

Avoid injury to yourself and others by following these important hose assembly steps:

WARNING

Serious injury, death and destruction of property can result from rupture or blow-apart of a hydraulic hose assembly that is:

- Damaged or worn out
- Assembled or installed incorrectly

Never underestimate the power of a blown hydraulic assembly.



1. Receive hands-on training with Gates recommended equipment.
2. Follow current Gates **operating manual and crimp data**.
3. Use only new (unused) Gates recommended hose and couplings with Gates crimpers.
4. Wear safety glasses.

Select and Install Assemblies with Care

1. Select proper hose assemblies for the application. Many factors and conditions affecting the inside and outside diameter of the hose must be taken into account.
2. Hose assembly routing **must not** create an injury hazard or damage hose. Refer to the standards, regulations and directories that apply in the countries where the equipment is sold and used.
3. Select hydraulic components so that the application's temperature, pressure and bend radius **do not exceed** recommended component limits.

4. Hose **must not** be stretched, kinked, crushed or twisted during installation or use. Hose **must not** be bent to less than the minimum bend radius.
5. Use **only** TH7NC, TH8NC and TH18NC hose for **non-conductive** applications. For instance: cherry pickers. All other Gates hoses are electrically conductive.

4. DO NOT USE HYDRAULIC HOSE TO TRANSMIT HIGH PRESSURE GASES OR STEAM. NOTE ANY PRESSURE ABOVE 500 PSI.

Follow Good Maintenance Practices

1. Establish a program of inspection, testing and replacement of hose assemblies from factors including:
 - Severity of application.
 - Frequency of equipment use.
 - Past performance of hose assemblies.
2. **Only** properly trained persons should inspect, test or service hose assemblies. Update training periodically.
3. **Document** maintenance, inspections and testing.



4. AVOID FLUID INJECTION INJURIES

- Fluid under pressure can cause serious injury. It can be almost invisible escaping from a pinhole and it can pierce the skin into the body.
 - Do not touch a pressurized hydraulic hose assembly with any part of your body.
 - If fluid punctures the skin, **even if no pain is felt, a serious emergency exists**. Obtain medical assistance immediately. **Failure to do so can result in loss of the injured body part or death.**
5. Stay out of hazardous areas while testing hose assemblies under pressure. **Use proper safety protection.**

Other Safety Information

Many factors affect the selection, crimping, installation and maintenance of hose assemblies. This catalog, Gates Corporation, the hydraulic equipment maker and the Society of Automotive Engineers Recommended Practice SAE J1273, have useful information about selecting, crimping, installing and servicing hydraulic hose assemblies. For further

information, please contact your local Gates representative or call Gates Corporation.

Gates recommends hose and coupling combinations in this catalog only after completing extensive testing.

Evaluation of a hose and coupling combination requires considerable impulse testing and cannot be

determined by a simple burst or pressure hold test. Gates disclaims all liability for any hose assembly made in violation of Gates recommendations, procedures and current crimp data. Crimp data is updated on average every year. For the most up-to-date crimp data, visit www.gates.com/ecrimp.

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