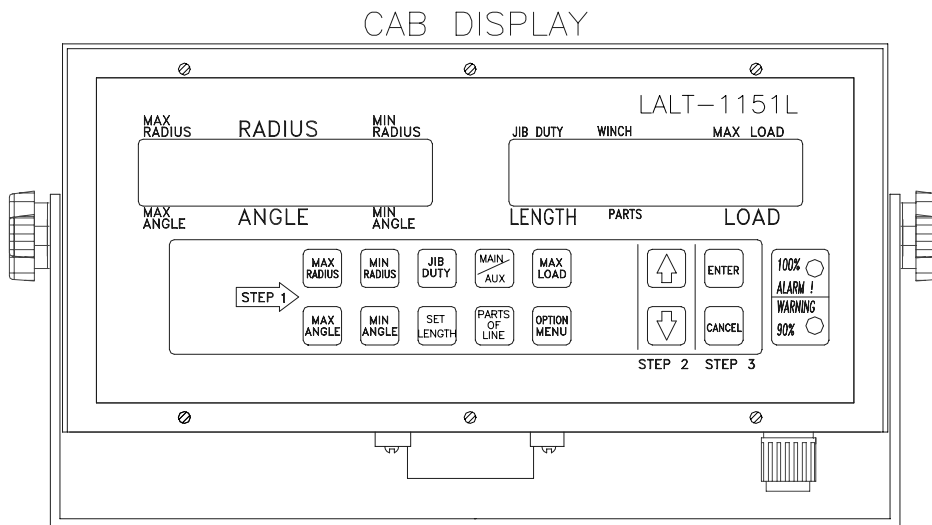


LALT™ -1151L SYSTEM for LATTICE CRANES



OPERATOR'S MANUAL



WARNING

The LALT™ 1151L System for Lattice Cranes is designed to aid fully trained and experienced crane operators in safe crane operation. This System may not be used as a substitute for the usual safety practices and precautions required for the safe setup and operation of cranes.

GREER COMPANY

Crane Systems

THE LALT™ -1151L SYSTEM FOR LATTICE CRANES

The LALT™ -1151L System for Lattice Cranes provides a visual and audible warning system with automatic as well as operator-settable alarms designed to alert the operator to an approaching overload and/or a “Two-Block” condition during crane operation. The LALT™ -1151L Display Console provides the crane operator with a continuous, digital display of load, boom angle, boom length, and load radius.

REQUIREMENTS PRIOR TO SETUP

Accurate Calibration

Refer to the LALT™ -1151L SYSTEM for LATTICE CRANES --Calibration Manual.

Configuration Data

- BOOM LENGTH
- WINCH IN USE -- MAIN/AUX.
- PARTS OF LINE reeved for each winch.
- MAXIMUM ALLOWABLE HOOK LOAD for each winch.


1 SYSTEM SETUP

Correct crane configuration data must be entered before the LALT™ System is used. For initial setup, complete all of the items (A-G) below. Thereafter, update appropriate items to match crane configuration changes.

A. REMOVING OLD LIMITS (Initial Setup Only)

Removes **all** previously set boom motion limits.

**OPTION
MENU**

1. Press **OPTION MENU**.
The display reads: "SET RIGGING MODE."
2. Press the  arrow once.
The display reads: "CLEAR ALL LIMITS."

GREER COMPANY

Crane Systems

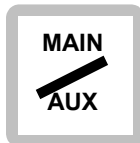
3. Press **ENTER**. All existing limits on *motion* are deleted.

B. SETTING THE BOOM LENGTH



1. PRESS **SET LENGTH**.
2. Press the **↑** and **↓** arrows to set **BOOM LENGTH**.
3. PRESS **ENTER**.

C. SELECTING THE MAIN OR AUX. WINCH



1. Press **MAIN/AUX**. The letter "**M**" will alternate with the letter "**A**" under "WINCH" on the display.
 - a) If the letter **M** is displayed, "PARTS OF LINE" and "MAXIMUM LOAD" are displayed for the **main hook**.
 - b) If the letter **A** is displayed, "PARTS OF LINE" and "MAXIMUM LOAD" are displayed for the **aux. hook**.

D. SETTING PARTS OF LINE

Main Winch



1. Press **MAIN/AUX**. Select **M** on the display.
2. Press **PARTS OF LINE**.
3. Press the **↑** and **↓** arrows to set **MAIN PARTS OF LINE**.
4. Press **ENTER**.

Aux Winch



1. Press **MAIN/AUX**. Select **A** on the display.
2. Press **PARTS OF LINE**.
3. Press the **↑** and **↓** arrows to set **AUX. PARTS OF LINE**.
4. Press **ENTER**.

GREER COMPANY

Crane Systems

E. SETTING THE MAXIMUM LOAD

Main Winch

MAX
LOAD

1. Press **MAIN/AUX**. Select **M** on the display.
2. Press **MAX LOAD**.
3. Press the **↑** and **↓** arrows* to set **MAXIMUM MAIN HOOK LOAD**.
4. Press **ENTER**.

Aux Winch

MAX
LOAD

1. Press **MAIN/AUX**. Select **A** on the display.
2. Press **MAX LOAD**.
3. Press the **↑** and **↓** arrows to set **MAXIMUM AUX. HOOK LOAD**.
4. Press **ENTER**.

F. SETTING JIB DIMENSIONS (skip if no jib is installed)

JIB
DUTY

1. Press **JIB DUTY**. The display reads: "SET JIB LENGTH."
2. Press the **↑** and **↓** arrows to set **JIB LENGTH** (Fig.1, page 6).
3. Press **ENTER**. The display reads: "SET JIB OFFSET."
4. Press the **↑** and **↓** arrows to set **JIB OFFSET ANGLE**.
5. Press **ENTER**. The display reads: "SELECT JIB WINCH."
6. Press **MAIN/AUX** to select **JIB WINCH**.
7. Press **ENTER**. (The jib is selected when "YES" appears below the words "JIB DUTY." The displayed radius will increase to indicate the **JIB POINT RADIUS**.)

*The longer an **↑** or **↓** arrow is pressed, the faster the displayed numbers will change. When the arrow key is released, the flashing digit will be the digit that will change the next time an **↑** or **↓** arrow is pressed.

GREER COMPANY
Crane Systems

G. REMOVING A JIB

1. Press **MAIN/AUX** to select the current winch for lifting off the jib point.
2. Press **JIB DUTY**.
(The word "**YES**," indicating the presence of a jib, will disappear and the **RADIUS** will revert to the main boom point radius.)
3. Press **MAIN/AUX** to select the correct winch for lifting off the main boom point.

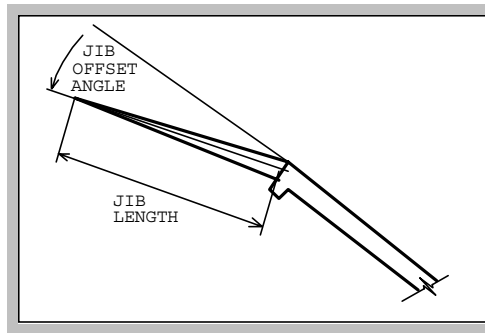


Figure 1

2 SYSTEM OPERATION

A. NORMAL DATA DISPLAYS

- **RADIUS** for Main, AUX., or Jib
- **BOOM ANGLE**
- **BOOM LENGTH**
- **JIB DUTY** ("YES" or "NO")
- **PARTS of LINE** for selected Winch
- **WINCH** Selection ("**M**" = Main & "**A**" = AUX)
- **MAX LOAD** limit setting for selected Winch
- **HOOK LOAD** for selected Winch

B. ALARM AND LIMIT FUNCTIONS*

- Warning Messages
- Yellow 90% Warning Light

GREER COMPANY

Crane Systems

- Intermittent Horn
- Red 100% Warning Light
- Continuous Horn
- Motion Cut Signal to activate crane motion limiting valves

*A complete table of Alarm and Limit functions can be found on the inside back cover of this manual.

C. ALARM TESTS

To activate **all** alarms, press and hold **ENTER** for 6 seconds when **not** in any System function or menu (calibration mode, option menu, or when adjusting limit settings).

D. CANCEL ALARMS

When not in any menu or performing any System function:

1. Press **CANCEL** to silence alarms.
2. Hold down **CANCEL** for 6 seconds to bypass motion cut relays.
3. Press **CANCEL** to restore normal alarm functions.

Note: If a new alarm condition occurs while alarms are deactivated, the System will automatically restore normal alarm functions.

E. OPERATOR SETTABLE LIMITS

MAXIMUM LOAD and the **LIMITS**, shown in Figure 2 on the following page, can be set by the operator.

Settable Boom Motion Limits

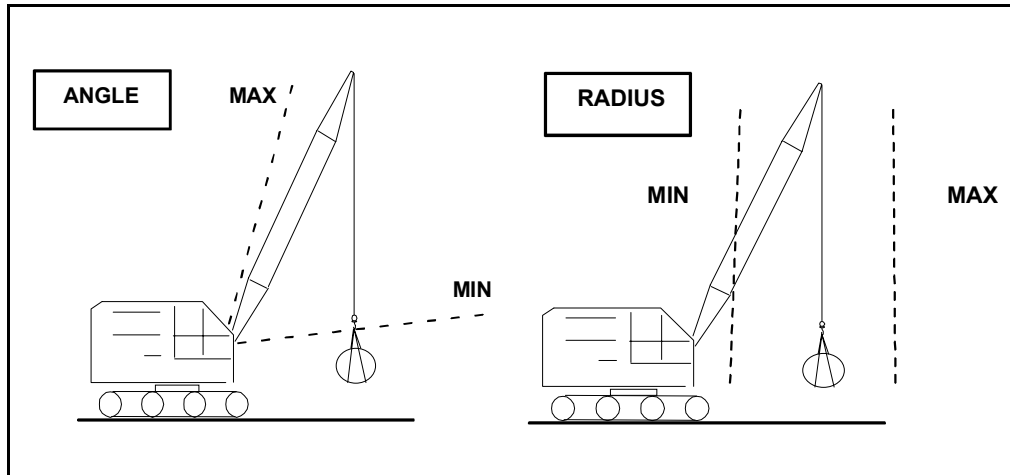
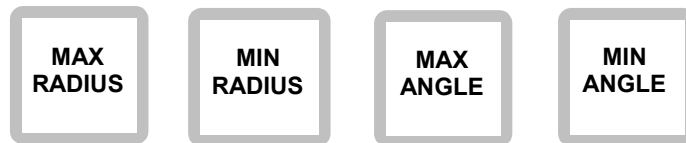


Figure 2

LIMIT SELECTION KEYS



1. SETTING LIMITS

There are two alternate procedures for setting boom motion limits.

Procedure One

1. Press any **LIMIT SELECTION KEY**.
2. Press **↑** and **↓** arrows to set desired limit.
3. Press **ENTER**.

GREER COMPANY

Crane Systems

Procedure Two

1. Move boom to desired limit position
(actual angle and radius will be displayed).
2. Press the appropriate **LIMIT SELECTION KEY**.
3. Press **CANCEL** to clear an old value.
4. Press the appropriate limit selection key.
5. Press **ENTER**. Alarms will activate.
6. Press **CANCEL** to silence alarms.
7. Move boom out of limits position.

2. REMOVING INDIVIDUAL SET LIMITS

1. Press a **LIMIT SELECTION KEY**.
2. Press **CANCEL**.

3 OTHER FUNCTIONS

OPTION MENU

Access selections in the **OPTION MENU** by pressing the **OPTION MENU** key first and then using the **↑** and **↓** arrows to scroll through the Options. Once the desired selection appears, press **ENTER** to start the routine.

A. RIGGING MODE

This mode completely disables all alarms, warnings, and motion cut signals for rigging or transporting the crane around the job site.

1. Press **OPTION MENU**. The display reads: "SET RIGGING MODE."
2. Press **ENTER**. The display reads: "RIGGING MODE! ALARMS DISABLED."

GREER COMPANY

Crane Systems

3. Press **CANCEL** to exit **RIGGING MODE**.

B. CLEAR ALL LIMITS

This mode removes all operator-settable boom motion limits.

1. Press **OPTION MENU**. The display reads: "SET RIGGING MODE."
2. Press the **▲** arrow once. The display reads: "CLEAR ALL LIMITS."
3. Press **ENTER**. All **LIMITS** except **MAXIMUM LOAD** will be replaced by "- - - -."

C. DISPLAY INPUTS

This Mode is a diagnostic tool that shows unprocessed data input from the sensors to the display. A sensor problem can be isolated by looking at this information.

1. Press **OPTION MENU**. The display reads: "RIGGING MODE."
2. Press **▲** arrow twice. The display reads: "DISPLAY INPUTS."
3. Press **ENTER**. The first input group is displayed.
4. Press **ENTER**. The second input group is displayed.
5. Press **ENTER** to exit the routine.

D. CALIBRATION MODE

DO NOT ENTER CALIBRATION MODE. Calibration is discussed in the Calibration Manual.

GREER COMPANY

Crane Systems

4 TABLE OF SYSTEM ALARM FUNCTIONS

Settable limits for angle, length, and radius are not connected to the motion cut system.

Questions should be directed to the Service Department at the number below.

SYSTEM ALARM FUNCTIONS						
Alarm Condition	Alarm Level	Yellow Light	Red Light	Warning Horn	Display Flashes	Motion Cut
Two-Block	—	—	ON	continuous	!!WARNING!! TWO BLOCK	active
MAX Linepull	90%	ON	—	intermittent	!PULL!	—
	100%	ON	ON	continuous	!!WARNING!! MAX(mn/aux) LINEPULL	active
MAX Load	90%	ON	—	intermittent	!!!	—
	100%	ON	ON	continuous	!!WARNING!! OVERLOAD (MAIN/AUX)	active
MAX Radius	90%	ON	—	intermittent	!!!	—
	100%	ON	ON	continuous	!!WARNING!!	active
MIN Radius	90%	ON	—	intermittent	!!!	—
	100%	ON	ON	continuous	!!WARNING!! MIN RADIUS	—
MAX & MIN Angle	90%	ON	—	intermittent	!!!	—
	100%	ON	ON	continuous	!!WARNING!! (MAX/MIN) ANGLE	—



1918 East Glenwood Place
Santa Ana, CA 92705
Telephone: (714) 259-9702
Fax: (714) 259-7626