## 9020B/9030B CASE EXC. WITH LARGE PLASTIC HEATER

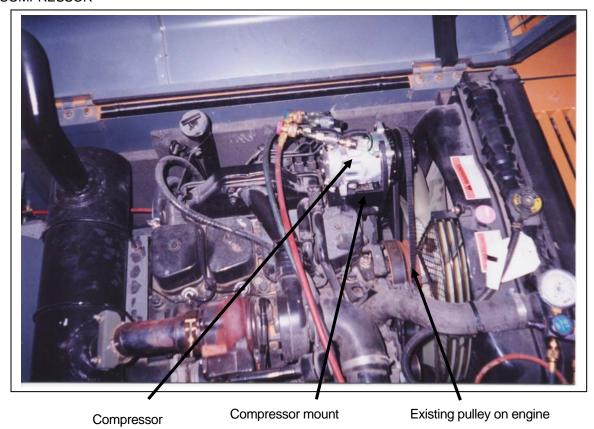


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Steps:

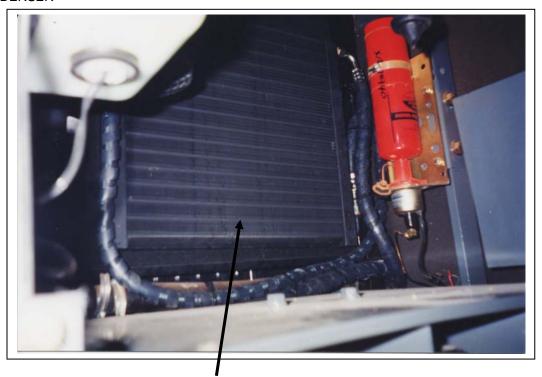
- Remove all paneling from behind the seat to expose the computer and electrical area behind the seat.
- 2) Unbolt the computer frame from the lower frame assembly (4 bolts with 19mm heads) so it can be moved forward or back to gain access to the heater box.
- 3) Clamp off and remove heater lines and electrical connections from box. (3 plugs at top front of box)
- 4) Unbolt heater box from the floor (5 or 6 bolts) and remove the heater box from the cab.
- 5) Unbolt the air intake/filter section from the heater box and remove the plastic insert to make room for the hoses to exit the box.
- 6) Remove the top half of the center section of the box to expose the heater coil area.
- 7) Remove the two outside plugs in the drain holes and leave the center plug in place.
- 8) Slip the evap coil into place in the box and replace the lid. Reinstall the intake filter section on the end of the box. Use tar tape to seal the pipework and wiring area where it exits the box.
- 9) Install the supplied double hose clamp adapter plates on the air outlets of the blower end of the box. Secure with the self drilling screws supplied. Seal any gaps to the box with tar tape or silicon.
- 10) Insert the thermostat probe into the coil through one of the little holes in the top of the box over top of the evap area. The hole closer to the blower end would be better.
- 11) Install ½" drain tube and restrictors onto the two outside tubes on the bottom of the box. The rear tube should be as short possible as it sits into a metal channel.
- 12) Once the box is all set up, replace it in the cab and bolt back down. Reconnect the heater lines and air line for the defrost pipe.
- 13) Mount the A/C on/off push button switch in the left hand control panel, in one of the unused rectangular knockouts. Wire as shown in the wiring diagram.
- 14) Before bolting down the computer frame, cut a notch out of the steel plate that would sit above the upper air outlets from the heater box. This makes it easier to attach and run the flex hose.
- 15) Connect flex duct to the two upper air outlets adapters. Bolt the computer frame back down and connect the wiring back to the box. (3 plugs)
- 16) Reinstall the lunch box frame overtop of the computer. Connect the lunch box air line from the heater box to the lunch box. Secure with gear clamps or tie wraps.
- 17) Install the louvers backing boxes into the rectangular holes on either side of the lunch box. Secure with the self drilling screws provided. Outline the boxes in the 1" X 1" self adhesive foam so they will seal the louvers.
- 18) Connect the flex hose to the louver backing boxes using tie wraps.
- 19) Reinstall all other panels and wiring behind seat.
- 20) Remove the two existing rectangular louvers from under the front of the seat. Cut the strip of metal underneath the louver holes and remove it.
- 21) Install the new rectangular louvers and mounting bezels using the original mounting screws and holes
- 22) Connect the new louvers to the lower air outlets using flex hose. Leave extra slack in the hose because the whole seat frame moves.
- 23) Run the A/C hoses up the same grommet as the heater lines and connect to the A/C outlets.
- 24) Connect the clutch wire from the compressor to the thermostat. When testing the system it is possible to adjust the thermostat to ensure that the coil does not freeze up.

### COMPRESSOR

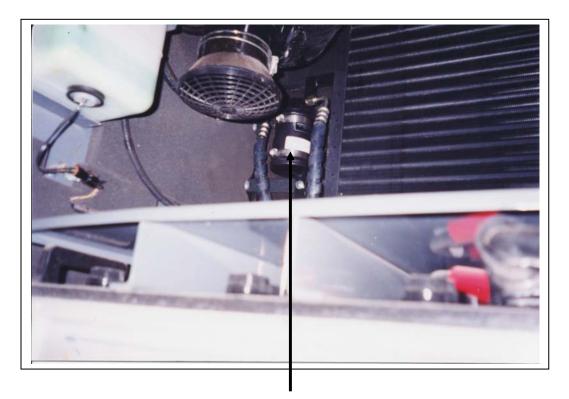




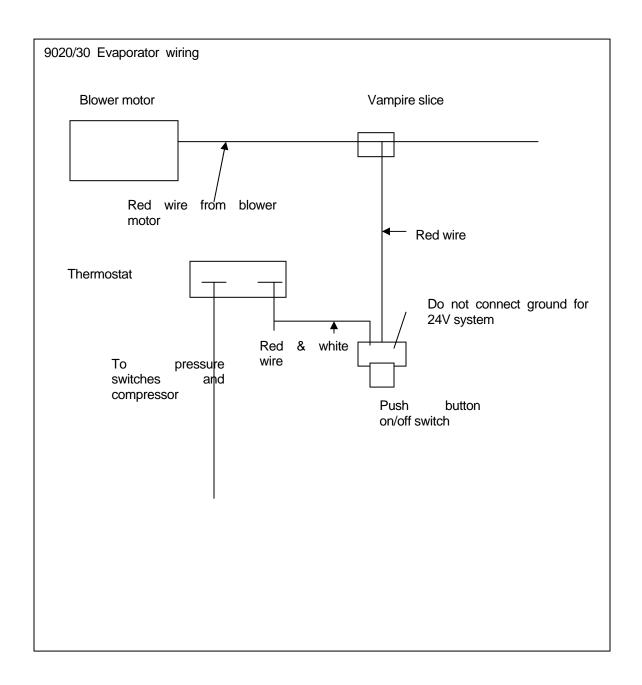
## CONDENSER



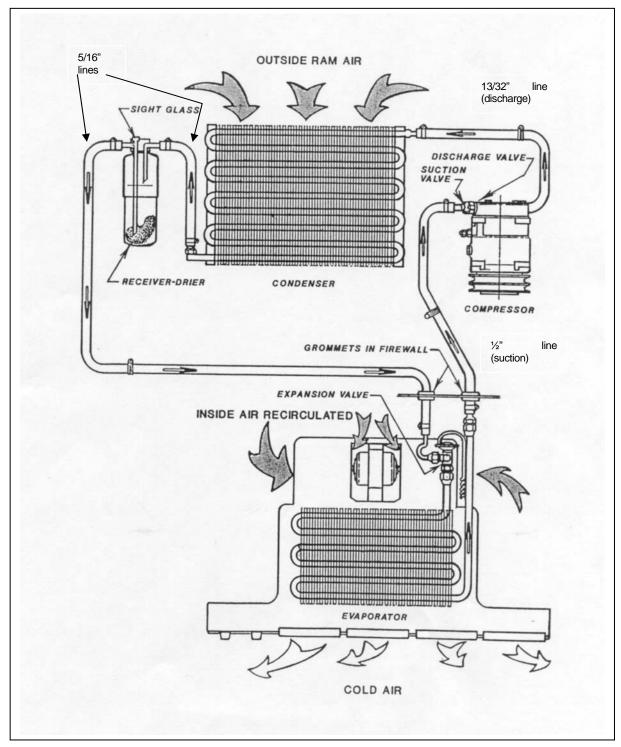
Condenser mounted on existing bolt holes



Receiver drier.



## Refrigerant Flow Pattern in a Standard Air Conditioning System



#### **Thermostat Setting Procedures**

- 1) Thermostat types a) preset
  - b) adjustable
  - a) A preset thermostat is adjusted to its specific cut in and cut out temperatures when manufactured and does not have a rotary adjustment for the operator.
  - b) An adjustable or rotary thermostat has been manufactured to a predetermined cut in and cut out temperatures, but it is also operator adjustable to achieve the desired comfort level.

Both types of thermostats can have their factory settings adjusted by turning the setting screws on the body of the thermostat. One body type has the setting screws mounted externally and labeled for direction of rotation. The other body type requires the removal of the plastic end plate to expose the set screw.

- 2) Thermostat probe location: The location of the thermostat probe in an evaporator coil can be very important to achieve the maximum cooling potential of the coil while also preventing coil freeze-up. There is no set location for the thermostat probe to be put that will be optimum for all systems, but several rules of thumb may be followed:
  - a) Insert the probe in the coldest area of the evaporator coil.
  - b) Insert the probe from the top of the coil down, if possible.
  - c) Make sure that at least the last 3" of the thermostat probe are in the coil.

To find the most likely area where the coil is the coldest, consider these factors:

- 1) Direction of air flow through the coil.
- 2) The coil area likely to have the lowest air flow.
- 3) The inlet locations of the refrigerant into the coil.
- 4) The inlet of the hotter outside air into the coil area.
- 1) Usually the coldest side of the evaporator coil will be the air outlet side. Often the thermostat probe can be inserted between the last and second last row of tubes.
- 2) The lower air flow area of the evaporator coil in most systems tends to be near either end of the coil. These areas will be colder
- 3) The area of the coil that the refrigerant inlet tube(s) occupy should be the coldest part of the coil.
- 4) If the system is equipped with an outside air intake, where and how that air is brought into the evaporator area can have a large effect on the coil temperature. If all the outside air is piped into the evaporator in one area, that area will be considerably warmer in hot weather.

By looking at all these different factors, the area of an evaporator coil most likely to be the coldest can be determined.

Once the probe is inserted, the A/C system needs to be tested. Run the system to ensure that the thermostat is cycling the compressor off at the appropriate temperature. A core temperature ranging between 25° and 30° F should cause the thermostat to cycle off. The air temperature at the vent outlet closest to the evaporator coil should be between 38° F and 45° F when the compressor cycles off.

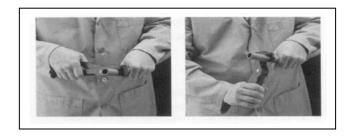
If the thermostat doesn't cycle off after a reasonable cool down period, and the air outlet temperature has dropped below 40° F, the cut in and cut out settings should be adjusted until the compressor is cycling on and off regularly. Let the system run for a decent time period (at least 15 min) and then check the evaporator coil for any signs of freezing.

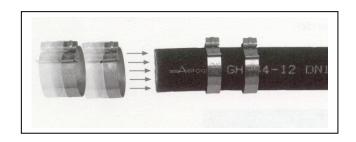
# Aeroquip E-Z Clip Assembly Instructions

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.

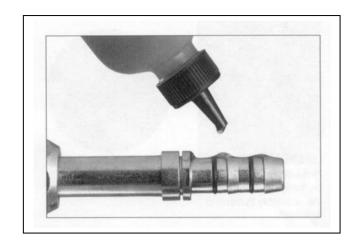
NOTE: Failure to slide the clips over the hose at this time will require the clips to be stretched over the hose or fitting later. This may permanently damage the clip.





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.

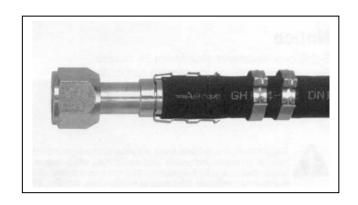
Step 4. Insert the nipple into the hose. To ensure that the nipple is fully inserted, check the gap between the cut end of the hose and the shoulder on the nipple. Care should be taken to avoid kinking or other damage to the hose during nipple insertion. NOTE: Be sure to wipe excess oil from the nipple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





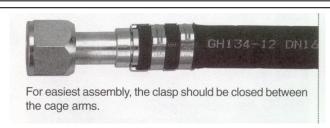
Step 5. Snap the cage into the groove on the nipple. The arms should extend over the hose length. When the cage has been correctly installed in the cage groove, the cage will be able to rotate in the groove. This step MUST be performed to ensure:

- 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.

