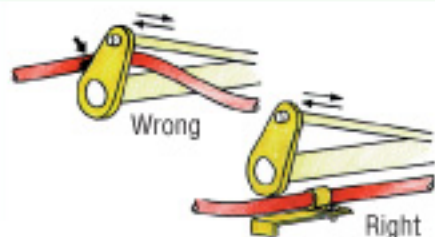
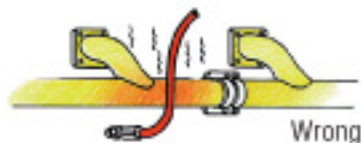


# HOW TO INSTALL HOSES

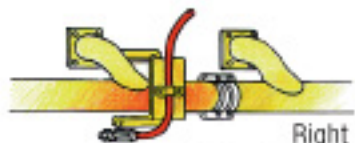
Hoses provide an advantage over rigid steel lines in some applications by absorbing vibration, deadening noises, giving ease of routing and allowing movement of components. Care should be taken to select the correct replacement hose and fittings so that the new hose is comparable to the original. Hoses and fittings must be a correct match and of the correct pressure rating, or serious injury to operating personnel could occur. A small size hose used at a correct operating pressure may be suitable at high pressure, but the same specification hose in a larger diameter may not be suitable at the same pressure. Operating pressure drops as hose diameter increases. Flexible hoses change in length as pressure changes in the system. This shrinkage or expansion must be allowed for in selection of hose length. Twisting or excessive bending of hoses can cause eventual damage and failure. Abrasion causing the outer cover to wear through can lead to rust failure of the steel reinforcing and hose rupture. Excess strain on hoses can also cause fitting failure, and hose material must be compatible to fluids used.



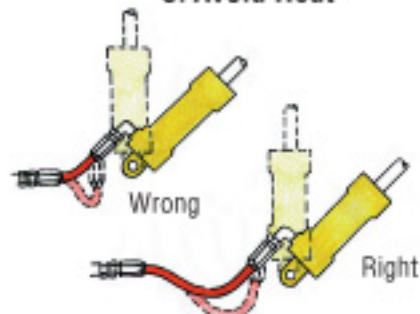
## 4. Avoid Rubbing



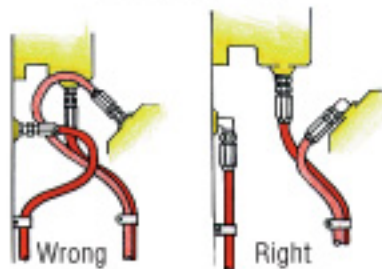
## 5. Avoid Heat



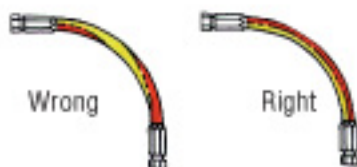
## 6. Avoid Sharp Bends



## 1. Avoid Taut Hose



## 2. Avoid Loops



## 3. Avoid Twisting