

# CRANE MODEL 5520

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#### Model 5520 Crane SPECIFICATION SHEET

Crane Rating 25,000 ft-lbs (3.46 ton-meters)

Standard Boom Length 10'(3.05 m) from CL of Crane

Boom Extension 1<sup>st</sup> stage: Hydraulic 60"(152.4 cm)

2<sup>nd</sup> stage: Manual 60"(152.4 cm)

Maximum Horizontal Reach 20'(6.10 m) from CL of Crane

Maximum Vertical Lift 21' 4"(6.50 m)

(from crane base)

Boom Elevation -8 to +80 degree

Winch Specification

Rope Diameter 5/16"(.794 cm)

Line pull speed 40 ft/min (12.19 m/min)
Max. single part line 2500 lbs (1135 kg)
Max. double part line 5000 lbs (2270 kg)

Rotation 385 degree power

(worm gear)

Lifting Capacities 2500 lbs @ 10'(1135 kg @ 3.05 m)

1670 lbs @ 15'(760 kg @ 4.57 m) 1250 lbs @ 20'(565 kg @ 6.10 m)

Power Supply Required PTO & Pump

(4.00 gpm @ 2500 psi) (15.14 lpm @ 172 bars)

Controls Radio control standard

for all functions.

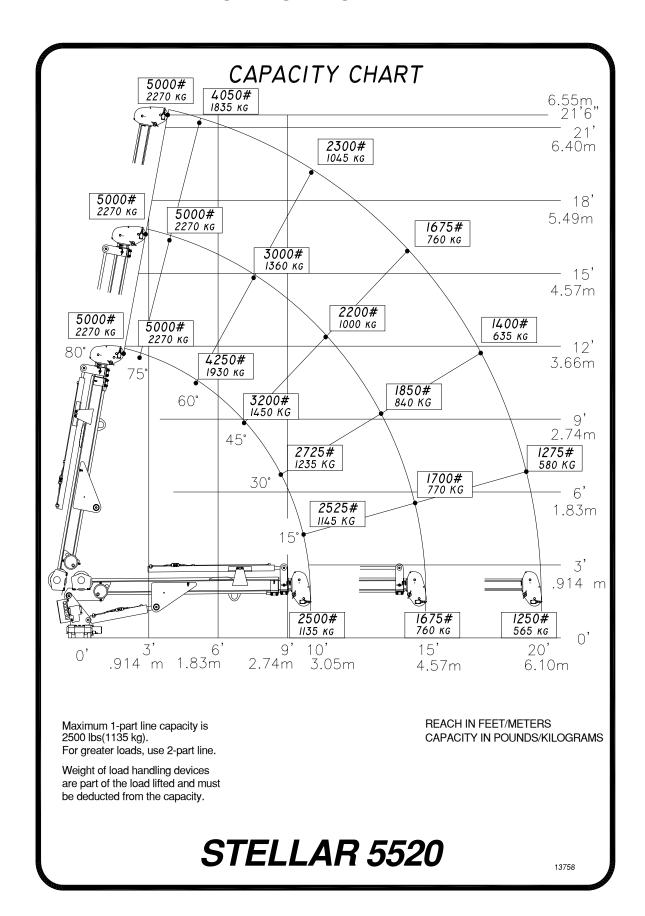
Stowed Height 31.50 inches (80.0 cm)

(crane only)

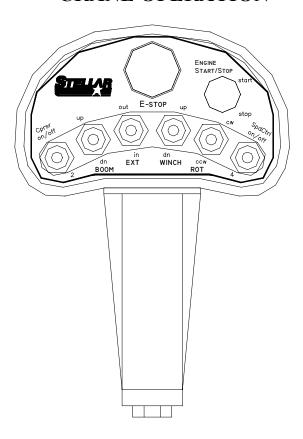
Mounting Space Required 18 x 20 inches (45.7 x 50.8 cm)

Approximate Shipping Weight 1400 lbs (635 kg)

#### **CAPACITY CHART**



#### **CRANE OPERATION**



THIS CRANE IS OPERATED BY A RADIO CONTROL SYSTEM WHICH OPERATES AN ELECTRONIC VALVE BANK. THE CONTROLLER (AS SHOWN) OPERATES THE FOLLOWING FUNCTIONS:

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

THIS CONTROLLER CAN ALSO BE UTILIZED TO OPERATE THE FOLLOWING OPTIONAL FUNCTIONS:

ENGINE START & STOP SPEED CONTROL ON & OFF COMPRESSOR ON & OFF

TWO OPTIONAL FUNCTIONS ARE ALSO AVAILABLE FOR OTHER CUSTOMER NEEDS. OPTION TWO AND OPTION FOUR ARE BOTH MOMENTARY 12 VOLT FUNCTIONS AND WILL REQUIRE A LATCHING RELAY FOR MOST INSTALLATIONS.

#### MANUAL OPERATION

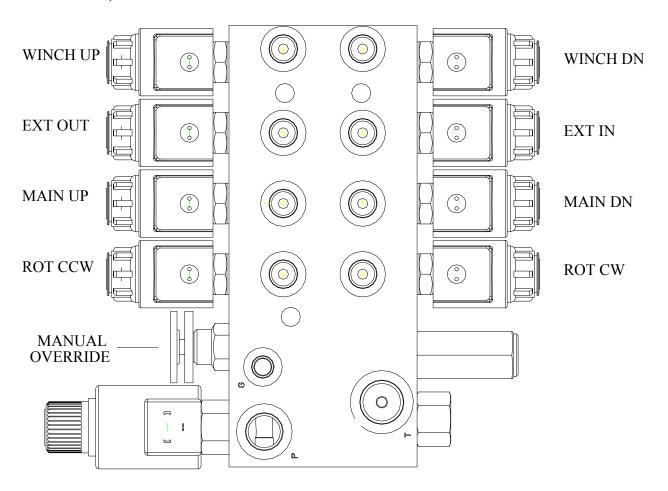
IN CASE OF RADIO FAILURE THE CRANE CAN BE OPERATED USING THE MANUAL OVERRIDES LOCATED ON THE VALVE BANK. USE THE MANUAL OVERRIDES **ONLY** TO GET THE CRANE INTO A STOWED POSITION FOR TRAVEL. HAVE THE EQUIPMENT SERVICED FOR NORMAL RADIO USE.

# **WARNING**

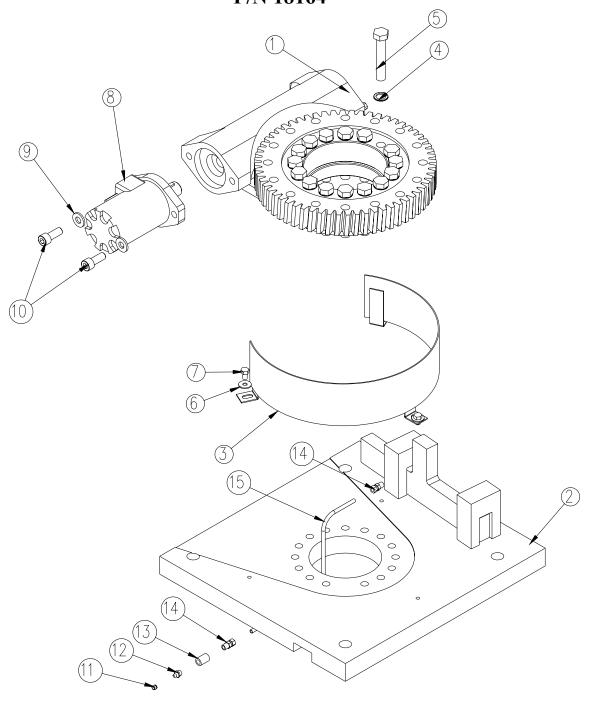
PROLONGED MANUAL OPERATION WILL CAUSE SEVERE DAMAGE TO THE HYDRAULIC SYSTEM.

#### TO OPERATE CRANE MANUALLY:

- 1.) LOOSEN JAM NUT ON MANUAL OVERRIDE VALVE
- 2.) TURN THE HANDKNOB FULLY COUNTER CLOCKWISE
- 3.) OPERATE FUNCTIONS AS NEEDED TO STOW CRANE BY PUSHING ON THE END OF THE SOLENOID
- 4.) TURN THE HANDKNOB FULLY CLOCKWISE
- **5.)** HAVE UNIT SERVICED

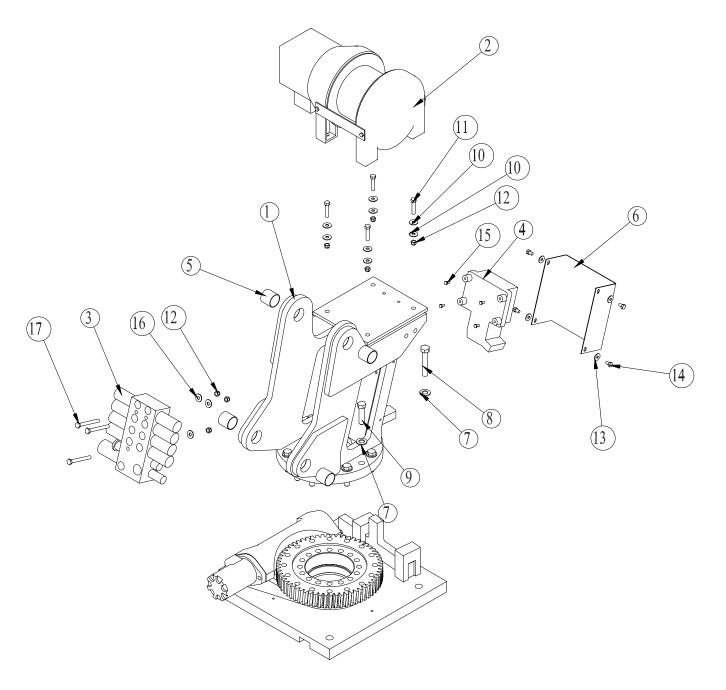


# BASE ASSEMBLY P/N 18164



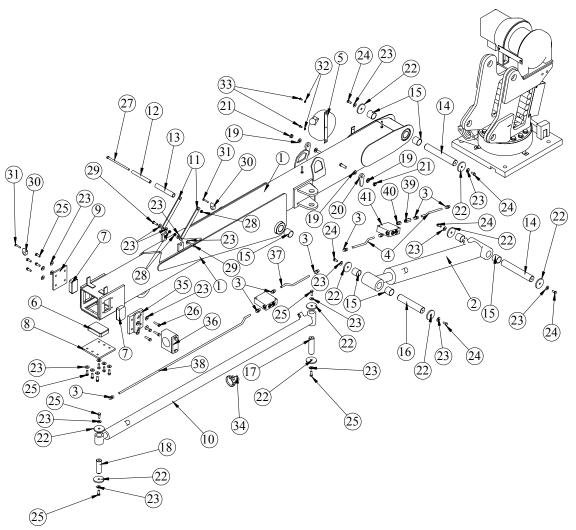
| ITEM | PART  | DESCRIPTION                        | QTY. | ITEM | PART  | DESCRIPTION                 | QTY. |
|------|-------|------------------------------------|------|------|-------|-----------------------------|------|
| 1    | 12857 | BEARING SWING DRIVE WR170A-60:1ASK | 1    | 9    | D0790 | WASHER 0.50 FLAT GR8        | 2    |
| 2    | 12141 | BASE 5520                          | 1    | 10   | D1307 | CAP SCR 0.50-13X1.25 SH     | 2    |
| 3    | 10668 | GEAR GUARD WELDMENT 2200           | 1    | 11   | C4808 | CAP PLASTIC (RED)           | 1    |
| 4    | 12152 | WASHER 0.63 FLAT SP                | 16   | 12   | c1592 | ZERK 1/8 NPT STRAIGHT       | 1    |
| 5    | D1312 | CAP SCR 0.63-11X3.50 HHGR8         | 16   | 13   | C2256 | FTG COUPLER PIPE 0.13       | 1    |
| 6    | 0343  | WASHER 0.31 FLAT                   | 3    | 14   | D1345 | FTG CPRSN 0.12NPT/0.25 TUBE | 2    |
| 7    | 0484  | CAP SCR 0.31-18 X 0.50 HHGR5       | 3    | 15   | D1810 | TBE AIR SAEJ844 TYPE A .25  | 1    |
| 8    | D1204 | ROTATION MOTOR 5520                | 1    |      |       | _                           |      |

# MAST ASSEMBLY P/N 18165



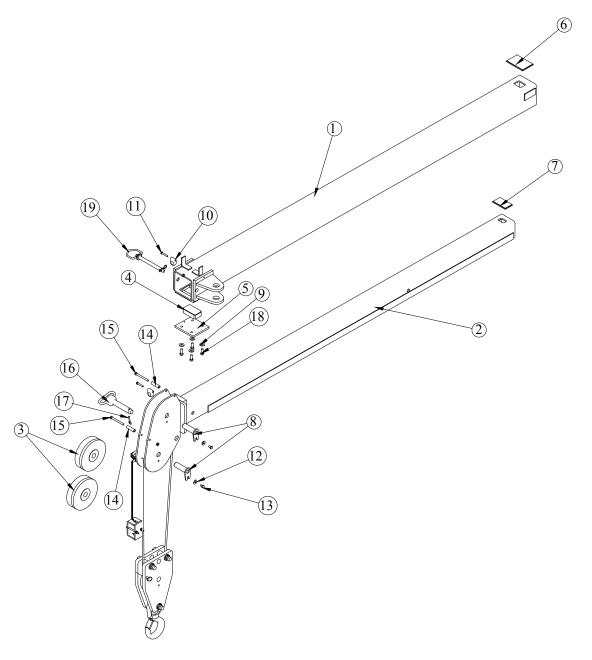
| ITEM | PART  | DESCRIPTION                      | QTY. | ITEM | PART  | DESCRIPTION                  | QTY. |
|------|-------|----------------------------------|------|------|-------|------------------------------|------|
| 1    | 11699 | MAST 5520                        | 1    | 10   | C6353 | WASHER 0.38 FLAT GR8         | 8    |
| 2    | 11362 | WINCH KINEMATIC'S 3000#          | 1    | 11   | 12167 | CAP SCR 0.38-16X1.75 HHGR8   | 4    |
| 3    | 12810 | VB 4 SECT ELECT W/PROP VLV HYDAK | 1    | 12   | 0347  | NUT 0.38-16 HH NYLOC         | 7    |
| 4    | 11847 | RADIO RECEIVER                   | 1ref | 13   | 0343  | WASHER 0.31 FLAT             | 4    |
| 5    | 0067  | BUSHING QSI-2426-24              | 4    | 14   | 0484  | CAP SCR 0.31-18 X 0.50 HHGR5 | 4    |
| 6    | 12137 | COVER MAST 5520                  | 1    | 15   | 10976 | CAP SCR 6MMX12MM HHGR8       | 4    |
| 7    | C5902 | WASHER 0.63 FLAT GR8             | 12   | 16   | 0346  | WASHER 0.38 FLAT             | 3    |
| 8    | D1312 | CAP SCR 0.63-11X3.50 HHGR8       | 3    | 17   | 0531  | CAP SCR 0.38-16X3.50 HHGR5   | 3    |
| 9    | C1026 | CAP SCR 0.63-11X2.50 HHGR8 ZY    | 9    |      |       |                              |      |

### MAIN BOOM ASSEMBLY P/N 18226



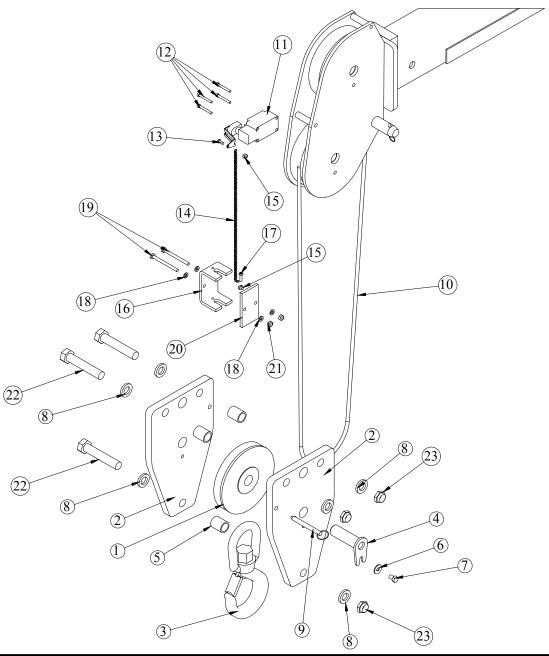
| ITEM NO. | PART NO. | DESCRIPTION                      | QTY. | ITEM NO. | PART NO. | DESCRIPTION                      | QTY. |
|----------|----------|----------------------------------|------|----------|----------|----------------------------------|------|
| 1        | 12014    | INNER BOOM 5520                  | 1    | 22       | 7403     | PIN CAP 0.44X2.50X.252           | 10   |
| 2        | 13754    | CYLINDER 3.50X21.00              | 1    | 23       | C6353    | WASHER 0.38 FLAT GR8             | 28   |
| 3        | 0279     | FTG ADAPT 6-F5OLO-S              | 8    | 24       | 9843     | CAP SCR 0.38-16X0.75 HHGR8       | 6    |
| 4        | 15173    | TUBE ASM 0.38X7.81 MAIN CYL 5520 | 2    | 25       | 13573    | CAP SCR 0.38-16X1.00 HHGR8       | 14   |
| 5        | 11544    | CORD REEL 6620                   | 1    | 26       | 16962    | CAP SCR 0.38-16X1.50 HHGR8       | 4    |
| 6        | 12040    | WEAR PAD 3.00X4.50X1.00          | 1    | 27       | C0987    | CAP SCR 0.38-16X7.00 HHGR5       | 1    |
| 7        | 13642    | WEAR PAD 2.00X3.50X0.97          | 2    | 28       | 0347     | NUT 0.38-16 HH NYLOC             | 3    |
| 8        | 13643    | PLATE WEAR PAD COVER 5520        | 1    | 29       | 0335     | CAP SCR 0.38-16X1.25 HHGR5       | 2    |
| 9        | 13644    | PLATE WEAR PAD COVER 5520        | 1    | 30       | 0337     | HOSE CLAMP LN 4190 PP            | 2    |
| 10       | 13441    | CYLINDER 2.00 X 60.00            | 1    | 31       | 0220     | CAP SCR 0.25-20 X 1.50 HHGR5     | 2    |
| 11       | 13757    | BRKT ROPE GUIDE 6620             | 2    | 32       | C1033    | WASHER 0.25 USS FLAT ZINC        | 2    |
| 12       | 13759    | SPACER ROPE GUIDE 5520           | 1    | 33       | 0478     | CAP SCR 0.25-20X0.50 HHGR5       | 2    |
| 13       | 13760    | PIPE 0.75X6.00 PVC               | 1    | 34       | 14929    | CLAMP 0.38 PORT TUBE             | 1    |
| 14       | 13811    | PIN 1.50X9.75 D&T                | 2    | 35       | 14494    | WEAR PAD COVER W\CLAMP 5520      | 1    |
| 15       | 0067     | BUSHING QSI-2426-24              | 8    | 36       | 14491    | CLAMP ASM CYL 5520(HRS4S65PPUNC) | 1    |
| 16       | 13812    | PIN 1.50X7.88 D&T                | 1    | 37       | 12158    | TUBE ASM 0.38X8.88 MAIN CYL 6620 | 1    |
| 17       | 13813    | PIN 1.25X4.50 D&T                | 1    | 38       | 13575    | TUBE ASM 0.38X45.00 EXT CYL 5520 | 1    |
| 18       | 13814    | PIN 1.25X3.50 D&T                | 1    | 39       | 15110    | VALVE CHECK SINGLE W/ ORIFICE    | 1    |
| 19       | D0790    | WASHER 0.50 FLAT GR8             | 4    | 40       | 15111    | FTG ADAPT MSTH/FSTH 6-4-F50G5    | 1    |
| 20       | 13815    | PLATE ANGLE INDICATOR            | 2    | 41       | 13080    | MANIFOLD ASM 6620 INNER HOLDING  | 2    |
| 21       | C6106    | NUT 0.50-13 HHGR5 NYLOC          | 2    |          |          |                                  |      |

# EXTENSION BOOMS ASSEMBLY P/N 18227



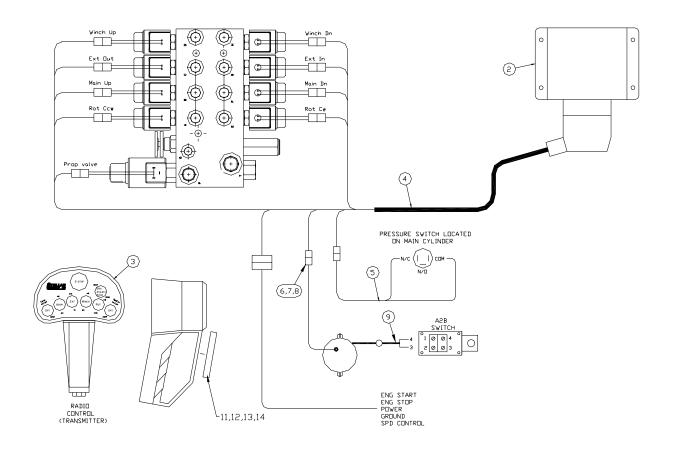
| ITEM | PART  | DESCRIPTION                        | QTY. | ITEM | PART  | DESCRIPTION                  | QTY. |
|------|-------|------------------------------------|------|------|-------|------------------------------|------|
| 1    | 12023 | EXT BOOM 1ST 5520                  | 1    | 11   | 0220  | CAP SCR 0.25-20 X 1.50 HHGR5 | 2    |
| 2    | 12013 | EXT BOOM 2ND 5520                  | 1    | 12   | 0343  | WASHER 0.31 FLAT             | 2    |
| 3    | 11545 | SHEAVE 6620 6.75 DIA .31R/1.94 THK | 2    | 13   | 0484  | CAP SCR 0.31-18 X 0.50 HHGR5 | 2    |
| 4    | 13642 | WEAR PAD 2.00X3.50X0.97            | 1    | 14   | 11936 | SPACER BOOM TIP 3820         | 2    |
| 5    | 13644 | PLATE WEAR PAD COVER 5520          | 1    | 15   | 12178 | CAP SCR 0.31-18X3.25 HHGR5   | 2    |
| 6    | 13645 | WEAR PAD 3.00X4.50X.63             | 1    | 16   | 12824 | PIN HITCH 1.00X4.50          | 1    |
| 7    | 13646 | WEAR PAD 2.00X3.50X.63             | 1    | 17   | 5753  | PIN 0.19X1.56 LYNCH          | 1    |
| 8    | 9706  | PIN TEAR DROP 1.00X3.25            | 2    | 18   | 13573 | CAP SCR 0.38-16X1.00 HHGR8   | 4    |
| 9    | C6353 | WASHER 0.38 FLAT GR8               | 4    | 19   | D1298 | PIN HITCH 0.63X6.25          | 1    |
| 10   | 0337  | HOSE CLAMP LN 4190 PP              | 2    |      |       |                              |      |

# CABLE AND HOOK ASSEMBLY P/N 18228



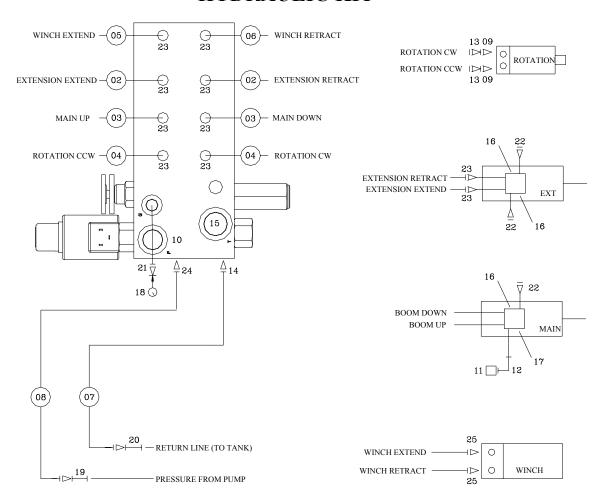
| ITEM | PART  | DESCRIPTION                        | QTY. | ITEM | PART  | DESCRIPTION                     | QTY. |
|------|-------|------------------------------------|------|------|-------|---------------------------------|------|
| 1    | 11934 | SHEAVE 6620 6.50 DIA .31R/1.12 THK | 1    | 13   | D1711 | CAP SCR #10-24X0.50 BTNHD SS    | 1    |
| 2    | 9676  | PLATE 6620 SNATCH BLOCK            | 2    | 14   |       | CHAIN 0.105 (RM) 2607-21201     | 1    |
| 3    | 3863  | HOOK 5 TON                         | 1    | 15   | C4956 | NUT #10-24 HH NYLOC SS          | 2    |
| 4    | 9706  | PIN TEAR DROP 1.00X3.25            | 1    | 16   |       | WEIGHT 6620 ATB                 | 1    |
| 5    |       | SPACER 5520 SNATCH BLOCK           | 3    | 17   | D0894 | CAP SCR #10-24 X 0.75 BTN HD SS | 1    |
| 6    |       | WASHER 0.31 FLAT                   | 1    | 18   |       | WASHER 0.25 USS FLAT ZINC       | 4    |
| 7    |       | CAP SCR 0.31-18 X 0.50 HHGR5       | 1    | 19   |       | CAP SCR 0.25-20 X 3.00 HHGR5    | 2    |
| 8    |       | WASHER 0.75 SAE FLAT YELLOW GR8    | 6    | 20   | 12876 | FLAT 0.25 X 2.00 X 3.63         | 1    |
| 9    | 9263  | PIN .38X3.00 QUICK RELEASE         | 1    | 21   | 0333  | NUT 0.25-20 HHGR5 NYLOC         | 2    |
| 10   |       | WIRE ROPE 0.31 6X19 IWRC-XIP 90FT  | 1    | 22   |       | CAP SCR 0.75-10X4.00 HHGR8 ZY   | 3    |
| 11   |       | SWITCH LIMIT A2B FURNAS 3SE3170    | 1    | 23   | C0538 | NUT 0.75-10 HHGR8 NYLOC         | 3    |
| 12   | 12177 | CAP SCR #10-24 X 1.50 SHGR5        | 4    |      |       |                                 |      |

## **CONTROL KIT**



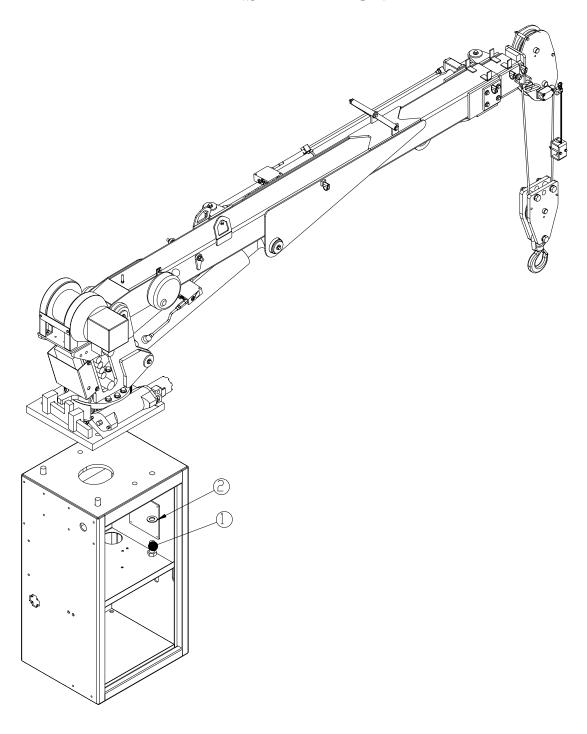
| ITEM | PART No. | DESCRIPTION                       | QTY |
|------|----------|-----------------------------------|-----|
| 01   | 11835    | RADIO CONTROLLER ASSEMBLY         | 1   |
| 02   | 11847    | RECEIVER - RADIO (PART OF 1)      | REF |
| 03   | 11834    | TRANSMITTER - RADIO (PART OF 1)   | REF |
| 04   | 12134    | WIRE HARNESS RADIO/VB             | 1   |
| 05   | 13004    | WIRE HARNESS PRESSURE SWITCH 6620 | 1   |
| 06   | 9752     | CONNECT 2 PIN SHROUD              | 1   |
| 07   | 8384     | CABLE SEAL 18-20 PACKARD          | 2   |
| 80   | 9756     | CONTACT M TERM SHROUD 18-20       | 2   |
| 09   | 10965    | CABLE GROMMET                     | 1   |
| 10   | 16255    | BATTERY CHARGER W/BTRY 110-3.6V   | 1   |
| 11   | 6629     | MAGNET 70# 2.80 DIA               | 1   |
| 12   | 6832     | DECAL MAGNET COVER-2.94DIA        | 1   |
| 13   | d6021    | CAP SCR 0.25-20X0.75 BTNHD SS     | 1   |
| 14   | 0333     | NUT 0.25-20 HHGR5 NYLOC           | 1   |

# **HYDRAULIC KIT**



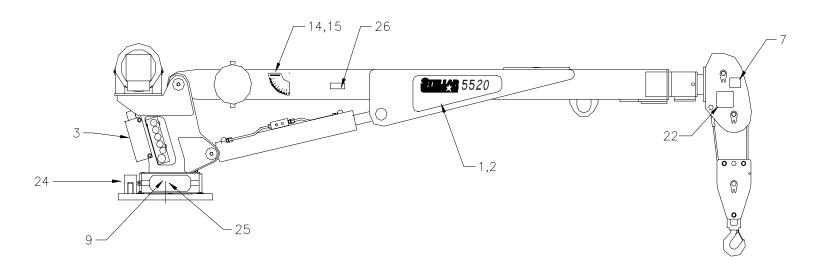
| 25   | 7343     | FTG O'RING FS 45 DEG 6-8 V5C       | DLO        | 2    |  |
|------|----------|------------------------------------|------------|------|--|
| 24   | C1854    | FTG ADAPT 6-8 F5OLO-S              |            |      |  |
| 23   | C4922    | FTG ADAPT 4-6 F5OLO-S              |            | 10   |  |
| 22   | C4961    | FTG O'RING PLUG                    |            | 3    |  |
| 21   | 12159    | FTG ADAPT MSTR/FNPT 8 - 0.2        | 5          | 1    |  |
| 20   | 12172    | FTG SWIVEL 0.50 FS/FS PS81 JN      | MJM-8-8    | 1    |  |
| 19   | 12171    | FTG SWIVEL 0.38 FS/FS PS81 JN      | MJM-6-6    | 1    |  |
| 18   | 6397     | GAUGE OIL LF 2.5" 0-5000 CBN       | М          | 1    |  |
| 17   | 11991    | VALVE C-BAL PLUG                   |            | REF  |  |
| 16   | 9803     | VALVE C-BAL                        |            | REF  |  |
| 15   | 12153    | PLUG STR HOLLOW HEX 0.63           | 10-HP5ON   | 1    |  |
| 14   | C2252    | FTG ADAPT SL LOK 8-10-F5OL         | O-S        | 1    |  |
| 13   | D1190    | FTG O'RING SL LK TBE 45DG 4 6V5OLO |            |      |  |
| 12   | 3861     | FTG ML FM O'RING 90 DEG            |            |      |  |
| 11   | 3862     | SWITCH PRES OVERLD 744.6-S         | 603R-2900N | 1    |  |
| 10   | D1535    | PLUG STR HOLLOW HEX 0.50           | 8-HP5ON    | 1    |  |
| 09   | C1111    | FTG ADAPT MSTR/FSTR 10-6 F         | 5OG5       | 2    |  |
| 08   | 13034    | HOSE-HYD .38 X 6                   | <b>I</b>   | 1ref |  |
| 07   | 13033    | HOSE-HYD .50 X 5                   |            | 1ref |  |
| 06   | 15034    | HOSE-HYD .25 X 13                  |            | 1ref |  |
| 05   | 15033    | HOSE-HYD .25 X 12                  |            | 1ref |  |
| 04   | 15032    | HOSE-HYD .25 X 35                  |            | 2ref |  |
| 03   | 15031    | HOSE-HYD .25 X 23.50               |            | 2ref |  |
| 02   | 14800    | HOSE-HYD .25 X 63.50               |            | 2ref |  |
| 01   | 14799    | HOSE KIT,5520 CRANE (incl:2-11)    |            |      |  |
| ITEM | PART No. | DESCRIPT                           | ION        | QTY  |  |

# INSTALLATION KIT



| ITEM | PART  | DESCRIPTION                     | QTY. |
|------|-------|---------------------------------|------|
| 1    | 14928 | CAP SCR 1.00-8X2.25 HHGR8 ZY    | 4    |
| 2    | 6538  | WASHER 1.00 SAE FLAT YELLOW GR8 | 4    |

# **DECAL KIT**



| 26   | 15172    | DECAL ASME/ANSI B30.22/B30.5     | 1   |
|------|----------|----------------------------------|-----|
| 25   | 15171    | DECAL GREASE WORM DRIVE BEARINGS | 1   |
| 24   | 4188     | DECAL-ROTATION ALIGNMENT         | 1   |
| *23  | C4541    | DECAL-CRANE STOWING              | 1   |
| 22   | 12300    | DECAL-TWO BLOCKING               | 1   |
| *21  | 4214     | DECAL-SERVICE                    | 1   |
| *20  | C0568    | DECAL-DIESEL                     | 2   |
| *19  | 12452    | DECAL MANUAL EXT                 | 1   |
| *18  | C5911    | DECAL-STELLAR 2x4.5              | 3   |
| *17  | C5910    | DECAL-STELLAR 4x9.5              | 1   |
| *16  | 12451    | DECAL HOISTING PERSONNEL         | 1   |
| 15   | 13819    | DECAL-ANGLE INDICATOR SS         | 1   |
| 14   | 13820    | DECAL ANGLE INDICATOR CS         | 1   |
| *13  | C1179    | DECAL-ELECTROCUTION 4.5x7.5      | 2   |
| *12  | C5918    | DECAL-DANGER MOVING O.R.         | 2   |
| *11  | C4795    | DECAL-DANGER O.R.                | 2   |
| *10  | 4190     | DECAL-DANGER                     | 1   |
| 09   | 9188     | DECAL-ROTATE/GREASE              | 1   |
| *08  | 4189     | DECAL-DANGER                     | 1   |
| 07   | 4186     | DECAL-ELECTROCUTION 2x2.75       | 1   |
| *06  | C4544    | DECAL-DANGER                     | 1   |
| *05  | C4540    | DECAL-DANGER                     | 1   |
| *04  | C4545    | DECAL-ELECTROCUTION 5x13         | 4   |
| *03  | 13758    | DECAL CAPACITY                   | 2   |
| 02   | 14219    | DECAL IDENTIFICATION SS          | 1   |
| 01   | 14220    | DECAL IDENTIFICATION CS          | 1   |
| ITEM | PART No. | DESCRIPTION                      | QTY |

\*USE THESE DECALS WITH BODY PACKAGE

#### 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 5520 Crane**

- <u>Maximum Horizontal Reach</u> 240 inches (center of rotation to boom tip)
- Stability Test Weight 1475#

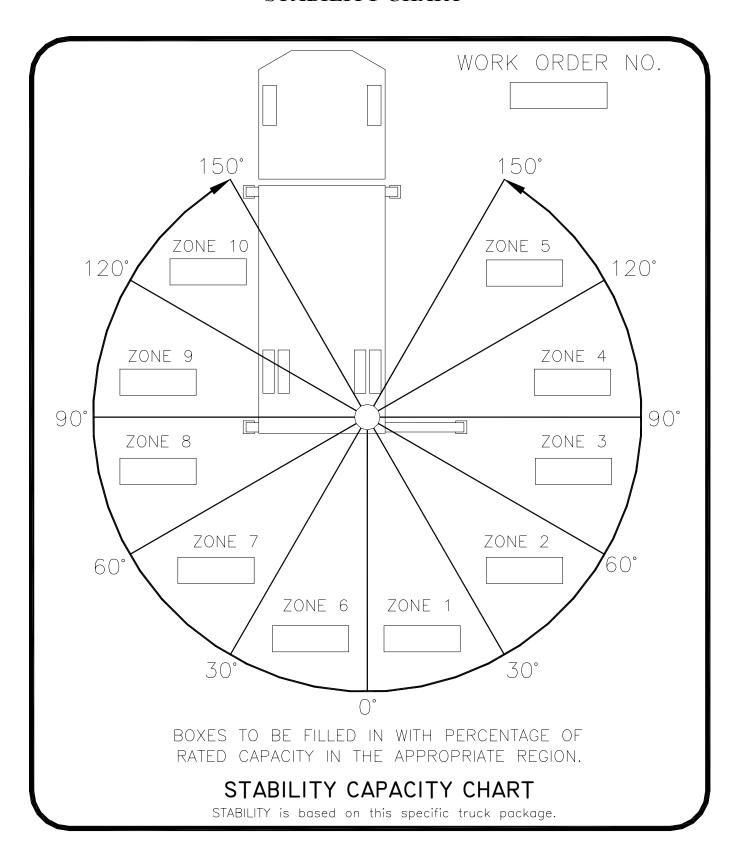
#### **Test Procedure**

- -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.

<u>Stable horizontal reach</u> 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.

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REVISED 10/05/2000