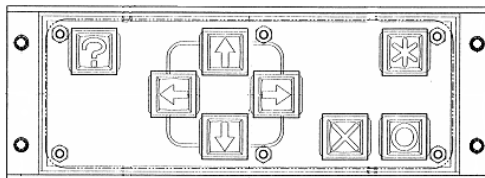
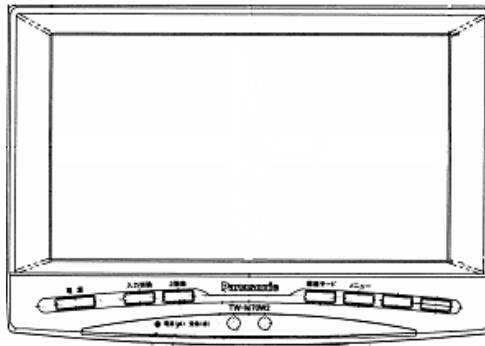


# HSL-1 LOAD MOMENT LIMITER ADJUSTMENT MANUAL



**Link-Belt**  
CONSTRUCTION EQUIPMENT

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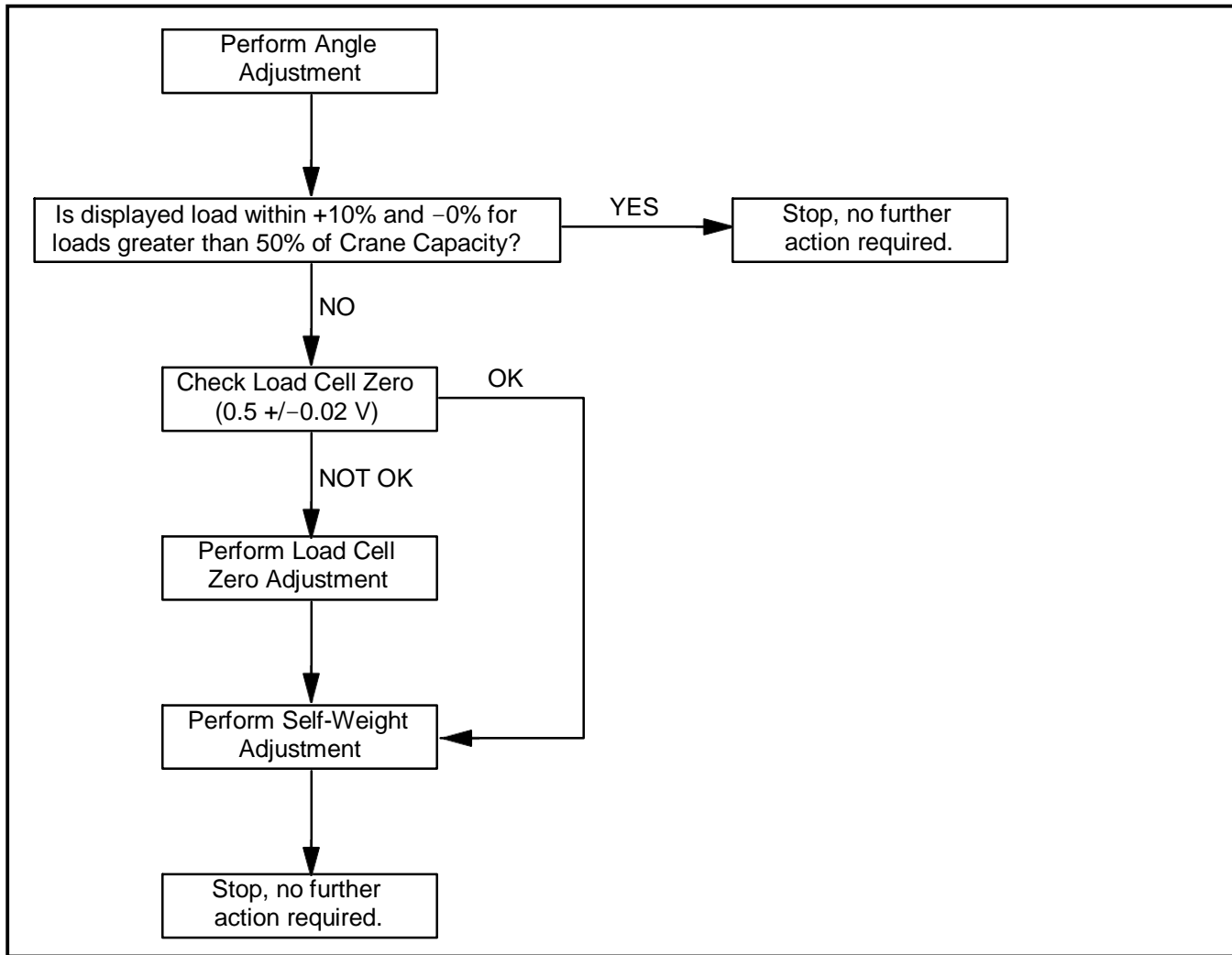
**Fax: 706-569-7004**

**E-Mail: [jeff@psrinc.biz](mailto:jeff@psrinc.biz)**

**P.O. Box 6506  
Columbus, GA  
31917-6506**

## Introduction

This manual is provided to assist service personnel with the adjustment procedures of the HSL-1 load moment limiter. The angle adjustment routine must be performed when the boom is installed on the crane the first time. Follow the flow chart below to determine the actions required after completing the angle adjustment routine.

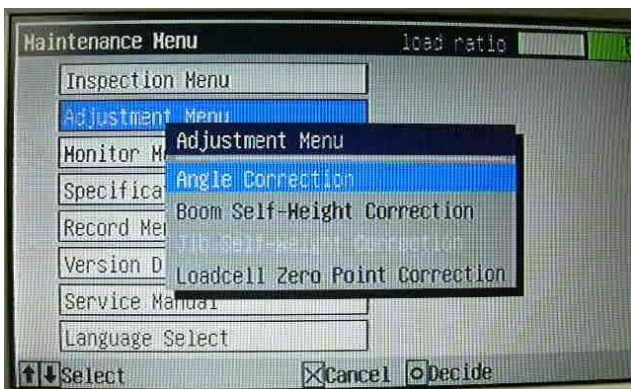


## Adjustment Menu

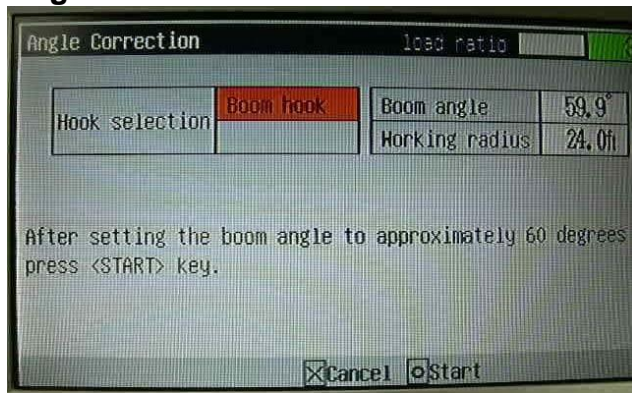
To access the adjustment menu, a maintenance key is required. The key switch is located under the fuse panel access cover. The access cover is located behind and to the right of the operator's seat. Remove the access cover and locate the key switch next to the fuse panels. Insert the key and turn it to the on position. Press the LML <MENU> button to access the Adjustment Menu. Three adjustment routines are available on the Adjustment Menu as follows:

- Angle Correction
- Self-Weight Correction
- Load Cell Zero Point Correction

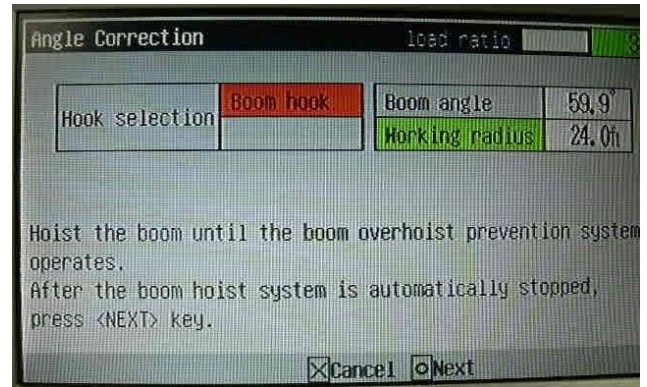
**Note:** If after performing the adjustment and calibration routines, system accuracy is still not within specification, contact a Link-Belt service representative.



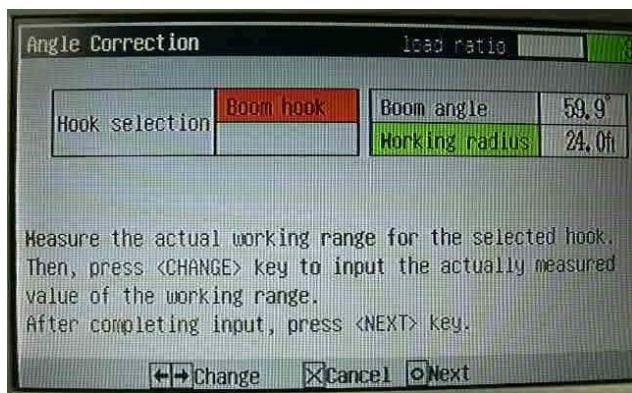
## Angle Correction



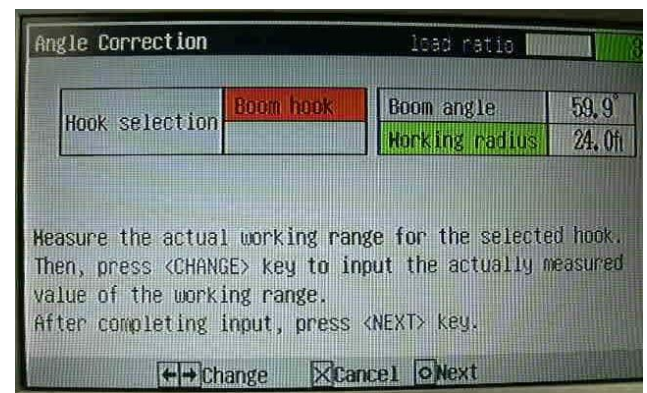
1. Move the boom to a 60 degree angle and press the <START> button.



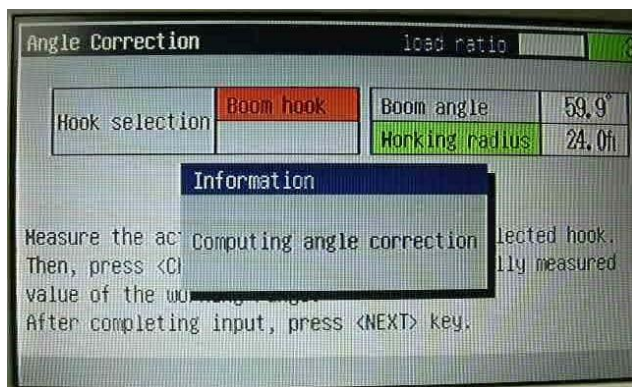
4. Hoist the boom until the boom hoist limit system activates. After the boom automatically stops, press the <NEXT> button.



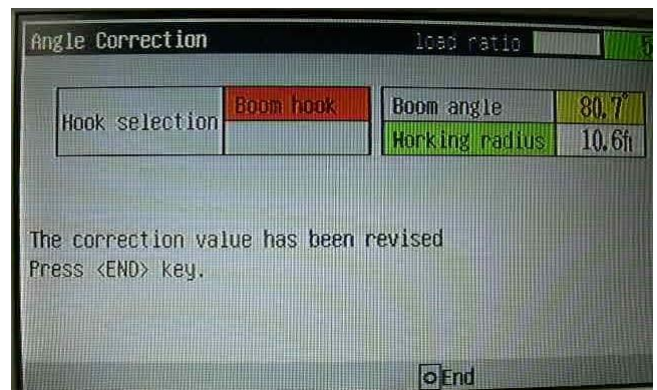
2. Measure the actual working radius for the selected hook. Press the <CHANGE> button until the actual measured working radius value is displayed. After inputting the actual measured working radius value, press the <NEXT> button.



5. Measure the actual working radius for the selected hook. Press the <CHANGE> button until the actual measured working radius value is displayed. After inputting the actual measured working radius value, press the <NEXT> button.

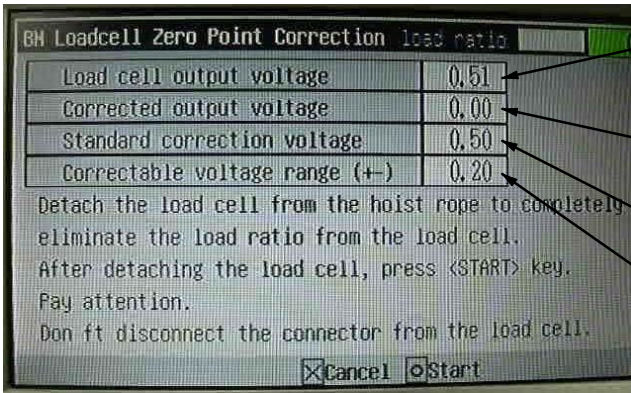


3. A pop-up dialogue box should appear indicating the system is computing the angle correction.



6. The angle correction value has been adjusted. Press the <END> button to complete the angle correction routine.

## Load Cell Zero Point Correction



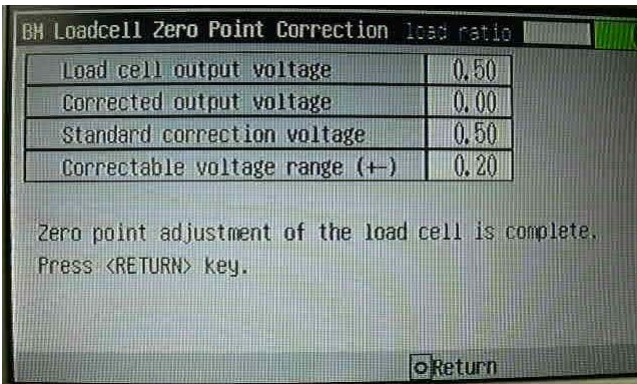
This value is the actual output voltage from the load cell. This number will vary with boom hoist rope tension. With no tension on the boom hoist rope, this number must be 0.48 to 0.52 before pressing the start button to begin the load cell adjustment routine.

This value is the load cell zero point after the load cell has been zeroed. If this number is out of range from 0.00 to 0.02, load cell zero point adjustment is required.

This value is the base number for the load cell zero point. This number does not change and should be 0.50.

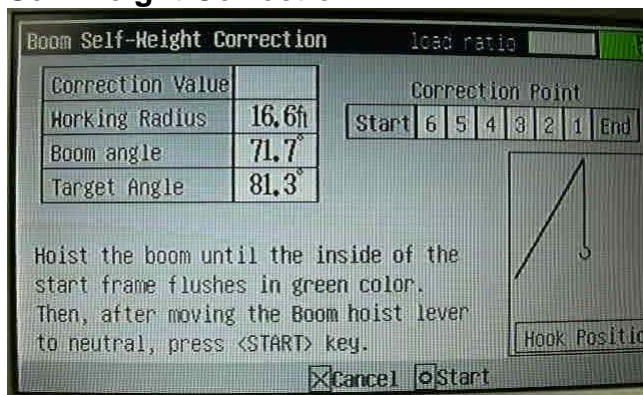
This value is the correctable voltage range. This number does not change and should be 0.20. However, the important thing is that the "Corrected output voltage" value is 0.02 or less.

1. Set boom on the ground and lower live mast onto cribbing or support with an assist crane until the boom hoist rope is slack and no tension is on the load cell. Press the <START> button.



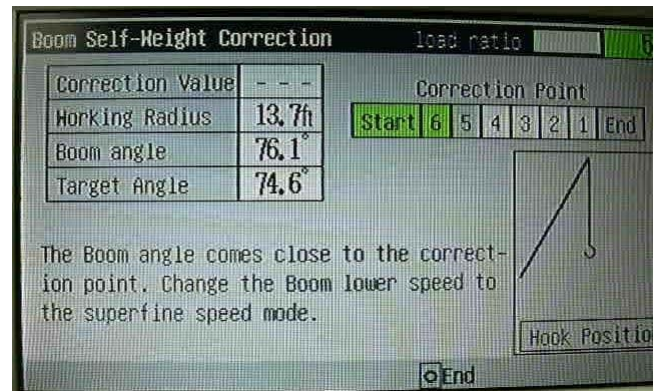
2. Load cell zero point correction has been adjusted. Press the <RETURN> button to complete routine.

## Self-Weight Correction

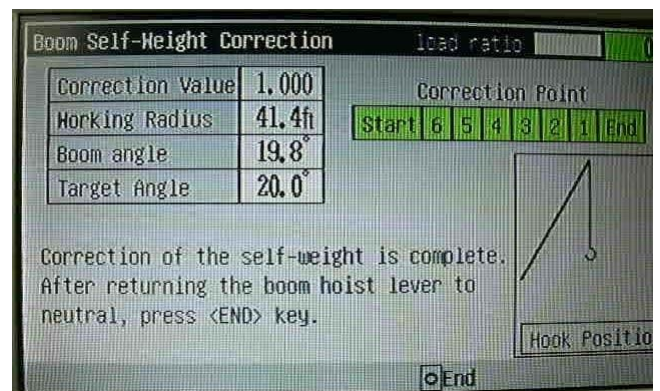


1. Hoist the boom until the target angle is reached and the Start box and correction point 6 illuminates green. Move the boom hoist lever to neutral and press the <START> button.

**Note:** If the boom overhoist prevention system activates before the target angle is reached and the start box illuminates, use the boom hoist override switch and continue to hoist the boom until target angle and start box illuminates.



2. With the boom lower speed in the superfine mode, lower the boom. As the boom passes each target angle, the appropriate correction box will illuminate green.



3. Continue to lower the boom until the End box illuminates green. Move the boom hoist lever to neutral and press the <END> button to complete the routine. Self-weight correction has been adjusted.

**Note:** If boom lower limit system activates due to an out of working range radius, the routine can be completed by pressing the end button.

