

### OPERATING BUTTONS PRESENTATION



Shows available hoist lines for selection.



Shows the menu for the selection of the crane duty number. Press this button to enable the selection of the actual crane duty number.



Press this button to toggle between the angle, length, height and %SWL (in the lower-right portion of the bottom display). Also used to scroll up in menus or increase editable values.



Shows parts of line (falls) menu for selection of the number of parts actually in use.



This button is used to subtract the weight of any slings or lifting frames when the weight of only the load lifted is required. Switch back to the normal load display by pressing it again.



This button is used to set operational limits in addition to those automatically provided by the W3100. Also used to scroll up in menus or increase editable values.



Press this button to bypass the motion cut (lockout). Also used to close a menu or cancel the modification of a value.

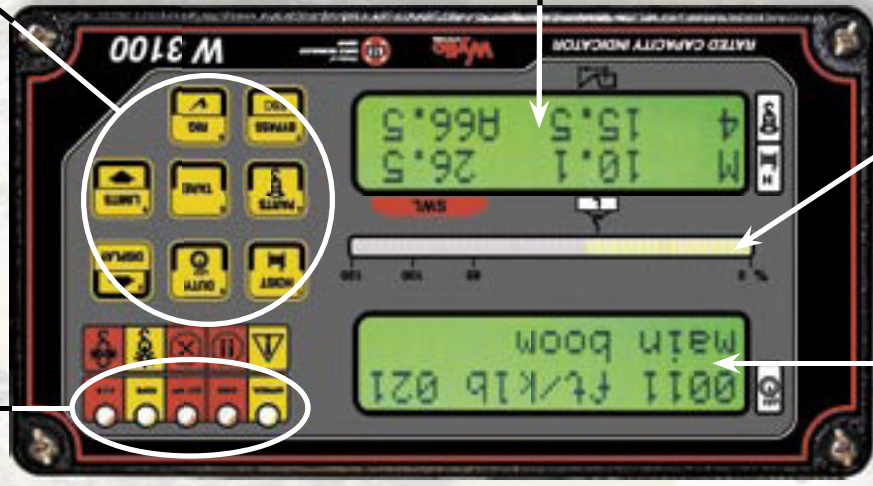


Used to select (confirm, approve) an item in a menu. Press it in normal mode when below the rig angle to enter the rigging mode.

### WYLIE'S W3100 RATED CAPACITY INDICATOR OVERVIEW

OPERATING BUTTONS

WARNING LIGHTS

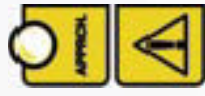


LOWER DISPLAY

SAFE WORKING LOAD % BARGRAPH

UPPER DISPLAY

**WARNING LIGHTS**



The approach warning light blinks when the load on the hook is between 85% and 99.9% of the rated capacity. This light (yellow in color) will also flash on and off if you are approaching within 3 units (feet, meters or degrees) of a predetermined limit.



The overload warning light (red in color) illuminates at or above 100% of the rated capacity. This light will also turn on if you are reaching a predetermined limit.



The motion cut warning light (red in color) illuminates at or above 100.1% of the rated capacity. This is usually associated with, for example, booming down, telescoping out or hoisting up. The exact operation is specific to the crane model.

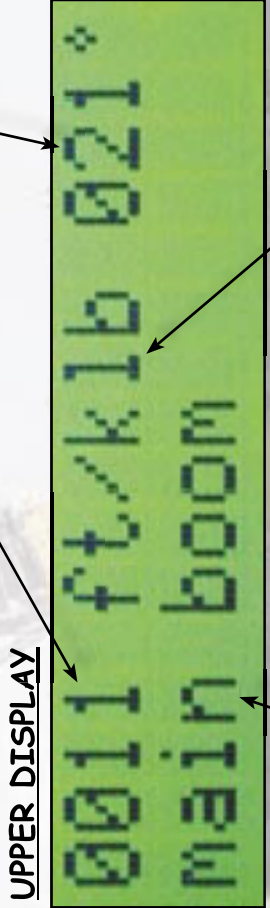


The Rope Limit light indicates that the maximum load is limited by rated strength and the number of parts of line of the hoist rope. Increasing the number of falls (parts of line) reeved and set on the display is normally required to alleviate a rope limit.



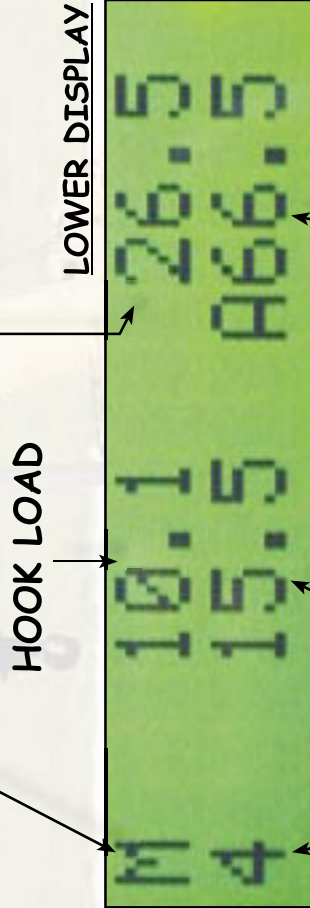
The Two-Block condition light appears when such a condition is detected by the system. This may block the hoist and telescope out function, depending on crane model and/or on options fitted on the machine.

**W3100 DISPLAYS**



UNITS OF MEASURE

HOIST:  
M: MAIN  
A: AUXILIARY



PARTS OF LINE (FALLS)



## POWER ON

Switch on the electrical supply (ie. crane key switch) to the W3100 system. The indicator now performs a «self test» during which time (approximately 10 seconds) the audible alarm will sound, the approach, overload, motion cut, rope limit, two-block and bargraph lights will illuminate and the display will show the message «starting, please wait...». Subsequently, the indicator goes to the normal operating mode. The normal mode displays the hook load, the rated capacity, the radius, the boom angle, the hoist used, the parts of line, etc.

## SYSTEM CONFIGURATION

In order to have the proper rated capacity and radius, the system must be configured properly. Failure to configure the system properly can cause the crane to break or tip and result in injury or death. Failure to configure properly may also cause a zero capacity if no chart is found to match the configuration set by the operator.

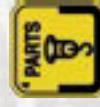
## The operator must verify the crane configurations every time he/she enters the crane and every time the crane is rigged.

The system configuration is done with the following Two buttons:



**Duty Button**

Used for selection of important parameters such as: Boom Selection, Boom length, head type, outriggers, hoist selection etc.



**Parts Button**

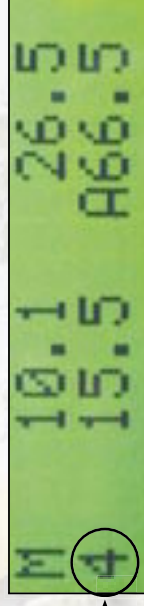
Used for parts of line selection.

## PARTS OF LINE SELECTION

This button allows the operator to select the number of parts of line (falls) used. The operator can see the actual number of parts selected in the lower left portion of the lower display.



Numbers of Parts of Line Actually Selected



## To change the parts of line selection:

**1-** Push the PARTS button (#4) to display the parts of line selection menu on the upper display.



**2-** Scroll up or down with buttons #3 and #6 to display the desired number of parts of line in the lower left portion of the bottom display.



or



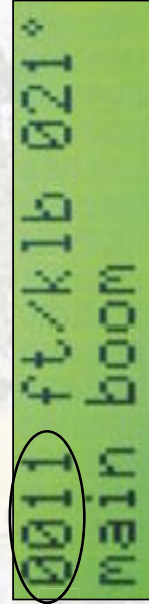
**3-** Push button #8 to confirm your choice.

## DUTY NUMBER SELECTION



Look up the crane duty number to be used on the W3100 duty list. The W3100 duty list is a plasticated sheet of paper and it must be stored in the operator's cab for duty selection purpose. The currently selected duty number is displayed in the upper left part of the higher display. The second line of this display shows a partial description of the selected duty. To toggle the information displayed on this line, press the SELECT button (#7).

Duty Number Actually Selected



### To change the duty number selection:

1-Push the DUTY button (#2) to display the duty selection menu on both display.



Partial Duty Description

2-Scroll up or down with buttons #3 and #6 to display the desired duty number in the top display upper left corner.



or



3-Push button #8 to confirm your choice.

## THE RANGE LIMITING MODE

The Range Limiting purpose is to warn the operator when the boom approaches obstacles, especially electric wires. However, the Range Limiting is not made to detect the proximity of electric wires. It was conceived to analyse the crane's position in relation with obstacles programmed beforehand by the operator.

The Range Limiting will not avoid an accident automatically without the operator's intervention. The operator must adequately program the Range Limiting in order to be functional.



The Range Limiting is a monitoring aid that gives the operator information on the crane's position in relation with obstacles. Since the operator has to program the obstacle's position in the monitoring aid, the Range Limiting efficiency depends on him.

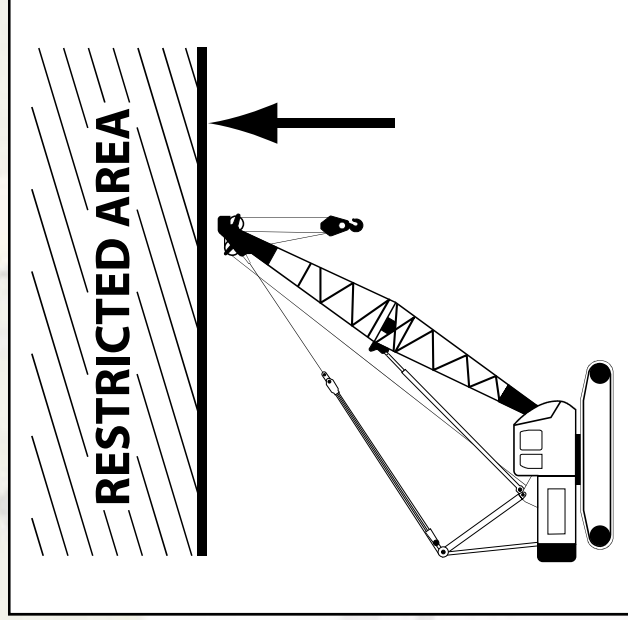
The Range Limiting will then give an accurate indication with a precision of one foot or one degree. With its continuous monitoring, the Range Limiting will guide the operator by sending interactive messages (sonorous and luminous) on the crane's proximity to an obstacle. The operator will then be warn and able to avoid that obstacle. The system contributes to eliminate the human mistake responsible for serious and deadly accidents.




There are 4 types of limits that can be programmed: the **height limit**, the **free zone**, the **variable height limit** and the **variable radius limit**. Because only one limit may be programmed at a time, you will need to delete any previously programmed limit. When you program a limit, follow the instructions in the upper display. An operating limit set in the W3100 memory is lost when the system is powered down.

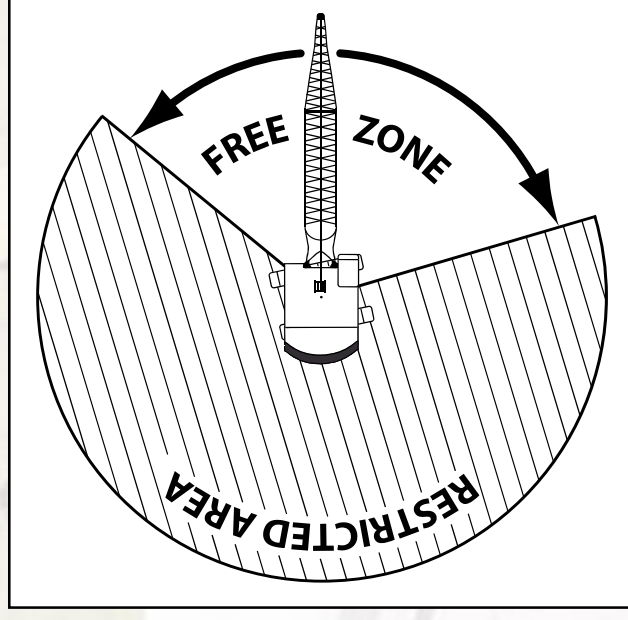


**HEIGHT LIMIT**

- 1- Access the range limiting mode by pressing button #6.
  - 2- Use the up (#3) or down (#6) buttons to select «height limit» in the lower display.
- 
- 3- Push button #8 to confirm your choice.
  - 4- Boom up and/or telescope out to the desired boom tip height limit.
- 
- 5- Push button #8 to confirm the maximum boom tip height position. As you release button #8, a 7 second countdown will allow you to boom down or telescope in before your programmed height limit becomes active.
  - 6- The display will automatically return to the normal mode.

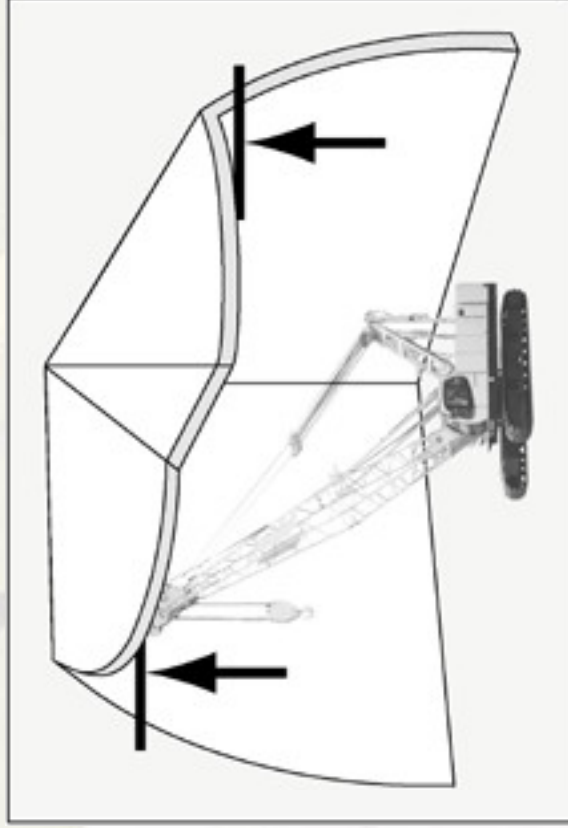
**FREE ZONE**

- 1- Access the range limiting mode by pressing button #6.
  - 2- Use the up (#3) or down (#6) buttons to select «free zone» in the lower display.
- 
- 3- Push button #8 to confirm your choice.
  - 4- Rotate the crane to the first limit position (first wall).
  - 5- Push button #8 to confirm that this will be the position of the first wall.
  - 6- Rotate the crane to the second limit position (second wall).
- 
- 7- Push button #8 to confirm. This will be the position of the second wall. As you release button #8, a 7 second countdown will allow you to rotate the crane between the two walls before your programmed free zone limit becomes active.
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- 8- The display will automatically return to the normal mode.

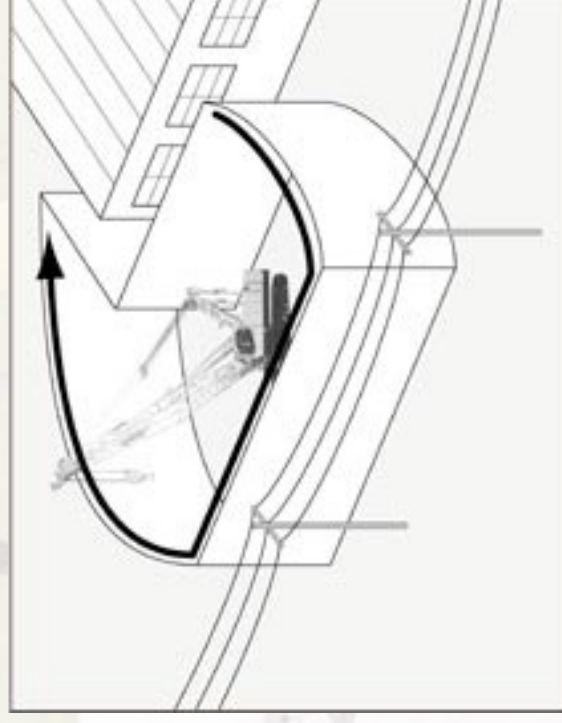


**VARIABLE HEIGHT LIMIT**

- 1- Access the range limiting mode by pressing button #6.
- 2- Use the up (#3) or down (#6) buttons to select «var. height limit» in the lower display.
- 3- Push button #8 to confirm your choice.
- 4- Rotate the crane to the first limit position (first wall).
- 5- Push button #8 to confirm that this will be the position of the first wall.
- 6- Rotate the crane toward the second limit position (second wall) with the boom tip always at the maximum height permitted by the surrounding environment.
- 7- Push button #8 to confirm the position of the second wall. As you release button #8, an 7 second countdown will allow you to return between the two walls and boom down below the height limit before your programmed variable height limit becomes active.
- 8- The display will automatically return to the normal mode.

**VARIABLE RADIUS LIMIT**

- 1- Access the range limiting mode by pressing button #6.
- 2- Use the up (#3) and down (#6) buttons to select «var. radius limit» in the lower display.
- 3- Push button #8 to confirm your choice.
- 4- Rotate the crane to the first limit position (first wall).
- 5- Push button #8 to confirm that this will be the position of the first wall.
- 6- Rotate the crane toward the second limit position (second wall) with the boom tip always at the maximum radius permitted by the surrounding environment.
- 7- Push button #8 to confirm the position of the second wall. As you release button #8, an 7 second countdown will allow you to return between the two walls and boom up or telescope in within the allowed radius limit before your programmed variable radius limit becomes active.
- 8- The display will automatically return to the normal mode.



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