

# **INSTALLATION INSTRUCTIONS**

## **CAT 769D HAUL TRUCK**

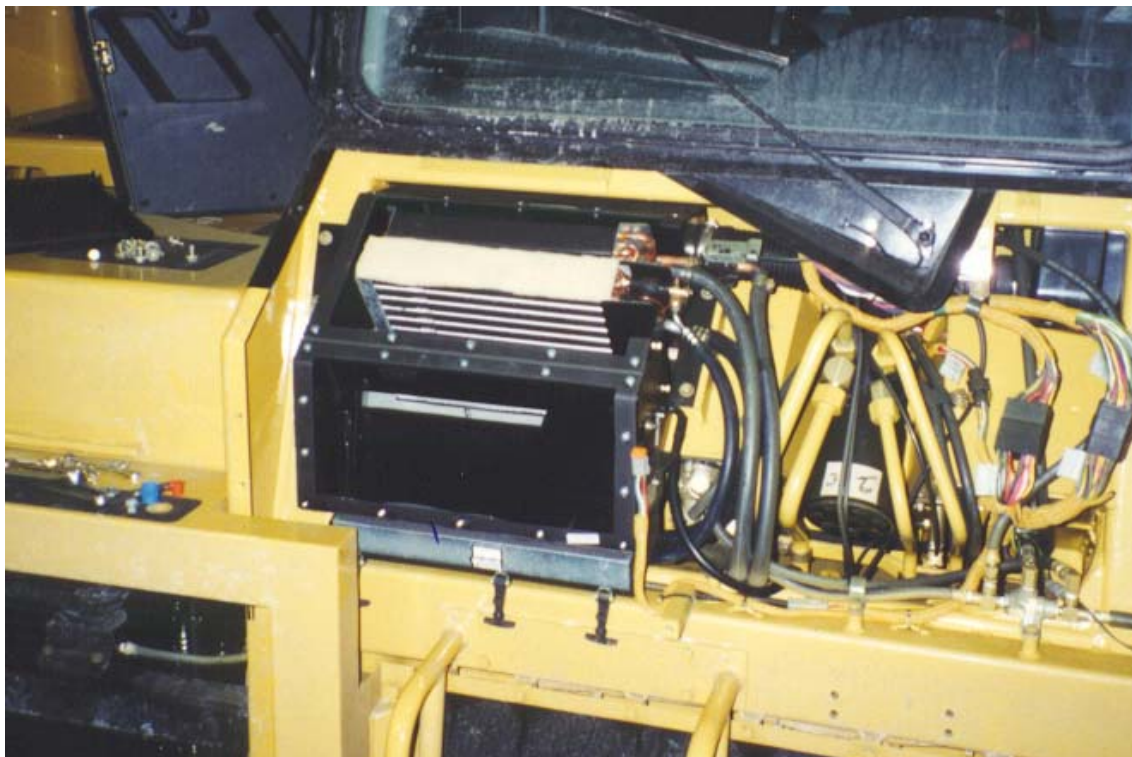
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## CAT 769D INSTRUCTIONS

### EVAPORATOR COIL:

The evaporator coil goes alongside the heater core in the heater blower assembly in front of the cab

1. Remove the exterior cover from in front of the operator's windshield. Remove the cover over the heater box assembly to access the heater core area.
2. Ensure the drain tubes are clear and attach the drain lines with the air inlet restrictors to the exposed drain tubes with the #4 gear clamps provided.
3. Insert the evaporator coil assembly into place beside the heater coil and secure. Make sure the expansion valve is 'UP' and oriented as shown in the pictures.
4. Do not resecure the cover until the system has been leak tested.



Evaporator in position beside heater coil in box.



Assembly with cover re-installed.

## COMPRESSOR:

The compressor mounts on the lower left-hand side of the engine below the alternator and drives off an open groove on the crankshaft pulley.

- 1) Install the mount to the location directly beneath the alternator. There will be four open threaded holes. The holes may need to be run through with a tap to remove any paint from the threads.
- 2) Check for alignment and secure the mount in place.
- 3) Mount the compressor onto the mount as shown and install the drive belt. The belt will drive the front groove on the compressor.



Compressor mounted in place showing bolt locations.



Compressor showing set-up and hose routing.

## **CONDENSER:**

The condenser mounts the face of the radiator mounted on the brackets bolted to the side frames as shown.

1. Remove the frame and screen from in front of the radiator in order to access the front of the radiator assembly.
2. Slide the condenser assembly across in front of the radiator and behind the box beam cross member.
3. Bolt to the existing threaded holes on the radiator flanges with the hardware provided.



Right side of condenser with drier as viewed from front of truck.



Left side of condenser as viewed from in front of the truck.

**RECEIVER-DRIER:**

The receiver drier assembly is mounted on the right side of the condenser assembly as viewed from the front of the truck. See picture on previous page.

## HOSES:

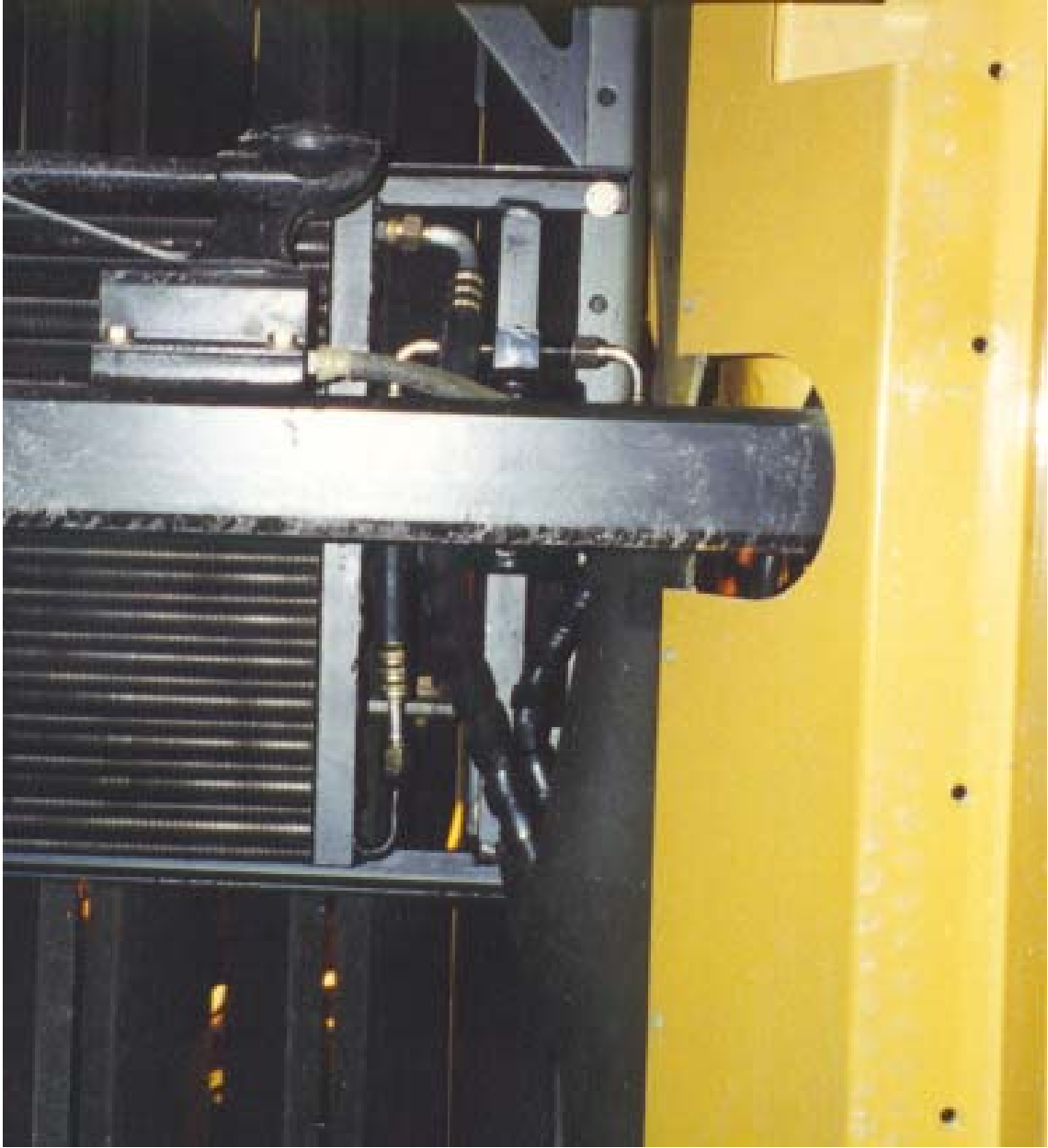
The hoses for the air conditioning are all pre-crimped on one end and will require being cut to length and crimped by the installer.

1. The 13/32" (#8) hose runs from the compressor discharge rotolock fitting (the one with the pressure switch with black leads – high pressure) toward the front of the truck and up to the inlet fitting at the top of the condenser. The 90o fitting with the 134a charging port is to be connected at the compressor. See the compressor pictures and the following picture for hose set-up.
2. The 5/16" (#6) hose runs from the drier to the expansion valve. It is routed from the drier back to the engine compartment with the 13/32" hose and then up to the evaporator with the 5/8" suction hose. Connect to the 'INLET' fitting of the expansion valve and tighten.
3. The 5/8" (#12) hose runs from the compressor suction rotolock fitting (the one with the pressure switch with blue leads – low pressure) up toward the cab. From the compressor the hose is routed tied to the 13/32" hose and then runs up to the cab with the 5/16" hose. See the pictures for accurate descriptions of the outing. The 90o fitting with the 134a charging port is for use at the compressor and the other 90o fitting is for use on the outlet side of the evaporator.



Hose routing in engine compartment of truck.





Hoses at condenser/drier assembly.

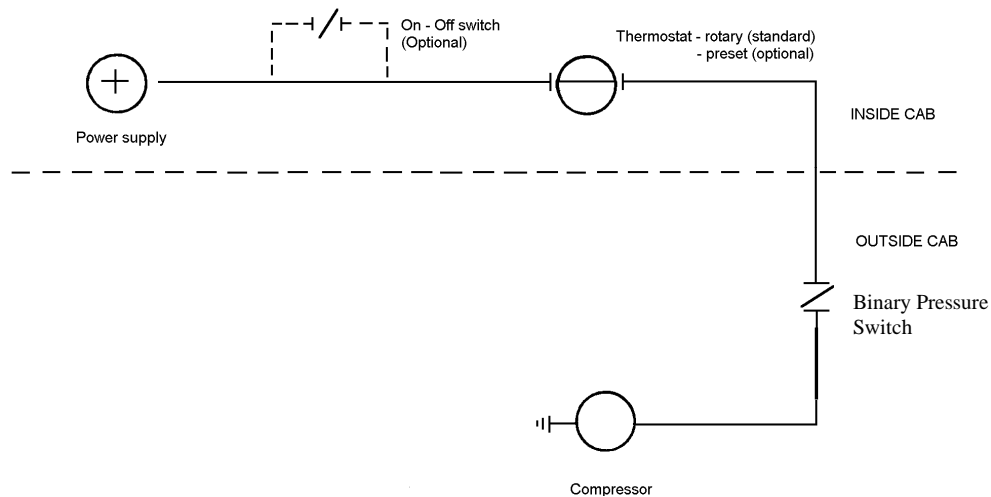


Hoses and routing at evaporator.

## ELECTRICAL:

The electrical system is designed to be simple and straightforward to install and to service. All connections are in series and require no special tools. The system is available with an optional rocker switch and pre-set thermostat and is shown in the optional wiring diagram below.

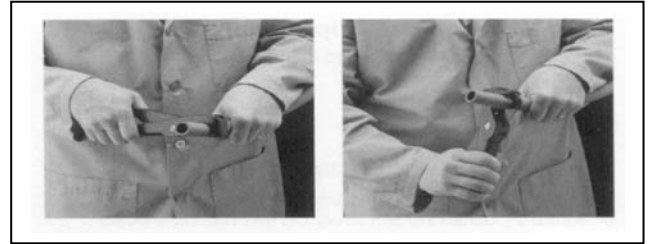
1. From the blower switch there will be one post that is live in all the fan speed positions except 'OFF'. This is the clutch terminal post.
2. Connect the thermostat to the clutch post of the blower switch.
3. Connect the 14ga black wire with the wire loom to the other terminal on the thermostat and run back to the compressor with the suction hose.
4. Connect to the pressure switches in series and then to the compressor clutch wire.



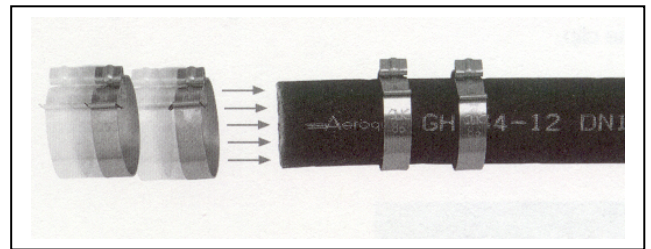
Thermostat on dash panel.

## Aeroquip E-Z Clip Assembly Instructions

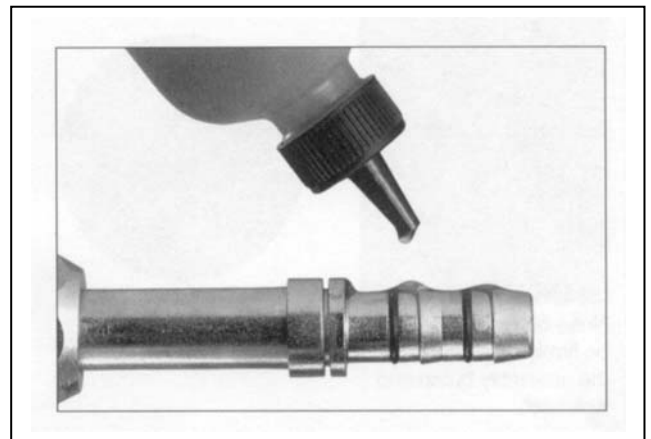
Step 1. Cut the hose to proper length with an appropriate cutting tool. Aeroquip's hand held hose cutter has been specially designed for cutting all non-wire reinforced hose, such as GH-134 Multi-Refrigerant hose. Be sure the cut is made square to the hose length.



Step 2. Install two proper-sized clips onto the cut end of the hose. Orientation of the clips does not affect the performance of the connection. However, for ease of assembly, both clips should have the same orientation. NOTE: Failure to slide the clips over the hose at this time will require the clips to be stretched over the hose or fitting later. This may permanently damage the clip.



Step 3. Lubricate the nipple with a generous amount of the refrigeration or A/C system's compressor lubricating oil. This MUST be done to lower the force of nipple insertion.



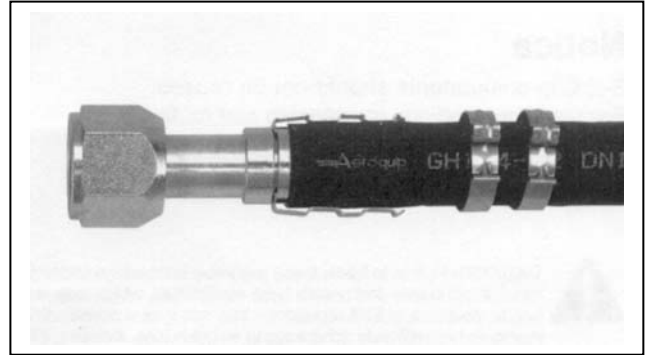
Step 4. Insert the nipple into the hose. To ensure that the nipple is fully inserted, check the gap between the cut end of the hose and the shoulder on the nipple. Care should be taken to avoid kinking or other damage to the hose during nipple insertion. NOTE: Be sure to wipe excess oil from the nipple and hose.



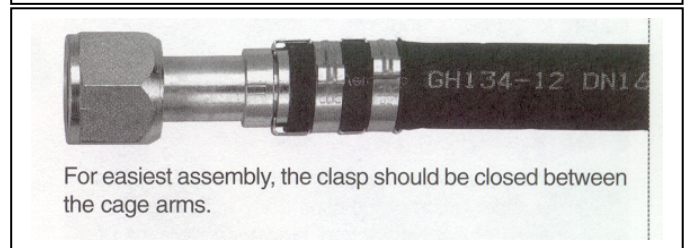
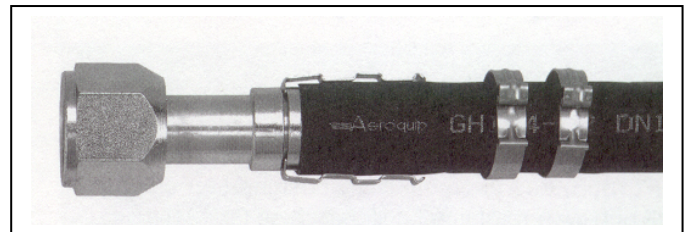
Step 5. Snap the cage into the groove on the nipple. The arms should extend over the hose length. When the cage has been correctly installed in the cage groove, the cage will be able to rotate in the groove.

This step **MUST** be performed to ensure:

1. The clips will be located over the O-rings on the nipple.
2. The connection will be compatible with the connection's pressure rating.



Step 6. Slide the clips over the cage arms and into the channels on each arm.



Step 7. Use the pliers to close the clips. The pliers should be positioned squarely on the clip connection points and should remain square during the closing of the clip.

**NOTICE:** E-Z Clip components should not be reused.

