Service Call:

Z135 axle position indicator lights flashing when axles fully extended or fully retracted. Calibrating axle sensors

Tools Needed:
- Digital multimeter
- 7/16" open wrench

Model:

Z135
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.
Step 1

Make sure the boom is in the fully retracted position, the lower emergency stop button is pulled out and the off/ground controls/platform controls keyswitch is in the platform controls position.

Move the boom if necessary to an area where there will be enough room to fully retract and extend the axles.

Step 2

At the platform controls pull the emergency stop button out.

Start the engine and depress the foot pedal and fully retract the axles by depressing the axle retract button.

At this time the engine may be shut down.

Leave the emergency stop button out.
TECH TIPS

Step 3

In the left and right lower side trays on the boom chassis you will find a 4 pin Deutsch connector coming into the cabinet from the axle position sensors.

With your multimeter check for voltage between pin 2 (green/white) and pin 3 (black) for voltage between 4.2 and 4.4 volts on both the front and rear Deutsch plugs.

Note: If you have a computer with WEB GPI connected at TCON these voltages may be checked in the axle runscreen.

If the front and rear sensor voltages are within the specified voltage you may proceed to step 5.

Step 4

If either the front axle angle sensor or rear axle angle sensor are not within the specified 4.2 to 4.4 volts the “turtle shell” must be adjusted to get the sensor within range.

To adjust the “turtle shell” back off the 1/4" mounting bolts enough to rotate the "turtle shell" until the reading on the multimeter is within 4.2 and 4.4 volts.

When the adjustment has been made tighten the 1/4" mounting bolts to secure the “turtle shell”.
Step 5

At the ground controls put the run/service bypass/recovery keyswitch in the service bypass position.
Put the off/ground controls/platform controls keyswitch in the ground controls position.
While holding the ENTER button pull out the ground controls emergency stop button.
Press the following buttons in this order: PLUS - ENTER - ENTER - PLUS
Use the enter button to scroll through the menu to "RESET AXLES ANGLE SENSORS YES/NO"
With the PLUS button change the display from NO to YES.
Press the ENTER button to save the change.
The display will change to "AXLE ANGLE FULLY RETRACTED YES/NO".
With the PLUS button change the display from NO to YES.
Press the ENTER button to save the change.

Step 6

The display will change to "AXLE ANGLE SENSOR FULLY EXTENDED NO/YES"

Start the engine from the ground controls and put the off/ground controls/platform controls keyswitch in the platform controls position.

NOTE: If the display changes and is no longer displaying "NO" put the keyswitch back into the ground controls position and push the PLUS - ENTER - ENTER - PLUS buttons again and use the ENTER button to return you to the "AXLE ANGLE SENSOR FULLY EXTENDED ON/YES" display. Put the keyswitch back in the platform controls position.

From the platform controls fully extend the axles.

Leave the engine running.
**Step 7**

At the ground controls put the off/ground controls/platform controls keyswitch in the ground controls position. With the PLUS button change the display from NO to YES. Press the "ENTER" button to save the change. Continue to scroll through the menu by using the "ENTER" button until the display reads "EXIT NO/YES". Use the PLUS button to change NO to YES. Hold the start button for 5 seconds or until the engine shuts down. A beep will be heard and the new data has been saved. Return the run/service bypass/recovery keyswitch to the run position.

**Step 8**

Check the axle indicators at the platform controls. When the axles are fully extended the indicator light should be on solid. When the axles are fully retracted the indicator light should be on solid. Any time the axles are between the fully extended and fully retracted positions both indicator lights will be flashing.

If more diagnosis is needed contact the Genie Service Department at 1-800-536-1800