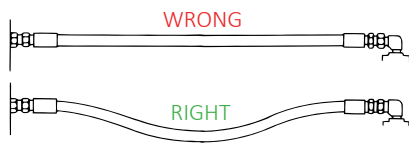


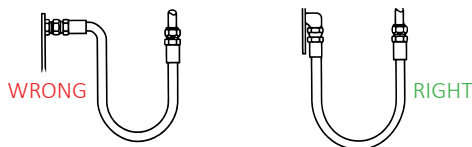
CORRECT ASSEMBLY INSTALLATION

Satisfactory performance and appearance depend upon proper hose installation. Excessive length destroys the trim appearance of an installation and adds unnecessarily to the cost of the equipment. Hose assemblies of insufficient length to permit adequate flexing, expansion or contraction will cause poor power transmission and shorten the life of the hose.

The diagrams below offer suggestions for proper hose installations to obtain the maximum in performance and economy.



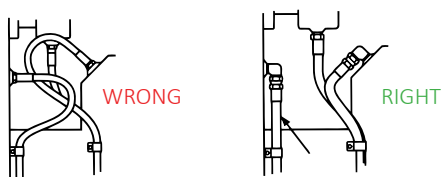
Since hose may change in length from +2% to -4% under the surge of high pressure, provide sufficient slack for expansion and contraction.



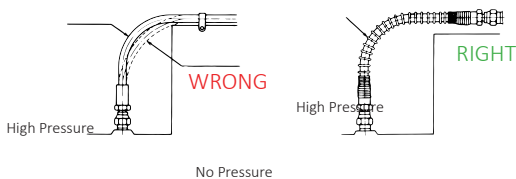
Avoid sharp twist or bend in hose by using proper angle adapters.



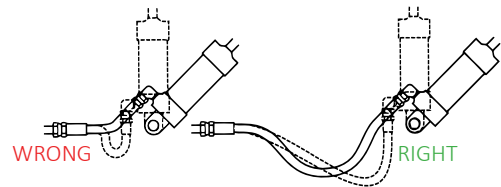
Where the radius falls below the required minimum, an angle adapter should be used as shown above to avoid sharp bends in hose.



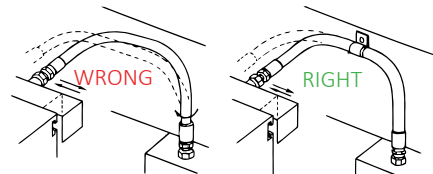
Obtain direct routing of hose through use of 45° and 90° adapters and fittings. Improve appearance by avoiding excessive hose length.



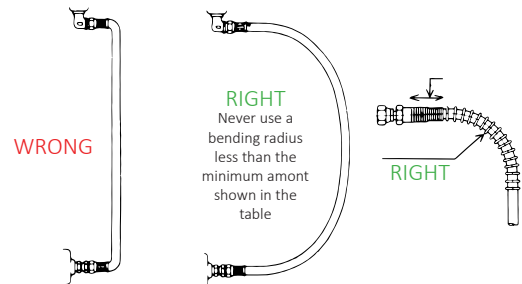
Due to changes in length when hose is pressurised, do not clamp at bends so curves absorb changes and protect the hose with a spring guard. Do not clamp high and low pressure lines together and protect the hose with a spring guard.



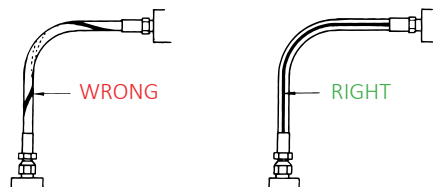
Adequate hose length is most important to distribute movement on flexing applications and to avoid abrasion.



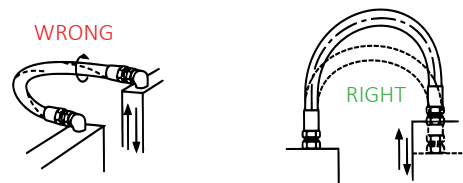
To avoid twisting in hose lines bent in two planes, clamp hose at change of plane, as shown.



To prevent twisting and distortion, hose should be bent in the same plane as the motion of the boss to which the hose is connected.

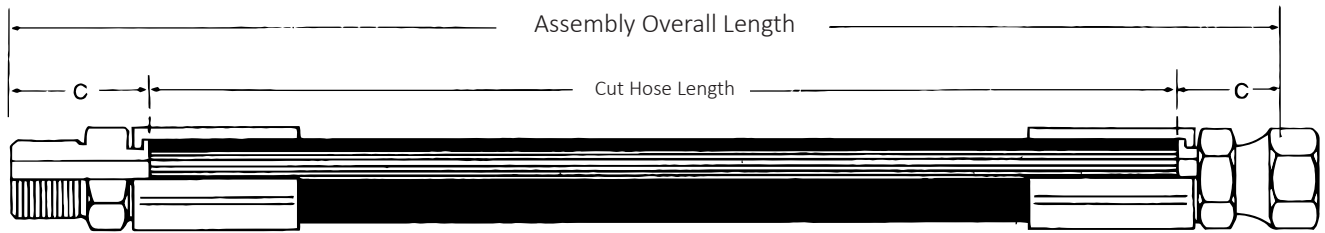


Hose should not be twisted. Hose is weakened when installed in twisted position. Also pressure in twisted hose tends to loosen fitting connections. Design so that machine motion produces bending rather than twisting.



Never use a bending radius less than the minimum shown in the hose specification tables. Avoid sharp bend in hose to reduce collapsing of line and restriction of flow by using proper spring guard. Exceeding minimum bend radius will greatly reduce hose assembly life.

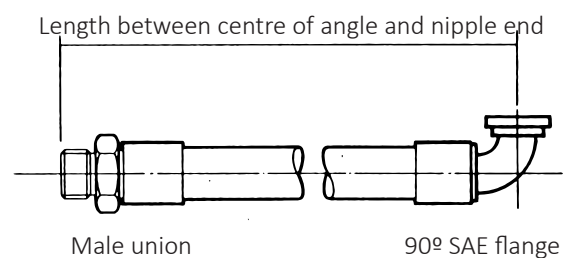
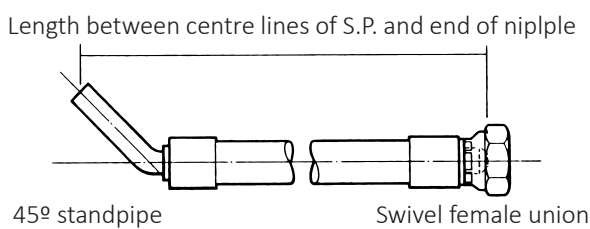
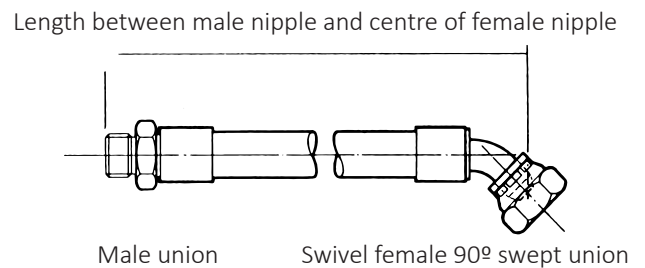
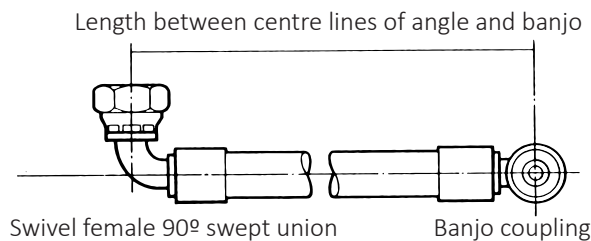
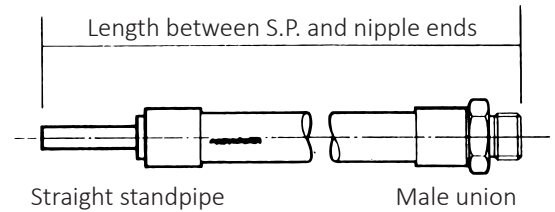
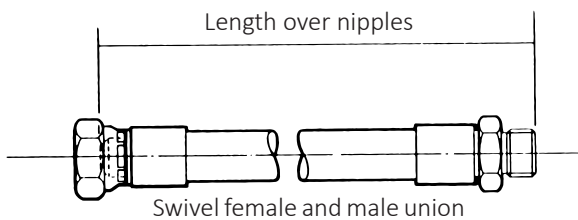
HOW TO DETERMINE CORRECT ASSEMBLY LENGTH



For most assemblies, the correct assembly length may be determined by direct measurement of the equipment or a drawing. Minimum bend radii as shown in the hose specification tables should be observed. Assemblies are measured to the end of the seal.

To determine the length of hose needed in making assemblies with permanent or reusable couplings, subtract Dimension "C" (Cut off factor) for each coupling from the required overall assembly length. Dimension "C" may be found in the coupling specification tables.

HOW TO MEASURE ASSEMBLIES



Remember that hydraulic hose under pressure will elongate up to 2% of its length or contract up to 4% depending on pressure, type and size. Sufficient allowance should be made to permit such changes in length.

