

## Micro and Ultra Force® (U.0175/U.0325) Load Cells

With a DADCO Micro Load Cell or small **Ultra Force®** Load Cell, you can check the contact force of DADCO's C.045/SL.16/E.16, C.070, C.090, C.180/E.24, C.250, U.0175, U.0325 and 90.10.00170 Nitrogen Gas Springs to quickly determine if the gas springs are charged to the desired force. To check the internal pressure of DADCO's larger gas springs, use a DADCO Standard Load Cell or a DADCO Super Compact Load Cell.



### Operating Instructions

1. Select the appropriate DADCO Micro Load Cell or **Ultra Force®** Load Cell. *Using the improper load cell will cause damage to the load cell and provide an inaccurate reading.*
2. Place the Micro Gas Spring or **Ultra Force®** Gas Spring on top of the appropriate load cell (Fig. 1).
3. Place both the load cell and gas spring in a Micro Test Stand-125 (MTS-125), an arbor press or other press.
4. **Apply the load to the gas spring, depressing the gas spring rod only 2 mm (1/16")** (additional travel may damage the load cell) and read the gauge on the front of the load cell. The gauge reflects the contact force of the spring. Use the color-coding to identify the force requirements for Micro Gas Spring models (the reading should not exceed the end of the yellow region).

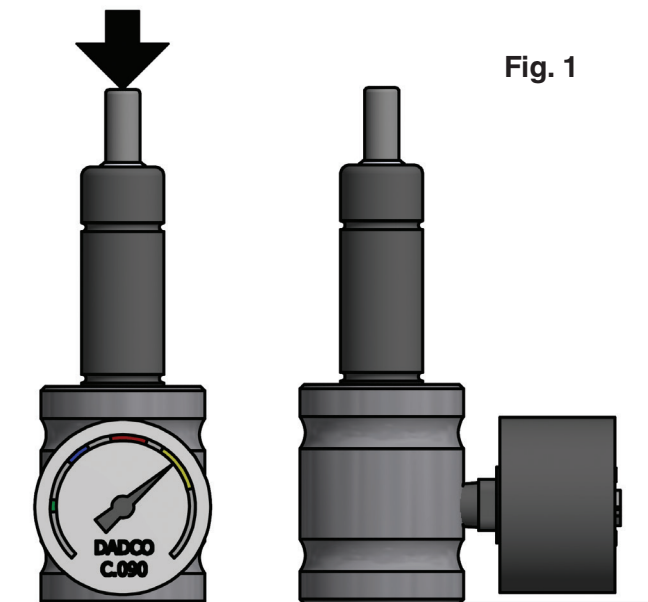


Fig. 1

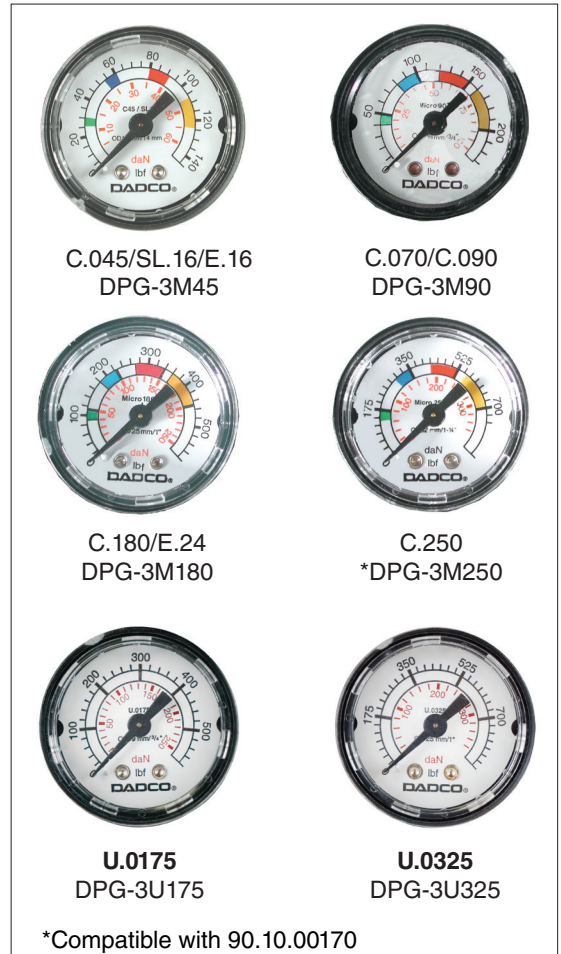
Series	Model	DADCO Load Cell
C	45	90.300.00045
SL, E	16	
C	70	90.300.00090
	90	
C	180	90.300.00180
E	24	
C	250	90.300.00250
	90.10	
U	175	90.300.0175
U	325	90.300.0325

Front and side view of a yellow **Micro 180®** Gas Spring in testing position on top of the C.180 load cell.

**Rebuild (Gauge Replacement) Instructions**

**Order the appropriate replacement gauge. For questions on which gauge to order reference DADCO's Gauge Bulletin B18110.**

1. Remove the Flush Plug (G-109) and set aside for reassembly (Fig. 1).
2. Empty the oil out of the body and wipe with a lint-free cloth.
3. Unthread the old gauge and discard.
4. Apply thread seal tape to the new gauge thread. Ensure that the tape does not cover the access hole.
5. Thread the gauge onto the body (lettering should be right-side-up at final position).
6. Noting the fill line, fill the body with oil (DADCO recommends ISO 32 Hydraulic Oil until the oil level reaches the base of the flush plug (Fig. 2).
7. Install the Flush Plug (G-109), and watch for needle movement on the gauge, if movement occurs, stop and remove a small quantity of oil with an eye dropper. Repeat this step until flush plug is installed with no needle movement.
8. Test the new gauge by using it on the appropriate spring with a known pressure; see Operating Instructions on reserve side.



**Figures**

