

Charging Nitrogen Gas Springs

CAUTION: Always wear safety goggles when performing any maintenance work.
All gas springs should be inspected before recharging. Do not recharge gas springs if damaged.

1. Before charging, verify the rod is fully extended to its proper stroke length, ensuring that the housing is seated properly. Use a DADCO T-Handle to extend the rod. Hold the spring vertically at all times during filling. When filling a gas spring that does not have a rod end thread (*for example: Micro Series*) initially fill with low pressure (< 70 psi or 4 bar) to extend rod fully; then fill to desired pressure.
2. Prepare the Filling Port:
 - Self-Contained Operation**
 - a. Remove the protective screw/flush plug.
 - b. Thread the appropriate DADCO Filler Valve into the port.
 - c. Connect the female quick disconnect adapter on the charging assembly to the filler valve.
 - Linked System Operation**
 - a. Pipe all gas springs to the control panel or multi panel following proper assembly guidelines.
 - b. Make sure all hoses and fittings are tight.
 - c. Attach the charging assembly to the filler valve on the control panel or multi panel.
3. Open the main valve on the nitrogen tank.
4. Set the desired charging pressure on the regulator.
5. Slowly open the shut-off valve and allow each gas spring to reach the desired charging pressure.
6. After each spring has been charged to the desired pressure, **CLOSE THE HOSE SHUT-OFF VALVE AND TANK SHUT-OFF VALVE**. Disconnect the charging assembly from the gas spring or the control panel. The small amount of nitrogen trapped between the shut-off valve and filler valve will bleed off as you disconnect the fitting.

NOTE: If not using a DADCO Charging Assembly, make sure your charging assembly consists of high pressure thermo plastic hose, o-ring face seal fittings, and a high pressure valve.

7. Verify the internal pressure by using a DADCO Load Cell, contact DADCO for load cell instructions and additional information. DADCO recommends periodic checking of internal gas spring pressure as a preventive maintenance measure.

Quick Disconnect Charging Assembly

90.310.040 (CA-40)

Use this charging assembly for pressures below 2200 psi (152 bar).



Quick Disconnect Filler Valve

90.310.143 (CN-4)



NOTE: For use with DADCO's Micro, Mini, SCR Series and U.0175-U.2600 Nitrogen Gas Springs.

High Pressure Quick Disconnect Charging Assembly

90.310.041 (CA-41)

Use this charging assembly for pressures above 2200 psi (152 bar) up to 4500 psi (310 bar). Refer to bulletin B01122B for more information.



Quick Disconnect Charging Nipple

90.310.111



NOTE: For use with DADCO's Large, Compact, Super Compact and U.4600-U.20000 Nitrogen Gas Springs.