

Instruction Manual: 510-46 & 710-46 Series Interior Dash Mounted Load Scale



Please read carefully before installation

Installation Instructions

When installing a Right Weigh interior load scale there are two basic installation options.

Option #1: Replace the current air suspension PSI gauge. Use this option if you already have an air suspension PSI gauge in your dash and you want to replace it with the Right Weigh interior load scale.

Option #2) New Installation. Use this option if you do not have an air suspension PSI gauge, or you can not mount the Right Weigh interior load scale in the same location as your air suspension PSI gauge.

Option #1: Replace Existing Air Suspension PSI Gauge

Step 1: Dump the air from the suspension system. Locate and remove the air suspension PSI gauge from the dash panel. If needed, refer to the vehicle owner's manual, or a qualified technician, for detailed instructions on dash panel assembly and gauge replacement.

Warning: Some vehicles have multiple PSI gauges. Make sure to replace the AIR SUSPENSION PSI gauge.

Note: If the vehicle has a twist-in or pop-in gauge console, it may restrict the ability to install the Right Weigh load scale in the same location as the air suspension PSI gauge. If so, select an alternate mounting location.

Step 2: Mount the Right Weigh interior load scale into the dash panel using the U-bracket provided with the gauge.

Step 3: Attach the existing airline from the suspension PSI gauge into the back of the Right Weigh load scale. Air up the suspension and double check for leaks.

Note: Fittings and thread sizes may vary depending on the make and model of the vehicle. You may need to purchase additional fittings in order to connect the existing airline to the back of the Right Weigh load scale.

Step 4: Locate an electrical power and ground source for the gauge LED lighting. Attach the positive (RED) wire to the power source and the negative (BLACK) wire to a ground source.

Please Note: The LED lights will not work if the wires are not attached correctly. If needed, refer to the vehicle owner's manual or a qualified technician for assistance.

Step 5: Reassemble the dash panel.

Option #2: New Gauge and Airline Installation

Step 1: Locate an available factory gauge hole in the dash panel, or create a new hole. A new hole must be 2 1/16 inch in diameter for the 2 inch load scale gauge, or 3 1/16 inch in diameter for the 3 inch load scale gauge.

Warning: To avoid damage to internal dash components, DO NOT drill or punch a new hole without first making sure there is ample space behind the dash panel for a new gauge. If needed, refer to the vehicle owner's manual, or a qualified technician, for detailed instructions on dash panel assembly and gauge installation and/or replacement.

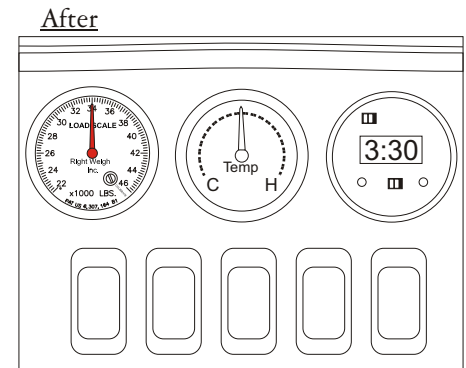
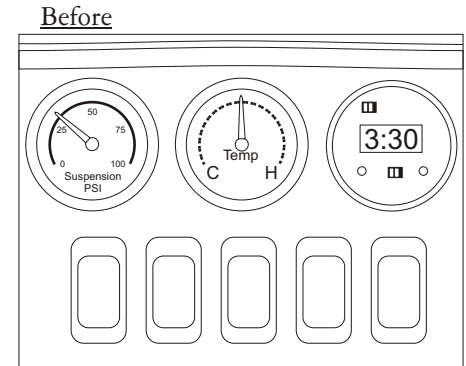
Step 2: Mount the Right Weigh interior load scale into the dash panel using the U-bracket provided.

Step 3: Dump the air from the suspension system. Locate and remove the suspension airline from the most accessible air bag on the drive axle tandems.

Step 4: Insert a Street Tee fitting into the top of the air bag, then reattach the suspension airline into the top of the Street Tee. (Fig 1 & Fig 2).

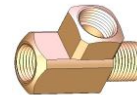
Step 5: Using a 90° Elbow fitting and a Straight fitting, run a new airline from the Street Tee to the load scale mounted in the dash as shown in the diagram on the next page. (Fig 3)

Attention: ALWAYS use a thread sealant to ensure leak-free operation.



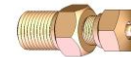
You will need the following parts to install a new air suspension airline:

Fittings:



Street Tee

Size to match vehicle fittings (1/4" or 3/8")



Straight Airline Fitting (Male)

Size to match the Street Tee



1/8" NPT Female Airline Fitting (Straight or Elbow)

Airline:

We recommend using standard nylon tubing. Make sure to match the tubing size with the fittings listed above.

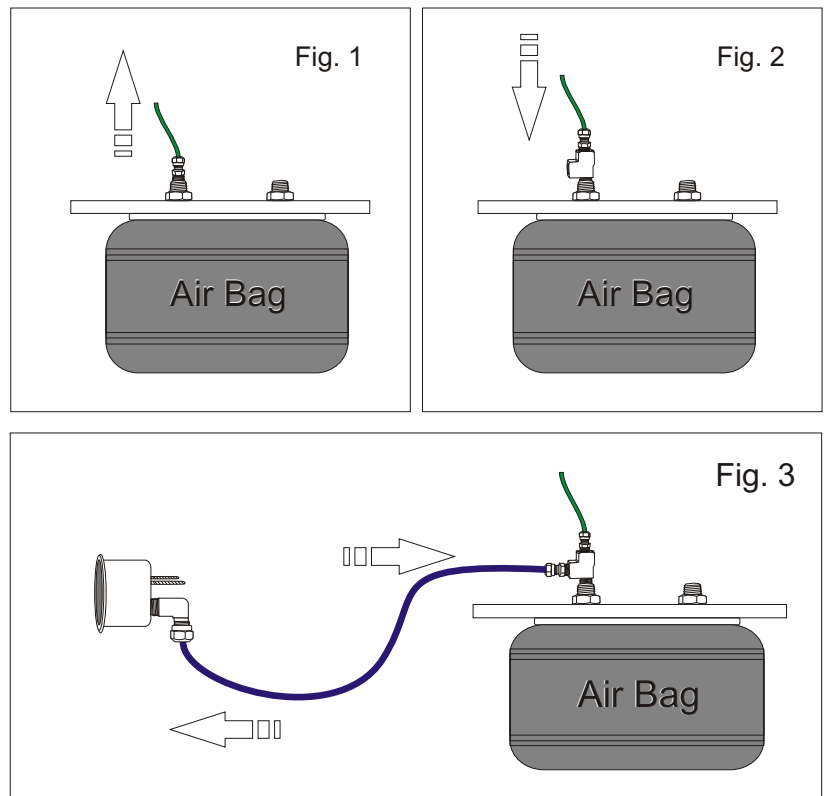
(cont.):

Step 6: Air up the suspension system and check all fittings and airlines for leaks.

Step 7: Locate an electrical power and ground source for the gauge LED lighting. Attach the positive (RED) wire to the power source and the negative (BLACK) wire to a ground source.

⚠ Please Note: The LED lights will not work if the wires are not attached correctly. If needed, refer to the vehicle owner's manual or a qualified technician for assistance.

Step 8: Reassemble the dash panel.



Calibration Instructions:

Step 1: The vehicle must be loaded. For best results, calibrate with a loaded weight that is within 1,500 LBS (680 KG) of the legal limit for the axle group.

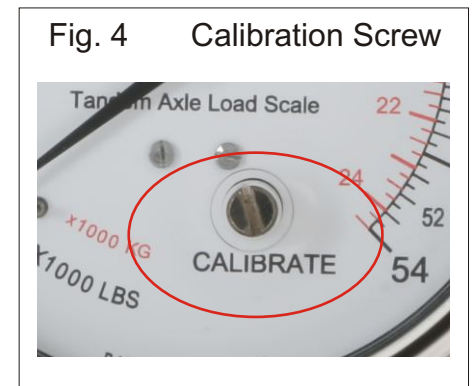
(Do Not Calibrate Empty!)

Step 2: Using a certified in-ground scale, obtain a loaded weight for the axle group attached to the Right Weigh load scale.

Step 3: Park on a level surface with the brakes off.

Step 4: Make sure the Height Control Valve (HCV) has fully inflated the air bags. (This may take several minutes depending on the type of HCV.)

Step 6: Using a small flat head screwdriver, turn the calibration screw on the dial face until the gauge matches the certified scale weight. (Fig. 4)



Operating Instructions:

Step 1: Park on a level surface with the brakes off.

Step 2: Make sure the Height Control Valve (HCV) has fully inflated the air bags. (This may take several minutes depending on the type of HCV.)

Step 3: After the air suspension is fully inflated, read the Right Weigh load scale gauge to determine the on-the-ground axle weight for the suspension group.

Troubleshooting:

Erratic or inaccurate readings could result from the following: 1) Parked on an uneven surface; 2) The vehicle's brakes are on; 3) One or more wheels are in a pothole or elevated on a large bump/rock; 4) The height control valve (HCV) is malfunctioning and/or broken. To test for an HCV problem, park on a level surface with the brakes off. The trailer should be loaded. Get a reading for the Right Weigh load scale and write it down. Then, drive the vehicle around the block and return to the same location. Get a second reading for the Right Weigh load scale. If the two readings are significantly different then the HCV may be malfunctioning and/or broken.

For additional installation support please call Right Weigh, Inc.

Toll free (888) 818-2058 or (503) 628-0838

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