SERVICE CALL: How to calibrate joystick threshold on a machine equipped with an ALC500 board

TOOLS NEEDED: None

MODELS: S40, S60, S80, Z45, Z60
Tech Tips Safety Rules

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.

Tools (delete this before publication)
Step 1

At the ground controls pull out the red stop button and turn the key switch to platform.
Step 2

Begin with the platform stop switch in the off or down position.
Pull up the red stop button while holding the drive enable toggle switch to the right. DO NOT STEP ON THE FOOT SWITCH.

The beeper will start to beep, within 3 seconds activate the drive enable toggle switch to the right 8 times. The beeper will beep back 8 times to acknowledge it is in the threshold calibration state.

If the beeper does not respond with 8 beeps start over with step 2.

You have 10 seconds to proceed with the next step.
Step 3

Start the engine from the platform controls.

Step on the foot switch.
Step 4

Select the function you are going to calibrate by moving the joystick in the forward direction. (In this tech tip primary lift is being calibrated.)

The primary boom will begin to rise. As the boom is moving, slowly bring the joystick back toward the neutral position to the point where the boom is still rising at the slowest possible speed.

Allow the boom to rise out of the stowed position to a point that will allow sufficient room to calibrate the down direction.

When the desired boom creep speed has been achieved move the drive enable switch to the left or right once and release it while maintaining the joystick position.

When the toggle switch is moved the function will momentarily pause to acknowledge the calibrated value.

Release the joystick and allow it to return to the neutral position.
Step 5

Select the primary boom down function by moving the joystick in the back or down direction. The primary boom will begin to lower. As the boom is moving, slowly bring the joystick back toward the neutral position to the point where the boom is still lowering at the slowest possible speed.

When the desired boom creep speed has been achieved move the drive enable switch to the left or right once and release it while maintaining the joystick position.

When the toggle switch is moved the function will momentarily pause to acknowledge the calibrated value.

Release the joystick and allow it to return to the neutral position.
Step 6

Remove your foot from the footswitch. After 10 seconds the beeper will beep 10 times indicating the calibration has been saved and the calibration process has ended. Do not press the red stop button down until the 10 beeps have been heard or the calibration will not be saved. If 10 beeps are not heard start the procedure over with step 2.

This threshold calibration procedure can be applied to all boom joystick functions and the drive function.