

Right Weigh Load Scales

Exterior Load Scale 310 Series



Installation and Operation Manual

Please read carefully before installation

Table of Contents

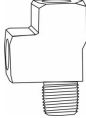
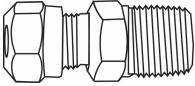
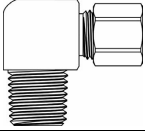
Specifications:	3
Parts Needed for Installation	4
Installation Instructions.....	4
Calibration Instructions.....	6
Operating Instructions	7
Troubleshooting.....	8
Additional Support.....	8

Specifications:

- Operating & Storage Temperature: -40° C to +85° C (-40° F to +185° F)
- Available Units: Pounds (LBS) / Kilograms (kg)
- Housing: High impact polycarbonate blend
- Gauge Size: 3.5"

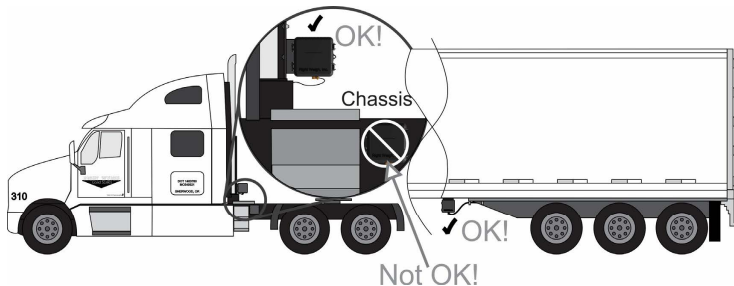
Parts Needed for Installation

Included in 310-RK kits, or sold separately in the 101-SK kit

	Street Tee Fitting: The thread size and type should match the thread size and type of the vehicle suspension
	Standard Air Line Fitting for 1/4" Tubing: The thread size and type should match the thread size and type of the vehicle suspension
	Male Elbow Air Line Fitting for 1/4" Tubing: Tubing size to match the male straight airline fitting. 1/4" NPT to match the thread size of the fitting at the bottom of the load scale.
	Standard 1/4" Tubing: The amount of tubing needed depends on the mounting location of the Right Weigh load scale.

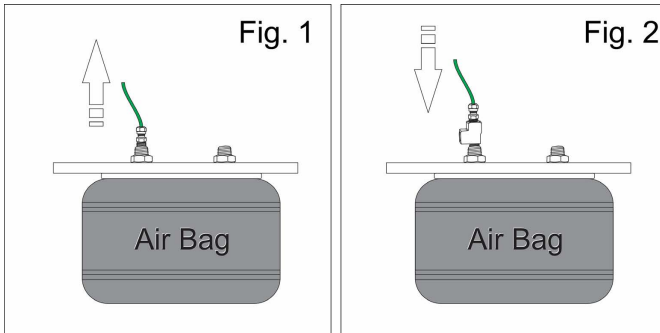
Installation Instructions

1. Mount the Right Weigh load scale in a location on the vehicle that is easily accessible and safe from damage (forklifts, tire caps, etc.) **Do not mount the load scale directly to the chassis or any other main beam unless it is approved by the vehicle manufacturer. Doing so may void the warranty with the vehicle manufacturer.**

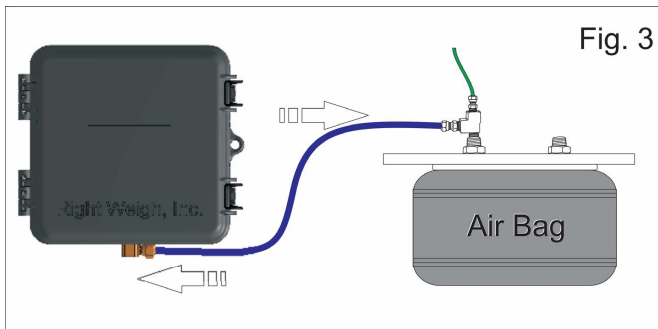


2. Dump the air from the suspension system.

3. Locate and remove the suspension air line fitting from the top of one of the air bags connected to the height control valve. (Fig. 1)
4. Insert a street tee fitting into the top of the air bag. The street tee fitting should match the thread size and type of the vehicle suspension. (Fig 2)
5. Reattach the suspension air line fitting into the top of the street tee. (Fig 2)



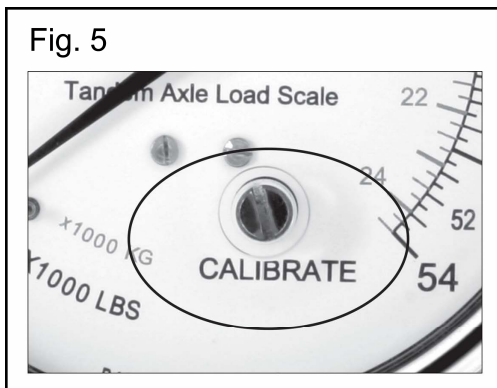
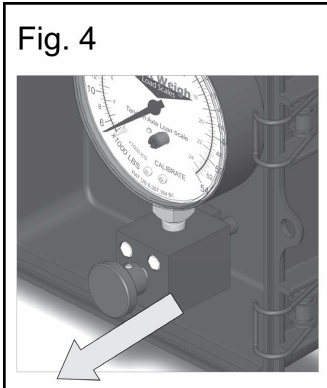
6. Run a new 1/4" air line from the street tee fitting to the mounting location of the Right Weigh load scale. (Fig 3)



7. Air-up the suspension system and check all fitting connections for air leaks.

Calibration Instructions

1. The vehicle must be loaded. For best results, calibrate with a loaded weight that is within 1,500 lbs or 700 kg) of your typical loaded axle group weight (DO NOT calibrate empty!)
2. Using a certified in-ground scale, obtain a loaded weight for the axle group attached to the Right Weigh load scale.
3. Park on a level surface. Shift the transmission to neutral and set the parking brakes.
4. Chock the wheels to prevent unexpected vehicle movement.
5. Release the parking brakes.
6. Make sure the Height Control Valve (HCV) has fully inflated the air bags. For best results, briefly dump the air from the suspension and allow the HCV to refill the system, (this may take several minutes to refill depending on the type of HCV).
7. Pull the gauge air valve knob into the fully open position. (Fig. 4)
8. Using a flat head screwdriver, turn the calibration screw on the dial face until the gauge matches the certified axle group weight. (Fig. 5)



Operating Instructions

1. Park on a level surface. Shift the transmission to neutral and set the parking brakes.
2. Chock the wheels to prevent unexpected vehicle movement.
3. Release the parking brakes.
4. Make sure the Height Control Valve (HCV) has fully inflated the air bags. For more consistent results, briefly dump the air from the suspension and allow the HCV to refill the system. (This can take several minutes depending on the type of HCV.)
5. Pull the gauge air valve knob into the open position.
6. View the load scale to determine the on-the-ground axle group weight.
7. Push the air valve knob into the closed position and latch the door shut.

Troubleshooting

Erratic or inaccurate readings could result from the following:

- 1) The vehicle is NOT parked on a level surface: parking on a sloped or banked surface will cause the vehicle weight distribution to shift between the axle groups.
- 2) The vehicle's brakes are on. When the vehicle brakes are set, they could apply additional pressure or torque on the air bags. This will cause the air bags to have a different air pressure than what is needed to support the given weight.
- 3) The vehicle is parked on an uneven or rough surface: if one of the wheels are in a pothole, for example, it could result in additional pressure or torque on the suspension air bags. This will cause the air bags to have a different air pressure than what is needed to support the given weight.
- 4) The Height Control Valve (HCV) is malfunctioning and/or broken. If the HCV is not functioning correctly, then the air pressure applied to the suspension system will be inconsistent. To test for a HCV problem, follow steps 1 to 6 of the operating instructions (the vehicle should be loaded). Write down the weight reading from the load scale. Then, drive the vehicle around the block and return to the same location. Follow steps 1 to 6 of the operating instructions again to get a second reading for the load scale. If the two readings are significantly different, then the HCV might be malfunctioning.
- 5) There is a significant air leak in the suspension system. If there is an air leak within the suspension system, this could cause the HCV to refill the suspension at regular intervals to maintain the vehicles ride height. If there is a significant leak, the gauge display will slowly decrease in value and then quickly increase in value when the HCV refills the suspension system.