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BOOM LOAD CELL BASICS

When checking, servicing or diagnosing boom load cell issues, it's a good idea to have some information handy. The Operator's and Service manuals supply the correct information for testing proper operation, troubleshooting, and replacing the load cell if necessary. Please use the correct manual for the serial number of the model you are working on.

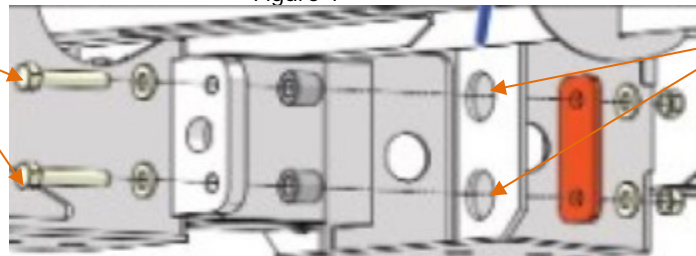
The Operator's manual instructs how to properly operate and test the load system, including the position of the "Glazier" or Option switch on the platform console; it should only be ON when an option is being used in the platform. Section 3 of the Service manual has the load cell wiring diagram with wire colors and terminal positions so the technician can check the load cell wiring. Section 5 of the Service manual contains instructions for installing and setting up the load cell which is also good information for checking that the load cell settings are correct. Both the Service and Operator's manuals have the information for the transport drivers to properly tie down the platform end of the boom to prevent load cell damage.

If you have an SCM module that is showing a LOAD CELL LOSS or ERROR on the display; first make sure both emergency stops are ON. Then make sure the platform is not resting on the ground or any structure – it must be free to move. Check that there are no modifications to the platform and it is empty. Then check the platform railings and the base weldment for ANY damage at all. If the structure is bent or damaged, it will affect load cell operation. Check that the boom was secured properly during transport.

Check the 'catch bolts'. (Fig. 1) These are the 4 long bolts that are located on either side of the load cell between the rotary actuator mount and the platform base weldment itself. These bolts are meant to 'catch' the platform if the load cell is damaged. Make sure these bolts are undamaged, properly tightened, assembled correctly, and that the collars on the bolts are not touching the structure where they pass through the large holes.

Figure 1

Catch bolts, Flat washers, Collars, Safety washer plate, flat washers, and torque lock nuts.



The collars should not contact the holes in the platform weldment at this spot.

Correct or repair any mechanical issues that are found. If that does not correct the problem, use the SCM keypad to check the CAN BUS menu and make sure all the CAN signals are OPERATING. ID 11 and ID 12 are the 2 load cell CAN signals. If the load cell is properly installed and set up, you can use the flowchart in section 5 of the Service manual: Calibrating The SCM, and try recalibrating the load cell. Most models do not require weights in the platform when calibrating. Just carefully follow the procedure in the correct service manual and it should calibrate. If these steps do not correct or point to the problem the load cell is likely bad and needs replacement. Again, check the manual for the correct procedures. If you have any questions about the load cells or any other issues regarding your Skyjack, please contact Skyjack Technical support at 1-800-275-9522 or email service@skyjack.com