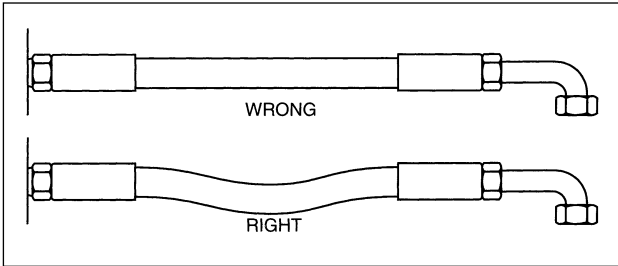
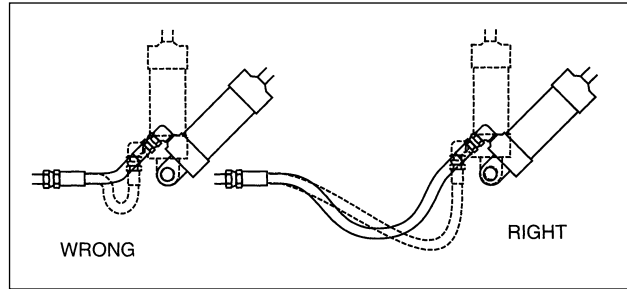


Proper hose installation is essential for satisfactory performance. If hose length is excessive, the appearance of the installation will be unsatisfactory and unnecessary cost of equipment will be involved. If hose assemblies are too short to permit adequate flexing and changes in length due to expansion or contraction, hose service life will be reduced.

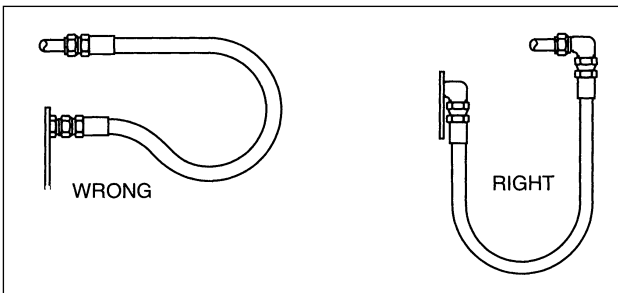
The following diagrams show proper hose installations which provide maximum performance and cost savings. Consider these examples in determining length of a specific assembly.



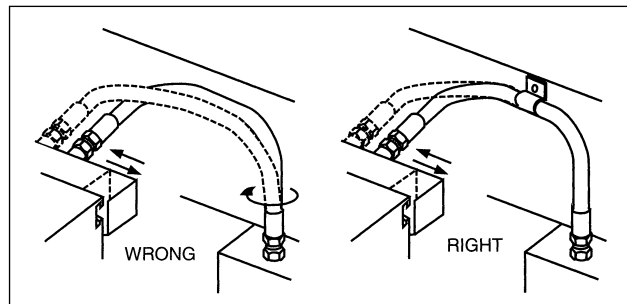
When hose installation is straight, allow enough slack in hose line to provide for length changes which will occur when pressure is applied.



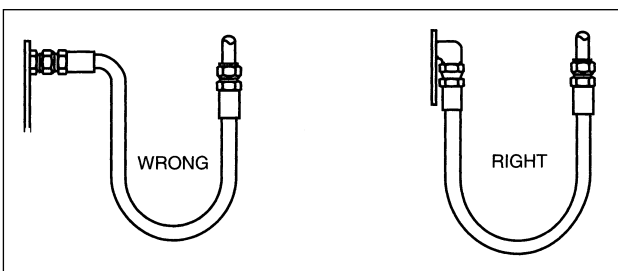
Adequate hose length is necessary to distribute movement on flexing applications and to avoid abrasion.



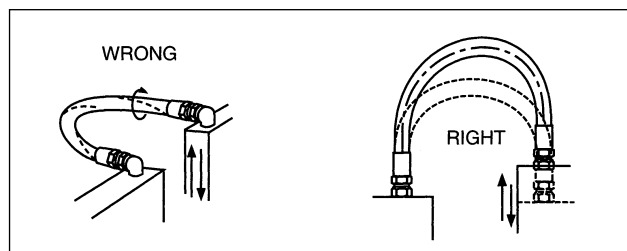
When radius is below the required minimum, use an angle adaptor to avoid sharp bends.



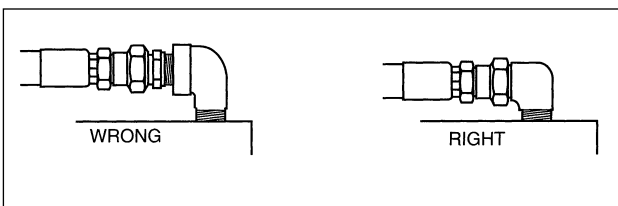
Avoid twisting of hose lines bent in two planes by clamping hose at change of plane.



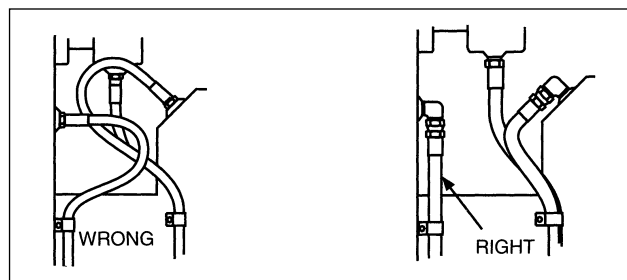
Use proper angle adaptors to avoid sharp twist or bend in hose.



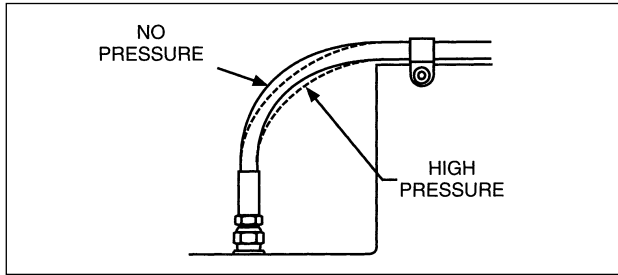
Prevent twisting and distortion by bending hose in same plane as the motion of the boss to which hose is connected.



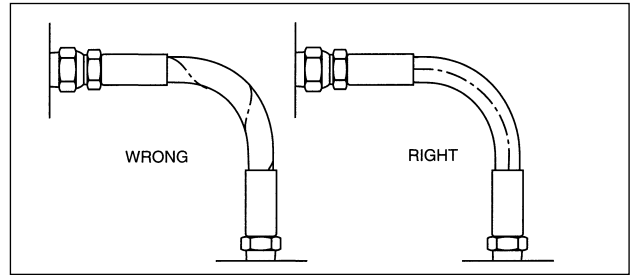
Reduce number of pipe thread joints by using proper hydraulic adaptors instead of pipe fittings.



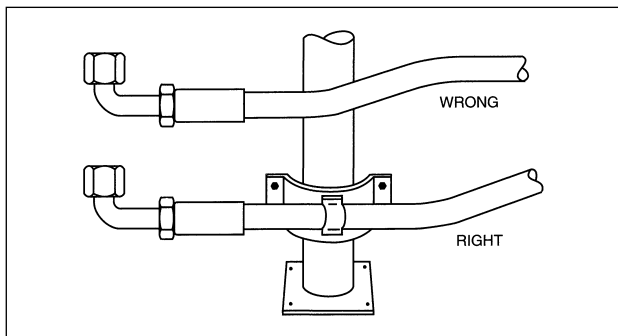
Route hose directly by using 45° and/or 90° adaptors and fittings. Avoid excessive hose length to improve appearance.



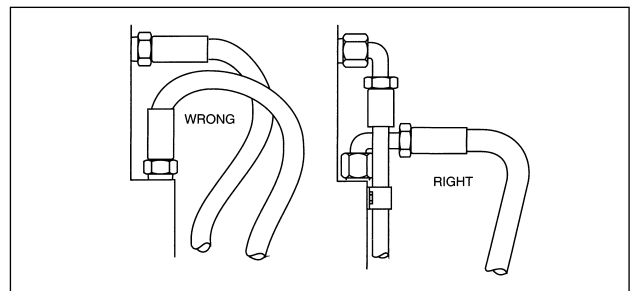
To allow for length changes when hose is pressurised, do not clamp at bends. Curves will absorb changes. Do not clamp high and low pressure lines together.



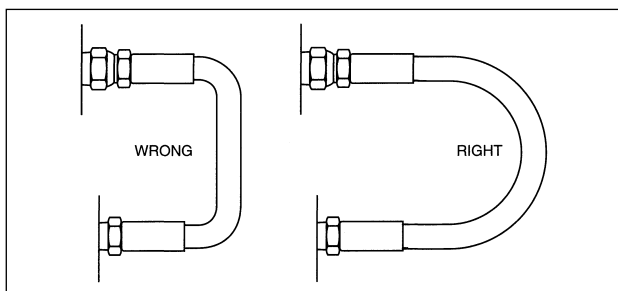
When installing hose, make sure it is not twisted. Pressure applied to a twisted hose can result in hose failure or loosening of connections.



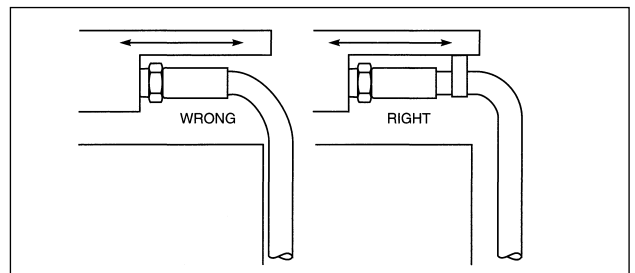
High ambient temperatures shorten hose life so make sure hose is kept away from hot parts. If this is not possible, insulate hose.



Elbows and adaptors should be used to relieve strain on the assembly, and to provide neater installations which will be more accessible for inspection and maintenance.



To avoid hose collapse and flow restriction, keep hose bend radii as large as possible. Refer to hose specification tables for minimum bend radii.



Run hose in the installation so that it avoids rubbing and abrasion. Often, clamps are required to support long hose runs or to keep hose away from moving parts. Use clamps of the correct size. A clamp too large allows hose to move inside the clamp and causes abrasion.

When determining the length of hose assemblies, provide sufficient length to prevent bending strain from localising at the back of the coupling. In the diagram measurement "B" allows for a strain section of hose beyond the coupling to prevent concentration of bending strain. "T" designates the amount of travel. "A" indicates the smallest diameter to which hose should be bent.

$$\text{Overall length} = B + 1.57A + T$$

## TYPICAL DIMENSIONS FOR ONE & TWO WIRE BRAID HOSE

HOSE SIZE			"B" CONSTANT FOR STRAIGHT PORTION INCLUDING COUPLING
DIN	INCH	DASH	
06	1/4	-04	250mm
10	3/8	-06	250mm
12	1/2	-08	300mm
20	3/4	-12	350mm
25	1	-16	400mm
32	1.1/4	-20	450mm
40	1.1/2	-24	500mm
50	2	-32	500mm

