Ultra Force™ Nitrogen **Gas Springs**

Linked Operations

Self-contained **Ultra Force™** Series Nitrogen Gas Springs are quickly converted to the *MINILink*[™] System by the addition of DADCO Mini-fittings, *MINIFLEX*[™] hose, and a 90.407.11 mini control panel.

To pipe a compact system, DADCO's *MINIFLEX*[™] hose offers a superior bending radius for maximum flexibility. A variety of Mini-fittings ensure easy set-up. For instructions on exhausting self-contained **Ultra Force™** Series Springs follow steps 1-2. To convert **Ultra Force™** Series Springs to linked system mode follow steps 1-5.



DADCO *MINIFLEX*[™] hose is available pre-assembled or in an already piped and tested sectional mounting system (SMS).

Conversion (Self-Contained to Linked)

CAUTION Always wear safety goggles when exhausting a gas spring.

Remove Screw

1. Remove the protective screw, 90.296, (Fig.1) conveniently located at the base of the gas spring (Fig.2).

Exhausting the Ultra Force™ Series Spring

2. Keeping face and hands clear of the port, use the 90.360.4 Valve Bleed Tool, 90.320.4 Port Servicing Tool, or the 90.315.5 DADCO Pressure Analyzer to depress the needle valve stem, 90.260. A small screwdriver or allen wrench may also be used to depress the needle valve stem (Fig.3).

After all the gas pressure is exhausted, be sure that the piston rod will retract into the tube manually. If not, try depressing the valve again. If still unsuccessful stop and contact your **DADCO** Service Representative.

Needle Valve

3. Remove the needle valve, 90.260, by unthreading it with the 90.320.4 Port Servicing Tool (Fig.4).

Ready to Pipe

4. Insert a port adapter such as the 90.607.120 (pictured in Fig.5) into the port.

Linked

5. Attach a 90.700 hose assembly onto the port adapter (Fig.6). The gas spring is now ready for linked operation with DADCO's 90.407.11 mini control panel.

DADCO MINIFLEX™ Hose

DADCO's MINIFLEX[™] hose is used to connect gas springs together as a linked system. MINIFLEX™ hose is able to withstand high pressure and still maintain the flexibility necessary when linking gas springs.

| | OD | ID | Working Pressure | Burst Pressure | Bend Radius | Hose Min Length |
|---------|------|------|---------------------|-------------------|----------------|--------------------|
| 90.700 | 5.3 | 2.3 | 413 bar | 1655 bar | 6.4 | 75 |
| (Y-700) | 0.21 | 0.09 | 6000 psi | 24000 psi | 0.25 | 2.95 |

C 90.296 90.296 Fig. 1 90 260 Fig. 3





