

Below are general recommendations that DADCO advocates when linking nitrogen gas springs. For additional information or assistance contact DADCO.

1. Use as many direct runs as possible to reduce the number of fittings required.
2. Allow ample space to secure hoses to plate. It is preferred that hoses rest side by side, see Fig. 1.

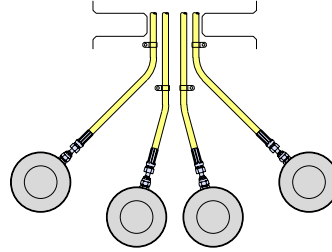
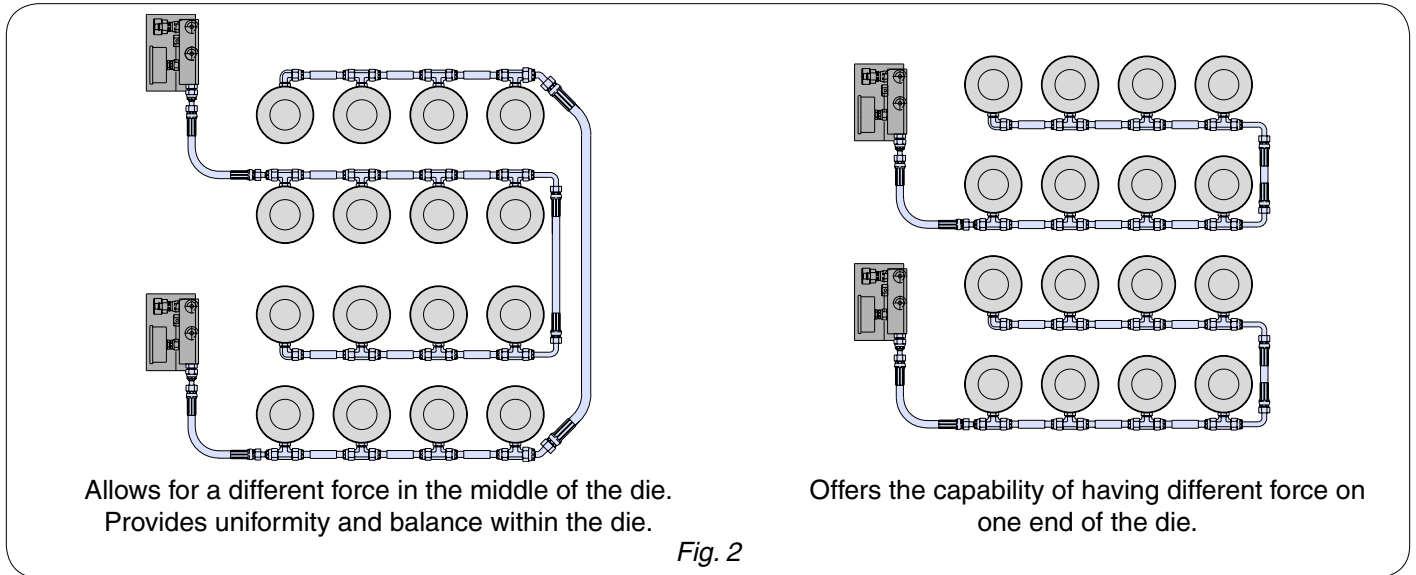


Fig. 1

3. Link a maximum of 8 cylinders to a single control panel. Some standards require staggering of hoses and cylinders when linking cylinders, see Fig. 2.



Allows for a different force in the middle of the die.
Provides uniformity and balance within the die.

Offers the capability of having different force on one end of the die.

Fig. 2

4. Use *MINIFLEX™* Y-700 hose to link nitrogen gas springs up to a maximum force of 1.5 ton. Use *DADCOFLEX™* Y-250, Y-400 or Y-500 hose to link large series nitrogen gas springs with force greater than 1.5 ton. The chart below provides recommendations for the hose type and hose strap to use with DADCO's nitrogen gas springs.

DADCO Cylinder Model	Hose Type				Hose Strap		
	Y-250	Y-400	Y-500	Y-700	L-250	HS-250	HS-400
U.0400				X	X		
Mini LJ Series				X	X		
Mini L Series				X	X		
90.5B.00750 - 90.5B.01500				X	X		
90.5B.03000 - 90.5B.05000	X	X	X			X	X
90.9.01500				X	X		
90.9.03000 - 90.9.07500	X	X	X			X	X
90.10.00500 - 90.10.01500				X	X		
90.10.03000 - 90.10.10000	X	X	X			X	X
90.10R.03000 - 90.10R.07500	X	X	X			X	X
SC.01000 - SC.18300	X	X	X			X	X

Linked System Recommendations

5. Do not force hose to bend. To prevent hose from kinking, adhere to the minimum hose bend radius. Refer to *How to Order a Hose Assembly* (Bulletin #99B105B) for hose bend radius information.
6. Allow an extra 10% in length when cutting hose to avoid taut connections. Refer to *How to Order a Hose Assembly* (Bulletin #99B105B) for guidelines on calculating hose length.
7. When possible use solid fittings, see Fig. 3. Solid fittings come in predetermined lengths and can replace hose that requires crimping. Solid fittings are ideal for limited space applications and may be used with Large Series Nitrogen Gas Springs: 90.5B Series, 90.9 Series, 90.10 Series, 90.10R Series, and SC Series models 1000 – 18300. Refer to the *90.10 Series Catalog* (#99C102B) for ordering information on solid fittings.

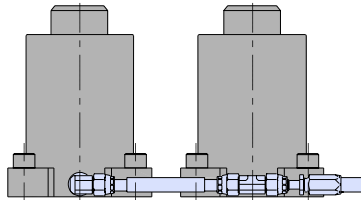


Fig. 3

8. When using solid fittings tighten fittings before bolting cylinders down, see Fig. 4.

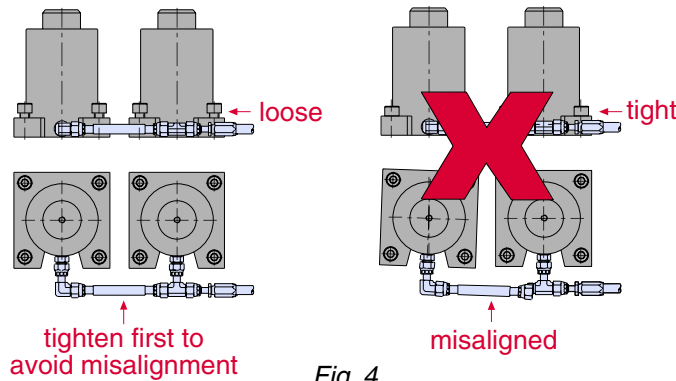


Fig. 4

9. Below are recommendations for selecting the proper connector for attaching hose assemblies :
 - A. When space is limited and a 90° bend is needed to link Large Series Nitrogen Gas Springs, use DADCO's 90.506.201, 90.506.401 or 90.506.501 connectors. These connectors may be used with Large Series Nitrogen Gas Springs: 90.5B Series, 90.9 Series, 90.10 Series, 90.10R Series, and SC Series models 1000 – 18300.
 - B. When space is limited and a 90° bend is needed to link Mini L, LJ Series or the U.0400 Nitrogen Gas Springs, use DADCO's 90.607.201 or 90.607.401 connectors.
10. When space is not limited use Standard Swivel Nut Fittings, refer to *DADCO Fitting Templates* (Bulletin #99B124).
11. When connecting hose adapters to port adapters, tighten by hand first. Then tighten using two wrenches, one on the hose adapter and one on the port adapter, to prevent twisting of the hose, see Fig. 5.

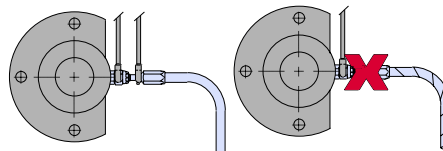


Fig. 5

12. Tighten fittings to the following torque specifications to prevent loosening from vibration during operation:

Port Type	Torque Specification	Adapter Connections	Torque Specification
M6	25 lbf*in	M8 x 1	25 lbf*in
G1/8	168 lbf*in	9/16-18	204 lbf*in