

## MODEL 14528 TELESCOPIC CRANE OWNERS' MANUAL

Installation • Assembly Drawings • Parts



### Stellar Industries, Inc.

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# 14528 Manual Revisions

	Description of Revision
Chapter 2: Installation Chapter 4: Assembly Drawings	Updated Hydraulic Schematics, Control Kit, Hydraulic Kit, Valve Bank, Main Boom and Mast Assembly Drawings to reflect engineering changes.
Chapter 2: Installation Chapter 3: Assembly Drawings	New Flip Sheave Design Implemented. Updated Extention Boom Assembly Drawings and Control Kits.
Chapter 2: Installation	
Chapter 4: Replacement Parts	Updated Decal Kit and Replacement Parts.
	Chapter 4: Assembly Drawings Chapter 2: Installation Chapter 3: Assembly Drawings Chapter 2: Installation Chapter 4:

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# 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

parts@stellarindustries.com

Warranty Information

**Order Parts** 

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.
<b>AWARNING</b>	A WARNING signal word indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	A DANGER signal word indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	ined within this manual does not cover operation, maintenance, or lease refer to the General EC Series Crane Manual for details on these

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.

# **Chapter 1 - Specifications**

Model 14528 Crane SPECIFICATION SHEET				
Crane Rating:	82,600 ft-lbs (11.42 TM)			
Standard Boom Length:	13' (3.96 m) from CL of crane			
Boom Extension:	1st stage: Hydraulic 90" (228.6 cm) 2nd stage: Hydraulic 90" (228.6 cm)			
Maximum Horizontal Reach:	28' (8.53 m) from CL of crane			
Maximum Vertical Lift:	29' 4" (8.94 m) from crane base			
Boom Elevation:	-5 to +80 degrees			
Stowed Height: (crane only)	43" (102.9 cm)			
Mounting Space Required:	25" x 22" (63.5 x 55.9 cm)			
Approximate Crane Weight:	3100 lbs (1406 kg)			
Controls:	Radio control standard for all functions.			
Winch Specifications Rope Diameter: Line pull speed: Max. single part line: Max. double part line:	1/2" (1.27 cm) 60 ft/min (18.29 m/min) 7000 lbs (3175 kg) 14,000 lbs (46,350 kg)			
Rotation: (worm gear)	400 degree power			
Lifting Capacities:	14,000 lbs @ 5' (6350 kg @ 1.52 m)**			
Power Supply Required:	2950 lbs @ 28' (1335 kg @ 8.54 m)** PTO & Pump (12 gpm @ 2600 psi) (45.4 lpm @ 180 bar)			

\*Crane rating in Boost Mode. Normal crane rating is 70,000 ft-lbs (9.68 ton-m). \*\*Maximum capacities in Boost Mode

### Capacity Chart - Decal PN 53567



# Chapter 2 - Installation

## **General Installation**

This chapter is designed to serve as a general guide for the installation of a Stellar 14528 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.

PTO and Pump installation instructions are provided by the corresponding manufacturers. For more information on which PTO and Pump fit your application, please contact your local Stellar Distributor or Stellar Customer Service.

**AWARNING** 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.

#### 4 14528 Owner's Manual

## Installation Overview

- 1. Determine that the mounting location for the 14528 crane is at least 25" x 22" (63.5 x 55.9 cm).
- 2. Use the detail below to drill 1.31" 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 14528 weighs approximately 3100 lbs (1406 kg). Note: cranes are shipped with rotation positioned at 200 degrees of 400 degree system. 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 14528.
- 5. Use eight (8) 3.5" x 1.25" #8 bolts and eight (8) #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 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.
- Secure the crane using the mounting hardware provided (see the detail below). Note: longer or shorter cap screws may be required – recommended thread engagement into crane base is 1.75" – use grade 8, zinc plated cap screws only.
- 10. Torque the cap screws to 1360 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.



## Control Kit - PN 61921



DESCRIPTION

QTY

ITEM

PART No.

## Control Kit (Non-Boost) - PN 61922



05	75393	CABLE ASM INCL EXT 36IN DTM	1
04	46307	WIRE HARNESS 12621/12628 LMI	1
03		TRANSMITTER - RADIO (PART OF 1)	REF
02		RECEIVER - RADIO (PART OF 1)	REF
01	56397	RADIO CONTROLLER ASSEMBLY	1
ITEM	PART No.	DESCRIPTION	QTY

## Hydraulic Kit - PN 57573



13	C2142	FTG ADAPT 12 F50L0-S	1	26	3861	FTG ML FM O'RING 90 DEG	2
12	D1302	FTG ST TH ELB 90 DEG 6-10 C50L0	2	25	1554	FTG ADAPT 8-F50L0-S	5
11	26016	HOSE-HYD .25X 15	1ref	24	25890	GAUGE OIL 0-5000 1/4 NPT TOU	1
10	59755	HOSE-HYD .38 X 64	1ref	23	15111	FTG ADAPT MSTH/FSTH 6-4-F50G5	2
09	59665	HOSE-HYD .38 X 26	1ref	22	C1180	FTG ADAPT 8-12 F50L0-S	2
08	59659	HOSE-HYD .50 X 24	1ref	21	28485	TRANSDUCER PRESSURE 5000 PSI	2
07	59660	HOSE-HYD .75 X 22	1ref	20	C4929	FTG ADAPT 6-4 F50L0-S	1
06	59666	HOSE-HYD .38 X 29	1ref	19	12172	FTG SWIVEL 0.50 FS/FS PS81 JMJM-8-8	1
05	59658	HOSE-HYD .38 X 44	1ref	18	28383	FTG SWIVEL 0.75 FS/FS PS81 JMJM-12-12	1
04	59532	HOSE-HYD .38 X 44	1ref	17	C1854	FTG ADAPT 6-8 F50L0-S	6
03	28385	HOSE-HYD .38 X 30	2ref	16	C2376	FTG ADAPT 8-C6LO-S	2
02	59531	HOSE-HYD .50 X 24	2ref	15	0279	FTG ADAPT 6 F50L0-S	2
01	57574	HOSE KIT,14528 CRANE (incl:2-11)	1	14	C1198	FTG ADAPT 90 4-C50L0-S	1
ITEM	PART No.	DESCRIPTION	QTY	ITEM	PART No.	DESCRIPTION	QTY

## Valve Bank - PN 57572





1	61059	VALVE RELIEF 14528 D03	1
2	61060	VALVE FLOW CTRL 14528 D03	1
3	61061	COIL FLOW CTRL 14528 D03	1
4	61062	VALVE TANDEM 14528 D03	3
5	61063	VALVE OPEN 14528 D03	1
6	61064	COIL VALVE 14528 D03	8

## Hydraulic Installation



## Winch Case Drain Installation

#### Installing the winch case drain

- 1. The winch case drain must run directly to the reservoir to ensure no back pressure in the line.
- 2. Use 3/8" hydraulic hose and fittings rated for a minimum of 300 psi.
- **3.** Locate the winch case drain line at the bottom of the crane base as shown in Fig. 1 (Blue Hose). Note: Both the main pressure and winch case drane line use a 3/8" swivel fitting. Verify the winch case drain is attached to the hose that is connected to the winch motor.
- 4. Attach one end of the winch case drain to 3/8 swivel fitting located in step 3.
- 5. Route the winch case drain hose directly to the reservoir.
- **6.** Connect the second end of the winch case drain to unshared fitting on the top of the reservoir as shown in Fig 2.





## **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 footing.
- 3. Operate the crane under partial load to assure operator proficiency and proper machine function.
- 4. Put the radio into Stability Test Mode:



- A. Push the bottom four switches up and hold until all lights come on (approximately 5 seconds.)
- B. At this point ,the crane will have enough capacity to handle the weight for the stability test.
- C. The radio will timeout of stability mode after 30 minutes or when the E-Stop button is pushed.

Note: The radio can only be put into stability mode five times. After that, the radio would have to be returned to Stellar to be reprogrammed to allow additional stability testing. All other radio functions will work properly even if stability mode is not available.

#### 14528 Stability Data

Max Horizontal Reach: 342" (From the center of rotation to boom tip)

Boost Stability Test Weight: 3480 lbs. Non-Boost Stability Test Weight: 2950 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:

Stable Horizontal Reach x 100 = Percentage of Rated Capacity

Max Horizontal Reach

- 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.

#### Installation 13

### Decal Kit Placement - PN 55124



# **Chapter 3 - Assembly Drawings**



ITEM	PART	DESCRIPTION	QTY.
1	25140	BEARING SWING DRIVE CAST BASE 14528	1
2	26206P	MOTOR HYD ROSS MK080613AAAB	1
3	D1307	CAP SCR 0.50-13X1.25 SH	2
4	26207	STOP 14528 400 SLIDE	1
5	44554PC	GUARD TTB 14528 CRANE LZR	1
6	26774	CAP SCR 1.25-7X0.63 PLASTIC	2
7	21151	GASKET MOTOR 008-10056-1	1
8	D1345	FTG CPRSN 0.12NPT/0.25 TUBE	2
9	D1810	TBE AIR SAEJ844 TYPE A .25 (RM)	2.33
10	C2256	FTG CPLR PIPE 0.13	1
11	0343	WASHER 0.31 USS FLAT ZINC	2
12	0420	CAP SCR 0.31-18X0.75 HHGR5	2
13	56589	ZERK 1/8 NPT STRAIGHT LONG THREAD	1



ITEM	PART	DESCRIPTION	QTY.
1	56493	MAST 14528	1
2	53199	ADAPTER PLATE RADIO 6 FCTN LMI 14528	1
3	26775	WINCH 7000 TULSA 707W	1
4	44533	BUSHING COMPOSITE MRP 2.00X0.75	6
5	C1028	CAP SCR 0.75-10X3.00 HHGR8	13
6	C0922	CAP SCR 0.31-18X1.00 HHGR5	4
7	0484	CAP SCR 0.31-18X0.50 HHGR5	4
8	C5902	WASHER 0.63 SAE FLAT YELLOW GR8	8
9	C6219	WASHER 0.75 SAE FLAT YELLOW GR8	13
10	0343	WASHER 0.31 USS FLAT ZINC	4
11	24868	NUT 0.63-11 HHGR8 NYLOC	8
12	53067	NUT 0.63-11 JAM NYLOC	2
13	56661PC	COVER VB 14528	1
14	57572	VB 4 EATON D03 14528	1
16	25890	GAUGE OIL 0-5000 1/4 NPT TOU	1
17	D1034	CAP SCR 0.63-11X3.00 HHGR8 RED PATCH	8
18	56165	CAP SCR 6MMX8MM HH 8.8(GR5)	4

## Main Boom - PN 57280



ITEM	PART	DESCRIPTION	QTY.
1	56977	BOOM INNER 14528 CDT	1
2	13364ZP	PIN 2.00X12.69 D&T	2
3	4381	BUSHING 32DXR32 2.00X2.00 GARLOCK	4
4	26197	CYLINDER ASM 14528 INNER	1
5	26213ZP	PIN 2.00X9.63 D&T	1
6	26214ZP	PIN 1.25X9.19 D&T	1
7	0249	BUSHING BPC-2022-20 1.25X1.25	4
8	8377	PIN CAP 0.56X3.50X0.19	6
9	D0790	WASHER 0.50 FLAT GR8	18
10	10172	CAP SCR 0.50-13X1.00 HHGR8 ZY	6
11	7403	PIN CAP 0.44X2.50X0.19	2
12	C6353	WASHER 0.38 FLAT GR8	6
13	9843	CAP SCR 0.38-16X0.75 HHGR8 (TRQ 33 FT/LBS)	2
14	26215	WEAR PAD 3.00X3.00X1.50	2
15	26751PC	PLATE WEAR PAD SUPPORT 14528	2
16	10666	CAP SCR 0.50-13X1.25 HHGR8	8
17	D1194PC	PLATE ANGLE INDICATOR	2
18	C6106	NUT 0.50-13 HHGR5 NYLOC	2
19	26752PC	BRKT ROPE GUIDE 14528	2
20	0335	CAP SCR 0.38-16X1.25 HHGR5	2
21	0347	NUT 0.38-16 HH NYLOC	4
22	26753	SPACER ROPE GUIDE 14528 UHMW	2
23	26755	CAP SCR 0.38-16X10.00 HHGR5	2
24	0340	WASHER 0.25 FLAT	2
25	0478	CAP SCR 0.25-20X0.50 HHGR5	1
26	72601	CORD REEL ASM 30 FT CRANE	1
27	c1592	ZERK 1/8 NPT STRAIGHT	1
28	53493	INCLINOMETER 60 DEG	1
29	18765	WASHER #6 SAE FLAT ZINC	2
30	18618	SCREW #6-32X1.00 PHMS PH	2
31	D0076	NUT #6-32 HH NYLOC SS	2
32	C5606	CLAMP 0.25 BLK VINYL	1
33	0480	CAP SCR 0.25-20X1.00 HHGR5	1

## **Extension Boom Assembly - PN 61834**



## Extension Boom Assembly - PN 61834 (Expanded)



## Main Cylinder Assembly - PN 26197



#### \*CYLINDER BUSHINGS FOR REFERENCE ONLY

#### PN 26197

ITEM	PART	DESCRIPTION	QTY.
1	26198	CYLINDER INNER 6.00X25.75	1
2	C1854	FTG ADAPT 6-8 F5OLO-S	2
3	0279	FTG ADAPT 6-F5OLO-S	2
4	0066	BUSHING QSI-3235-32	4
5	41514	TUBE ASM 0.38X9.00 MAIN CYL 14528	2
6	41910	MANIFOLD ASM DUAL 10-1CBAL-RLF-CHK	1

This cylinder uses the following seal kits:

- Seal Kit PN 35649 on cylinders manufactured prior to July 2012.
- Seal Kit PN 65935 on cylinders manufactured after July 2012.

## **Extension Cylinder Assembly - PN 26756**



#### Cable & Hook Assembly - PN 56274 (15) (5) (12)P (10)4 $(\mathbf{6})$ Ø (7)0 0 9 0 7 4 $\bigcirc$ 3 (12) 00 Æ (13) (1)0 A (2)(10)(14) 0 (0) (8) 9 2

ITEM	PART	DESCRIPTION	QTY.
1	24557	SHEAVE 14528 10.00 DIA .50R/1.94 THK	1
2	56272PC	PLATE SNATCH BLOCK 14528	2
3	39874	PIN 1.00X4.06 COTTER	1
4	44643PC	COLLAR 0.44X0.75X2.00	2
5	0347	NUT 0.38-16 HHGR5 NYLOC	2
6	C0538	NUT 0.75-10 HHGR8 NYLOC	1
7	C0953	CAP SCR 0.38-16X4.00 HHGR5	2
8	5841	CAP SCR 0.75-10X4.50 HHGR8	1
9	C6219	WASHER 0.75 SAE FLAT YELLOW GR8	2
10	0867	MACHY WASHER 1.00ID 14GA	2
11	39844	BUSHING V HOOK	1
12	5753	PIN 0.19X1.56 LYNCH	2
13	26762	HOOK 7 TON SWIVEL CROSBY 1028632	1
14	13436	PIN .38X4.00 QUICK RELEASE	1
15	26761	WIRE ROPE .50 6X19 IWRC-XIP 120FT	1

## CDT<sup>™</sup> Radio Transmitter Assembly - PN 56647



# Chapter 4 - Replacement Parts

PART#	DESCRIPTION
	HYDRAULIC SWING MOTOR
	RELIEF VALVE
	FLOW CONTROL VALVE
61061	COIL - FLOW CONTROL VALVE
61062	SOLENOID VALVE TANDEM
61063	SOLENOID VALVE OPEN
61064	COIL - 12VDC
41910	MANIFOLD ASM - MAIN CYLINDER
28840	MANIFOLD ASM - MAIN CTEINDER
9803	C-BALANCE VALVE
5787	O'RING
	PRESSURE TRANSDUCER 5000 PSI
	HYD PRESSURE GUAGE
C2027	O'RING - # 4 FACE SEAL
C2027	O'RING - # 6 FACE SEAL
C2028	O'RING - # 8 FACE SEAL
D1245	O'RING - # 4 SAE
D1245	
D1240	
35649	
65935	SEAL KIT - MAIN LIFT CYLINDER PRE //2012 SEAL KIT - MAIN LIFT CYLINDER POST 7/2012 With Ser# ending w/DP
35630	SEAL KIT - MAIN LIFT CTEINDER POST 7/2012 With Self ending W/DP
35631	SEAL KIT - EXTENSION CYLINDER (LOWER CYLINDER)
41514	TUBE ASM - MAIN CYLINDER
28842	TUBE ASM - EXTENSION CYLINDER
28843	TUBE ASM - EXTENSION CYLINDER
38198	WORM GEAR - BEARING SWING DRIVE
38194	BEARING & SEAL KIT - BEARING SWING DRIVE
4380	BUSHING 2.00" X 1.50" GARLOCK
4381	BUSHING 2.00" X 2.00" GARLOCK
	WEAR PAD 3.00" X 3.00" X 1.50"
26758	WEAR PAD 2.50" X 2.50" X 1.50"
9991	WEAR PAD 0.25" X 2.50" RND
7403	PIN CAP .44 X 2.50 X .25
8377	PIN CAP .56 X 3.50" X 0.25" SS
C6353	WASHER 0.38 FLAT GR8
9843	CAP SCR. 0.38-16 X 0.75"
D0790	WASHER 0.50 FLAT GR8
10172	CAP SCR. 0.50-13 X 1.00"
24557	SHEAVE
26761	WIRE ROPE
12824	HITCH PIN 1.00" X 4.50"
5753	LYNCH PIN
13436	PIN .38 X 4.00" QUICK RELEASE
53493	INCLINOMETER 60 DEGREE
41366	LOAD MOMENT INDICATOR
35105	LIMIT SWITCH - ANTI-2-BLOCK (CRADLE/BASKET STYLE)
61048	CRADLE FS/CRADLE A2B (After 8/1/2011)
27710	SPRING - LIMIT SWITCH ANTI-2-BLOCK (CRADLE/BASKET STYLE)
19166	CORD REEL
56647	RADIO TRANSMITTER (HETRONIC RADIO)
35441	BATTERY TUBE (AA) HOLDER (HETRONIC RADIO)
47856	E-STOP SWITCH (HETRONIC RADIO)
22600	TOGGLE SWITCH (HETRONIC RADIO)
35447	HANDLE / TRIGGER ASM (HETRONIC RADIO)
35916	BACK UP CABLE CONTROL - HETRONIC RADIO SYSTEM
C1592	
4460	GEAR BEARING GREASE - MOLUBE (Open Teeth)



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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