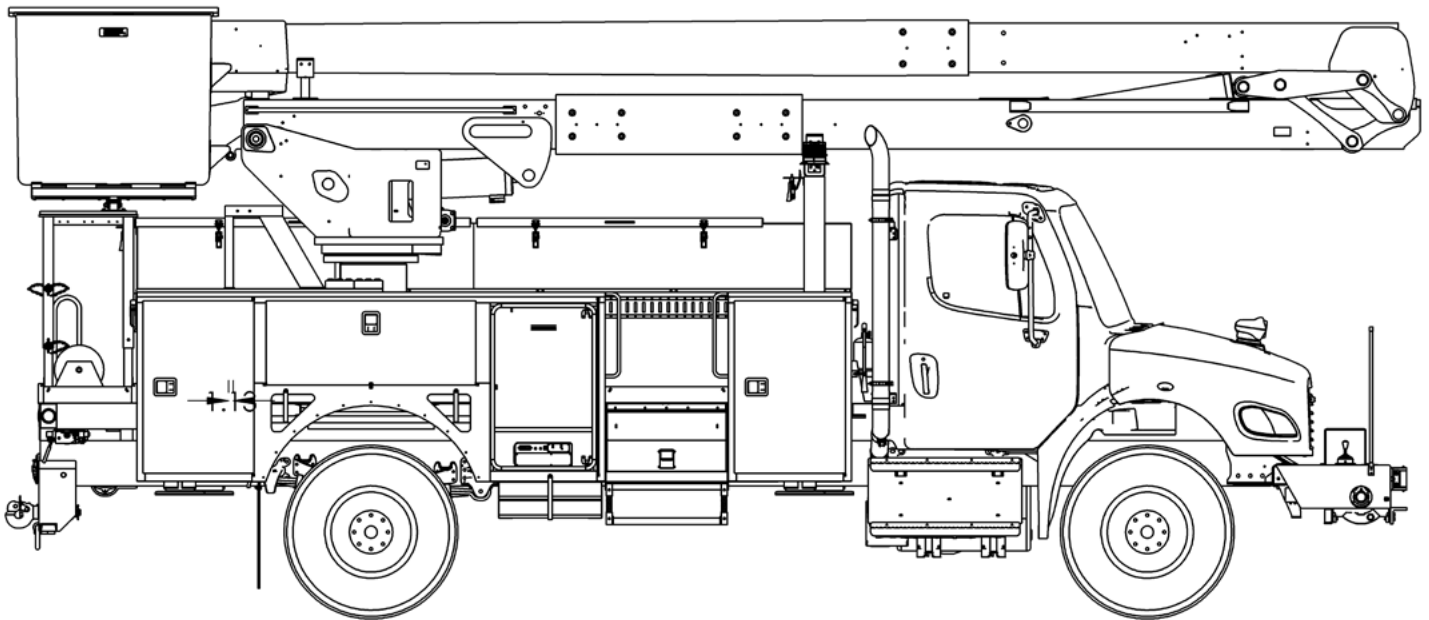




TECH TIPS

PROPER OPERATION OF LOAD ALERT SYSTEM (LAS) REVISION 2

NO. 60



SERVICE CALL:
PROPER OPERATION OF LOAD
ALERT SYSTEM (LAS) REVISION 2



MODEL(S):
AERIAL UNITS WITH LOAD ALERT
SYSTEM (LAS) REVISION 2



TOOLS NEEDED:
NONE

TEREX UTILITIES TECHNICAL SUPPORT TEAM

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DANGER

Failure to obey the instructions and safety rules in the appropriate Operator's Manual and Service Manual for your machine will result in death or serious injury.

Many of the hazards identified in the Operator's Manual are also safety hazards when maintenance and repair procedures are performed.

DO NOT PERFORM MAINTENANCE UNLESS:

- ✓ You are trained and qualified to perform maintenance on this machine.
- ✓ You read, understand and obey:
 - manufacturer's instructions and safety rules
 - employer's safety rules and worksite regulations
 - applicable governmental regulations
- ✓ You have the appropriate tools, lifting equipment and a suitable workshop.

The information contained in this Tech Tip is a supplement to the Service Manual. Consult the appropriate Service Manual of your machine for safety rules and hazards.



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INTRODUCTION

The Terex Load Alert System (LAS) monitors and analyzes the jib and platform loads and compares those values to the load chart based on boom and jib position. The LAS must be used in conjunction with the aerial device material handling load chart.

The Terex Load Alert System is an operator aid only and not to be used in place of the load chart and proper operating practice. It must be used in addition to following the employer's safe work practices as well as all applicable standards and regulations.

Operators/Users shall be trained and qualified to operate and perform the work using the aerial device and included equipment. Failure to follow proper work instructions, use within the capacity of the aerial load chart, or wear PPE suitable for the line voltage being worked, can result in death or serious injury.

Read the unit specific maintenance manual prior to performing this tech-tip.

This version of LAS will be equipped with the display in **Figure 1**.

STEP 1

The display screen for the LAS system contains both buttons and a touch screen. In some cases buttons F1 through F10 may be used, but the touch screen works better for most applications.

The *Home* button will always take the screen back to the first screen.

The *Back* button will always advance back to the previous screen.

Esc will cancel any changes that are being made and the *up/down* or *+-* buttons function as described.

STEP 2

With the ignition key ON and the PTO engaged, verify the system is operational.

In the example below, both the platform (basket) and the jib are showing a load. The platform load could be the liner or tools. The tolerance is ± 50 lbs.



FIGURE 1

STEP 3

From this screen shown in Step 2, select *Load Chart*. The weight marked green shows what the capacity is in each boom configuration.

LOAD CHART: OPTIMA HRX60						
MAXIMUM JIB LOAD (LBS)		2000	1 500	750	500	500
UPPER BOOM ANGLE	BASKET CAPACITY (LBS)	JIB CAPACITY AT LOAD RADIUS SHOWN (LBS)				
		ZONE A				ZONE B
		LOWER BOOM TO 110 DEG.				>110
		0 FT	0-2 FT	2-4 FT	4-6 FT	0-6 FT
-60	700	1 380	1 340	750	500	500
-30	700	530	510	490	470	0
0	700	500	480	460	450	0
30	700	660	640	610	500	0
60	700	1 850	1 500	750	500	500
90	700	1 130	1 130	750	500	500
120	700	60	60	60	60	60
150	360	0	0	0	0	0
180	260	0	0	0	0	0

STEP 4

In the screen shown below, a known load has been placed on the Jib. In this case the load is 77% of capacity.



STEP 5

This load chart shows the capacity in this boom configuration.

LOAD CHART: OPTIMA HRX60						
MAXIMUM JIB LOAD (LBS)		2000	1 500	750	500	500
		JIB CAPACITY AT LOAD RADIUS SHOWN (LBS)				
UPPER BOOM ANGLE	BASKET CAPACITY (LBS)	ZONE A				ZONE B
		LOWER BOOM TO 110 DEG.				>110
		0 FT	0-2 FT	2-4 FT	4-6 FT	0-8 FT
-60	700	1 380	1 340	750	500	500
-30	700	530	510	490	470	0
0	700	500	480	460	450	0
30	700	660	640	610	500	0
60	700	1 850	1 500	750	500	500
90	700	1 130	1 130	750	500	500
120	700	60	60	60	60	60
150	360	0	0	0	0	0
180	260	0	0	0	0	0

STEP 6

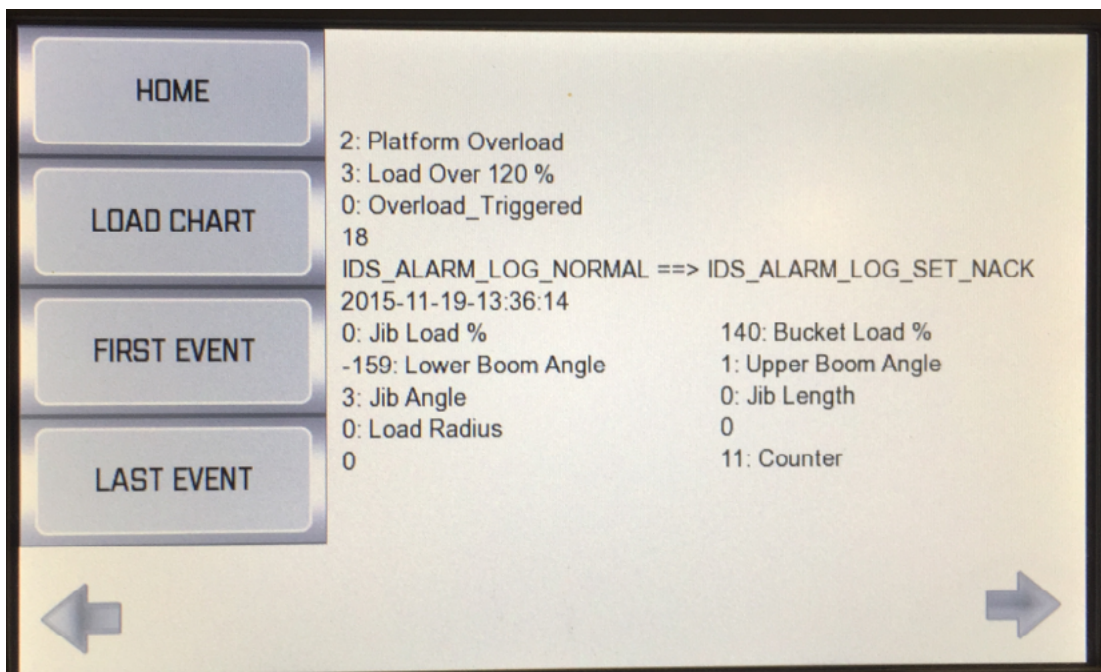
To review any overloads the system has experience, select the *Overload History* button.



Select the different options to find the desired information.

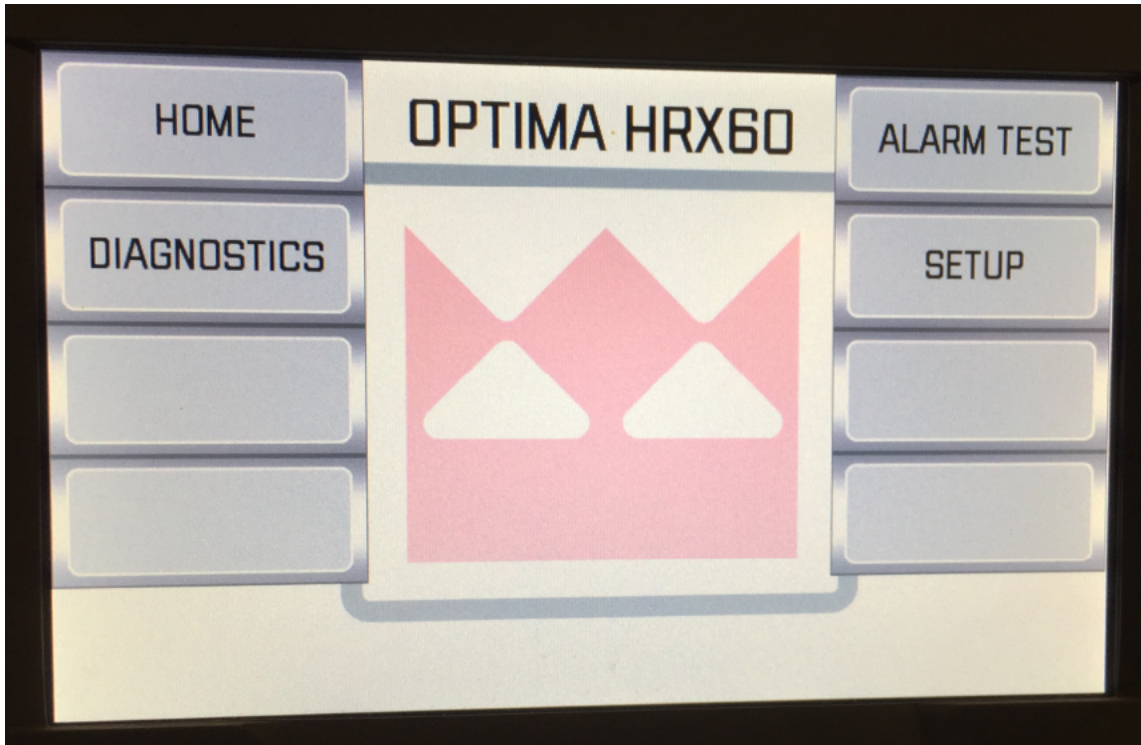
Overload levels are given as percentage ranges of capacity.

- Level 1 = 100%-109.9%
- Level 2 = 110%-119.9%
- Level 3 = 120%-149.9%
- Level 4 = over 150%



STEP 7

Main Menu will take the display back to the screen shown below. From this screen the alarm in the platform can be tested by pushing Alarm Test. The light and alarm will go off in the platform.



STEP 8

Below is an example of the screen in an overloaded state.



OVERLOAD



OVERLOAD



If an overload is indicated a Post Event Inspection and/or Test must be performed. The unit must be inspected by a qualified person to determine if it is safe to use. A documented inspection report must be retained of the inspection. All damaged items shall be replaced or repaired before the unit is returned to service.

STEP 9

If the platform load or jib load is between 90-100% of the capacity shown on the load chart, the system will provide the following warnings.

- The audible overload alarm at the boom tip will sound 3 times.
- The overload light at the boom tip will flash 3 times.



FOR FURTHER ASSISTANCE,
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