

CRANE MODEL 3315

TABLE OF CONTENTS STELLAR CRANE 3315

SPECIFICATION SHEET	3
CAPACITY CHART	4
CRANE OPERATION	5
MANUAL OPERATION	6
BASE ASSEMBLY	7
MAST ASSEMBLY	8
MAST ASSEMBLY REVISION A	9
MAIN BOOM ASSEMBLY	10
MAIN BOOM ASSEMBLY REVISION A	11
EXTENSION BOOM ASSEMBLY	12
CABLE AND HOOK ASSEMBLY	13
POWER UNIT ASSEMBLY – Electric Version Only	14
CONTROL KIT – Electric Version	15
CONTROL KIT – Hydraulic Version	16
HYDRAULIC KIT – Electric Version Only	17
HYDRAULIC KIT – Hydraulic Version Only	18
INSTALLATION KIT	19
DECAL KIT	20
STABILITY PROCEDURE	21
STABILITY CHART	22
LIMITED WARRANTY STATEMENT	23

Model 3315 Crane SPECIFICATION SHEET

Crane Rating 11,500 ft-lbs

Standard Boom Length 7' from CL of Crane

Boom Extension 1st stage: Hydraulic 48"

2nd stage: Manual 48"

Maximum Horizontal Reach 15' from CL of Crane

Maximum Vertical Lift 16' 9"

(from crane base)

Boom Elevation -5 to +80 degree

Winch Specification

Rope Diameter 1/4"
Line pull speed 30 ft/min
Max. single part line 1600 lbs
Max. double part line 3200 lbs

Rotation 370degree power

(worm gear)

Lifting Capacities 1625 lbs @ 7'

1025 lbs @ 11' 750 lbs @ 15'

Power Supply Required 12 Volt Power Unit

(2.00 gpm @ 2300 psi)

Controls 20 foot cord with hand held

control for all functions.

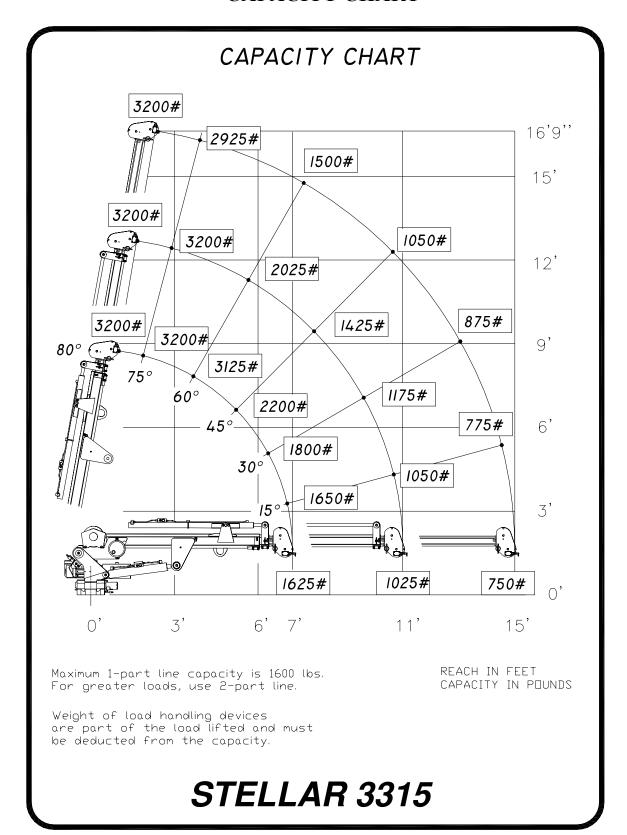
Stowed Height 32.50 inches

(crane only)

Mounting Space Required 18 x 15 inches

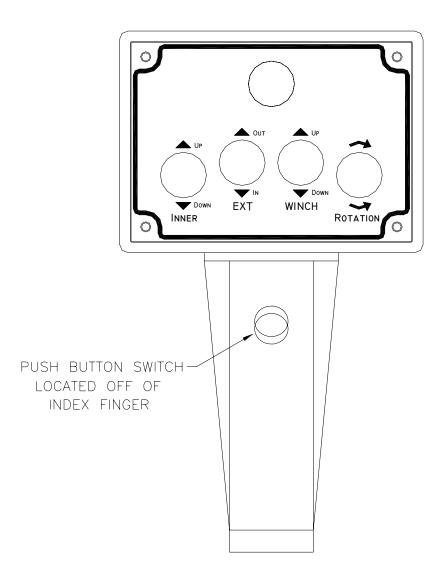
Approximate Shipping Weight 800 lbs

CAPACITY CHART



CRANE OPERATION

4 Function Handle



THIS CRANE IS CONTROLLED BY AN ELECTRONICALLY OPERATED VALVE BANK. THE CONTROLLER FOR THIS VALVE IS SHOWN TO THE SIDE.

THE FUNCTIONS IT CONTROLS ARE AS FOLLOWS:

MAIN BOOM UP & DOWN EXTENSION BOOM IN & OUT WINCH UP & DOWN ROTATION CW & CCW

TO RUN ANY HYDRAULIC FUNCTIONS THE PUSH BUTTON SWITCH(A SHOWN TO THE SIDE) MUST FIRST BE ACTIVATED.

MANUAL OPERATION

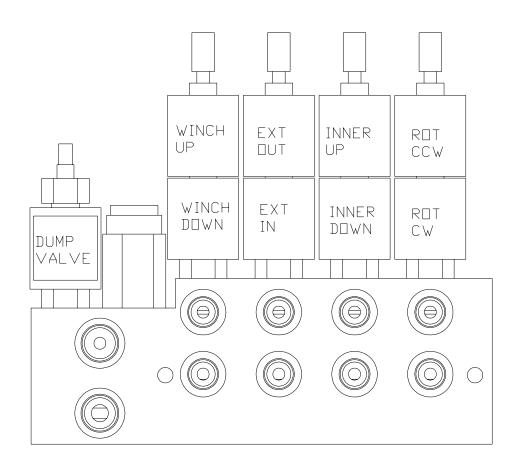
IN CASE OF REMOTE FAILURE THE CRANE CAN BE OPERATED USING THE MANUAL OVERRIDES LOCATED ON THE VALVE BANK. USE THE MANUAL OVERRIDES **ONLY** TO GET THE CRANE INTO A STOWED POSITION FOR TRAVEL. HAVE THE EQUIPMENT SERVICED FOR NORMAL REMOTE USE.

WARNING

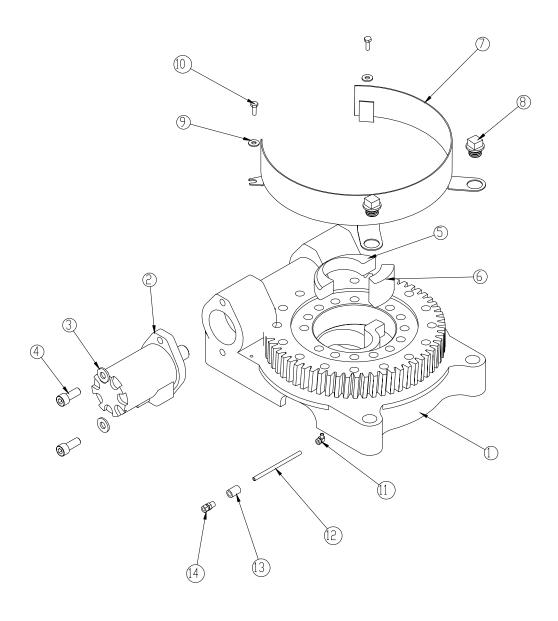
PROLONGED MANUAL OPERATION WILL CAUSE SEVERE DAMAGE TO THE HYDRAULIC SYSTEM.

TO OPERATE CRANE MANUALLY:

- 1.) HOLD PUSH BUTTON FOR SOLENOID AND PUSH OVERRIDE FOR DUMP VALVE.
- 2.) OPERATE DESIRED FUNCTION ON VALVE BANK BY PUSHING OR PULLING OVERRIDE.

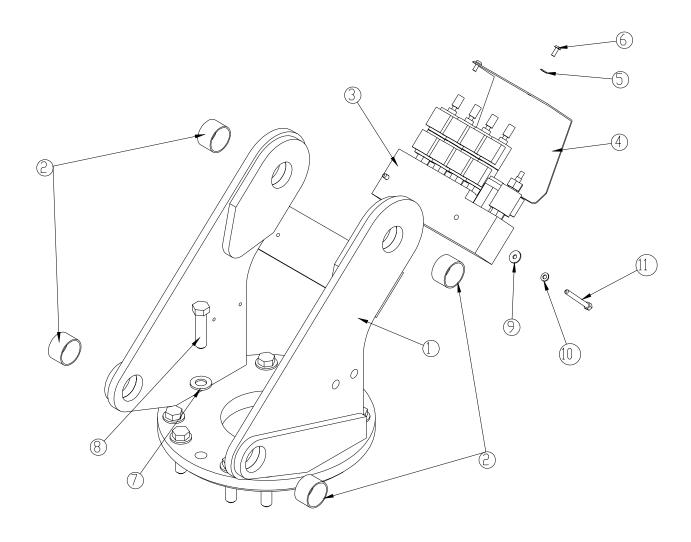


BASE ASSEMBLY P/N 19998



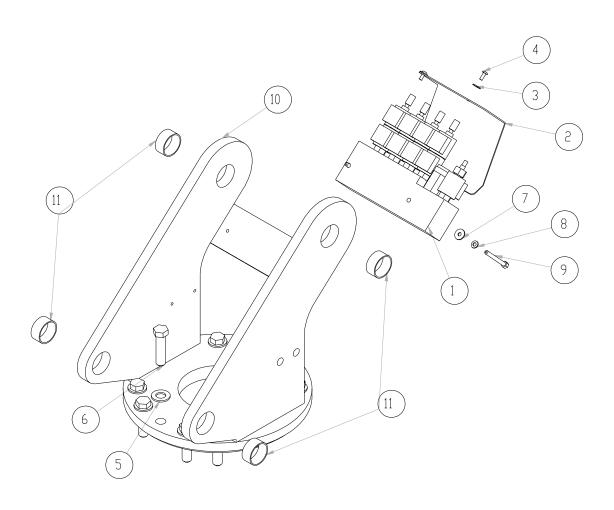
ITEM	PART	DESCRIPTION	QTY.	ITEM	PART	DESCRIPTION	QTY.
1	16653	BEARING SWING DRIVE CAST	1	8	18948	CAP SCR 0.88-9 X .63 PLASTIC	2
2	D1204	ROTATION MOTOR 5520	1	9	0340	WASHER 0.25 FLAT	2
3	D0790	WASHER 0.50 FLAT GR8	2	10	0479	CAP SCR 0.25-20X0.75 HHGR5	2
4	D1307	CAP SCR 0.50-13X1.25 SH	2	11	D0240	FTG ELL 0.13 CPRSN TUBE TO NPT	1
5	21164	PLATE CAST BASE 5520	1	12	22393	TUBE AIR	1
6	17750	STOP 3515	1	13	C2256	FTG COUPLER PIPE 0.13	1
7	18945	GUARD TTB 5520 CRANE	1	14	D1345	FTG CPRSN 0.12NPT/0.25 TUBE	1

MAST ASSEMBLY P/N 19999



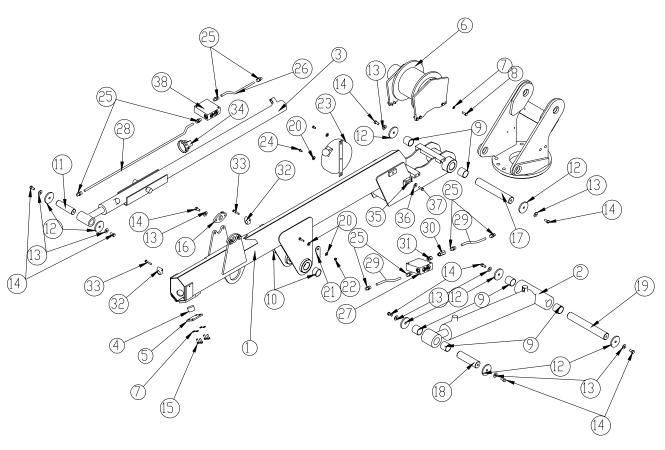
ITEM	PART	DESCRIPTION	QTY.	ITEM	PART	DESCRIPTION	QTY.
1	19441	MAST 3315	1	7	C5902	WASHER 0.63 FLAT GR8	10
2	16067	BUSHING QSI-2426-16	4	8	C1026	CAP SCR 0.63-11X2.50 HHGR8 ZY	10
3	20429	VB 4 SECT 3315	1	9	D0917	WASHER 0.25 FLAT SS	2
4	20428	COVER VB 3315	1	10	0521	WASHER 0.25 LOCK	2
5	D0178	WASHER #10 SAE FLAT ZINC	2	11	0339	CAP SCR 0.25-20X2.50 HHGR5	2
6	D1711	CAP SCR #10-24X0.50 BTNHD SS	2				

MAST ASSEMBLY -- REVISION A



ITEM	PART	DESCRIPTION	QTY.	ITEM	PART	DESCRIPTION	QTY.
1	20429	VB 4 SECT 3315	1	7	D0917	WASHER 0.25 FLAT SS	2
2	20428	COVER VB 3315	1	8	0521	WASHER 0.25 LOCK	2
3	D0178	WASHER #10 SAE FLAT ZINC	2	9	0339	CAP SCR 0.25-20X2.50 HHGR5	2
4	D1711	CAP SCR #10-24X0.50 BTNHD SS	2	10	24561	MAST 3315	1
5	C5902	WASHER 0.63 FLAT GR8	10	11	21810	BUSHING GSI-2426-12 1.50X0.75	4
6	C1026	CAP SCR 0.63-11X2.50 HHGR8 ZY	10				

MAIN BOOM ASSEMBLY

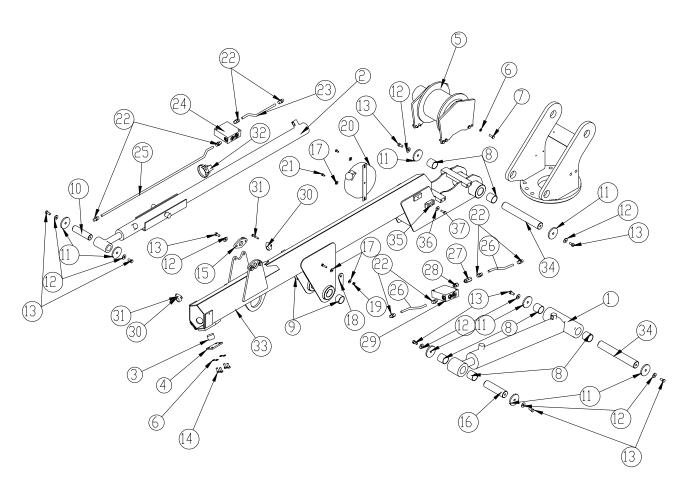


NOTE: CYLINDER BUSHING FOR REFERENCE ONLY

			_	ı		T	
ITEM	PART	DESCRIPTION	QTY.	ITEM	PART	DESCRIPTION	QTY.
1	19014	INNER BOOM 3315	1	20	0340	WASHER 0.25 FLAT	6
2	19017	CYLINDER 3.00X19.88	1	21	19881	PLATE ANGLE INDICATOR 3315	2
3	19507	CYLINDER 2.00 X 48.00	1	22	0333	NUT 0.25-20 HHGR5 NYLOC	2
4	19496	WEAR PAD .88X1.38 RND	2	23	11544	CORD REEL 6620	1
5	19497	PLATE 1ST EXT 3315 WEAR PAD	2	24	0478	CAP SCR 0.25-20X0.50 HHGR5	2
6	19511	WINCH 1600 3315 CRANE	1	25	0279	FTG ADAPT 6-F5OLO-S	8
7	5591	WASHER 0.31 SAE FLAT YELLOW GR8	16	26	12158	TUBE ASM 0.38X8.88 MAIN CYL 6620	1
8	21170	CAP SCR 0.31-18X1.00 HHGR8	8	27	13080	MANIFOLD ASM 6620 INNER HOLDING	1
9	0067	BUSHING QSI-2426-24	6	28	17009	TUBE ASM 0.38X33.00 EXT CYL 3515	1
10	16067	BUSHING QSI-2426-16	2	29	19363	TUBE ASM 0.38X5.69 3315	2
11	9086	PIN 1.25X4.69 D&T	1	30	15110	VALVE CHECK SINGLE W/ ORIFICE	1
12	7403	PIN CAP 0.44X2.50X.252	8	31	15111	FTG ADAPT MSTH/FSTH 6-4-F50G5	1
13	C6353	WASHER 0.38 FLAT GR8	12	32	0337	HOSE CLAMP LN 4190 PP	2
14	9843	CAP SCR 0.38-16X0.75 HHGR8	12	33	0220	CAP SCR 0.25-20 X 1.50 HHGR5	2
15	0420	CAP SCR 0.31-18X0.75 HHGR5	8	34	14929	CLAMP 0.38 PORT TUBE	1
16	3267	PLATE CYLINDER MTG	2	35	8622	CLAMP HOSE/TUBE AG-2	1
17	13873	PIN 1.50X10.00 D&T	1	36	0343	WASHER 0.31 FLAT	1
18	19514	PIN 1.50X5.50 D&T	1	37	C0922	CAP SCR 0.31-18X1.00 HHGR5	1
19	19513	PIN 1.50X11.00 D&T	1	38	16154	Manifold Double T11A 3500 psi	1

MAIN BOOM ASSEMBLY -- REVISION A

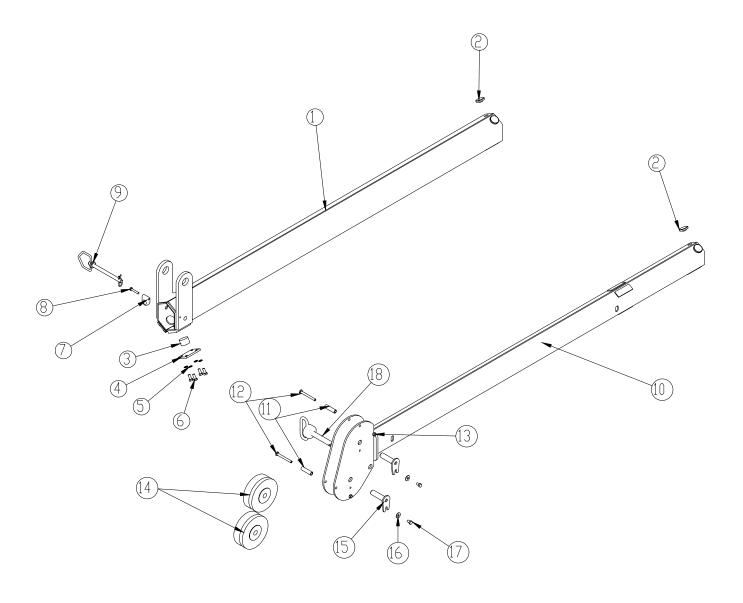
P/N 20000



NOTE: CYLINDER BUSHING FOR REFERENCE ONLY

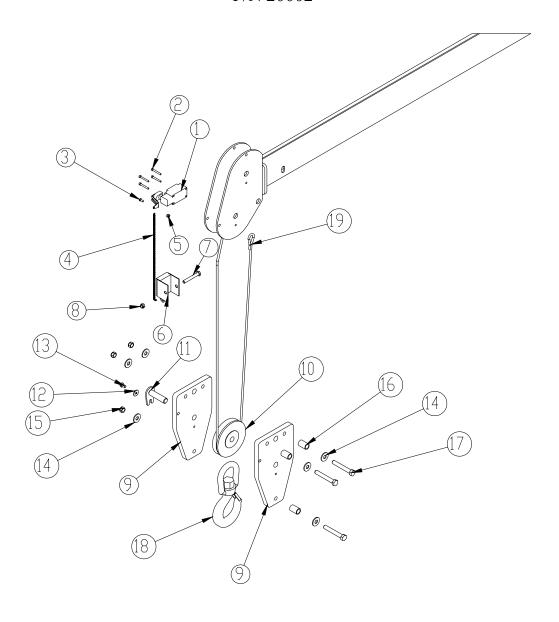
ITEM	PART	DESCRIPTION	QTY.	ITEM	PART	DESCRIPTION	QTY.
1	19017	CYLINDER 3.00X19.88	1	20	11544	CORD REEL 6620	1
2	19507	CYLINDER 2.00 X 48.00	1	21	0478	CAP SCR 0.25-20X0.50 HHGR5	2
3	19496	WEAR PAD .88X1.38 RND	2	22	0279	FTG ADAPT 6-F5OLO-S	8
4	19497	PLATE 1ST EXT 3315 WEAR PAD	2	23	12158	TUBE ASM 0.38X8.88 MAIN CYL 6620	1
5	19511	WINCH 1600 3315 CRANE	1	24	16154	Manifold Double T11A 3500 psi	1
6	5591	WASHER 0.31 SAE FLAT YELLOW GR8	16	25	17009	TUBE ASM 0.38X33.00 EXT CYL 3515	1
7	21170	CAP SCR 0.31-18X1.00 HHGR8	8	26	19363	TUBE ASM 0.38X5.69 3315	2
8	0067	BUSHING QSI-2426-24	6	27	15110	VALVE CHECK SINGLE W/ ORIFICE	1
9	16067	BUSHING QSI-2426-16	2	28	15111	FTG ADAPT MSTH/FSTH 6-4-F50G5	1
10	9086	PIN 1.25X4.69 D&T	1	29	13080	MANIFOLD ASM 6620 INNER HOLDING	1
11	7403	PIN CAP 0.44X2.50X.252	8	30	0337	HOSE CLAMP LN 4190 PP	2
12	C6353	WASHER 0.38 FLAT GR8	12	31	0220	CAP SCR 0.25-20 X 1.50 HHGR5	2
13	9843	CAP SCR 0.38-16X0.75 HHGR8	12	32	14929	CLAMP 0.38 PORT TUBE	1
14	0420	CAP SCR 0.31-18X0.75 HHGR5	8	33	24563	INNER BOOM 3315	1
15	3267	PLATE CYLINDER MTG	2	34	19512	PIN 1.50X10.50 D&T	2
16	19514	PIN 1.50X5.50 D&T	1	35	8622	CLAMP HOSE/TUBE AG-2	1
17	0340	WASHER 0.25 FLAT	6	36	0343	WASHER 0.31 FLAT	1
18	19881	PLATE ANGLE INDICATOR 3315	2	37	C0922	CAP SCR 0.31-18X1.00 HHGR5	1
19	0333	NUT 0.25-20 HHGR5 NYLOC	2				

EXTENSION BOOM ASSEMBLY



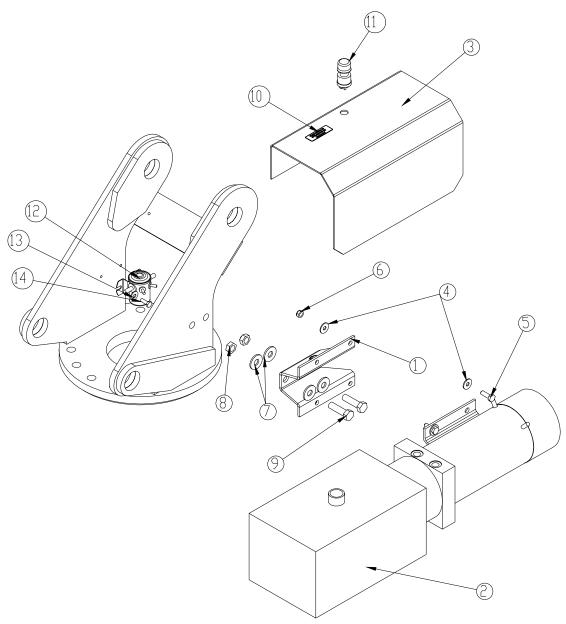
ITEM	PART	DESCRIPTION	QTY.	ITEM	PART	DESCRIPTION	QTY.
1	19010	EXT BOOM 3315 1ST	1	10	19007	EXT BOOM 2ND 3315	1
2	19457	WEAR PAD 0.25X1.38 RND	4	11	11936	SPACER BOOM TIP 3820	2
3	19496	WEAR PAD .88X1.38 RND	2	12	C0930	CAP SCR 0.31-18X3.00 HHGR5	2
4	19497	PLATE 1ST EXT 3315 WEAR PAD	2	13	0342	NUT 0.31-18 HH NYLOC	2
5	5591	WASHER 0.31 SAE FLAT YELLOW GR8	8	14	16363	SHEAVE 3515 5.50 DIA .25R/1.94THK	2
6	0420	CAP SCR 0.31-18X0.75 HHGR5	8	15	19996	PIN TEAR DROP .75X2.88	2
7	0337	HOSE CLAMP LN 4190 PP	1	16	0343	WASHER 0.31 FLAT	2
8	0220	CAP SCR 0.25-20 X 1.50 HHGR5	1	17	0484	CAP SCR 0.31-18 X 0.50 HHGR5	2
9	C5629	PIN HITCH 0.50X5.50	1	18	17007	PIN HITCH 0.75X4.00	1

CABLE AND HOOK ASSEMBLY



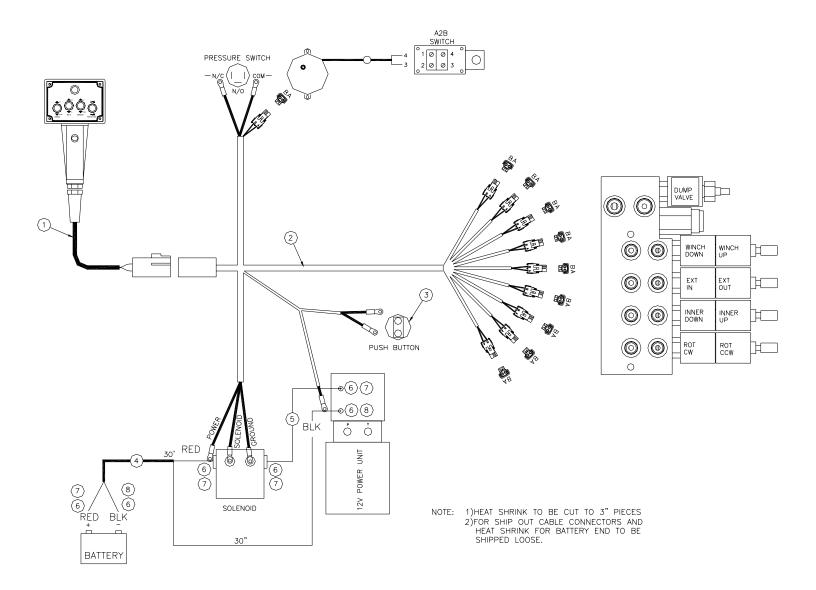
	I			T		T. C.	
ITEM	PART	DESCRIPTION	QTY.	ITEM	PART	DESCRIPTION	QTY.
1	11938	SWITCH LIMIT A2B FURNAS 3SE3170	1	11	19996	PIN TEAR DROP .75X2.88	1
2	12177	CAP SCR #10-24 X 1.50 SHGR5	4	12	0343	WASHER 0.31 FLAT	1
3	D1711	CAP SCR #10-24X0.50 BTNHD SS	1	13	0484	CAP SCR 0.31-18 X 0.50 HHGR5	1
4	10972	CHAIN 0.105 (RM) 2607-21201	1	14	0352	WASHER 0.50 USS FLAT ZINC	6
5	C4956	NUT #10-24 HH NYLOC SS	1	15	5468	NUT 0.50-13 HHGR8 NYLOC	3
6	19994	WEIGHT 3315 ATB	1	16	16607	SPACER 3515 SNATCH BLOCK	3
7	0530	CAP SCR 0.38-16X2.75 HHGR5	1	17	0505	CAP SCR 0.50-13X3.50 HHGR5	3
8	0347	NUT 0.38-16 HH NYLOC	1	18	C6018	HOOK 3 TON	1
9	16495	PLATE 3515 SNATCH BLOCK	2	19	17006	WIRE ROPE 1/4 6X19 IWRC-XIP 65FT	1
10	16494	SHEAVE 3515 5.25 DIA .25R/1.12 THK	1				

POWER UNIT ASSEMBLY – Electric Version Only P/N 20432



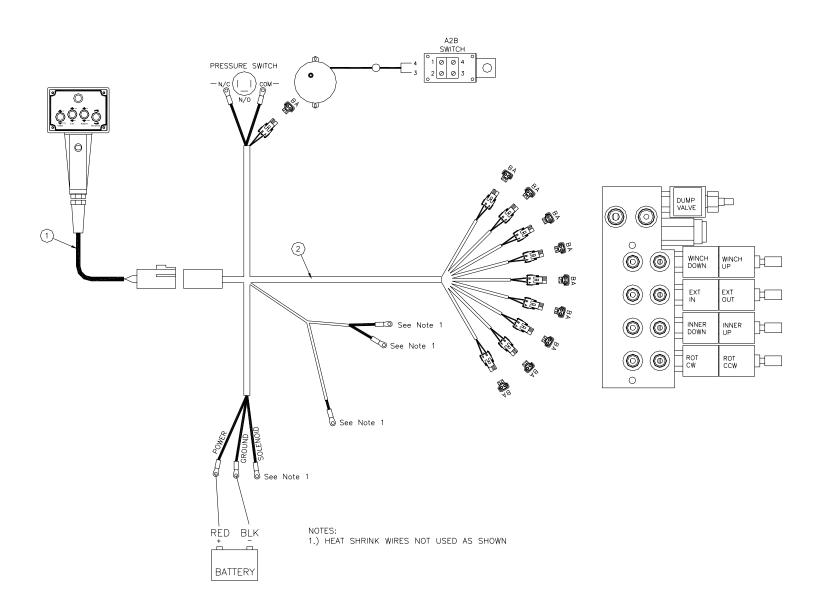
ITEM	PART	DESCRIPTION	QTY.	ITEM	PART	DESCRIPTION	QTY.
1	17132	BRKT POWER UNIT 5520	1	8	C6106	NUT 0.50-13 HHGR5 NYLOC	2
2	16994	POWER UNIT 12V 5520 HORZ	1	9	0500	CAP SCR 0.50-13X1.75 HHGR5	2
3	19997	COVER POWER UNIT 5520	1	10	18472	DECAL MANUAL OPERATION 5520	1
4	0343	WASHER 0.31 FLAT	8	11	17771	SWITCH PUSH BUTTON 9216-03	1ref
5	C0922	CAP SCR 0.31-18X1.00 HHGR5	4	12	18468	SOLENOID 12V 200 AMP CONT 24143	1ref
6	0342	NUT 0.31-18 HH NYLOC	4	13	0340	WASHER 0.25 FLAT	2
7	0352	WASHER 0.50 USS FLAT ZINC	4	14	0479	CAP SCR 0.25-20X0.75 HHGR5	2

CONTROL KIT – Electric Version P/N 20435



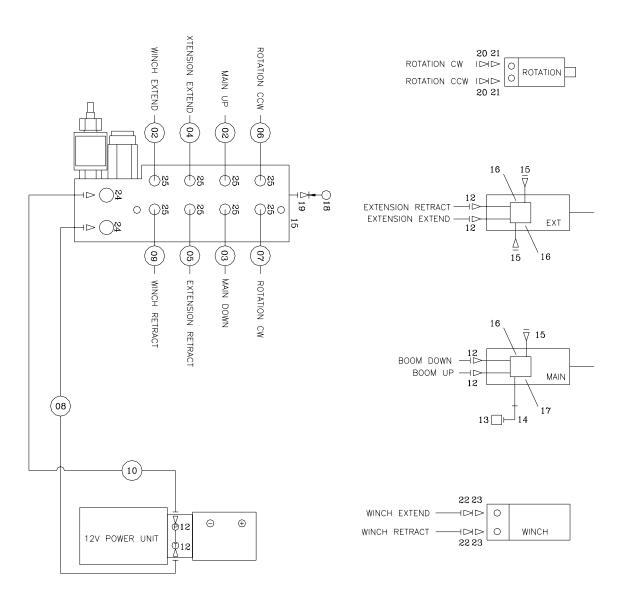
ITEM	PART	DESCRIPTION	QTY.
		HANDLE ASM 3315	1
		WIRE HARNESS 3315	1
		SWITCH PUSH BUTTON 9216-03	1
		CABLE #2 2 WIRE	32.5'
		CABLE #2 RED	18"
		TERML #1X.38 COPPER LUG	6
7	15219	HEAT SHRINK 0.50 RED	12"
8	15218	HEAT SHRINK 0.50 BLK	6"

CONTROL KIT – Hydraulic Version P/N 24331



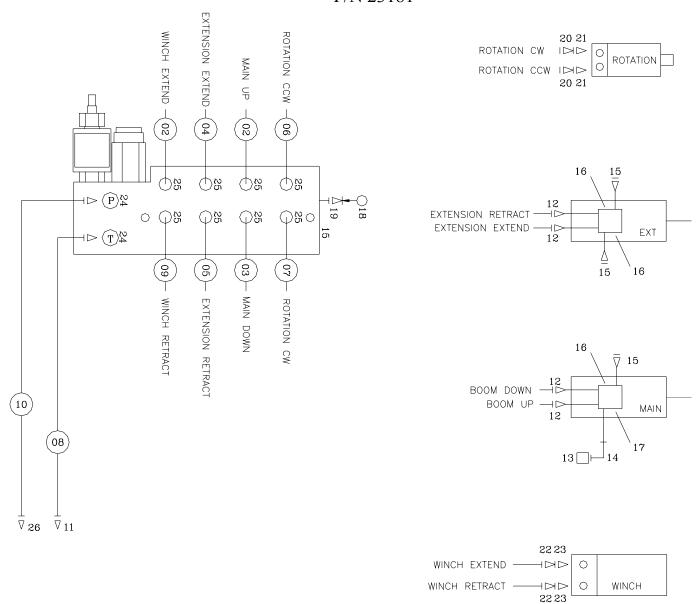
ITEM	PART	DESCRIPTION	QTY.
1	20436	HANDLE ASM 3315	1
2	21155	WIRE HARNESS 3315	1
3			

HYDRAULIC KIT – Electric Version Only P/N 20433



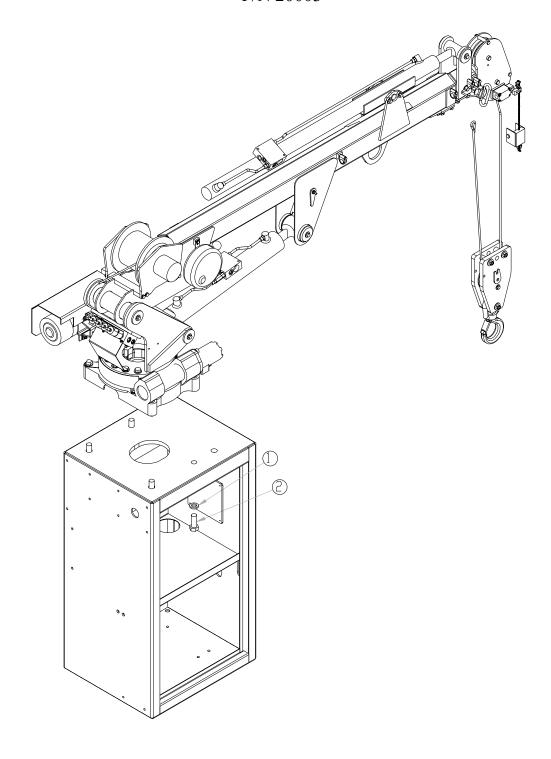
1	20434	HOSE KIT 3315 CRANE (incl:2-11)	1	14	3861	FTG ML FM O'RING 90 DEG	1
2	13438	HOSE-HYD .25 X 26	2ref	15	C4961	PLUG STR HOLLOW HEX 0.38 6-HP5ON	3(2ref)
3	13011	HOSE-HYD .25 X 26	1ref	16	9803	VALVE C-BAL SUN CBBD-LJN-3500	3ref
4	21156	HOSE-HYD .25 X 52	1ref	17	11991	VALVE C-BAL PLUG T11A XEOA-XXN	1ref
5	21157	HOSE-HYD .25 X 54	1ref	18	6397	GAUGE OIL LF 2.5 0-5000 CBM	1
6	15032	HOSE-HYD .25 X 35	1ref	19	6691	FTG MSTR/FNPT 6-1/4	2
7	21158	HOSE-HYD .25 X 34	1ref	20	C1111	FTG ADAPT MSTR/FSTR 10-6 F5OG5	2
8	21161	HOSE-HYD .25 X 19	1ref	21	C1198	FTG ADAPT 4-C5OLO-S	2
9	21159	HOSE-HYD .25 X 19	1ref	22	20060	FTG ADAPT MBSPP/FSTR 3/8-6 F4OHG5	2
10	21160	HOSE-HYD .25 X 16	1ref	23	D1193	FTG ADAPT 6-V5OLO-S	2
11		V		24	0279	FTG ADAPT 6-F5OLO-S	2
12	C4922	FTG ADAPT 4-6 F5OLO-S	6	25	D1291	FTG ADAPT 4-F5OLO-S	8
13	18452	SWITCH PRES OVERLD 744.6-S03R-2600N	1				

HYDRAULIC KIT – Hydraulic Version Only P/N 23181



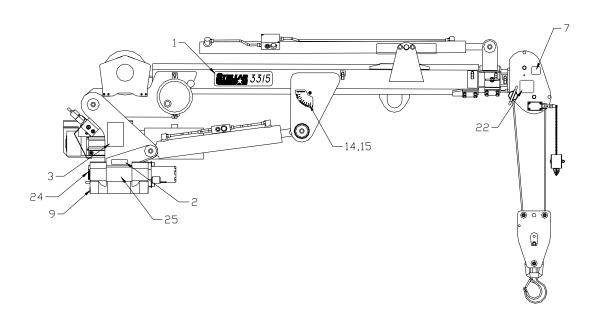
1	23184	HOSE KIT 3315 CRANE (incl:2-10)	1	14	3861	FTG ML FM O'RING 90 DEG	1
2	13438	HOSE-HYD .25 X 26	2ref	15	C4961	PLUG STR HOLLOW HEX 0.38 6-HP5ON	3(2ref)
3	13011	HOSE-HYD .25 X 26	1ref	16	9803	VALVE C-BAL SUN CBBD-LJN-3500	3ref
4	21156	HOSE-HYD .25 X 52	1ref	17	11991	VALVE C-BAL PLUG T11A XEOA-XXN	1ref
5	21157	HOSE-HYD .25 X 54	1ref	18	6397	GAUGE OIL LF 2.5 0-5000 CBM	1
6	15032	HOSE-HYD .25 X 35	1ref	19	6691	FTG MSTR/FNPT 6-1/4	2
7	21158	HOSE-HYD .25 X 34	1ref	20	C1111	FTG ADAPT MSTR/FSTR 10-6 F5OG5	2
8	23183	HOSE-HYD .38 X 14	1ref	21	C1198	FTG ADAPT 4-C5OLO-S	2
9	21159	HOSE-HYD .25 X 25	1ref	22	20060	FTG ADAPT MBSPP/FSTR 3/8-6 F4OHG5	2
10	23182	HOSE-HYD .25 X 15	1ref	23	D1193	FTG ADAPT 6-V5OLO-S	2
11	12171	FTG SWIVEL 6-6	1	24	0279	FTG ADAPT 6-F5OLO-S	2
12	C4922	FTG ADAPT 4-6 F5OLO-S		25	D1291	FTG ADAPT 4-F5OLO-S	8
13	18452	SWITCH PRES OVERLD 744.6-S03R-2600N		26	12172	FTG SWIVEL 8-8	1

INSTALLATION KIT



ITEM	PART	DESCRIPTION	QTY.
1	8648	WASHER 0.88 SAE FLAT YELLOW GR8	4
2	17688	CAP SCR 0.88-9X2.25 HHGR8 ZY	4

DECAL KIT



ITEM	PART	DESCRIPTION	QTY.	ITEM	PART	DESCRIPTION	QTY.
1	21163	DECAL IDENTIFICATION 3315	2	14	13820	DECAL ANGLE INDICATOR CS 5520	1
2	15172	DECAL ASME/ANSI B30.22/B30.5	1	15	13819	DECAL ANGLE INDICATOR SS	1
*3	20424	DECAL CAPACITY 3315	2	*16	12451	DECAL DANGER HOISTING	1
*4	C4545	DECAL DANGER ELECTROCUTION	4	*17	C5910	DECAL STELLAR LOGO 4.00X9.50	1
*5	C4540	DECAL DANGER	1	*18	C5911	DECAL STELLAR LOGO 2.00X4.50	3
*6	C4544	DECAL CAUTION	1	*19	12452	DECAL DANGER MANUAL EXT	1
7	4186	DECAL DANGER ELECTROCUTN	1	*20	C0568	DECAL DIESEL ONLY	2
*8	4189	DECAL DANGER OPERATION RESTRICTION	1	*21	4214	DECAL CONTACT STELLAR	1
9	9188	DECAL WORM GEAR LUBRICATION	1	22	12300	DECAL DANGER TWO BLOCKING	1
*10	4190	DECAL DANGER OPERATION CONDITION	1	*23	C4541	DECAL WARNING	1
*11	C4795	DECAL DANGER FOOT	2	24	4188	DECAL ROTATIONAL ALIGNMENT	1
*12	C5918	DECAL CAUTION STAND CLEAR	2	25	15171	DECAL GREASE WORM	1
*13	C1179	DECAL DANGER ELECTROCUTION	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% of tipping.

Set Up

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

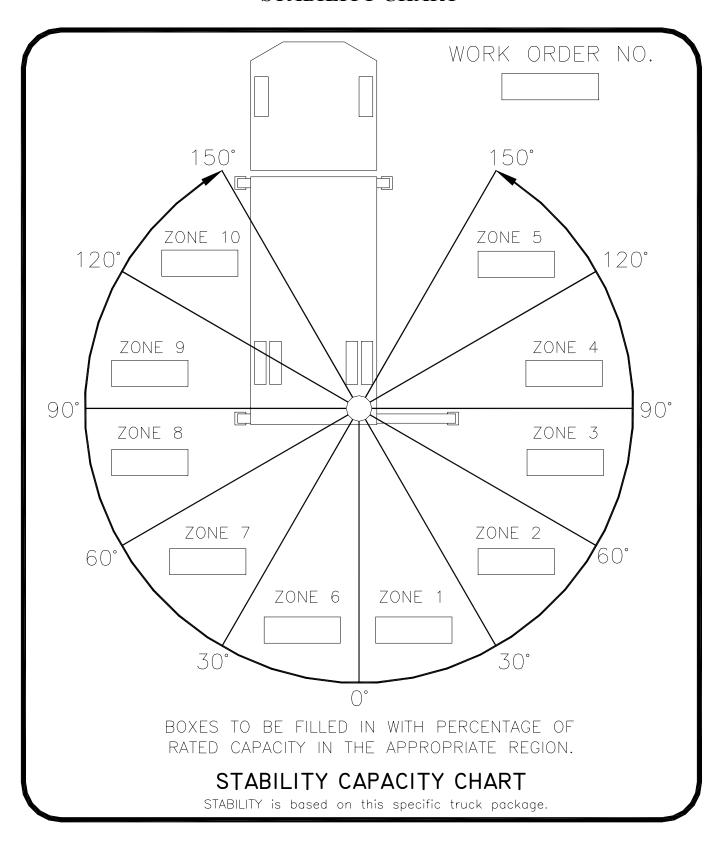
Test Data for 3315 Crane

- <u>Maximum Horizontal Reach</u> 180 inches (center of rotation to boom tip)
- Stability Test Weight 875#

Test Procedure

- -Rotate the crane into zone 1 position.
- -With the crane fully retracted and the boom horizontal, winch the test weight off the ground. Note: keep the weight within six inches of the ground at all times.
- -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).
- -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.
- -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 <u>stable horizontal reach</u> for this zone. Use the following formula to determine the percentage of rated capacity. Stable horizontal reach divided by <u>Maximum horizontal reach</u> multiplied by 100 equals the percentage of rated capacity for this zone. Record this number in the data box for zone 1. This is the revised capacity due to stability for this zone.
- -Repeat this procedure for each zone until the worksheet is completed.
- -This is the revised CAPACITY based on STABILITY of this package.

STABILITY CHART



Limited Warranty Statement

for Stellar Tire Service Trucks, Truck-mounted Cranes, Truck-mounted Stellarc Welders
& Truck-mounted Compressed Air Systems ONLY

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 stated lifting capacities. The warranty period shall be Twelve (12) month warranty on all Stellar designed and fabricated parts, and Ninety (90) days repair labor.

The warranty period shall begin from the date recorded by Stellar as the in-service date. This 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 part and/or component in question. Stellar after-sales service personnel must be notified by telephone, fax, e-mail, or mail of any warranty-applicable damage within fourteen (14) days of it's 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 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.

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 at the Stellar factory. 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 it's 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 the 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 engineering.

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 unsure 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 cost of labor and supplies associated with routine maintenance will be paid by the owner.

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.

Hydraulic cylinders used in Stellar products are subject to the same warranty provisions stated above. Should a cylinder defect develop within the above stated warranty period, notify Stellar immediately. Stellar will ship, freight prepaid, by the most effective, expedient, means a new or re-manufactured cylinder of the same size and type. An authorization for return of the original part will be issued at the time the order is placed. The defective cylinder is to be returned to Stellar freight prepaid by the owner. Cylinders returned freight collect will be refused. Should the defective cylinder not be returned within 30 days of shipping the replacement cylinder, the owner is responsible to pay Stellar the full purchase price of the replacement part.

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

This warranty will apply to all Stellar Tire Service Trucks, Truck-mounted Cranes, Truck-mounted Stellarc Welders & Truck-mounted Compressed Air Systems shipped from Stellar's factory after January 1,1997. 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.

Stellar Industries, Inc. • 280 West Third Street • Garner, Iowa 50438 • U.S.A. E-Mail • sales@stellar-industries.com

Telephone: 800/321-3741; 641/923-3741 • Fax: 641/923-2812; 641/923-2811 Revised 10/05/2000