

 Aeroquip



TRAINING BULLETIN
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HOW TO

inspect
and care
for truck
hose lines



THE
TRUCK
HOSE LINE
DETECTIVE'S
HANDBOOK

THE IMPORTANCE OF REGULAR INSPECTION AND CARE OF TRUCK HOSE LINES

If the service life of every truck hose line was the same, all hose lines could be replaced at the same time on a regular schedule. But hose line service life can vary greatly depending on the vehicle operating conditions, compatibility of the fluid being conveyed, and the care taken in the correct installation and routing of the completed hose assembly on the vehicle.

Aeroquip's Hose Line Detective's Handbook is designed as a guide to help you understand the symptoms, causes and corrections to the problems most common to hose lines in truck systems.

HEAT

1. SYMPTOM

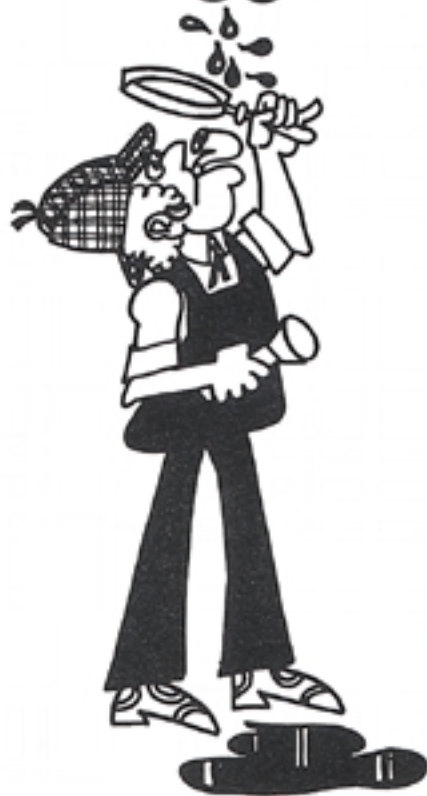
A hose is charred, stiff and/or baked out. The hose cover is disintegrating.

CORRECTION

Replace the hose and reroute it away from the heat source (exhaust pipe or manifold). Use stand-off baffle or fire sleeve over the hose. High temperature hose (+275°F to +300°F) is recommended.



LEAKS



2. SYMPTOM

A hot oil line hose is weeping or seeping oil. The hose is stiff and cracks when flexed. The cover is oil saturated.

CORRECTION

Replace the hose. **NOTE:** Oil saturation of the hose cover may be caused by an exterior source. Clean and inspect the hose. Replace it with high temperature hose, if in doubt.

3.



SYMPTOM

The end fitting leaks at the socket.

CORRECTION

Remove the fitting from the hose. Check the fitting for proper assembly and examine the nipple for burr or damage. If damaged, replace the end fitting. Always use a piece of new hose. Assemble and install the hose line.

4. SYMPTOM



Leakage occurs where a hose fitting or adapter connects to a threaded port.

CORRECTION

Check the end fitting and the adapter for damage. If either component is damaged, replace it. If not, tighten the loose connection.

LEAKS

5. SYMPTOM

A heater and coolant hose leaks.

CORRECTION

Check the hose clamps and tighten them if necessary. Check the hose cover for deterioration due to oil or bake out from high temperatures. Replace the hose, if in doubt.



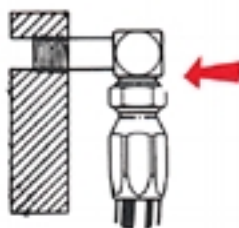
6.

SYMPTOM

A leak occurs between the adapter and the end fitting swivel nut.

CORRECTION

Disconnect the hose. Check the sealing surfaces on the adapter and the hose end fitting. If either component is damaged, replace it. Re-install the hose line and properly tighten the swivel nut.



7.

SYMPTOM

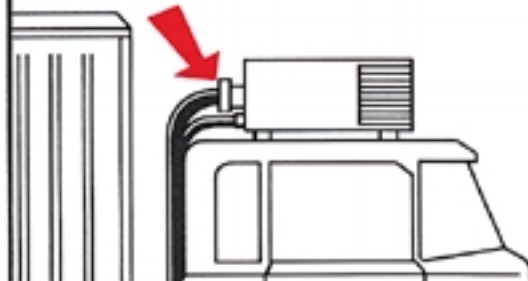
An air conditioning hose leaks.
A refrigerant oil coating is on or around the end fitting.

A refrigerant hot gas line is baked out or cracked from heat.

CORRECTION

Tighten the loose swivel end fitting. Replace the O-Ring in the O-Ring type fitting, if faulty.

Replace the hose line and recharge the system.



ROUTING



8. SYMPTOM

A hose cover is worn or chafed.

CORRECTION

Check the inside and the outside of the hose for sources of abrasion. If the cover has worn off and the reinforcement is exposed, replace the hose. If the hose is only slightly worn, reroute the hose and clamp it to avoid further chafing. If abrasion cannot be avoided, install a chafe guard on the hose.



9. SYMPTOM

A hose is kinked.

CORRECTION

Check the manufacturer's recommended hose bend radius. Reroute the hose if possible, or replace it with a proper length hose.

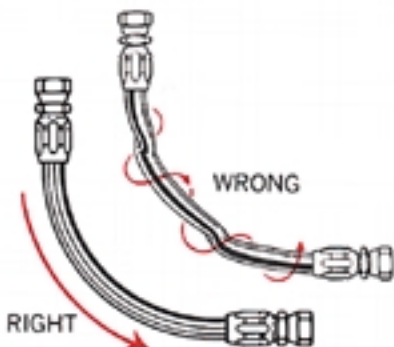
10. SYMPTOM

The layline has spiraled around the hose.

CORRECTION

Loosen the swivel nut. Realign the hose and tighten it. (The hose assembly should have a swivel end fitting on at least one end and preferably on both.)

When installing a new assembly with a male end and a swivel, tighten the male end first, then the swivel end. Use two wrenches on the swivel end to prevent the hose from twisting when tightening the swivel nut.



OTHER COMMON PROBLEMS

11. SYMPTOM

A hose cover is damaged or cut.

CORRECTION

Replace the hose. If possible, reroute the hose to a protected area. Do not allow the hose line to hang down where it can be damaged by road debris.



12.

SYMPTOM

A hose line is stretched too tight.

CORRECTION

Install a new hose line. Allow an additional overall length of about 4 percent. The hose may shorten when pressurized.



13.

SYMPTOM

A hose's cover fabric is loose or peeling.

CORRECTION

Replace the hose and route it away from possible corrosive elements, such as battery acid spillage. A rubber covered hose may last longer than a fabric covered hose in a corrosive atmosphere.



Aeroquip Corporation
Aeroquip Industrial Group
Americas Industrial Division
1895 Indian Wood Circle, P.O. Box 700, Maumee, OH 43537-0700
Phone: 419-891-6100, Fax: 419-891-7890
<http://www.aeroquip.com>

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