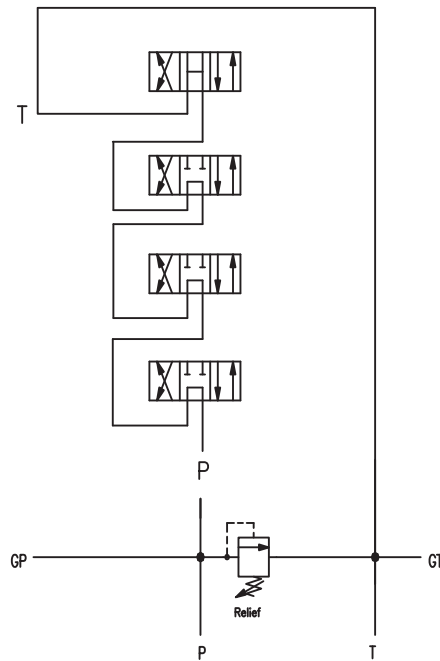
## PN 63024

13	3861	FTG ML FM O'RING 90 DEG	1	26	C5908	FTG 0.25 ML ELL	1
12	49314	SWITCH PRES OVERLD CD-11C-2600R/WD	1	25	C1854	FTG ADAPT 6-8 F50LO-S	1
11	C1111	FTG ADAPT MSTR/FSTR 10-6 F50G5	2	24	3338	FTG MF/MSTR 90 4-6 C50LO-S	2
10	23182	HOSE-HYD .25 X 15	1ref	23	D1190	FTG ADAPT 4-6 V50LO-S	2
09	21159	HOSE-HYD .25X 25	1ref	22	C4922	FTG ADAPT 4-6 F50LO-S	12
08	23183	HOSE-HYD .38 X 14	1ref	21	C4961	PLUG STR HOLLOW HEX 0.38 6-HP50N	REF
07	21158	HOSE-HYD .25X 34	1ref	20	D1430	FTG ADAPT O'RING FMP 6-1/4 F50G-S	1
06	15032	HOSE-HYD .25 X 35	1ref	19	12172	FTG SWIVEL 0.50 FS/FS PS81 JMJM-8-8	1
05	13022	HOSE-HYD .25 X 50	1ref	18	12171	FTG SWIVEL 0.38 FS/FS PS81 JMJM-6-6	1
04	25884	HOSE-HYD .25 X 50	1ref	17	6397	GAUGE OIL LF 2.5 0-5000 CBM	1
03	13011	HOSE-HYD .25 X 26	1ref	16	11991	VALVE C-BAL PLUG	REF
02	13438	HOSE-HYD .25 X 26	2ref	15	9803	VALVE C-BAL	REF
01	25886	HOSE KIT 4420 CRANE (incl: 2-10)	1	14	C4961	PLUG STR HOLLOW HEX 0.38 6-HP50N	1
ITEM	PART No.	DESCRIPTION	QTY	ITEM	PART No.	DESCRIPTION	QTY

# Valve Bank (Standard Hydraulic Version) - PN 50591



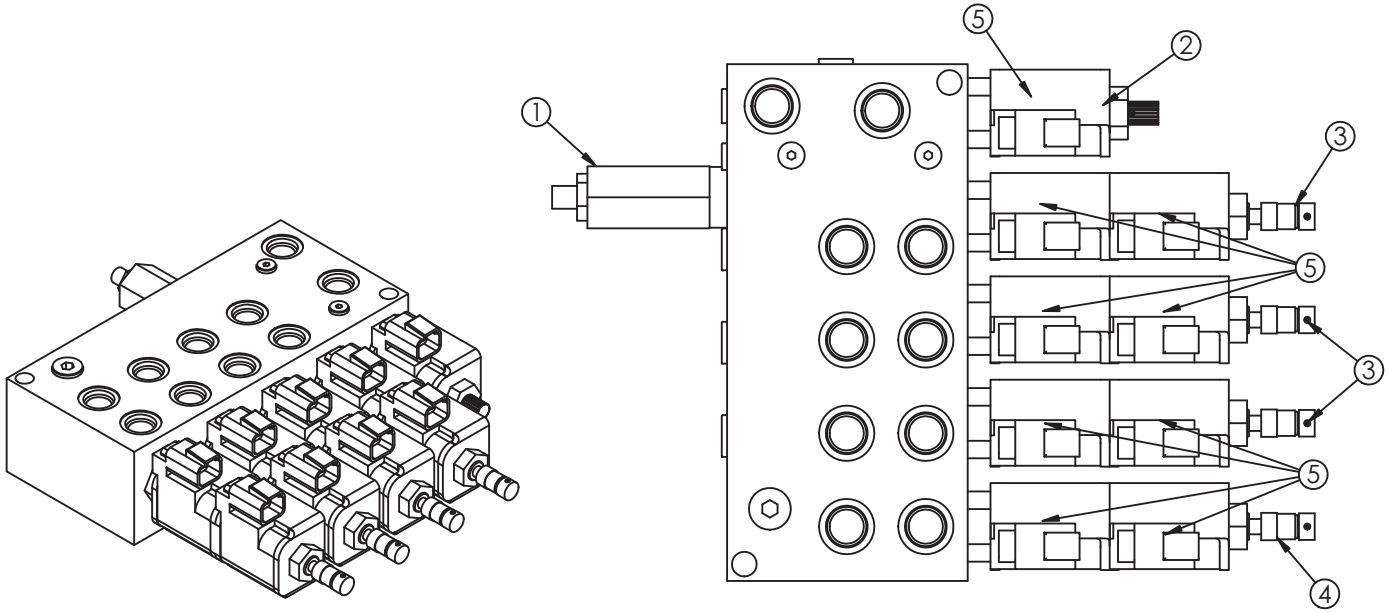
HYDRAULIC SCHEMATIC



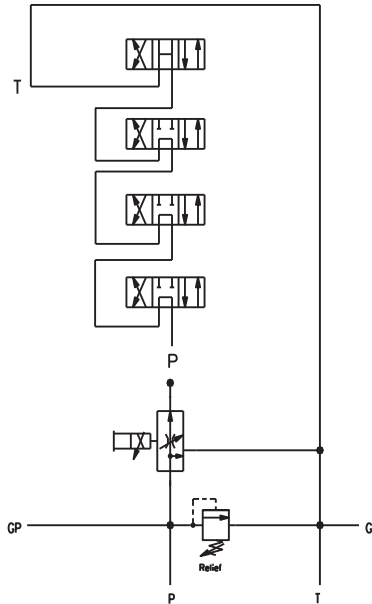
## PN 50591

ITEM	PART	DESCRIPTION	QTY
1	25375	RELIEF VALVE 24957	1
	25376	SEAL KIT 25375	
2	25377	VALVE SOLND 3 POS 4 WAY TAND G02571	3
3	25378	VALVE SOLND 3 POS 4 WAY OPEN G02591	1
	25379	SEAL KIT 25377/25378	
4	55126	COIL 12VDC DUETSCH CCP012H	8

# Valve Bank (Proportional Version) - PN 50592



HYDRAULIC SCHEMATIC

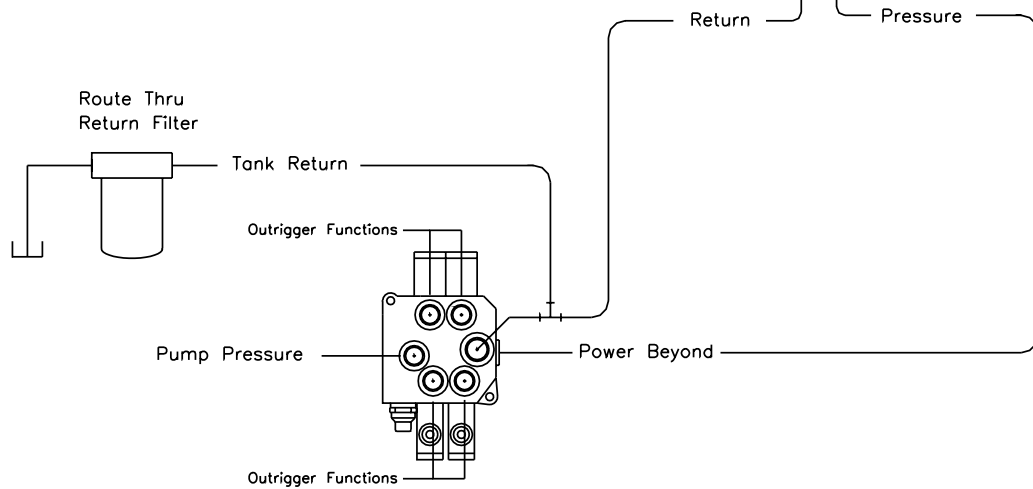
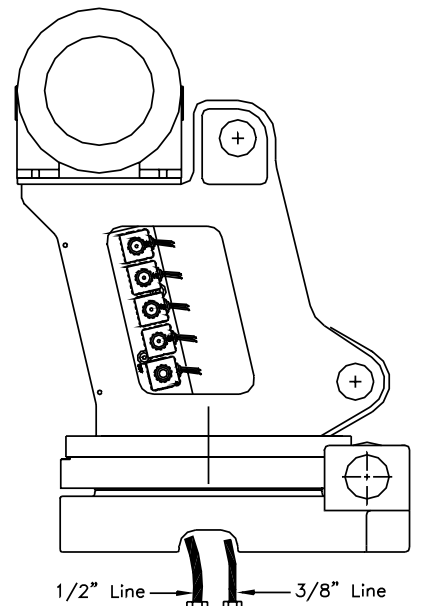


## PN 50592

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

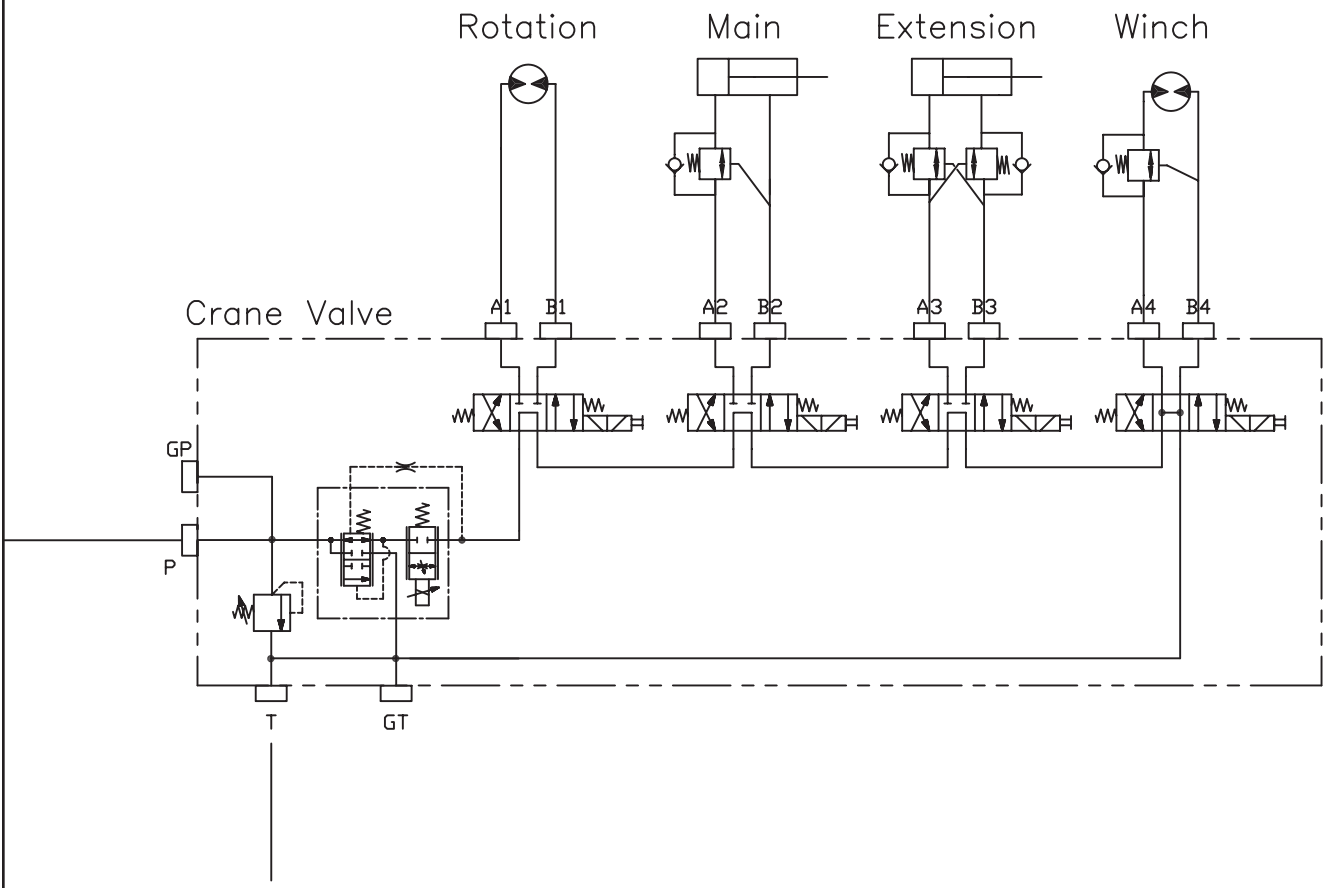
# Hydraulic Installation

1. After mounting, locate the pressure and return lines. Note: Pressure line is 3/8" hose; Return line is 1/2" hose. Hoses are terminated using swivel fittings.
2. Install hydraulic lines per diagram below. Note: Stabilizer valve supplies oil to crane using the Power Beyond feature.
3. Install hydraulic reservoir with return filter. Attach pump pressure line to valve, return link to tank.
4. Fill system with hydraulic oil (Mobil DTE-13M is recommended).



Typical Outrigger Valve  
with Power Beyond Capabilities

# Hydraulic System



## Stability Procedure

### Definition of Stability for the Stellar Telescopic Crane Products:

A truck is stable until the load cannot be lifted off the ground with the winch, without tipping over the truck. Every Stellar crane installed must be tested for stability to determine the actual load capacity of the final truck package. The actual test data must be recorded and supplied with the truck at the time of in-service and should be kept with the truck at all times. The following procedure will test the truck package for stability and will provide a stability capacity chart. The load limit information shown on the stability capacity chart is formulated on 85% tipping.

### Set Up:

1. Locate the truck on a test course in position for loading and engage travel brakes.
2. Set stabilizers so that they make contact with firm, level footings.
3. Operate the crane under partial load to assure operator proficiency and proper machine function.

### 4420 Stability Data

**Max Horizontal Reach:** 240" (From the center of rotation to boom tip)  
**Stability Test Weight:** 945 lbs.

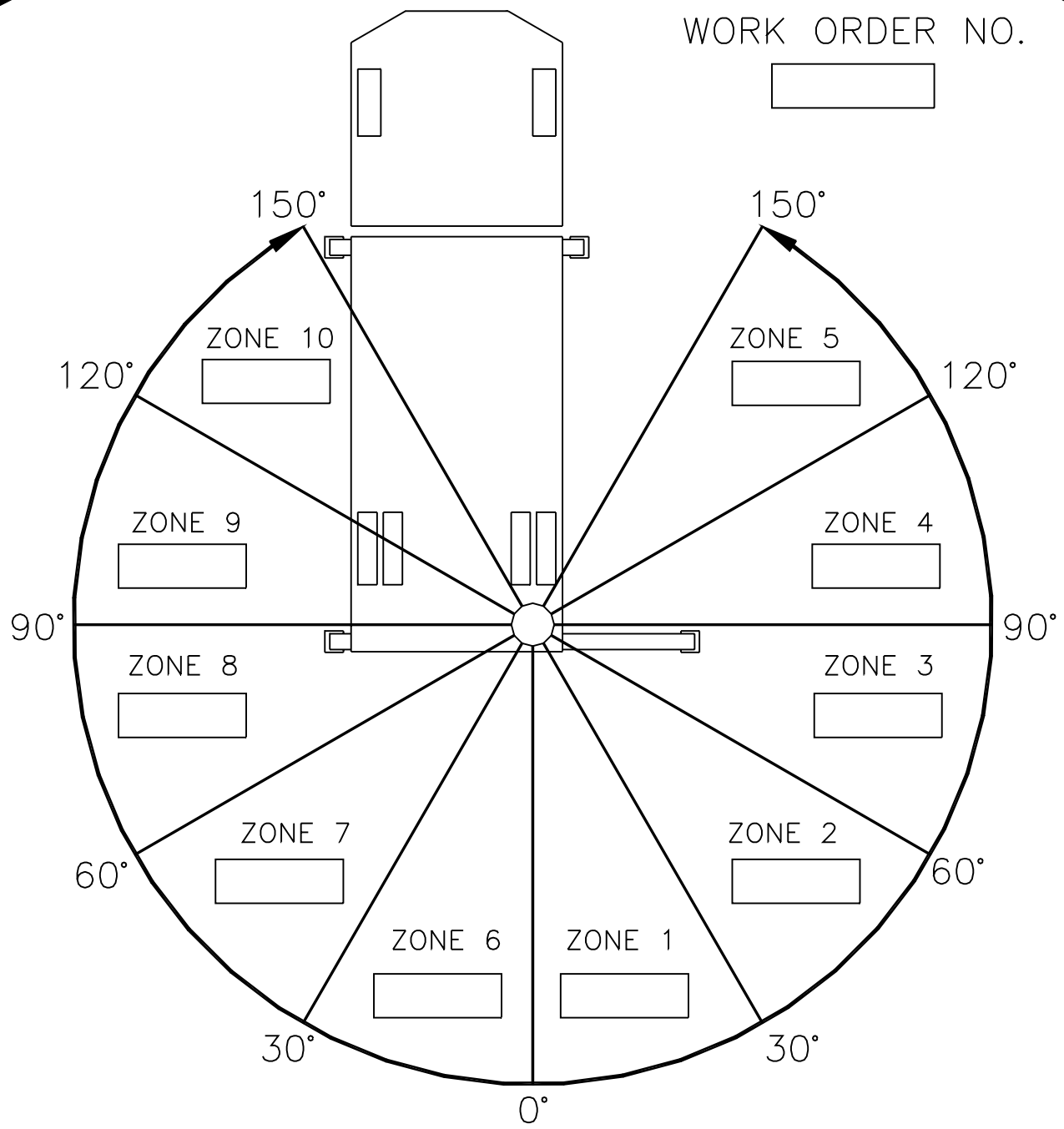
### Test Procedure

1. Rotate the crane into Zone 1 position.
2. With the crane fully retracted and the boom horizontal, winch the test weight off the ground. Note: Keep weight within six inches of the ground at all times.
3. Extend the boom outward until full extension has been reached or until the truck becomes unstable (Again, use the winch to keep the weight within six inches of the ground.)
4. If the boom goes full extension without becoming unstable, the crane is termed stable for this zone and 100% can be written in the Zone 1 data box.
5. If the truck becomes unstable prior to going full extension, retract the boom until the truck becomes stable and measure the horizontal reach in this position (center of rotation to boom tip). This is the stable horizontal reach for this zone. Stable horizontal reach divided by Maximum horizontal reach multiplied by 100 equals the percentage of rated capacity for this zone. Use the following formula to determine the percentage of rated capacity:

$$\frac{\text{Stable Horizontal Reach}}{\text{Max Horizontal Reach}} \times 100 = \text{Percentage of Rated}$$

6. Record this number in the data box for Zone 1. This is the revised capacity due to stability for this zone.
7. Repeat this procedure for each zone until the worksheet is completed.
8. This is the revised capacity based on stability of this package.

# Stability Capacity Chart

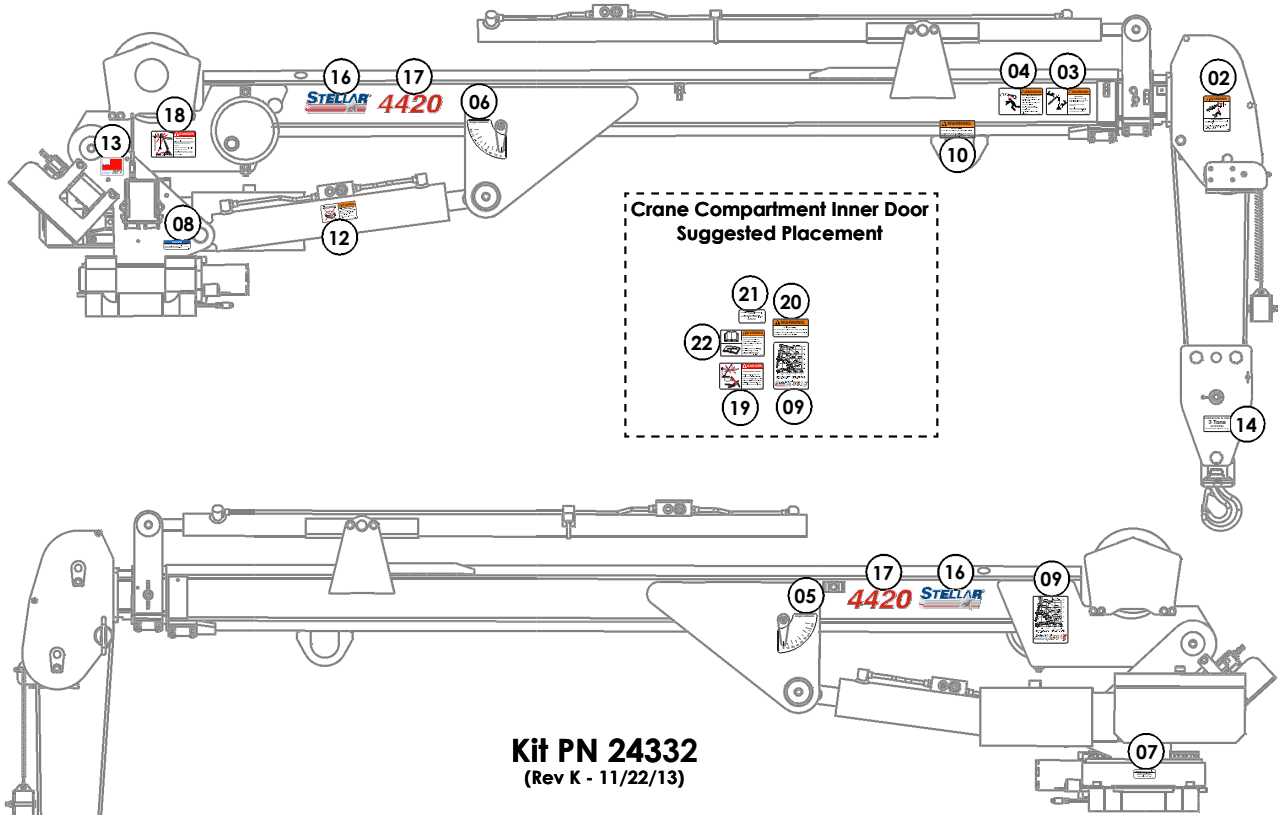


BOXES TO BE FILLED IN WITH PERCENTAGE OF RATED CAPACITY IN THE APPROPRIATE REGION.

## STABILITY CAPACITY CHART

STABILITY is based on this specific truck package.

# Decal Kit Placement - PN 24332



**Kit PN 24332**  
(Rev K - 11/22/13)

**For use with Crane Package**

ITEM	PN	DESCRIPTION	LOCATION	QTY
01	9188	DECAL ROTATE/GREASE	Crane Base	1
02	12300	DECAL WARNING TWO BLOCKING	Crane Horse Head	1
03	12451	DECAL WARNING HOISTING PERSONNEL	Main Boom	1
04	12452	DECAL WARNING MANUAL EXT	Main Boom	1
05	13819	DECAL ANGLE INDICATOR SS	Main Boom	1
06	13820	DECAL ANGLE INDICATOR CS	Main Boom	1
07	15171	DECAL GREASE WORM	Crane Base	1
08	15172	DECAL ASME/ANSI B30.22/B30.5	Crane Mast	1
09	24701	DECAL CAPACITY 4420	Main Boom and Crane Compartment	2
10	24712	DECAL WARNING STOW HOOK	Crane Boom above stow hook	1
11	25159	DECAL WARNING MANUAL OVERRIDES	Under Valve Bank	1
12	28256	DECAL WARNING OVERLOAD DEVICE	Main Cylinder	1
13	35234	DECAL STELLAR MADE IN THE USA	Main Boom	1
14	38205	DECAL SNATCH BLOCK 3 TON	Snatch Block	1
15	41068	DECAL VB CONTROL MECH CRANE	On side of Crane Mast	1
16	55128	DECAL STELLAR LOGO 2.75 x 7.75	Main Boom (Both Sides)	2
17	55130	DECAL IDENTIFICATION 4420	Main Boom (Both Sides)	2
18	C1179	DECAL DANGER ELECTROCUTION SMALL	Crane Mast	1

**For use with Body/Chassis Package**

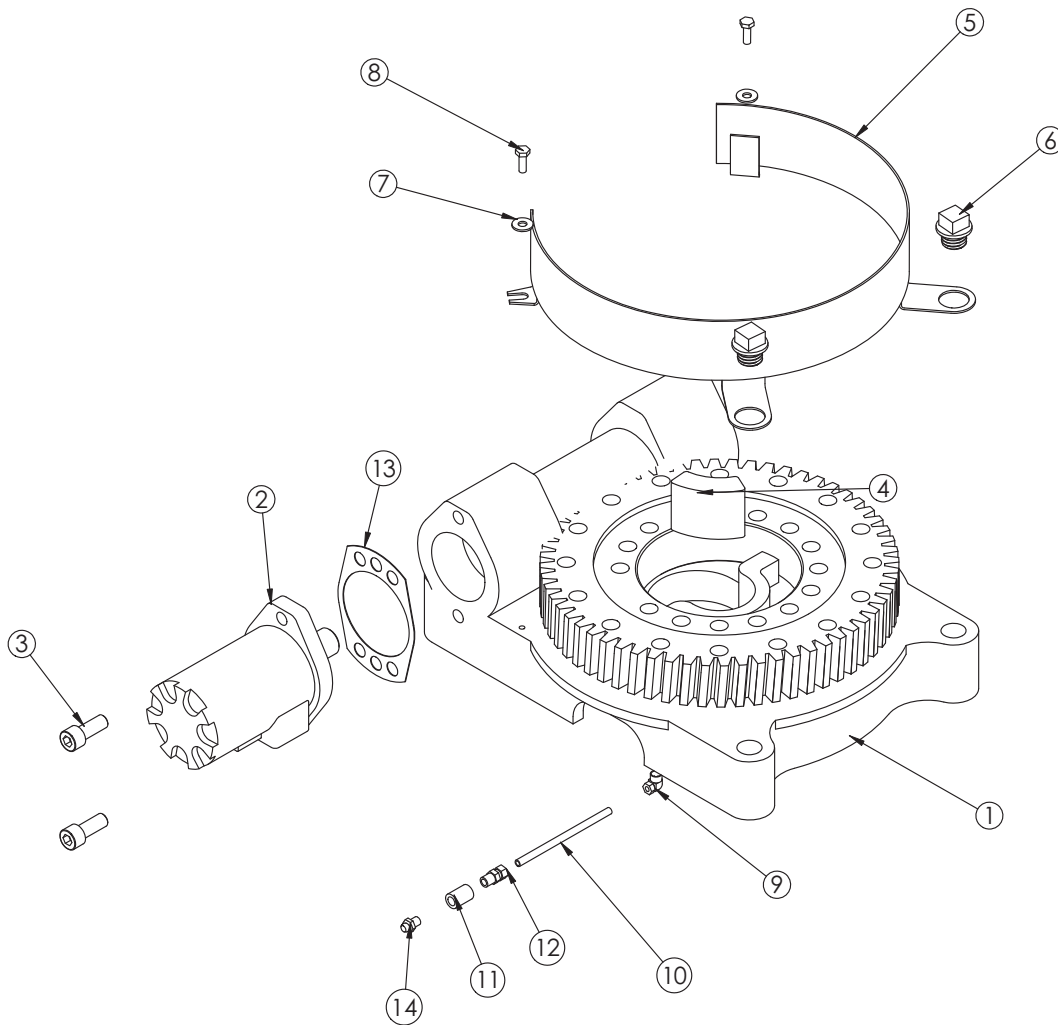
ITEM	PN	DESCRIPTION	LOCATION	QTY
19	4186	DECAL DANGER ELECTROCUTION REMOTE	Crane Compartment	1
20	4189	DECAL WARNING OVERLOAD	Crane Compartment	1
21	4214	DECAL SERVICE	Crane Compartment	1
22	68024	DECAL WARNING UNTRAINED OPERATOR	Crane Compartment	1
23*	C4545	DECAL DANGER ELECTROCUTION LARGE	Four corners of the body/chassis	4
24*	C5910	DECAL STELLAR 4x9.5	Suggested: Rear body/tailgate	1
25*	C5911	DECAL STELLAR 2x4.5	Suggested: Side corners of body	3

\*Not Shown



# Chapter 3 - Assembly Drawings

## Base Assembly - PN 19998



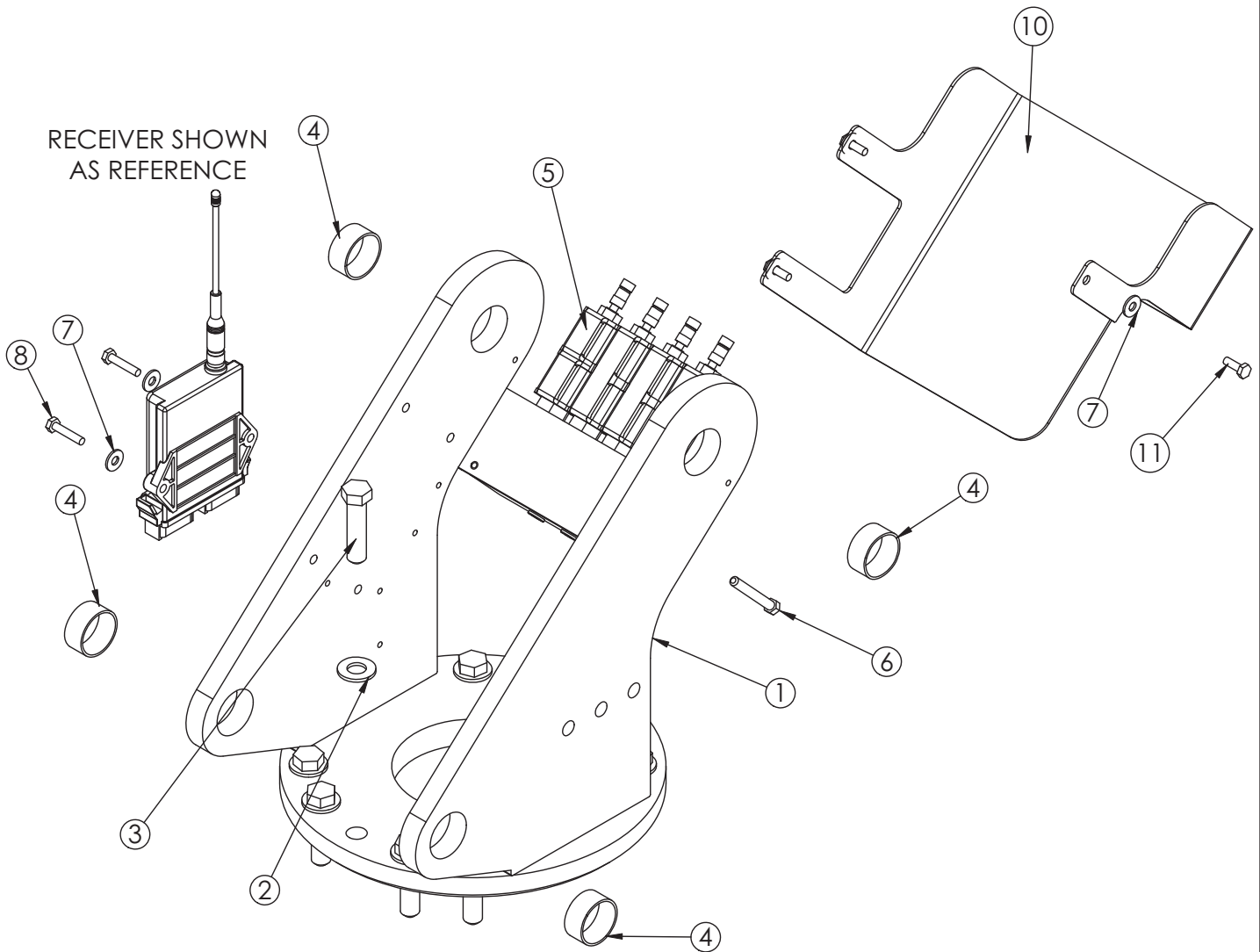
### PN 19998

ITEM	PART	DESCRIPTION	QTY.
1	16653	BEARING SWING DRIVE CAST	1
2	D1204	ROTATION MOTOR 5520	1
3	D1307	CAP SCR 0.50-13X1.25 SH	2
4	17750	STOP 3515	1
5	18945PC	GUARD TTB 5520 CRANE	1
6	18948	CAP SCR 0.88-9 X .63 PLASTIC	2
7	0340	WASHER 0.25 FLAT	2
8	0479	CAP SCR 0.25-20X0.75 HHGR5	2
9	D0240	FTG ELL 0.13 CPRSN TUBE TO NPT	1
10	22393	TUBE AIR	1
11	C2256	FTG COUPLER PIPE 0.13	1
12	D1345	FTG CPRSN 0.12NPT/0.25 TUBE	1
13	21151	GASKET MOTOR 008-10056-1	1
14	56589	ZERK 1/8 NPT STRAIGHT LONG THREAD	1

GASKET SHOWN AS REFERENCE

D0240 SHOWN AS REFERENCE  
(INCLUDED WITH GEAR BEARING)

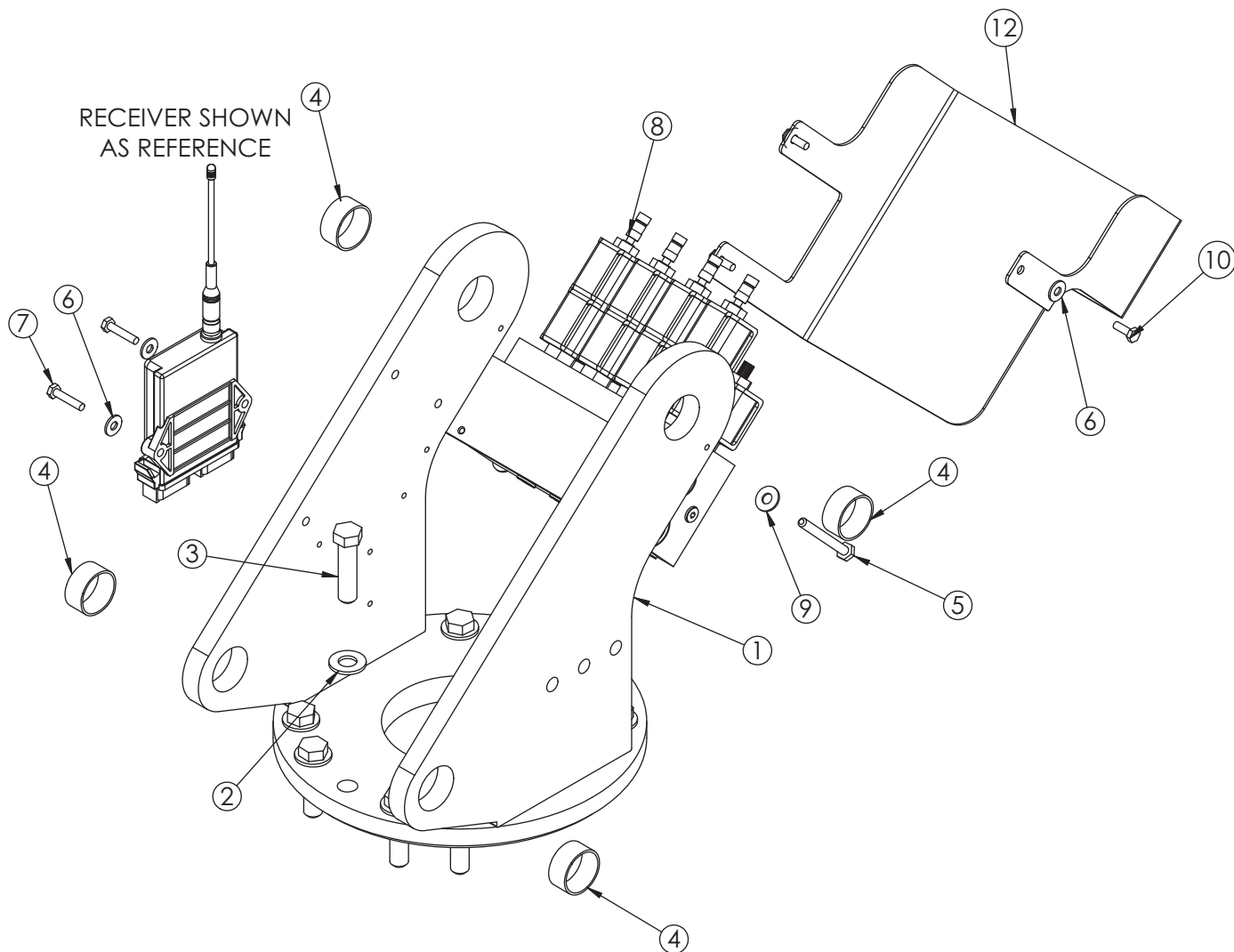
# Mast Assembly (Radio Remote Version) - PN 44647



## PN 44647

ITEM	PART	DESCRIPTION	QTY.
1	50597	MAST 3315 HYD PROP H2	1
2	C5902	WASHER 0.63 SAE FLAT YELLOW GR8	10
3	C1026	CAP SCR 0.63-11X2.50 HHGR8 ZY	10
4	21810	BUSHING GSI-2426-12 1.50X0.75	4
5	50591	VB 4 SECT ELECT ON/OFF STERLING4GPM	1
6	0489	CAP SCR 0.31-18X2.50 HHGR5	2
7	0340	WASHER 0.25 FLAT	5
8	0437	CAP SCR 0.25-20X1.25 HHGR5	2
10	50599PC	COVER 3315 HYD PROP H2	1
11	0479	CAP SCR 0.25-20X0.75 HHGR5	3

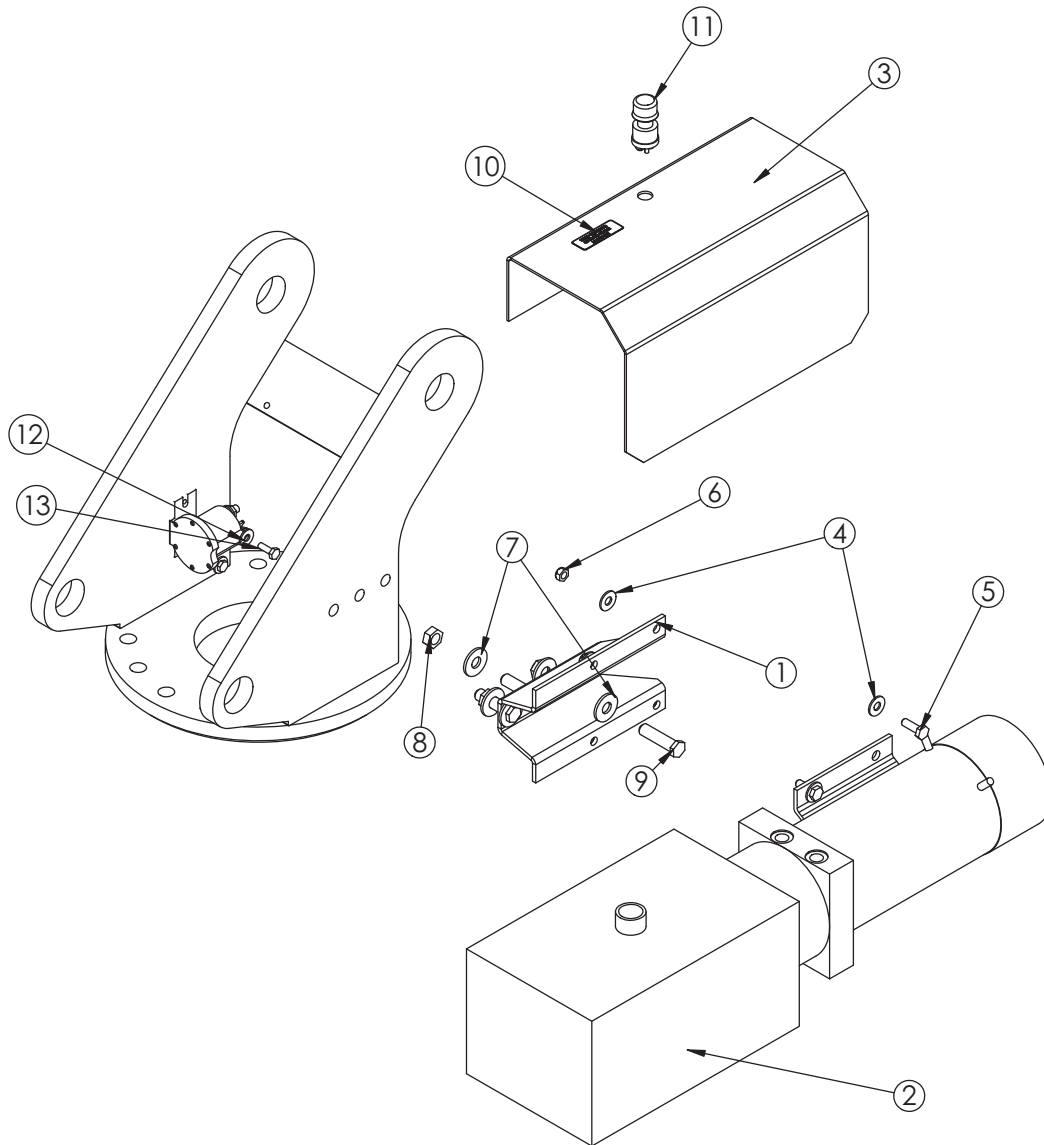
# Mast Assembly (Proportional Version) - PN 50596



## PN 50596

ITEM	PART	DESCRIPTION	QTY.
1	50597	MAST 3315 HYD PROP H2	1
2	C5902	WASHER 0.63 SAE FLAT YELLOW GR8	10
3	C1026	CAP SCR 0.63-11X2.50 HHGR8 ZY	10
4	21810	BUSHING GSI-2426-12 1.50X0.75	4
5	C0930	CAP SCR 0.31-18X3.00 HHGR5	2
6	0340	WASHER 0.25 FLAT	5
7	0437	CAP SCR 0.25-20X1.25 HHGR5	2
8	50592	VB 4 SECT W/PROP STER4GPM DEUTSCH	1
9	0343	WASHER 0.31 USS FLAT ZINC	2
10	0479	CAP SCR 0.25-20X0.75 HHGR5	3
12	50599PC	COVER 3315 HYD PROP H2	1

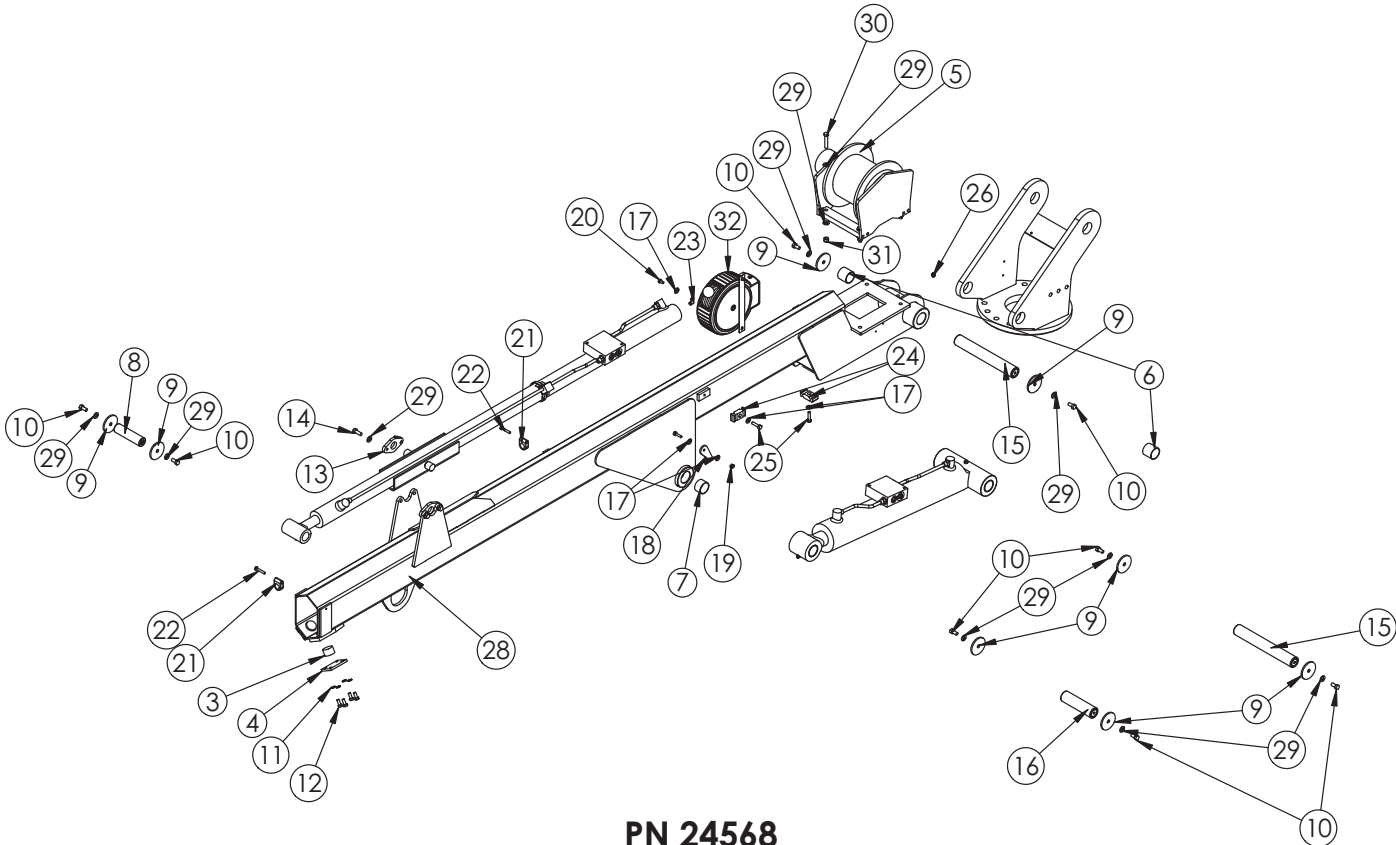
# Power Unit Assembly (Electric Version Only) - PN 20432



## PN 20432

ITEM	PART	DESCRIPTION	EXPL ODED
1	17132PC	BRKT POWER UNIT 5520	1
2	16994	POWER UNIT 12V 5520 HORIZ	1
3	19997PC	COVER POWER UNIT 5520	1
4	0343	WASHER 0.31 USS FLAT ZINC	8
5	C0922	CAP SCR 0.31-18X1.00 HHGR5	4
6	0342	NUT 0.31-18 HH NYLOC	4
7	0352	WASHER 0.50 USS FLAT ZINC	6
8	C6106	NUT 0.50-13 HHGR5 NYLOC	3
9	0501	CAP SCR 0.50-13X2.00 HHGR5	3
10	18472	DECAL MANUAL OPERATION 5520	1
11	17771	SWITCH PUSH BUTTON 9216-03	1
12	0340	WASHER 0.25 FLAT	2
13	0479	CAP SCR 0.25-20X0.75 HHGR5	2

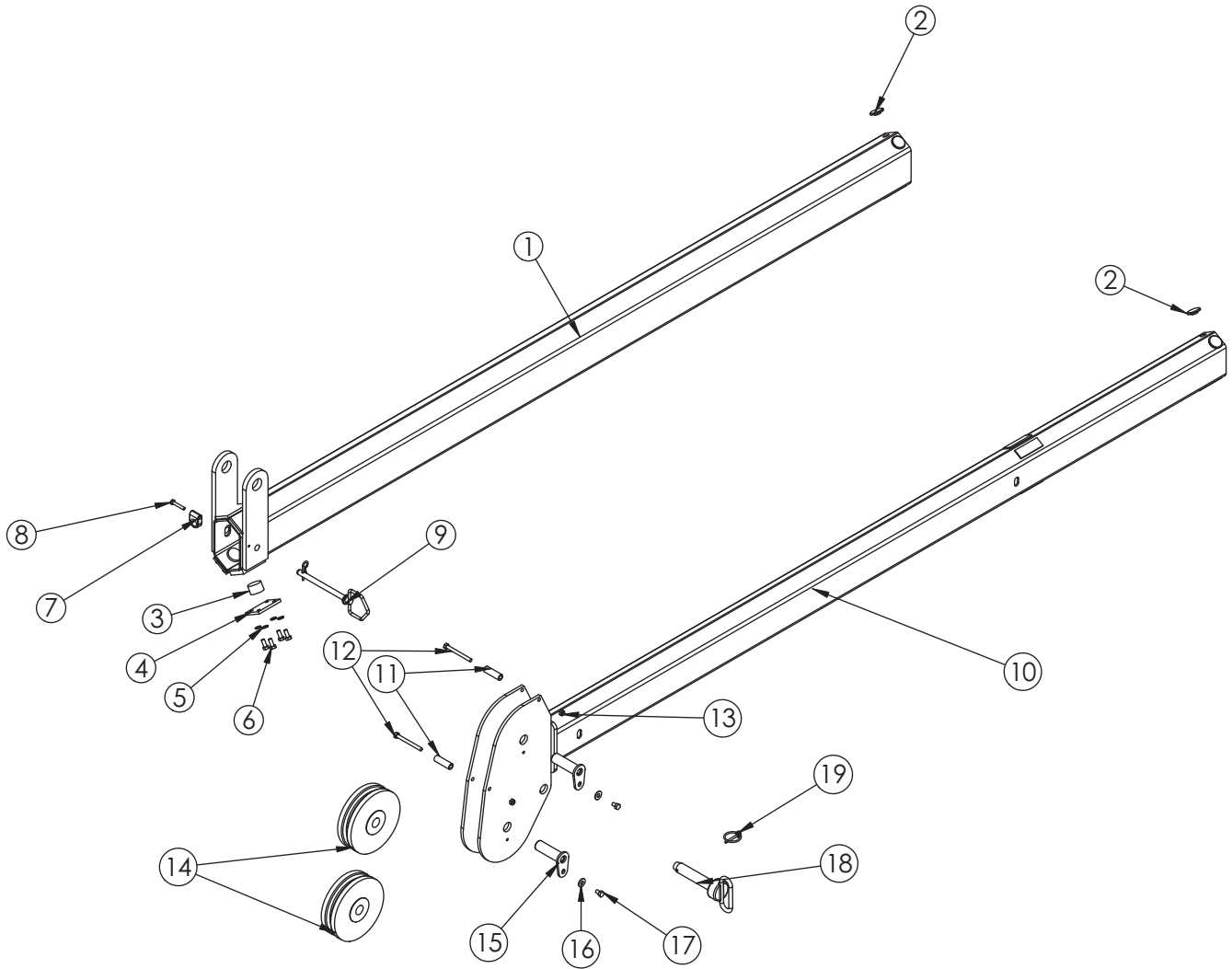
# Main Boom Assembly - PN 24568



**PN 24568**

ITEM	PART	DESCRIPTION	QTY.
1	25160	CYLINDER ASM 3.50X19.88	1
2	25881	CYLINDER ASM 2.00X60.00	1
3	19496	WEAR PAD .88X1.38 RND	2
4	19497PC	PLATE 1ST EXT 3315 WEAR PAD	2
5	20039	WINCH 2000 4416 CRANE	1
6	0067	BUSHING BPC-2426-24 1.50X1.50	2
7	16067	BUSHING QSI-2426-16	2
8	9086ZP	PIN 1.25X4.69 D&T	1
9	7403	PIN CAP 0.44X2.50X0.19	8
10	9843	CAP SCR 0.38-16X0.75 HHGR8 (TRQ 33 FT/LBS)	8
11	5591	WASHER 0.31 SAE FLAT YELLOW GR8	8
12	0420	CAP SCR 0.31-18X0.75 HHGR5	8
13	3267PC	PLATE CYLINDER MTG	2
14	13573	CAP SCR 0.38-16X1.00 HHGR8	4
15	19512ZP	PIN 1.50X10.63 D&T	2
16	19514ZP	PIN 1.50X5.50 D&T	1
17	0340	WASHER 0.25 FLAT	8
18	19881PC	PLATE ANGLE INDICATOR 3315	2
19	0333	NUT 0.25-20 HHGR5 NYLOC	2
20	0478	CAP SCR 0.25-20X0.50 HHGR5	2
21	0337	HOSE CLAMP LN 3160 PP	2
22	0220	CAP SCR 0.25-20 X 1.50 HHGR5	2
23	C5606	CLAMP 0.25 BLK VINYL	1
24	8622	CLAMP HOSE/TUBE AG-2	2
25	0485	CAP SCR 0.31-18X1.25 HHGR5	2
26	c1592	ZERK 1/8 NPT STRAIGHT	1
28	60239	INNER BOOM 4420 NEW WINCH MNT	1
29	C6353	WASHER 0.38 SAE FLAT YELLOW GR8	20
30	C1006	CAP SCR 0.38-16X2.00 HHGR8	4
31	56673	NUT 0.38-16 HHGR8 NYLOC	4
32	72602	CORD REEL ASM 21 FT CRANE	1

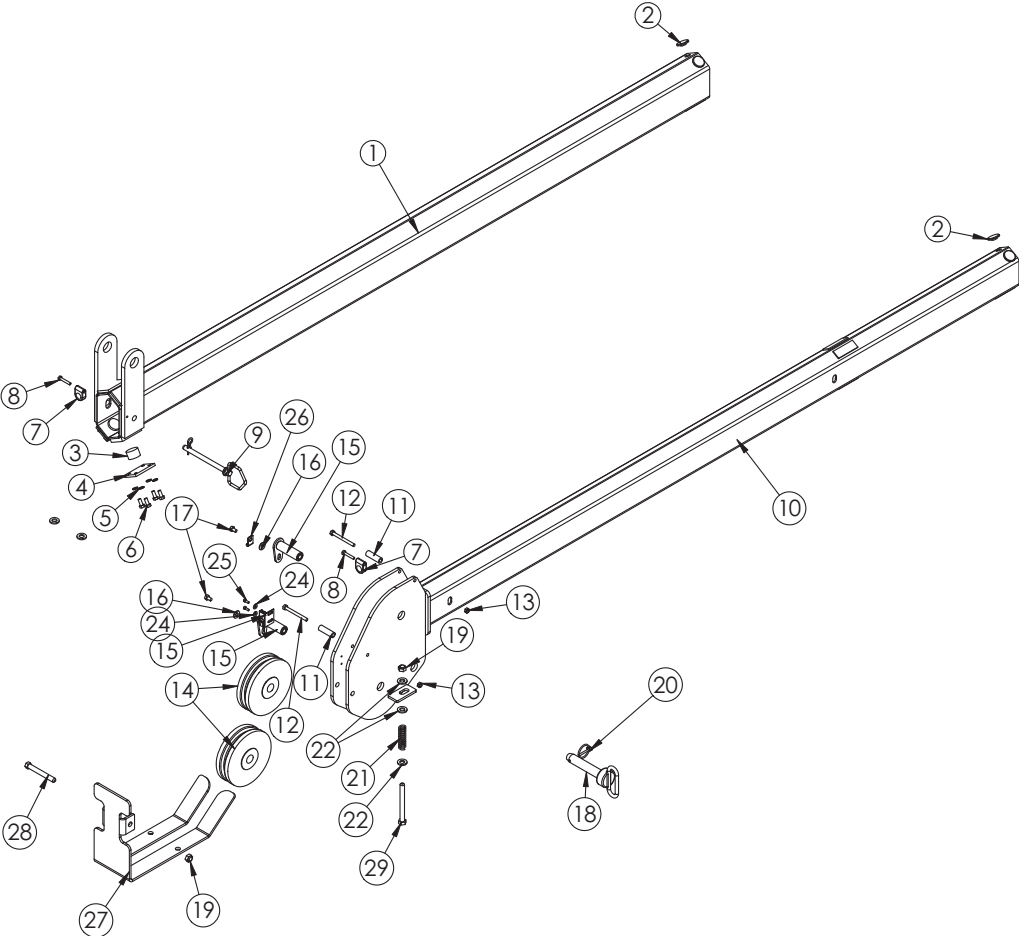
# Extension Boom Assembly - PN 24570



## PN 24570

ITEM	PART	DESCRIPTION	QTY.
1	24691	EXT BOOM 4420 1ST	1
2	19457	WEAR PAD 0.16X1.38 RND	4
3	19496	WEAR PAD .88X1.38 RND	2
4	19497PC	PLATE 1ST EXT 3315 WEAR PAD	2
5	5591	WASHER 0.31 SAE FLAT YELLOW GR8	8
6	0420	CAP SCR 0.31-18X0.75 HHGR5	8
7	0337	HOSE CLAMP LN 3160 PP	1
8	0220	CAP SCR 0.25-20 X 1.50 HHGR5	1
9	C5629	PIN HITCH 0.50X5.50	1
10	24692	EXT BOOM 2ND 4420	1
11	27719	SPACER BOOM TIP 6620 UHMW	2
12	12178	CAP SCR 0.31-18X3.25 HHGR5	2
13	0342	NUT 0.31-18 HH NYLOC	2
14	11545	SHEAVE 6620 6.75 DIA .31R/1.94 THK	2
15	9706ZP	PIN TEAR DROP 1.00X3.25	2
16	0343	WASHER 0.31 USS FLAT ZINC	2
17	0484	CAP SCR 0.31-18 X 0.50 HHGR5	2
18	12824	PIN HITCH 1.00X4.50	1
19	5753	PIN 0.19X1.56 LYNCH	1

# Extension Boom Assembly (Optional) - PN 30790

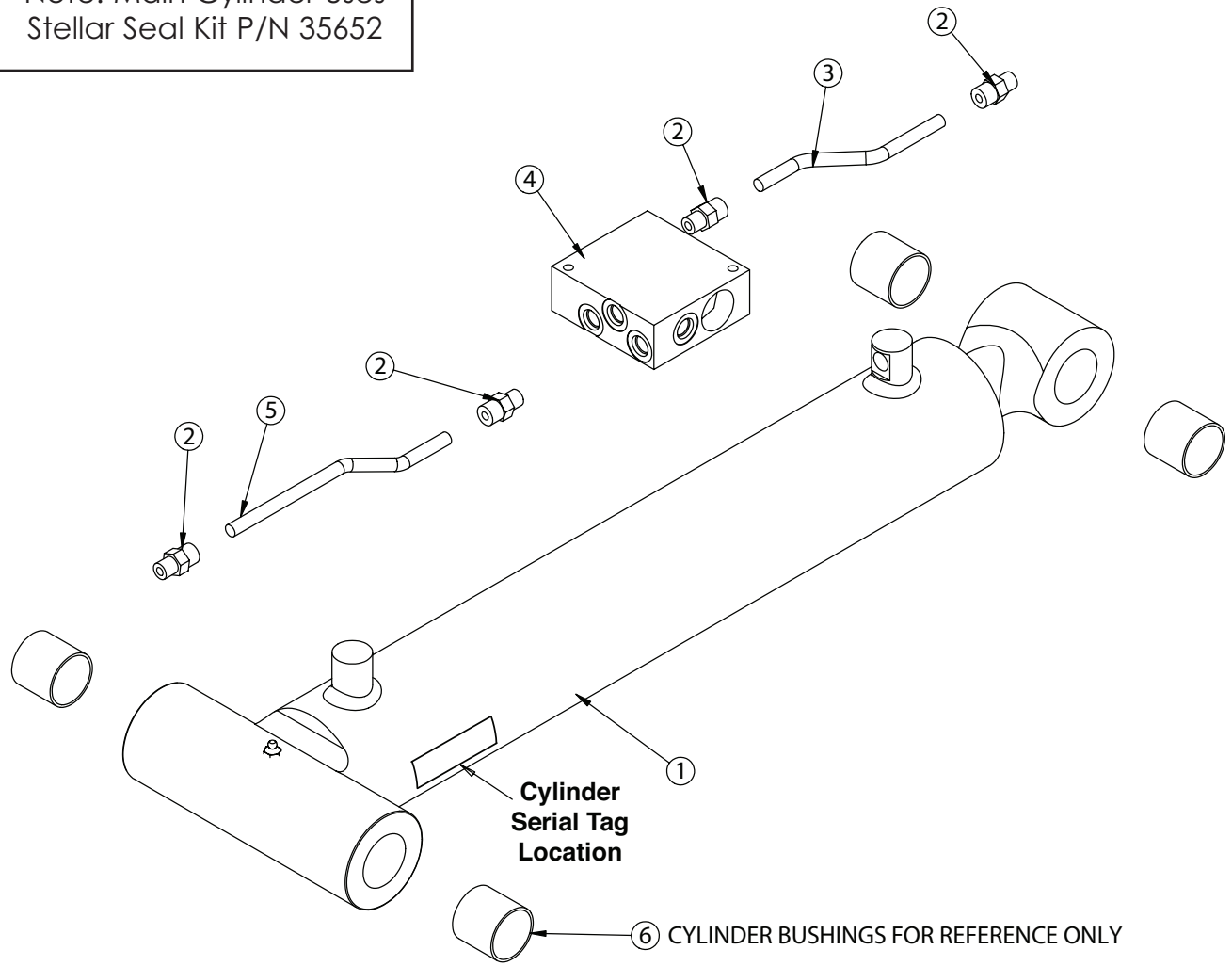


## PN 30790

ITEM	PART	DESCRIPTION	QTY.
1	24691	EXT BOOM 4420 1ST	1
2	19457	WEAR PAD 0.16X1.38 RND	4
3	19496	WEAR PAD .88X1.38 RND	2
4	19497PC	PLATE 1ST EXT 3315 WEAR PAD	2
5	5591	WASHER 0.31 SAE FLAT YELLOW GR8	8
6	0420	CAP SCR 0.31-18X0.75 HHGR5	8
7	0337	HOSE CLAMP LN 3160 PP	2
8	0220	CAP SCR 0.25-20 X 1.50 HHGR5	2
9	C5629	PIN HITCH 0.50X5.50	1
10	30791	EXT BOOM 2ND 4420 CRADLE A2B	1
11	27719	SPACER BOOM TIP 6620 UHMW	2
12	12178	CAP SCR 0.31-18X3.25 HHGR5	2
13	0342	NUT 0.31-18 HH NYLOC	2
14	11545	SHEAVE 6620 6.75 DIA .31R/1.94 THK	2
15	97062P	PIN TEAR DROP 1.00X3.25	2
16	0343	WASHER 0.31 USS FLAT ZINC	2
17	0484	CAP SCR 0.31-18 X 0.50 HHGR5	2
18	12824	PIN HITCH 1.00X4.50	1
19	C6106	NUT 0.50-13 HHGR5 NYLOC	3
20	5753	PIN 0.19X1.56 LYNCH	1
21	27710	SPRING ANTI 2 BLOCK SUMMIT	2
22	D0790	WASHER 0.50 FLAT GR8	8
23	29085	SWITCH LIMIT E1117-B9111-6C	1
24	D0178	WASHER #10 SAE FLAT ZINC	2
25	31132	SCREW #10-24X0.50 SH SS	2
26	31279	CLAMP 0.31 BLK VINYL	1
27	51903PC	PLATE CRADDLE 6620/6628	1
28	0507	CAP SCR 0.50-13X4.50 HHGR5	1
29	C1000	CAP SCR 0.50-13X5.00 HHGR5	2

# Main Cylinder Assembly - PN 25160

Note: Main Cylinder uses Stellar Seal Kit P/N 35652



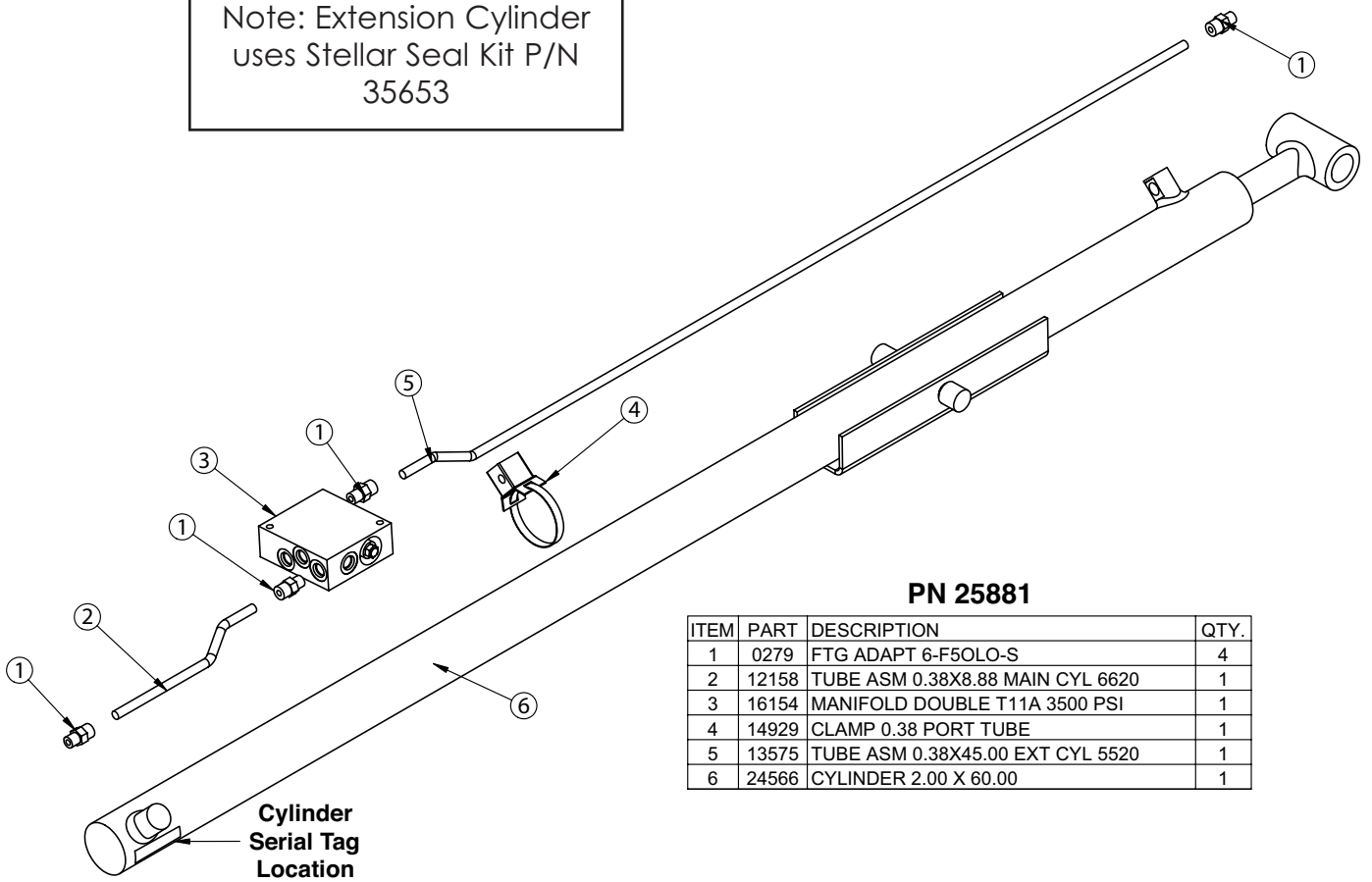
## PN 25160

ITEM	PART	DESCRIPTION	QTY.
1	24699	CYLINDER 3.50X19.88	1
2	0279	FTG ADAPT 6-F5OLO-S	4
3	19363	TUBE ASM 0.38X5.69 3315	1
4	13080	MANIFOLD SINGLE T11A 3500 PSI	1
5	15173	TUBE ASM 0.38X7.81 MAIN CYL 5520	1
6	0067	BUSHING BPC-2426-24 1.50X1.50	4



# Extension Cylinder Assembly - PN 25881

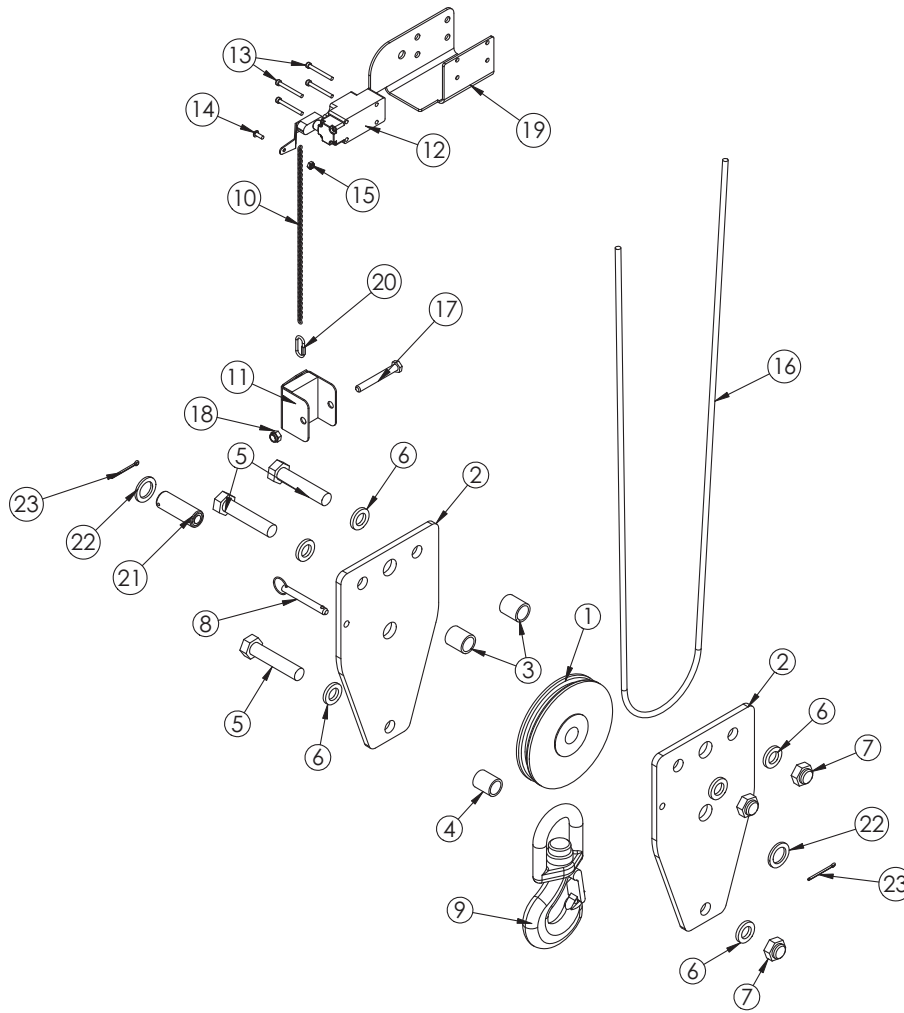
Note: Extension Cylinder  
uses Stellar Seal Kit P/N  
35653



## PN 25881

ITEM	PART	DESCRIPTION	QTY.
1	0279	FTG ADAPT 6-F5OLO-S	4
2	12158	TUBE ASM 0.38X8.88 MAIN CYL 6620	1
3	16154	MANIFOLD DOUBLE T11A 3500 PSI	1
4	14929	CLAMP 0.38 PORT TUBE	1
5	13575	TUBE ASM 0.38X45.00 EXT CYL 5520	1
6	24566	CYLINDER 2.00 X 60.00	1

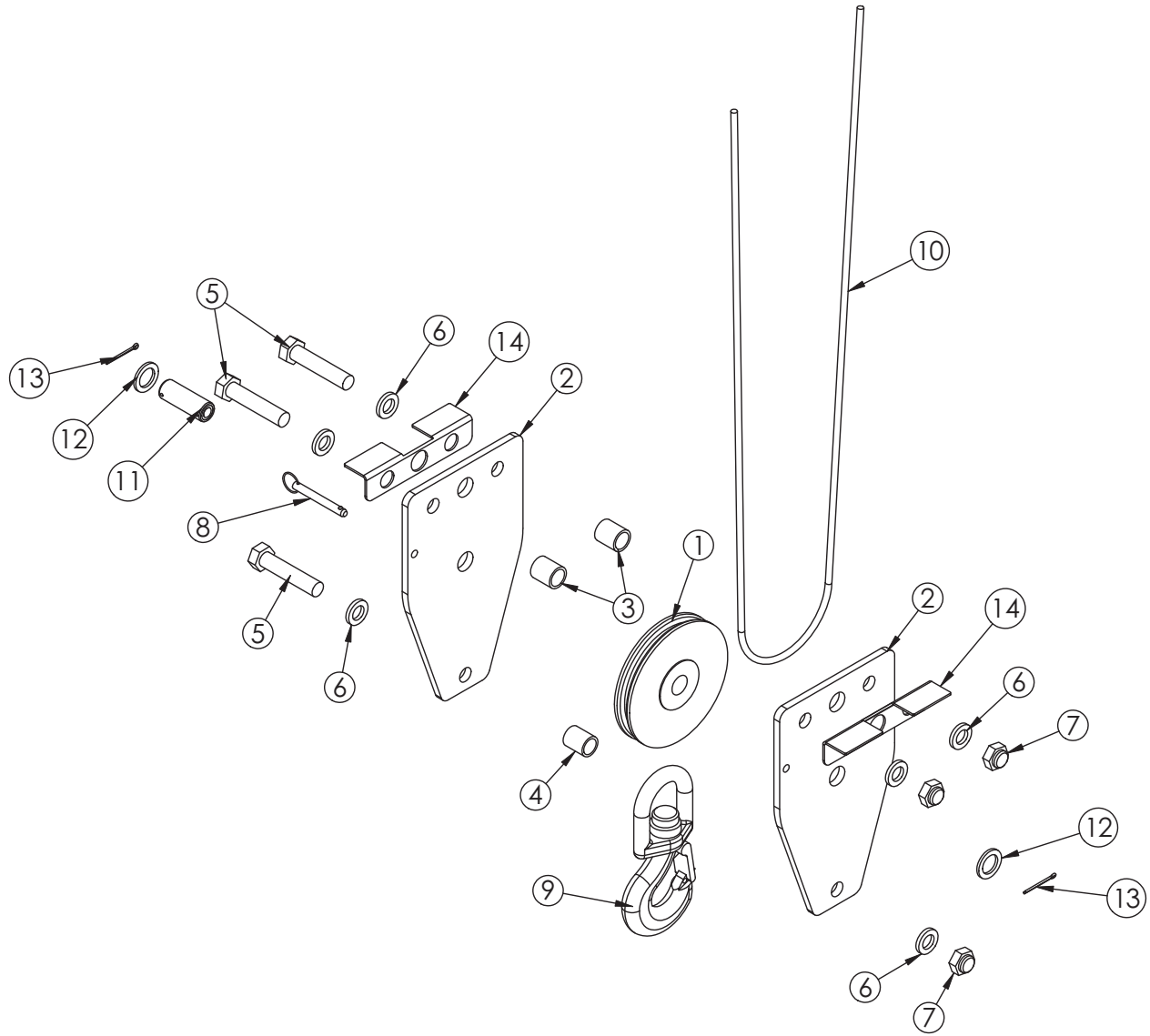
# Cable & Hook Assembly - PN 38203



## PN 38203

ITEM	PART	DESCRIPTION	QTY.
1	11934	SHEAVE 6620 6.50 DIA .31R/1.12 THK	1
2	37120PC	PLATE 6620 SNATCH BLOCK	2
3	27812	SPACER 6620 SNATCH BLOCK UHMW	2
4	11666PC	SPACER 5520 SNATCH BLOCK	1
5	4975	CAP SCR 0.75-10X3.50 HHGR8 ZY	3
6	C6219	WASHER 0.75 SAE FLAT YELLOW GR8	6
7	C0538	NUT 0.75-10 HHGR8 NYLOC	3
8	9263	PIN .38X3.00 QUICK RELEASE	1
9	25842	HOOK 3 TON SWIVEL CROSBY 1028618	1
10	10972	CHAIN 0.105 (RM) 2607-21201	1
11	35264PC	WEIGHT ANTI 2 BLOCK	1
12	11938	SWITCH LIMIT A2B FURNAS 3SE3170	1
13	33749	SCREW #10-24X1.75 SHGR8 ZINC	4
14	D1711	CAP SCR #10-24X0.50 BTNHD SS	1
15	C4956	NUT #10-24 HH NYLOC SS	1
16	9610	WIRE ROPE 0.31 6X19 IWRC-XIP 90FT	1
17	C0949	CAP SCR 0.38-16X3.00 HHGR5	1
18	0347	NUT 0.38-16 HH NYLOC	1
19	33081PC	COVER ANTI 2 BLOCK	1
20	37850	CONNECTOR QUICK LINK 0.13	1
21	37601ZP	PIN 1.00X2.75 COTTER	1
22	0867	MACHY WASHER 1.00ID 14GA	2
23	37824	COTTER PIN .125X1.00	2

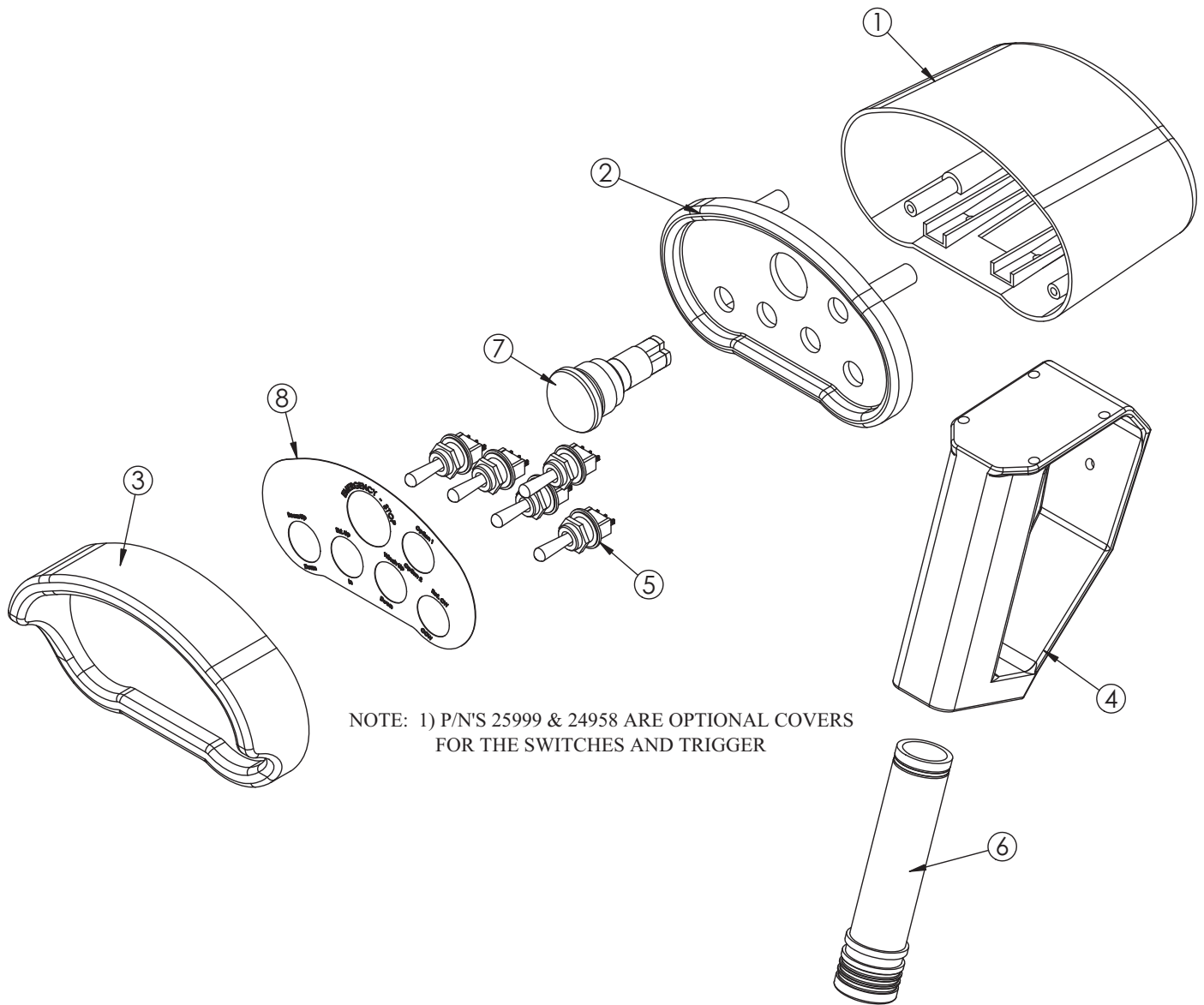
# Basket Cable & Hook Assembly (Optional) - PN 48109



## PN 48109

ITEM	PART	DESCRIPTION	QTY.
1	11934	SHEAVE 6620 6.50 DIA .31R/1.12 THK	1
2	37120PC	PLATE 6620 SNATCH BLOCK	2
3	27812	SPACER 6620 SNATCH BLOCK UHMW	2
4	11666PC	SPACER 5520 SNATCH BLOCK	1
5	4975	CAP SCR 0.75-10X3.50 HHGR8 ZY	3
6	C6219	WASHER 0.75 SAE FLAT YELLOW GR8	6
7	C0538	NUT 0.75-10 HHGR8 NYLOC	3
8	9263	PIN .38X3.00 QUICK RELEASE	1
9	25842	HOOK 3 TON SWIVEL CROSBY 1028618	1
10	9610	WIRE ROPE 0.31 6X19 IWRC-XIP 90FT	1
11	37601ZP	PIN 1.00X2.75 COTTER	1
12	0424	MACHY WASHER 1.00ID 10GA	2
13	37824	COTTER PIN .125X1.00	2
14	43536PC	BRACKET SNATCH BLOCK CRADLEA2B 5520	2

# Radio Transmitter Assembly



NOTE: 1) P/N'S 25999 & 24958 ARE OPTIONAL COVERS FOR THE SWITCHES AND TRIGGER

ITEM	PART	DESCRIPTION	QTY.
1	20088	CONTROL HANDLE HOUSING 4 FCTN HET	1
2	51830	CONTROL HANDLE FACE PLT 5 FCTN	1
3	24385	GUARD RADIO SWITCH 4 FCTN	1
4	50932	CONTROL HANDLE GRIP LESS TRIGGER HET H2	1
5	22600	SWITCH TOGGLE HET RADIO 63019300	5
6	35441	BATTERY TUBE AA HETRONIC RADIO	1
7	16975	SWITCH E STOP ASM HETRONIC RADIO	1
8	51831	DECAL CONTROL HANDLE 5 FCTN	1

# Chapter 4 - Replacement Parts

PART#	DESCRIPTION
D1204	HYDRAULIC SWING MOTOR
25375	RELIEF VALVE
25376	SEAL KIT - RELIEF VALVE
26196	FLOW CONTROL VALVE
25377	SOLENOID VALVE TAND G02571
25378	SOLENOID VALVE OPEN G02591
25379	SEAL KIT - SOLENOID VALVE
55216	COIL - 12VDC
13080	MANIFOLD ASM - MAIN CYLINDER
9803	C-BALANCE VALVE
11991	PLUG - C-BALANCE
16154	MANIFOLD ASM - EXTENSION CYLINDER
49314	PRESSURE SWITCH
6397	HYD PRESSURE GUAGE
44025	FILL CAP - HYDRAULIC RESERVOIR (12 VOLT POWER UNIT)
C2027	O'RING - # 4 FACE SEAL
C2028	O'RING - # 6 FACE SEAL
D1245	O'RING - # 4 SAE
D1246	O'RING - # 6 SAE
35652	SEAL KIT - MAIN LIFT CYLINDER
35653	SEAL KIT - EXTENSION CYLINDER
19363	TUBE ASM - MAIN CYLINDER
15173	TUBE ASM - MAIN CYLINDER
12158	TUBE ASM - EXTENSION CYLINDER
13575	TUBE ASM - EXTENSION CYLINDER
21810	BUSHING 1.50" X 0.75"
0067	BUSHING 1.50" X "1.50
16067	BUSHING 1.50" X 1.00"
19496	WEAR PAD 0.88" X 1.38" RND
19457	WEAR PAD 0.25" X 1.38" RND
7403	PIN CAP .44 X 2.50 X .25
C6353	WASHER 0.38 FLAT GR8
9843	CAP SCR. 0.38-16 X 0.75"
11545	SHEAVE
11934	SHEAVE
9610	WIRE ROPE
12824	HITCH PIN 1.00" X 4.50"
C5629	HITCH PIN 0.50" X 5.50"
9263	PIN - QUICK RELEASE 0.38 X 3.00
11938	LIMIT SWITCH
31670	WEIGHT & CHAIN ASSY - ANTI-2-BLOCK
11544	CORD REEL
20436	CONTOLLER HANDLE ASM.
4422	PUSH BUTTON SWITCH - HANDLE ASM.
6394	TOGGLE SWITCH -MOMENTARY (CONTROLLER HANDLE ASM)
39784	RADIO REMOTE SYSTEM (TRANSMITTER & RECEIVER)
35441	BATTERY TUBE (AA) HOLDER (HETRONIC RADIO)
16975	E-STOP SWITCH (HETRONIC RADIO)
22600	TOGGLE SWITCH (HETRONIC RADIO)
50932	HANDLE / TRIGGER ASM (HETRONIC RADIO)
35916	BACK UP CABLE CONTROL - HETRONIC RADIO SYSTEM
24956	12V SOLENOID (12V POWER UNIT ASSEMBLY)
17771	PUSH BUTTON (12V POWER UNIT ASSEMBLY)
25842	HOOK - 3 TON
10709	SAFETY LATCH FOR 3 TON HOOK - Campbell
51330	SAFETY LATCH FOR 3 TON HOOK - Crosby
C1592	GREASE ZERK
4460	GEAR BEARING GREASE - MOLUBE (Open Teeth)



## Limited Warranty Statement

Stellar Industries, Inc. (Stellar) warrants products designed and manufactured by Stellar to be free from defects in material and workmanship under proper use and maintenance. Products must be installed and operated in accordance with Stellar's written instructions and capacities. This warranty shall cover the following:

**Stellar Cranes, Stellar Hooklift Hoists, Stellar Cable Hoists, Stellar Container Carriers, Stellar Service Trucks, and Stellar X-Tra-Lift Systems:**

*Twelve (12) month warranty on parts from the date recorded by Stellar as the in-service date, not to extend beyond twenty-four (24) months from date of manufacture.*

*Twelve (12) month repair labor from the date recorded by Stellar as the in-service date, not to extend beyond twenty-four (24) month from date of manufacture, and*

*Thirty-six (36) month warranty on all Stellar Manufactured structural parts from the date recorded by Stellar as the in-service date, not to extend beyond forty-eight (48) months from date of manufacture.*

**Stellar Tarper Systems:**

*Twelve (12) month warranty on parts from the date recorded by Stellar as the in-service date, not to extend beyond twenty-four (24) months from date of manufacture and*

*Three (3) month repair labor from the date recorded by Stellar as the in-service date, not to extend beyond fifteen (15) month from date of manufacture.*

The in-service date will be derived from the completed warranty registration card. In the event a warranty registration card is not received by Stellar, the factory ship date will be used.

Stellar's obligation under this warranty is limited to, and the sole remedy for any such defect shall be, the repair and/or replacement (at Stellar's option) of the unaltered part and/or component in question. Stellar after-sales service personnel must be notified by telephone, fax, or letter of any warranty-applicable damage within fourteen (14) days of its occurrence. If at all possible, Stellar will ship the replacement part within 24-hours of notification by the most economical, yet expedient, means possible. Expedited freight delivery will be at the expense of the owner.

Warranty claims must be submitted and shall be processed in accordance with Stellar's established warranty claim procedure. Stellar after-sales service personnel must be contacted prior to any warranty claim. A return materials authorization (RMA) account number must be issued to the claiming party prior to the return of any warranty parts. Parts returned without prior authorization will not be recognized for warranty consideration. All damaged parts must be returned to Stellar freight prepaid; freight collect returns will be refused. Freight reimbursement of returned parts will be considered as part of the warranty claim.

Warranty service will be performed by any Stellar new equipment distributor, or by any Stellar-recognized service center authorized to service the type of product involved, or by the Stellar factory in the event of a direct sale. At the time of requesting warranty service, the owner must present evidence of date of delivery of the product. The owner shall be obligated to pay for any overtime labor requested of the servicing company by the owner, any field service call charges, and any towing and/or transportation charges associated with moving the equipment to the designated repair/service provider.

All obligations of Stellar and its authorized dealers and service providers shall be voided if someone other than an authorized Stellar dealer provides other than routine maintenance service without prior written approval from Stellar. In the case repair work is performed on a Stellar-manufactured product, original Stellar parts must be used to keep the warranty in force. The warranty may also be voided if the product is modified or altered in any way not approved, in writing, by Stellar.

The owner/operator is responsible for furnishing proof of the date of original purchase of the Stellar product in question. Warranty registration is the ultimate responsibility of the owner and may be accomplished by the completion and return of the Stellar product registration card provided with the product. If the owner is not sure of registration, he is encouraged to contact Stellar at the address below to confirm registration of the product in question. This warranty covers only defective material and workmanship. It does not cover depreciation or damage caused by normal wear and tear, accident, mishap, untrained operators, or improper or unintended use. The owner has the obligation of performing routine care and maintenance duties as stated in Stellar's written instructions, recommendations, and specifications. Any damage resulting from owner/operator failure to perform such duties shall void the coverage of this warranty. The owner will pay the cost of labor and supplies associated with routine maintenance.

The only remedies the owner has in connection with the breach or performance of any warranty on the Stellar product specified are those set above. In no event will Stellar, the Stellar distributor/dealer, or any company affiliated with Stellar be liable for business interruptions, costs of delay, or for any special, indirect, incidental, or consequential costs or damages. Such costs may include, but are not limited to, loss of time, loss of revenue, loss of use, wages, salaries, commissions, lodging, meals, towing, hydraulic fluid, or any other incidental cost.

All products purchased by Stellar from outside vendors shall be covered by the warranty offered by that respective manufacturer only. Stellar does not participate in, or obligate itself to, any such warranty.

Stellar reserves the right to make changes in design or improvement upon its products without imposing upon itself the same upon its products theretofore manufactured.

This warranty will apply to all Stellar Cranes, Stellar Hooklift Hoists, Stellar Cable Hoists, Stellar Container Carriers, Stellar Service Trucks, Stellar X-Tra-Lift Systems, and Stellar Tarper Systems shipped from Stellar's factory after January 1st, 2010. The warranty is for the use of the original owner only and is not transferable without prior written permission from Stellar.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISION OF MATERIAL AND SERVICES, AS SPECIFIED HEREIN. STELLAR INDUSTRIES, INC. IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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