

250 & H251 Bariatric Handrail Scales

Trimming Corner Load Cell Alignment

Issue: Different weight reading at different locations on the scale platform

Solution: Perform load cell corner adjustment

This trimming procedure of a scale ensures the same weight value is displayed regardless of weight placement or location.



Manuals are available from Rice Lake Weighing Systems at www.ricelake.com/manuals

Warranty information is available at www.ricelake.com/warranties

Tools List

- 2 calibration weights (50 lb or 20 kg)
- 5 mm hex wrench
- Phillips screwdriver
- Tweaker screwdriver
- 8 mm socket wrench
- Bubble level

Handrail Removal

1. Ensure the scale is powered off.
2. Use the hex wrench to remove side rail screws (see Figure 1).

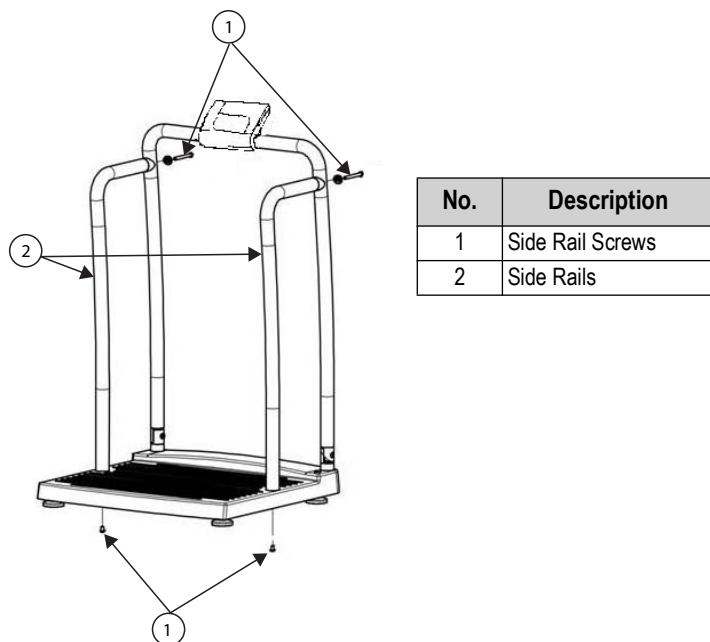


Figure 1. Side Rail Screw Locations

3. Disconnect and remove the side rails.

4. Unscrew and remove the wiring cover on the back of the indicator (see [Figure 2](#)).

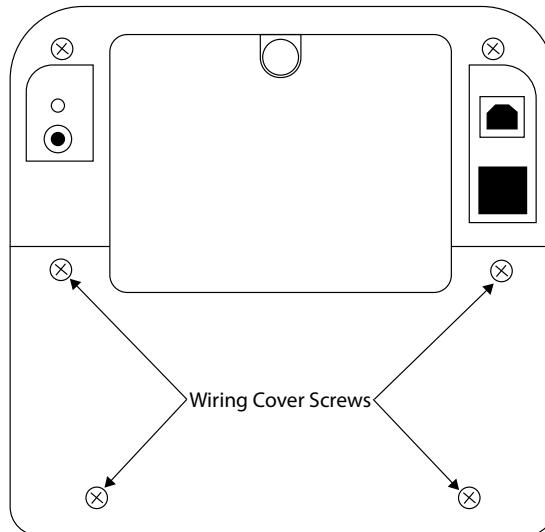


Figure 2. Wiring Cover Screw Locations

5. Disconnect the load cell cable (see [Figure 3](#)).

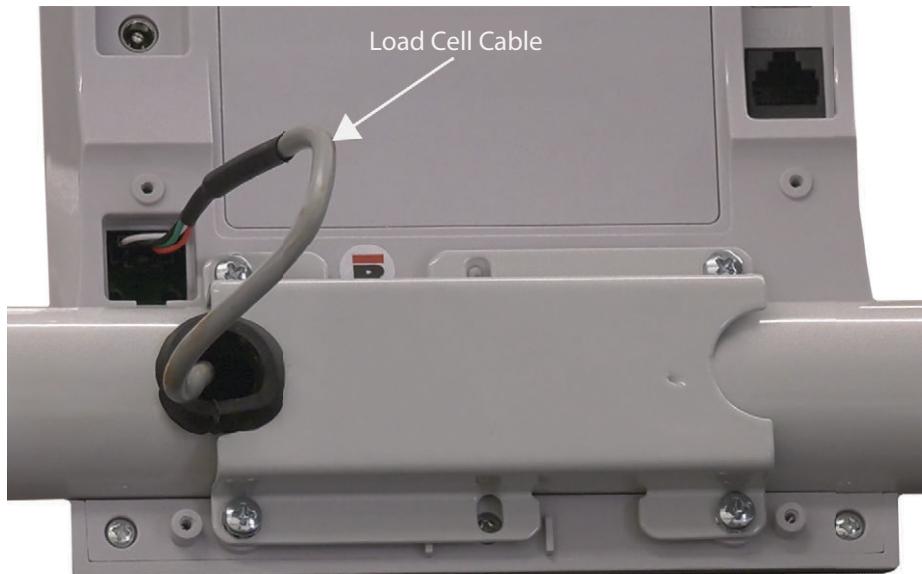


Figure 3. Load Cell Cable Connection Location

6. Use the hex wrench to remove the center rail screws on both of the center rail hinges (see [Figure 4](#)).

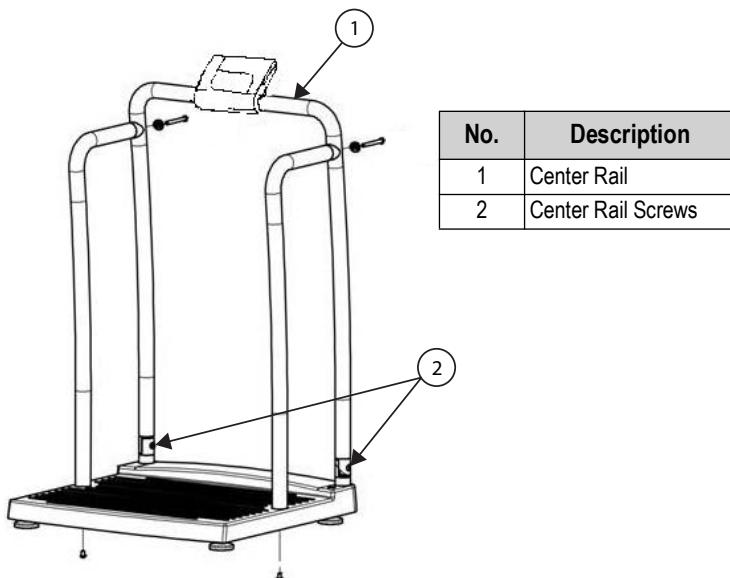


Figure 4. Center Rail Screw Locations

7. Disconnect the center rail.
8. Guide the loose end of the load cell cable through the wiring hole and center rail leg.

! **IMPORTANT:** Take care not to damage the cable when running through the wiring hole and center rail leg.

9. Set the center rail aside.

Plastic Cover Removal

1. Flip scale base upside-down.
2. Remove the nuts and washers with an 8 mm socket wrench from the base (see [Figure 5](#)).

! **NOTE:** Some nuts are covered by stickers. Remove the stickers before removing the nuts.

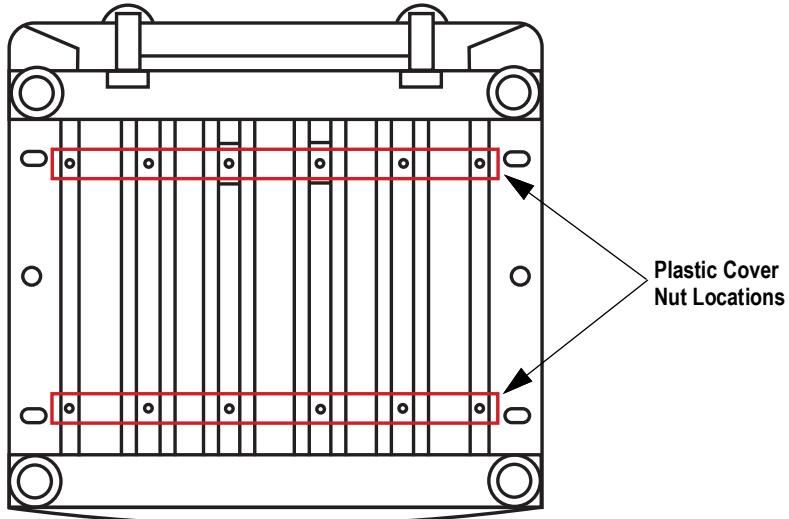


Figure 5. Plastic Cover Nut Locations

3. Place the scale base feet down.
4. Lift the black plastic cover off of the scale frame running the cable through the plastic cover hole.



IMPORTANT: Take care to prevent cable damage when running the cable through the plastic cover hole.

5. Use the hex wrench and screws to reconnect the center rail with the load cell cable placed between the center rail and leg base (see [Figure 6](#)).

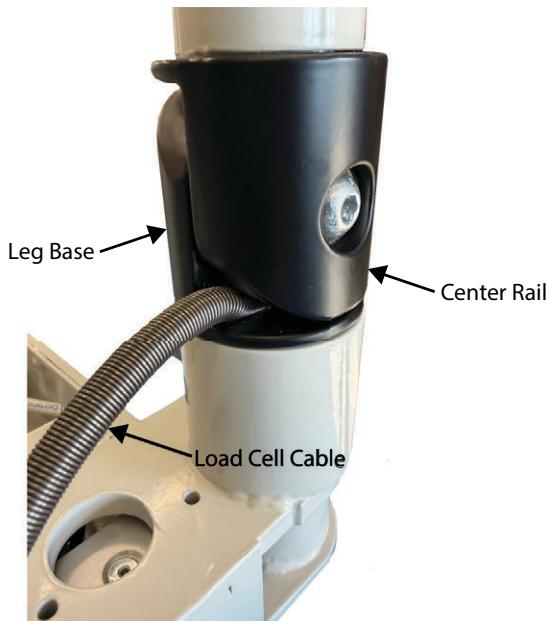


Figure 6. Reconnected Center Rail

6. Reconnect the load cell cable to the indicator (see [Figure 3](#)).

Trimming Procedure

1. On a flat work surface, use a bubble level to ensure the scale frame is level side-to-side and front-to-back. Adjust the feet as needed.
2. Reconnect the power cable to the indicator.
3. Power on the indicator.
4. Press and hold  and  button until *ID* flashes on the display.
5. Press the  button twice.
6. Press the  button twice to access the A/D raw counts.

7. Place calibration weight on corner 1 (see [Figure 7](#)). Record the A/D value.

IMPORTANT: Ensure that the calibration weight is placed on the scale frame and extends to the outer rail.
Never place more than one calibration weight on the frame.

8. Move the calibration weight to corner 2. Record the A/D value.

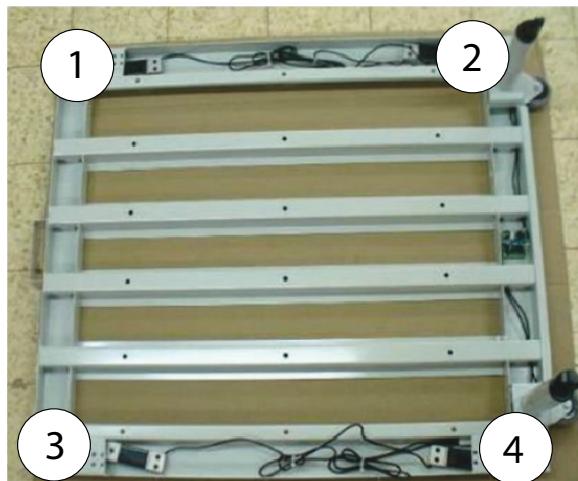


Figure 7. Weight Placement Locations on Scale Frame

9. Adjust the potentiometer in between the connectors for load cell corners 1 and 2 by rotating the screw with the tweaker screwdriver (see [Figure 8](#)).

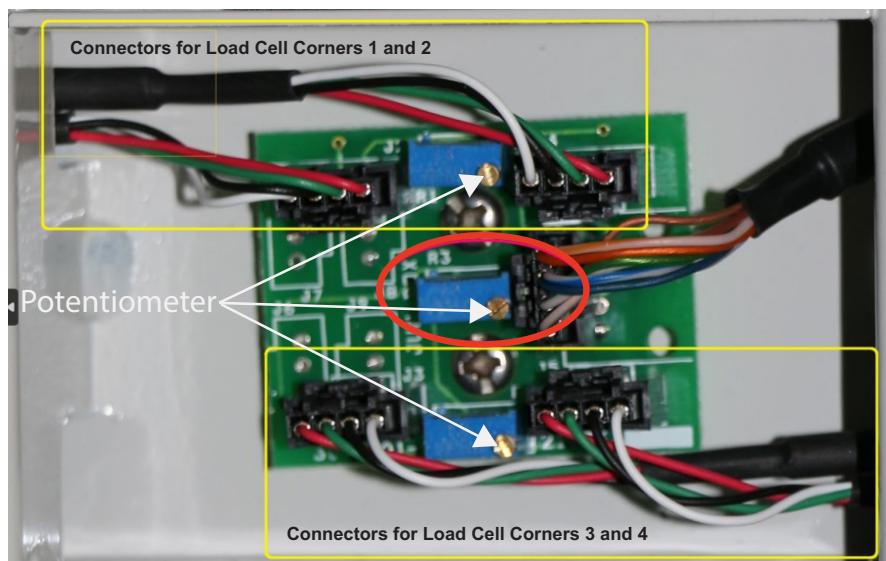


Figure 8. Potentiometer Locations

10. Repeat Steps 7 through 9 with corners 3 and 4 adjusting the applicable potentiometer.
11. To align the scale from side-to-side, place a weight between corners 1 and 2 (see [Figure 7](#)). Record the A/D value.
12. Place a weight between corners 3 and 4. Record the A/D value.
13. Adjust the center potentiometer until an equal value is reached between the sides with a margin of 2 units of A/D (see [Figure 8](#)).

Scale Reassembly

1. To exit the menu, press the  button 4 times. *DONE* displays.
2. Press the  button and turn off the scale indicator.
3. Disconnect the load cell cable from the indicator (see [Figure 3](#)).
4. Use the hex wrench to remove the center rail screws on both of the center rail hinges (see [Figure 4](#)).
5. Disconnect the center rail.
6. Run the cable through the plastic cover hole.
7. Place the plastic cover onto the scale frame.
8. Flip scale base upside-down to expose the screws under the frame.
9. Reinstall the previously removed washers and nuts (see [Figure 9](#)).

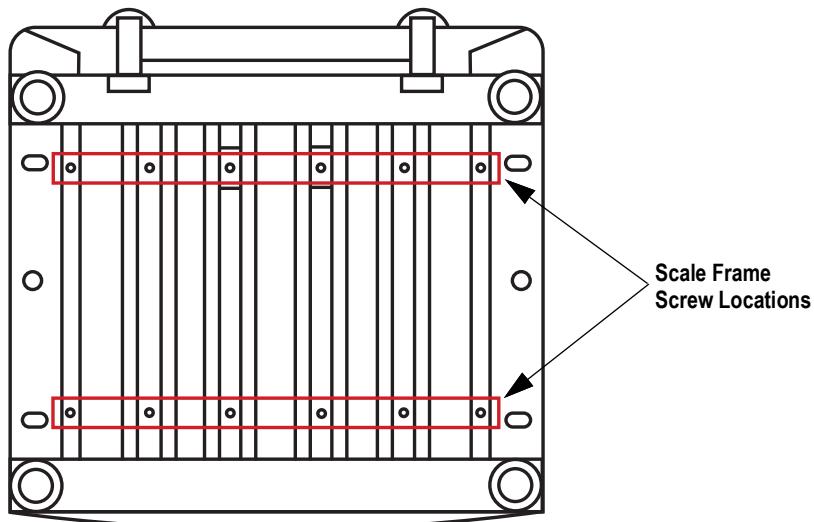


Figure 9. Scale Frame Screw Locations

10. Place the scale base feet down.
11. Carefully run the load cell cable through the bottom of the center rail to the top (see [Figure 10](#)).



Figure 10. Cable Ran Through the Center Rail

12. Catch and pull the cable through the wiring hole of the center rail (see [Figure 11](#)).
13. Reconnect the cable to the indicator (see [Figure 11](#)).

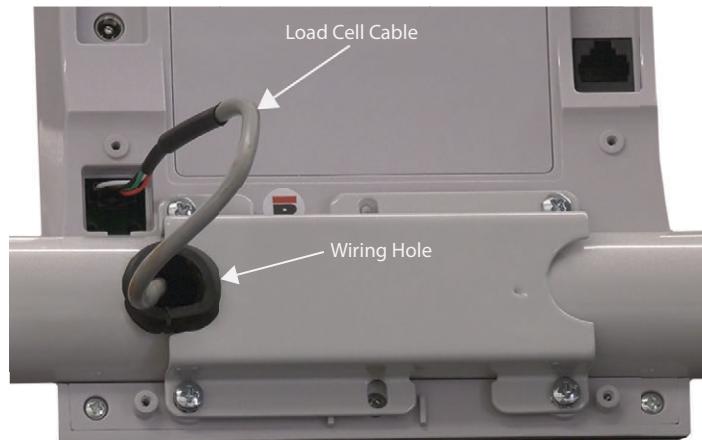


Figure 11. Load Cell Cable Connection and Wiring Cover

14. Reattach the indicator wiring cover (see [Figure 12](#)).

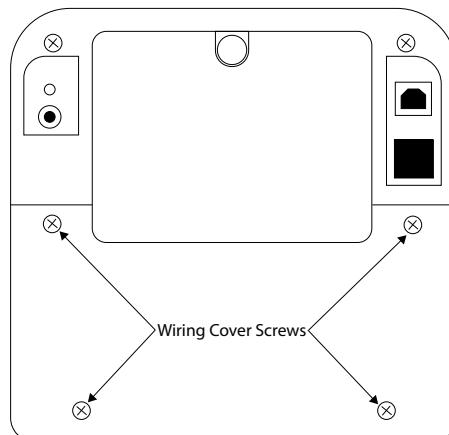


Figure 12. Wiring Cover Screw Locations

15. Reinstall the center and side rails (see Figure 13).

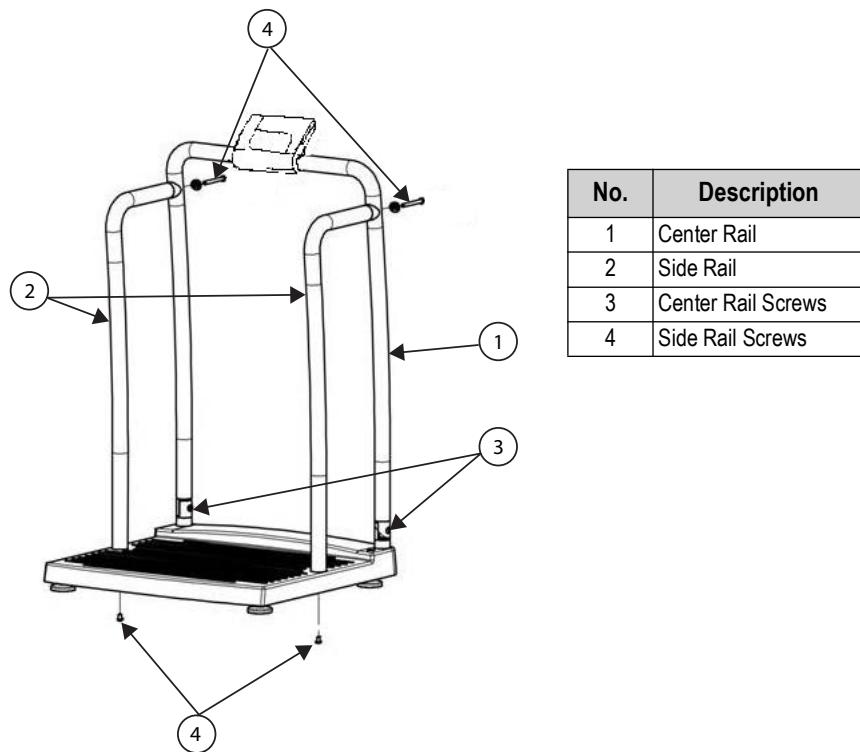


Figure 13. Reassembling the Scale

IMPORTANT: After trimming procedure is complete and scale is reassembled, recalibrate the scale using a minimum of 50 kg or 100 lb of certified test weights.



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