

TEREX TC37 INSTALLATION INSTRUCTIONS



PHONE (519)485-5961 OR 1-800-267-2665
FAX (519)485-3745 OR 1-888-267-3745

EVAPORATOR

The evaporator box is located on the floor to the right side of the operator. A mount tab fits nicely between the window and frame on the right side when facing the box, and the left side will mount to the lower frame of the cab structure.



Two ¼ bolts securing evap in place.

Evaporator

Set box in place, mark, drill and tap two holes for ¼" bolts
Temporarily remove floor pad and plate.



Holes marked for drilling.



Be sure to slide tab tightly behind window



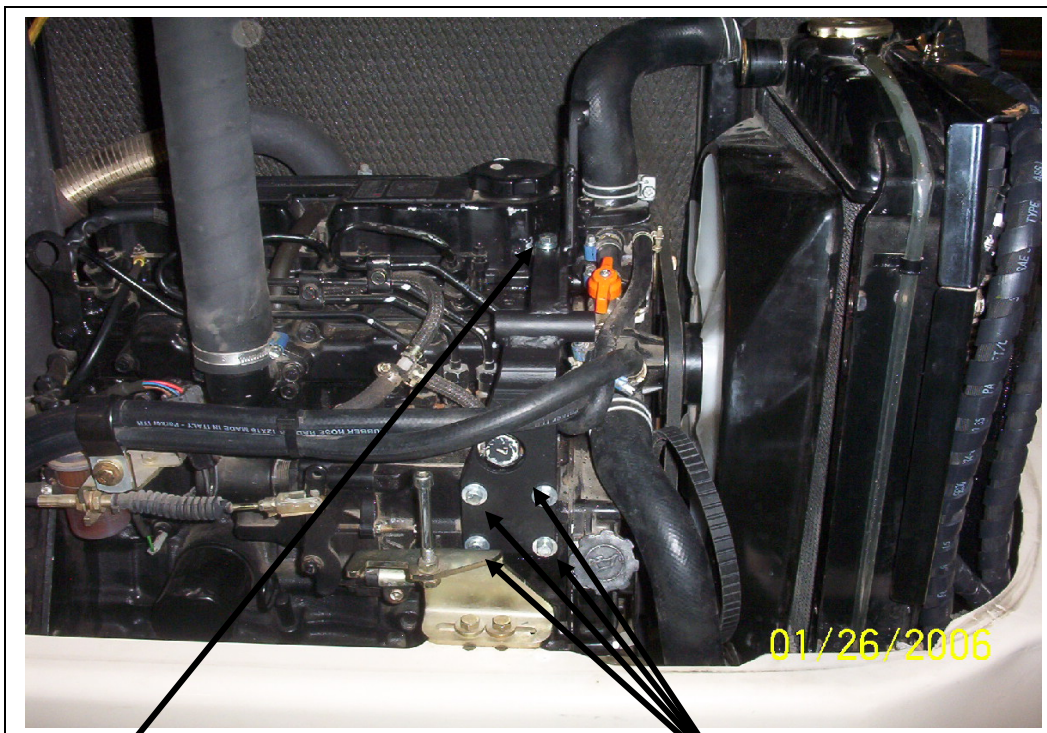
1/4" hardware provided in kit to secure evap box.

This ground wire no longer comes out this side of the box. Ground on mounting flange on right hand side when facing box.

COMPRESSOR

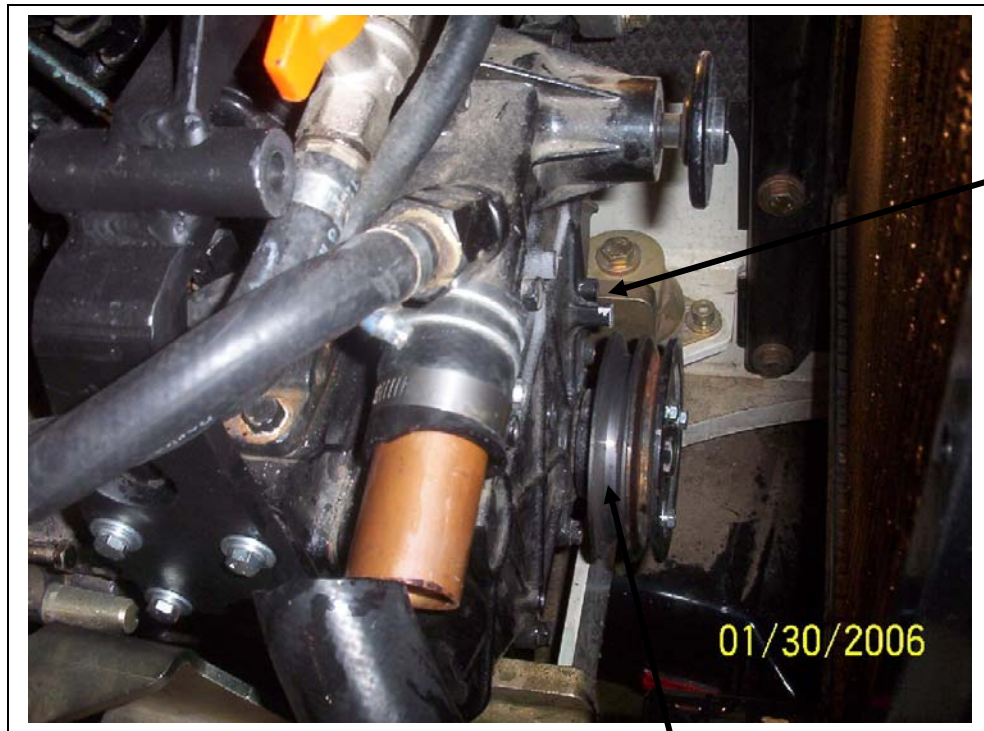


Install compressor mount as shown. Remove and discard four 6mm bolts from engine side cover and front right 8mm bolt from engine valve cover. New hardware is provided in the kit.



8mm bolt.

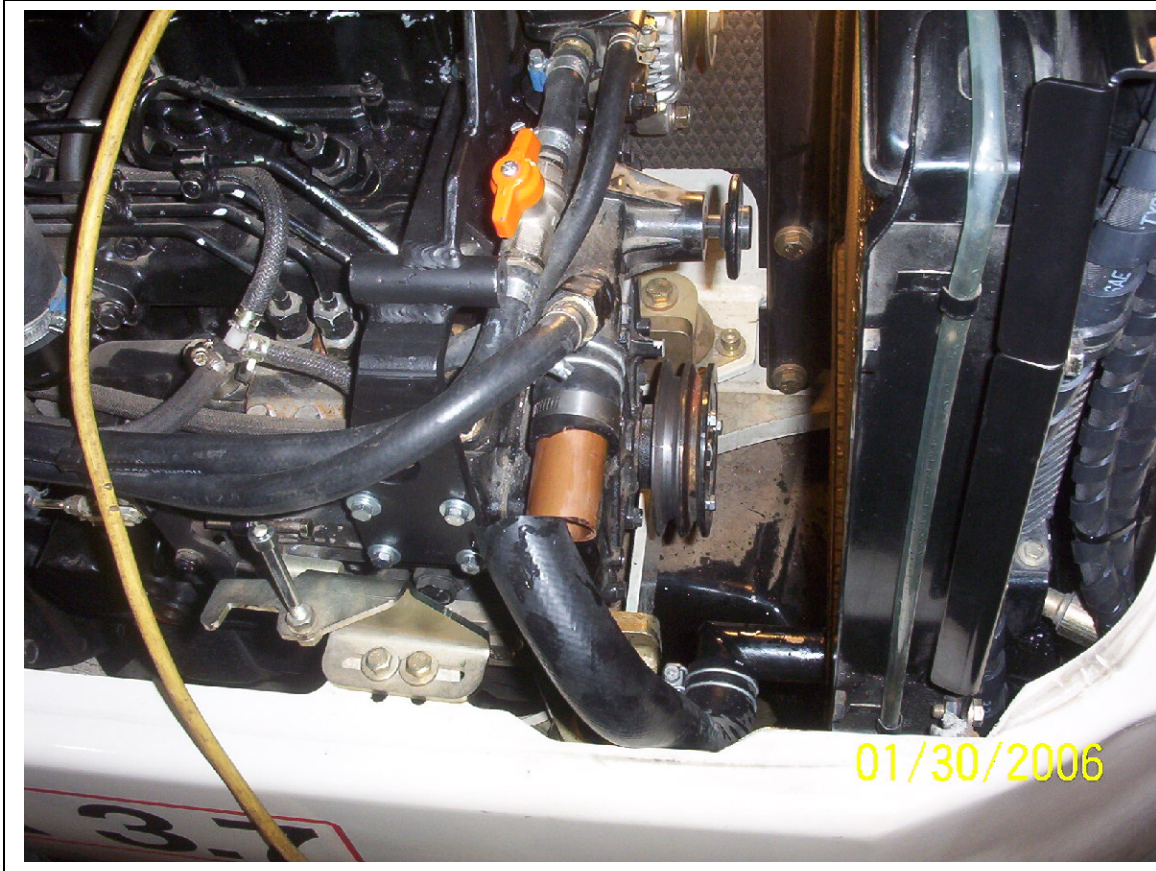
Four 6mm bolts.



Add on pulley.

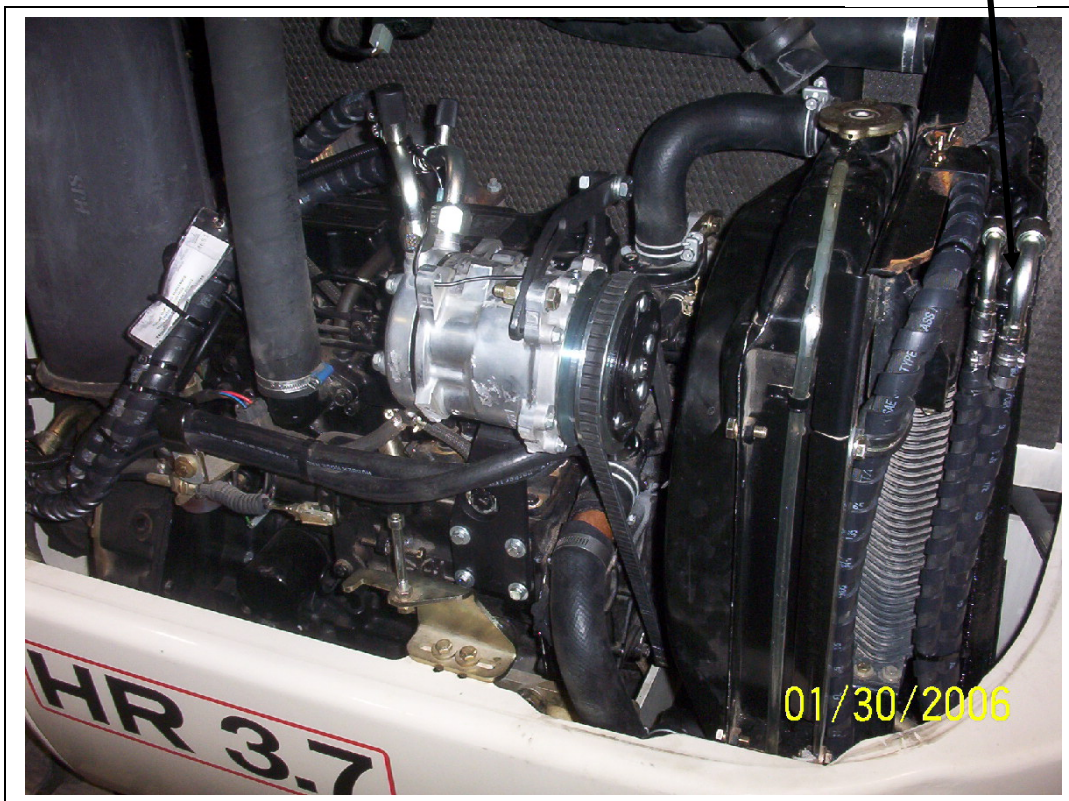
Install add-on pulley as shown. It is not necessary to remove the fan and shroud. This was only done for pictures only.

- 1) Remove three radiator mounting bolts. Loosen alternator and remove belts.
- 2) From beneath the machine remove large shield to gain access to front crank pulley.
- 3) Remove large bolts from crank pulley.
- 4) Remove crank from engine. With rad mount bolts loose, push rad forward enough to remove crank pulley from engine.
- 5) While pulley is off, grind 1/8" off the front of the timing knob.
- 6) The new add-on pulley to inside of crank pulley with hardware provided.
- 7) Re-install crank pulley and re-torque.



Remove antifreeze into clean container. Drain screw is found at bottom of radiator. Once antifreeze is removed, cut lower rad hose near water pump allowing enough hose to clamp copper extension tube. RE-connect the lower rad hose. This will allow space for the belt to travel without toughing the rad hose.

Condenser



- 1) Install the compressor as shown with the hardware provided in the kit.
- 2) Install the belt. You may need to rotate the crank to install belt.



- 3) Install tightener brackets as shown and tighten belt into place so it does not contact the water pump.

- 4) Refill the radiator, re-install and tighten the alternator belt.
- 5) Install the condenser before re-installing the lower radiator mounting bolts.

CONDENSER



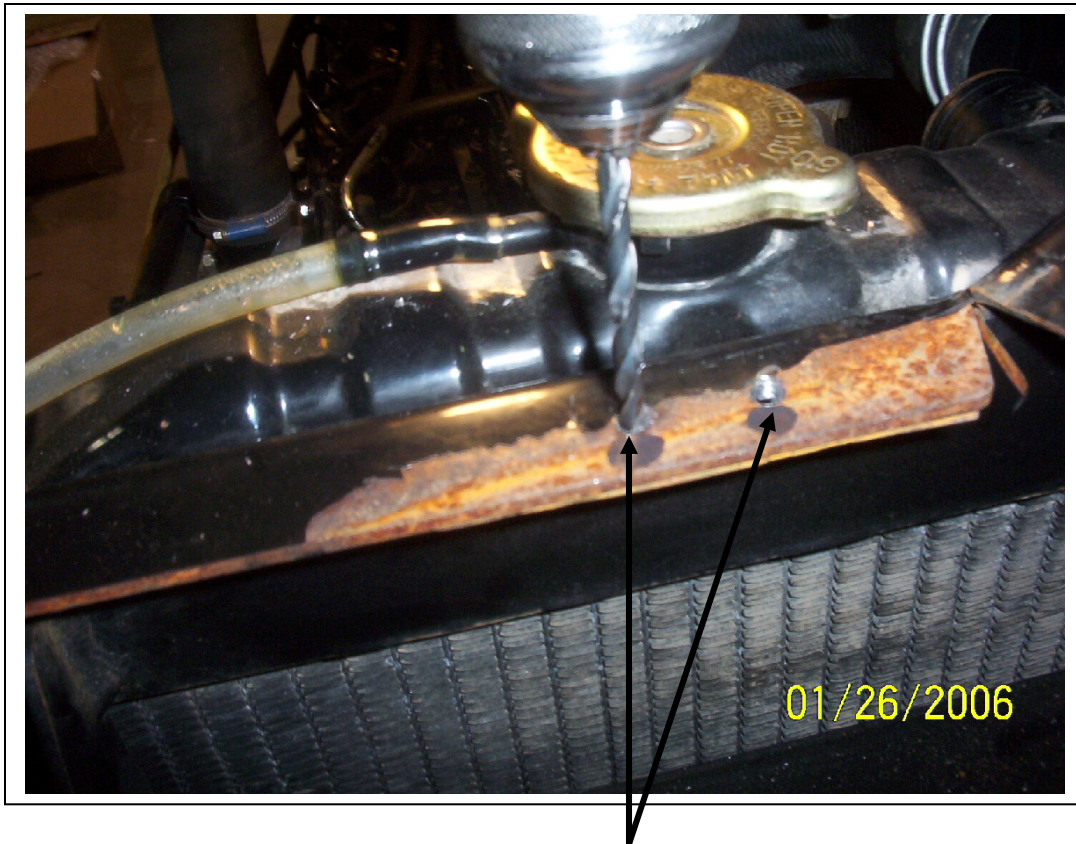
Lower rad mounting bolts.

Condenser bracket.

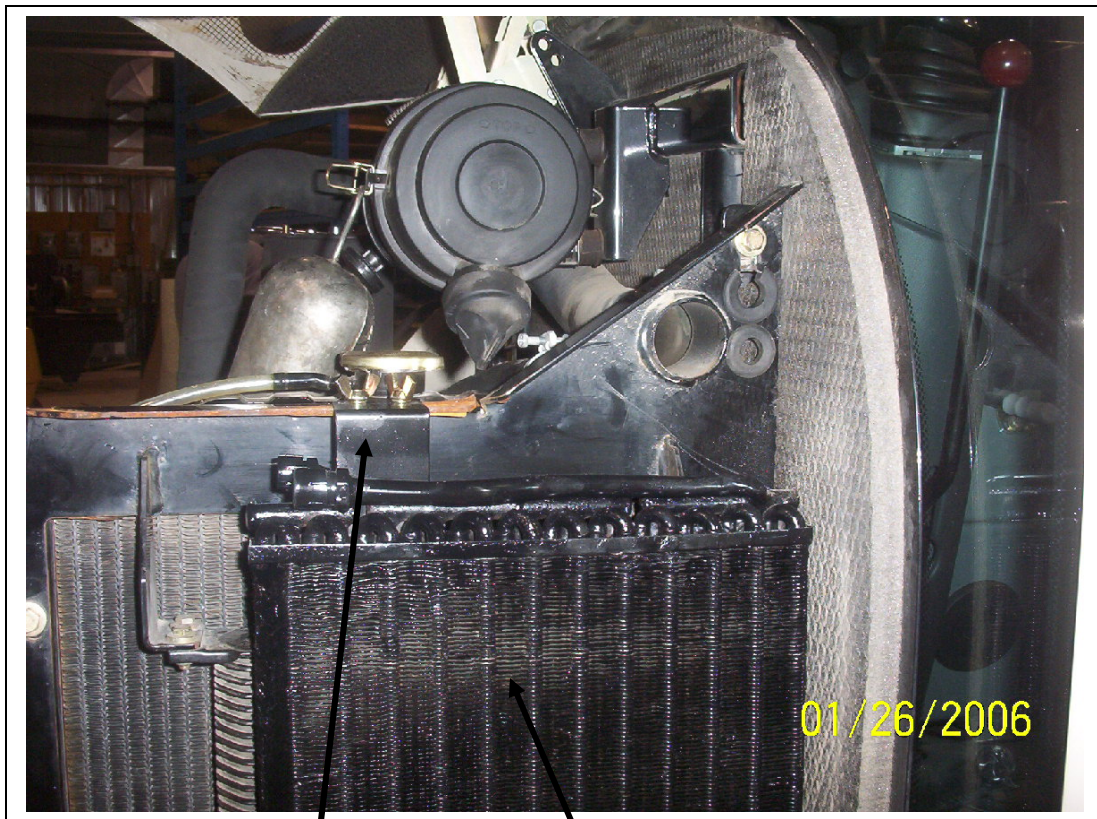
With the hood open, identify the two lower radiator mounting bolts. Remove the bolts and install the lower condenser bracket as shown. Re-use the same bolts and tighten.



Set condenser into bracket keeping it to the right about $\frac{1}{2}$ " from the inside wall with fittings to the top.



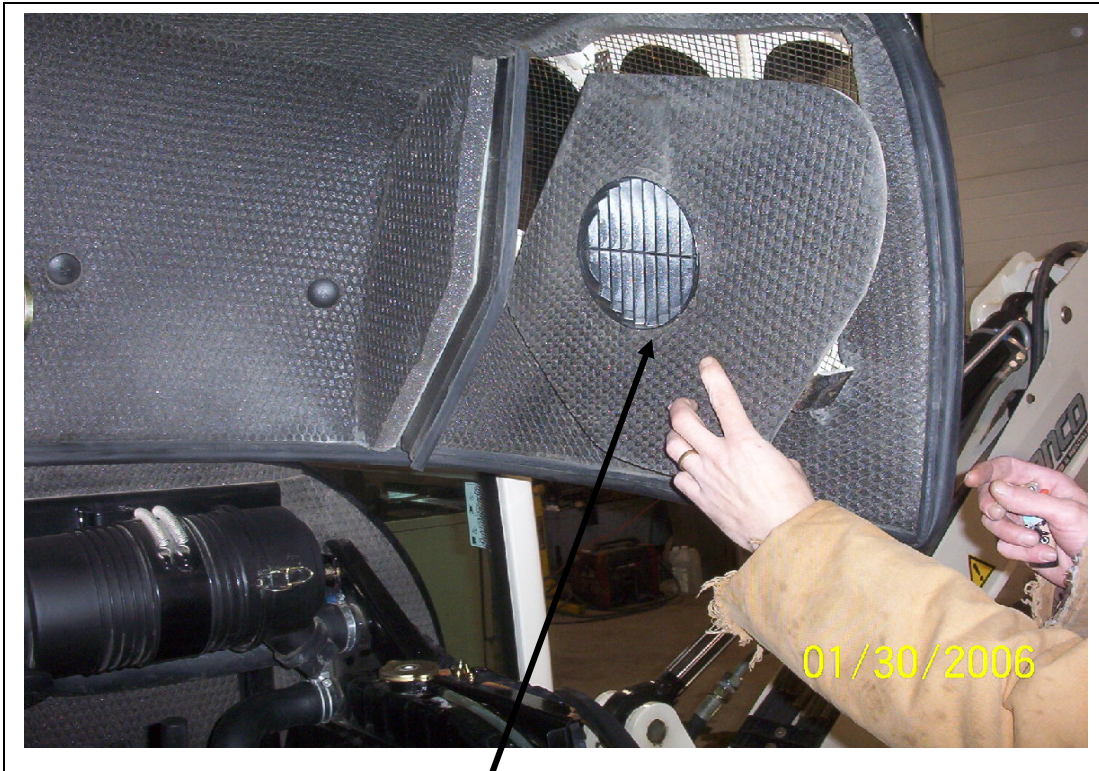
Mark holes for top bracket. Drill two $\frac{13}{16}$ " holes and tap to $\frac{1}{4}$ "



Top mounting
bracket.

Condenser

Set condenser in place and fasten top bracket with two wing bolts supplied in kit. This will allow the condenser to be easily removed for quick cleaning of the coils and the radiator.

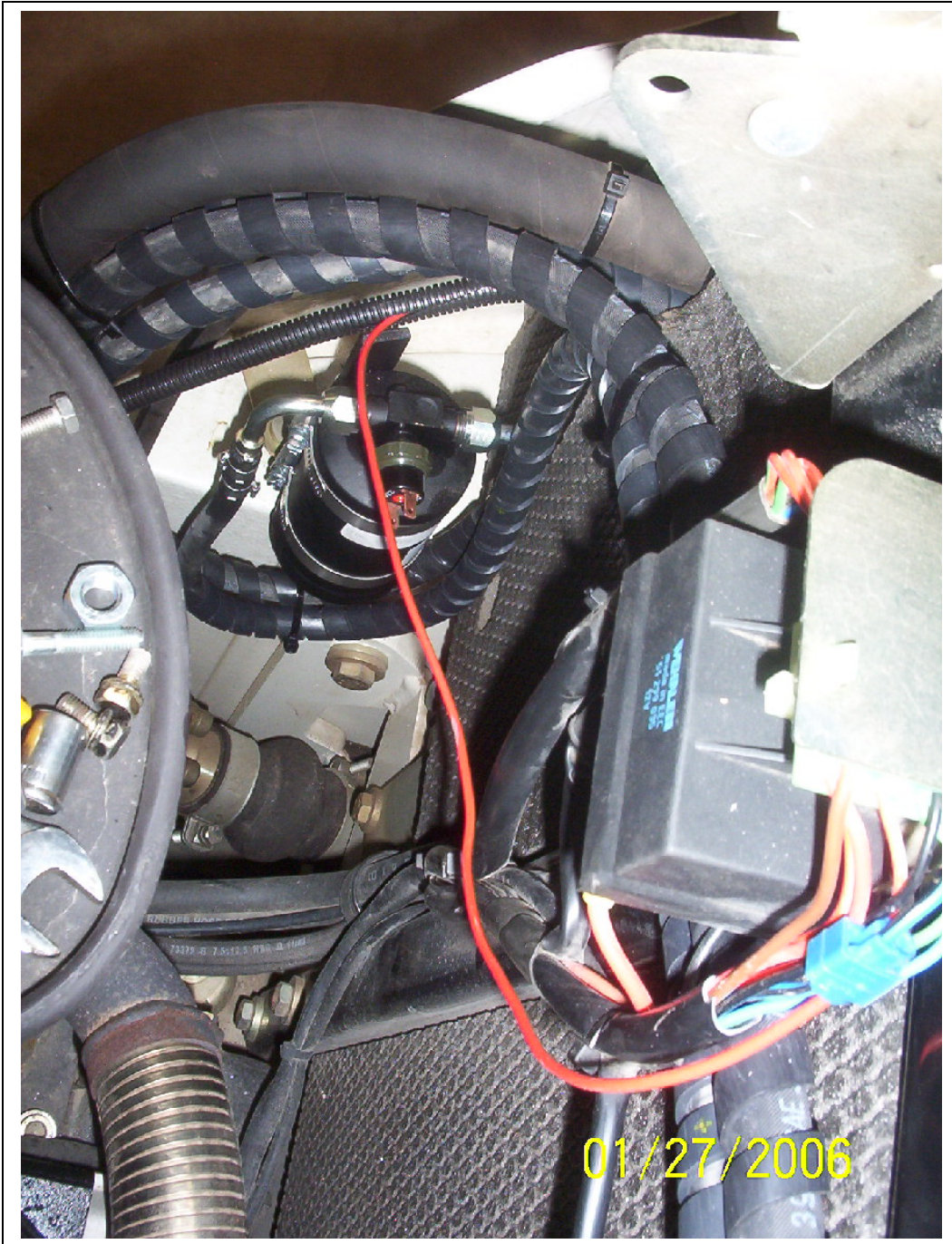


Remove the sound dampener to allow the hood to close. It is secured with three fiberglass legs that can easily be cut through.



Hole saw two 1 1/4" holes as shown and insert grommets.

DRIER



The drier and bracket will be located on the lower left inside engine compartment below where the other hose comes through into the engine compartment.



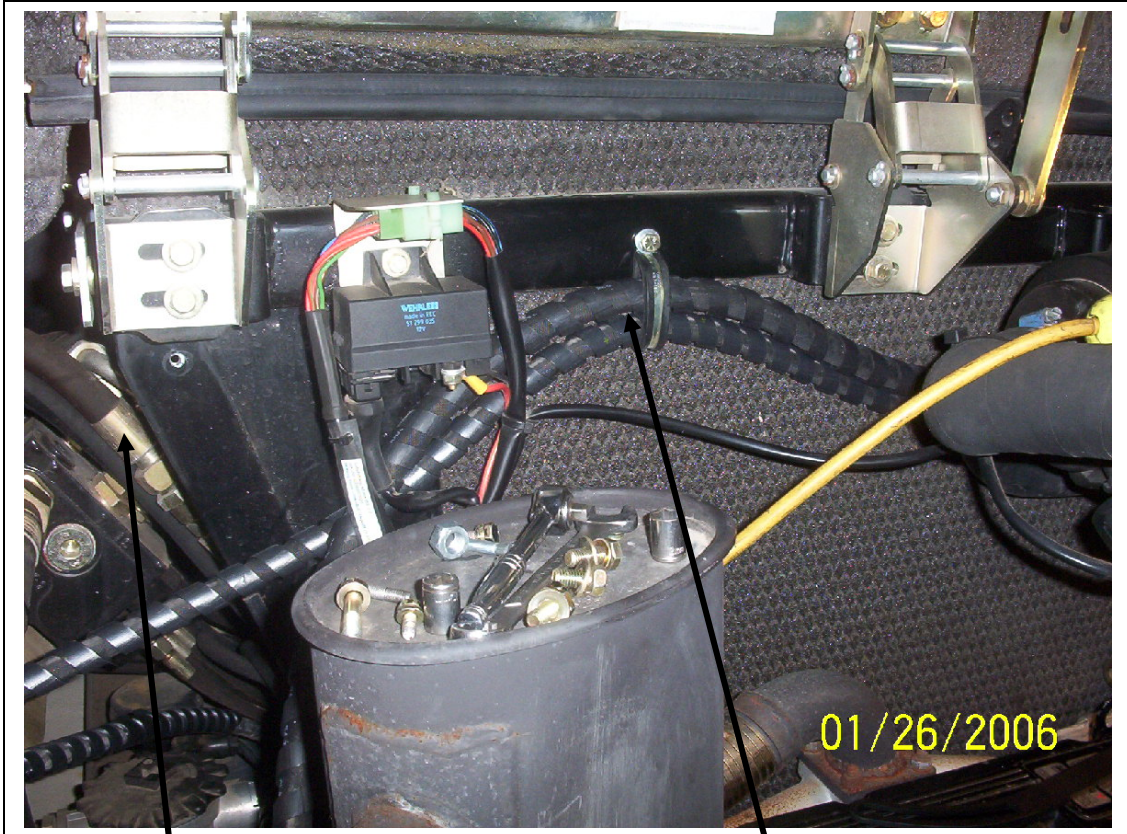
Install drier bracket as shown and tighten.



Fasten drier to bracket as shown using two #48 gear clamps.

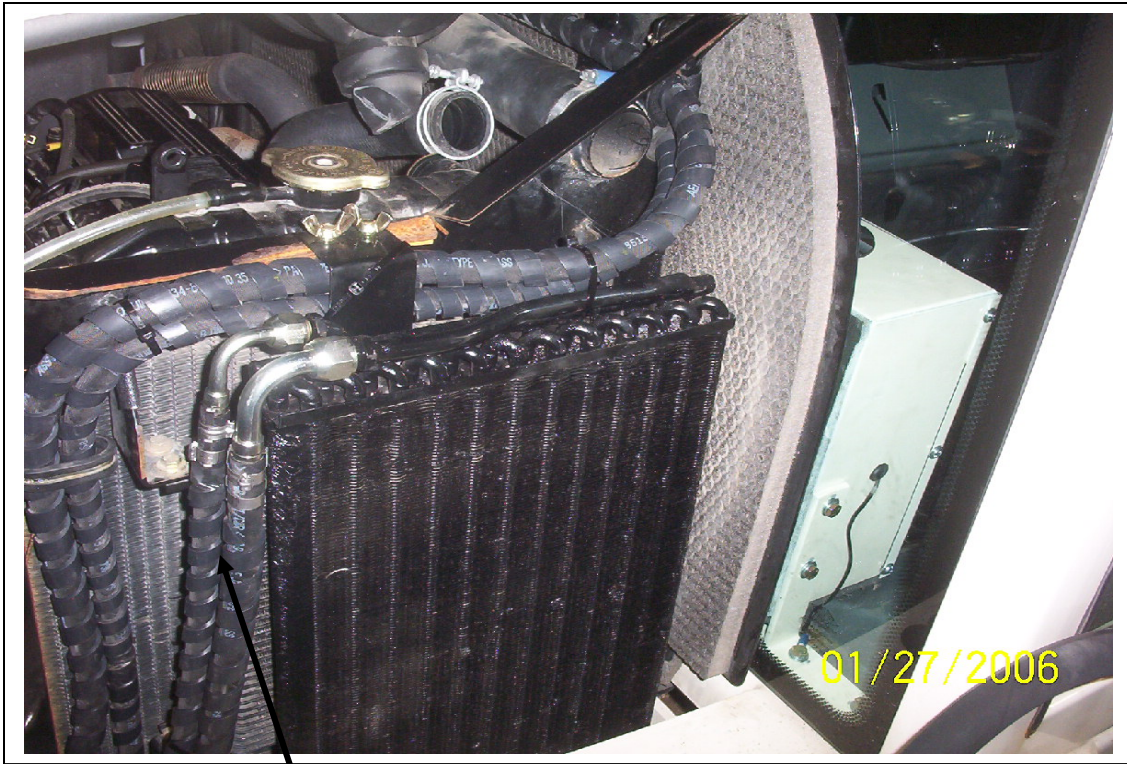
HOSE ROUTING





This panel temporarily removed for hose routing.

Hose wrap all hoses prior to installing them.



The #6 and 8 hoses from the condenser loop down below the rad before coming back up and along the rad so that the condenser can be easily removed for cleaning.



Hoses at condenser



Hoses going through previously drilled holes in the panel into engine compartment



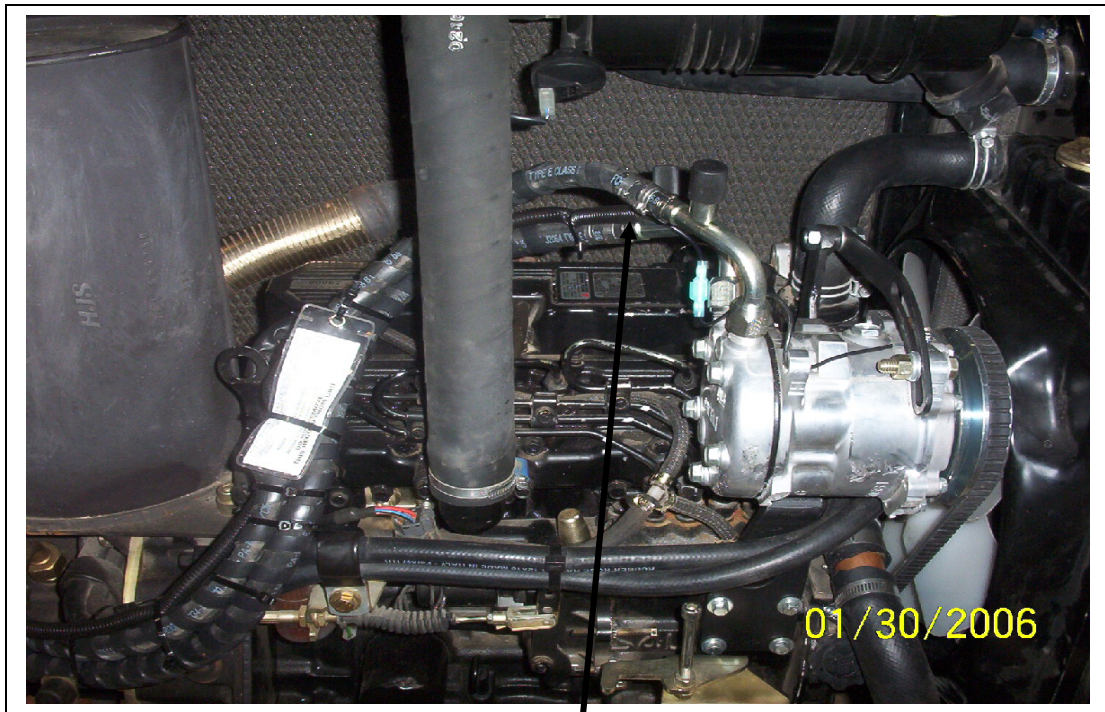
Receiver drier



Drain tube connected.

Hoses connected at the evaporator.

The hoses run along with many other hoses into the compartment behind the seat panel under the floor panel. Feed through from under cab and retrieve in compartment behind seat.



Hose orientation at compressor

ELECTRICAL

This unit comes with a pre-assembled wire harness for ease of installation. Once the floor panel and hose access panel are removed, and the evaporator box in place, you will be able to run the wire harness.

NOTES: When mounting the evaporator box, be sure to mount the ground wire with the front mount foot of the evap box.

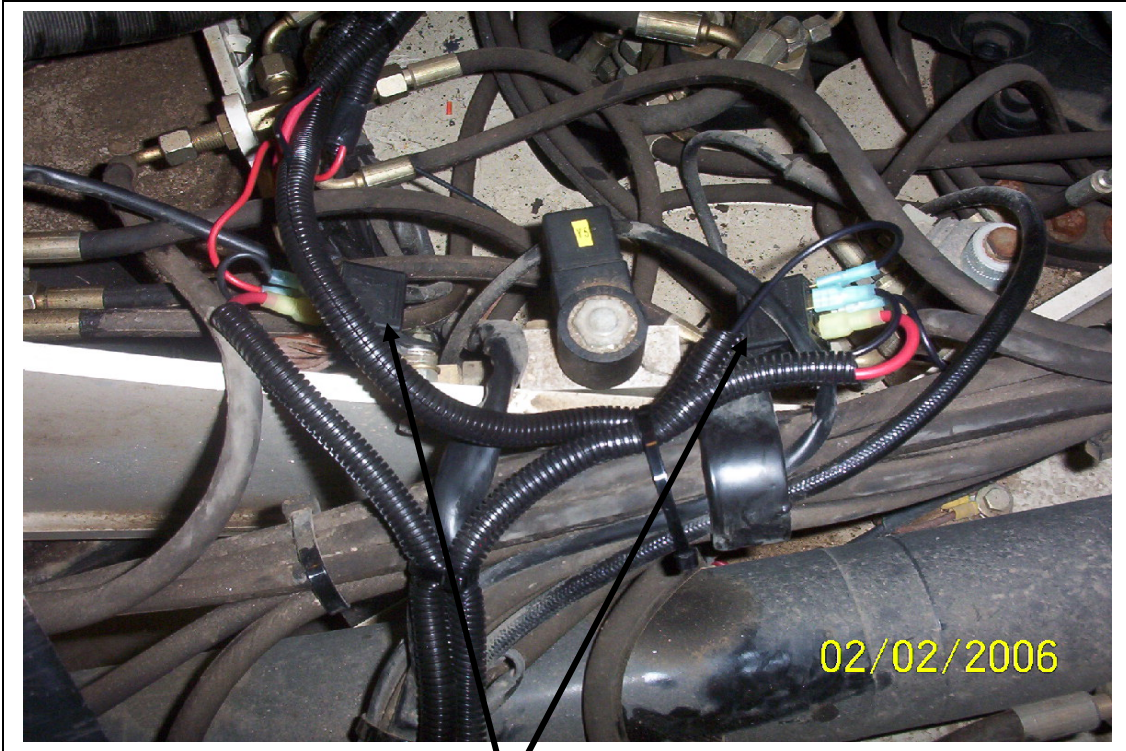


This ground wire no longer comes out here. It now comes out of the right side of the box.

The hose access panel is located in the engine compartment.



The floor panel requires modifications.



Around the middle of the floor panel there are two hose clamps. Mount a 12v relay with one of the hose clamps using the existing hardware.



Now connect the weather pak connector from the wire harness to the evaporator box connector.

NOTE: Only one 3 pin weatherpack connector now coming out of box. White 14ga clutch wire from the switch box located thermostat to the binary switch on the drier.

Run the switch part of the harness up from the floor panel area beside the console to the switch box and mount the blower and thermostat. (Do not mount the switch box yet.)



This small louver box provides air towards the top of the cab. It mounts in the right rear corner on the ledge beside the window. Run the switch box wiring and flex duct beside the console to the switch box mount location.



Connect wiring as shown.

The thermostat is mounted in this location.



Connect flex hose to louver and set in place. Squeeze hose along wall and connect to hose adaptor at evap box. Use #10 x 1/2" self drilling screws to mount box in place.

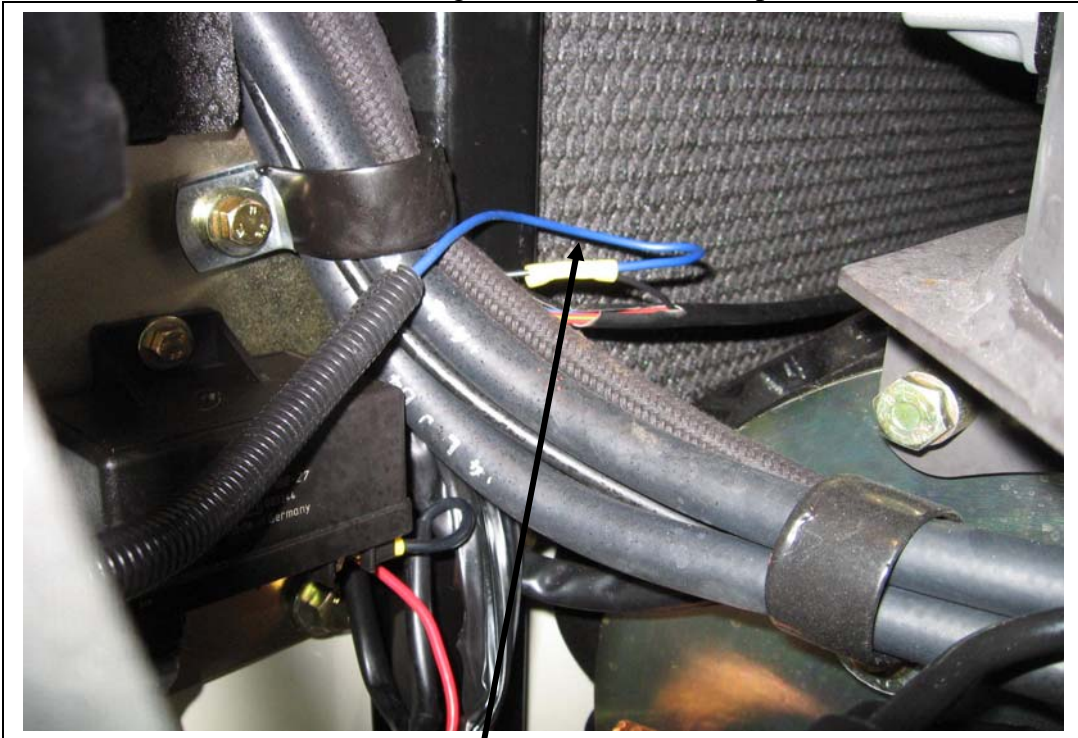


Set louver into box and fasten.

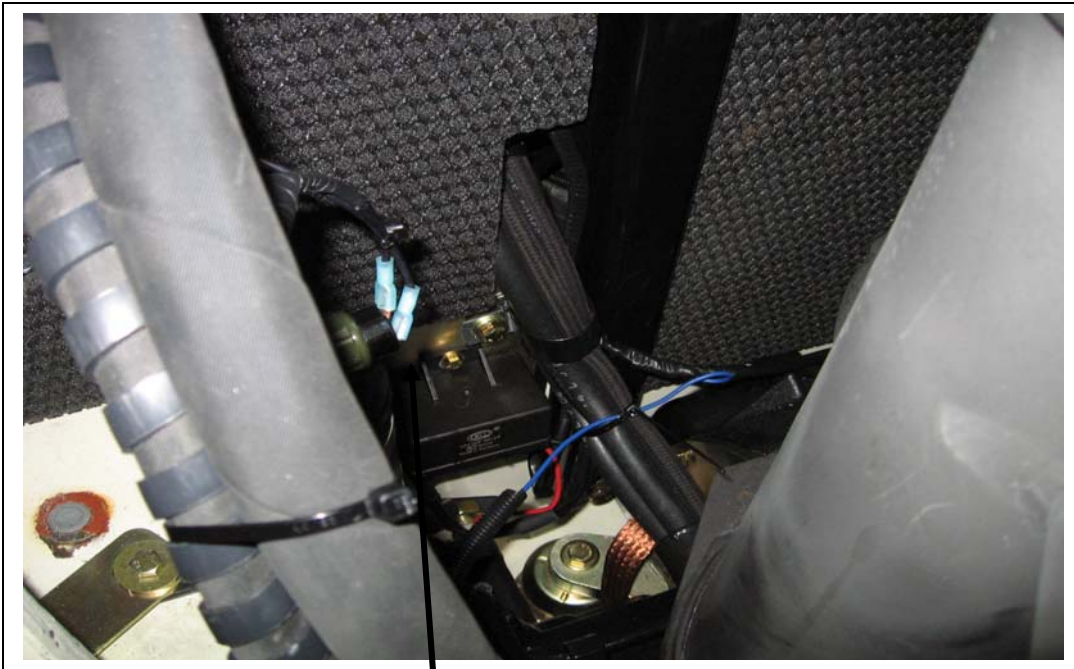
Run the 14ga white clutch wire and the 14ga red ignition live wire part of the harness out with the hoses and through the hose access panel. Connect the white clutch wire to the binary switch and the red wire to the blue/black ignition live wire in the engine compartment using the blue vampire connector supplied.



White 14ga clutch wire from evaporator.



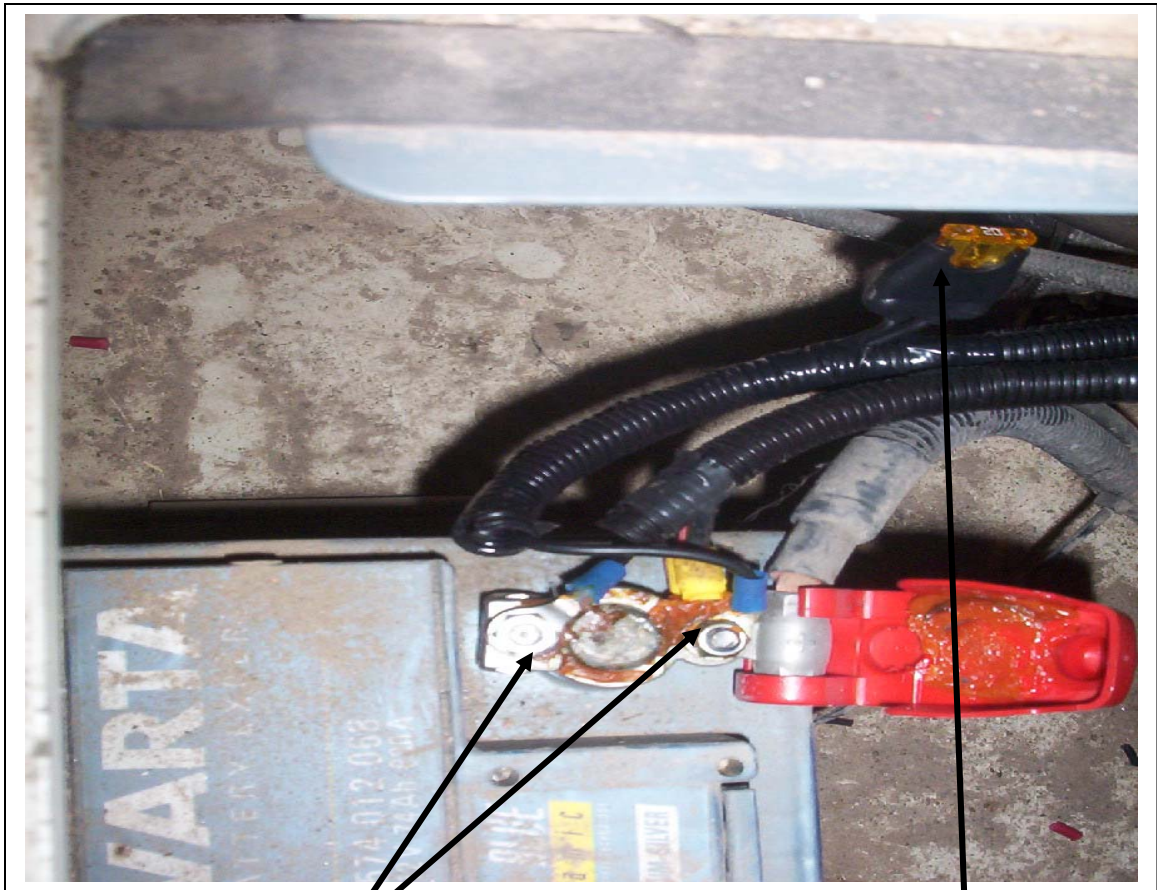
14ga red wire connected to the blue/black ignition live.



Run the 14ga white wire supplied with the hoses from the other terminal on the binary switch to the compressor.



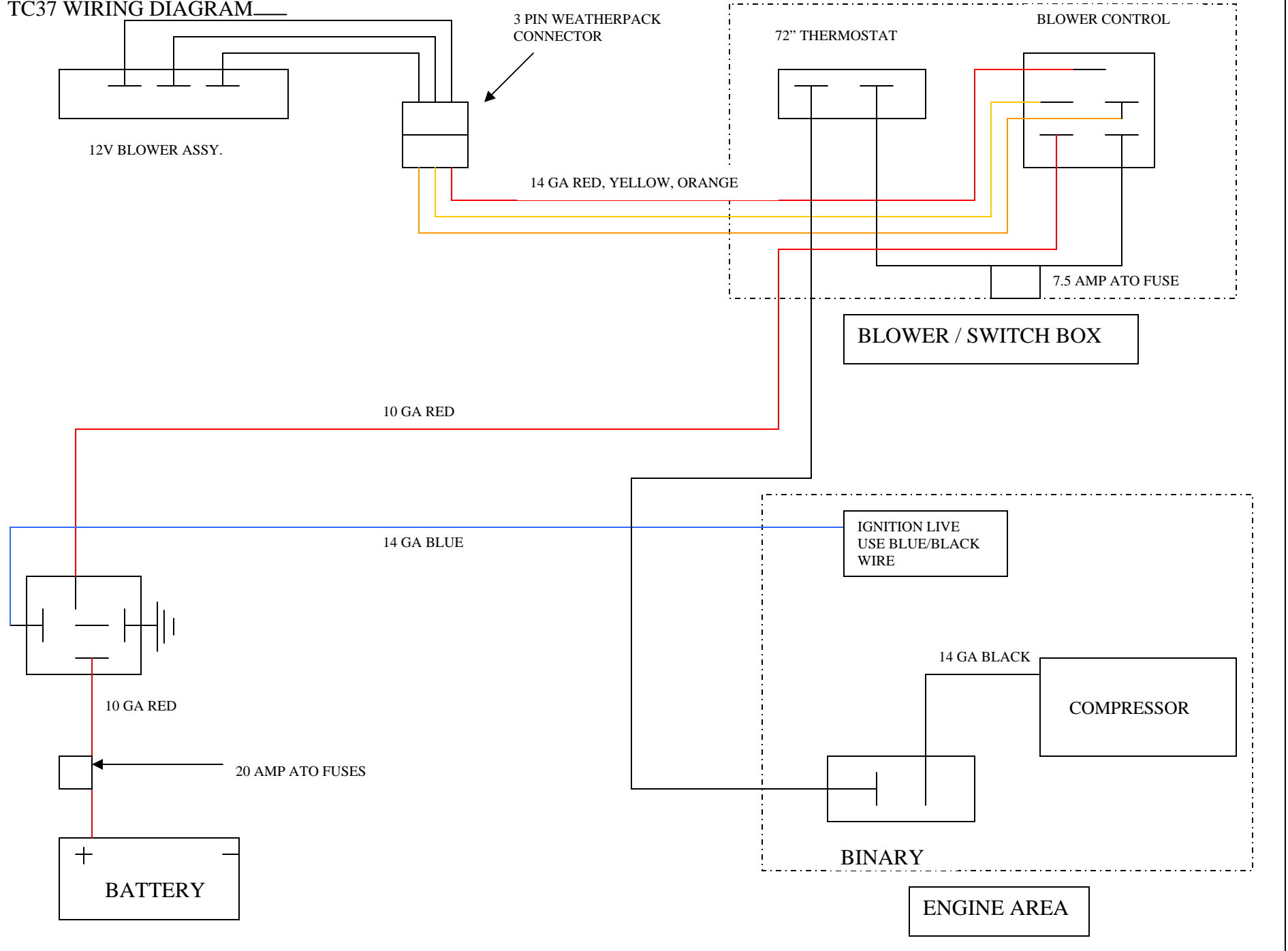
White wire in loom from binary to compressor.



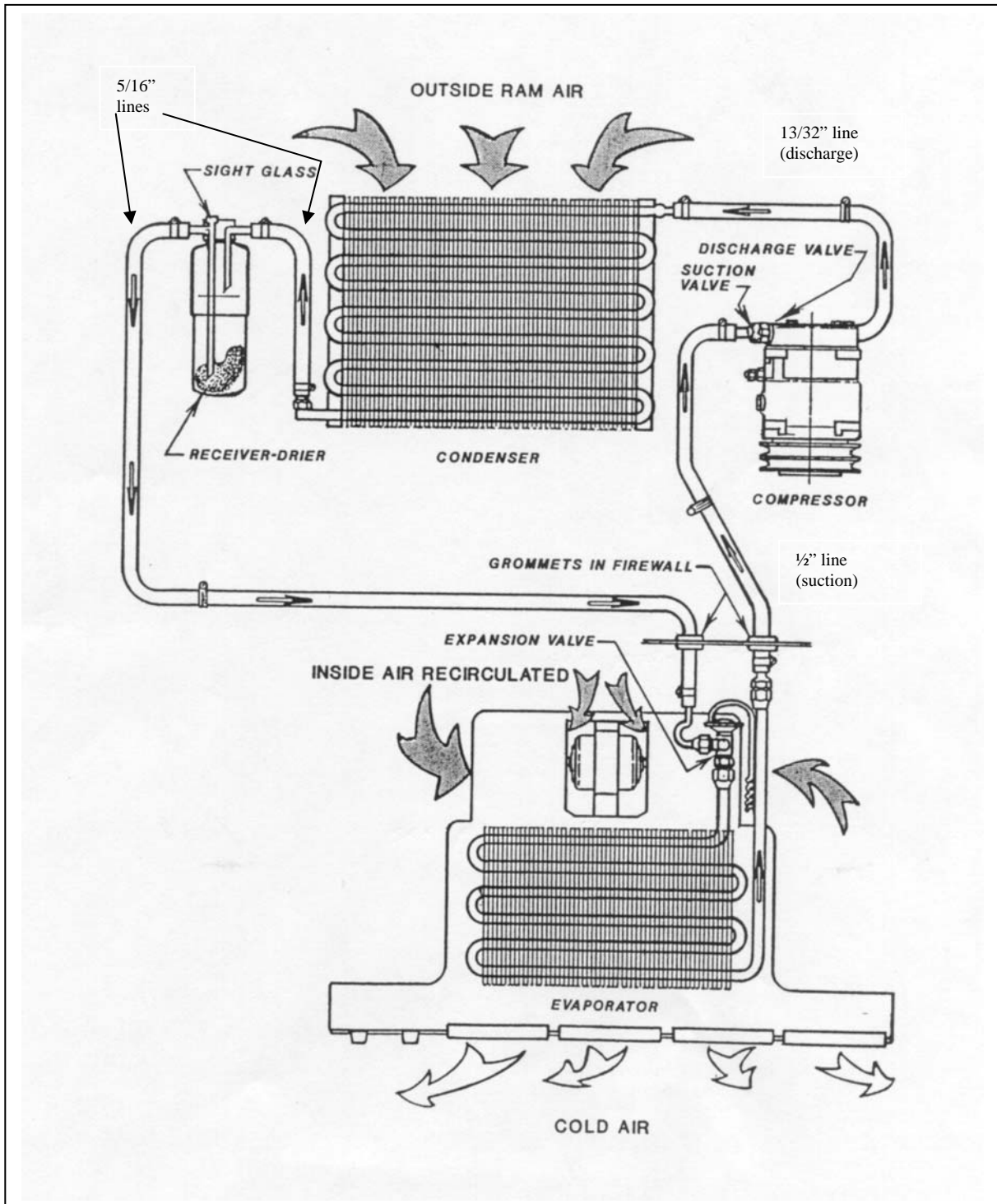
Two main power wires connected at the battery.

20 amp fuse on one of the power wires.

TC37 WIRING DIAGRAM



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.

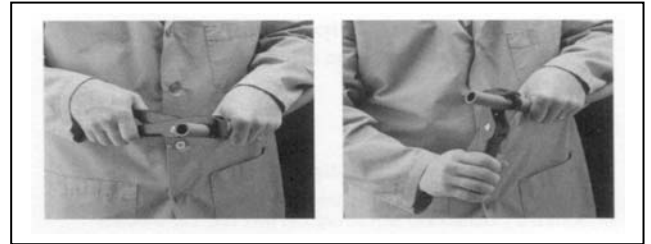
By looking at all these different factors, the area of an evaporator coil most likely to be the coldest can be determined.

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.

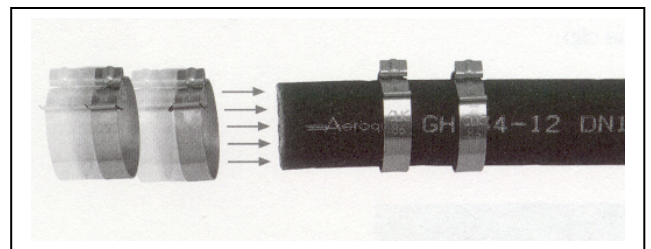
If the thermostat doesn't cycle off after a reasonable cool down period and the air outlet temperature has dropped below 40° F, the cut in and cut out settings should be adjusted until the compressor is cycling on and off regularly. Let the system run for a decent time period (at least 15 min) and then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

Aeroquip E-Z Clip Assembly Instructions

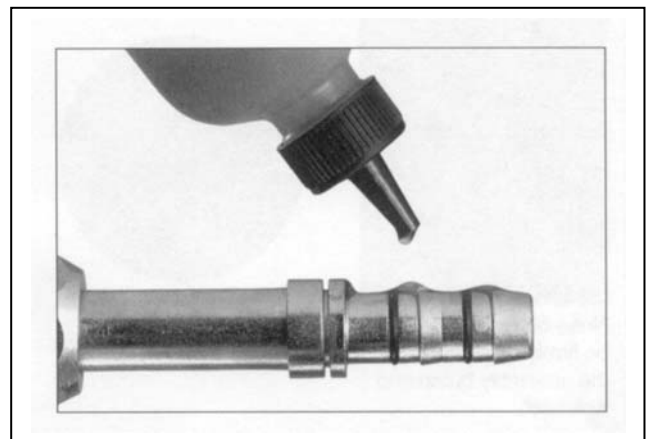
Step 1. Cut the hose to proper length with an appropriate cutting tool. Aeroquips hand held hose cutter has been specially designed for cutting all non-wire reinforced hose, such as GH-134 Multi-Refrigerant hose. Be sure the cut is made square to the hose length.



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.

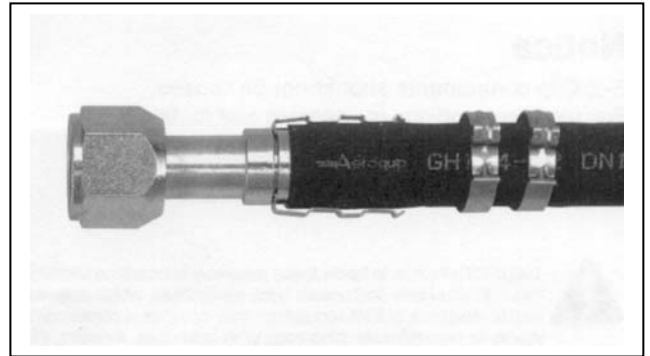


Step 4. Insert the nipple into the hose. To ensure that the nipple is fully inserted, check the gap between the cut end of the hose and the shoulder on the nipple. Care should be taken to avoid kinking or other damage to the hose during nipple insertion. NOTE: Be sure to wipe excess oil from the nipple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

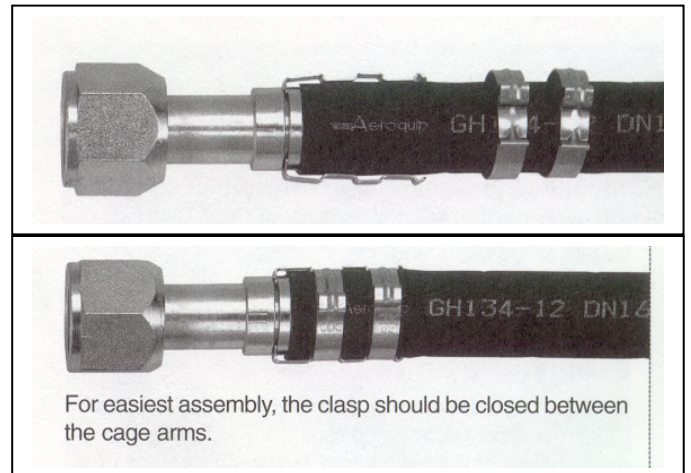


Step 5. Snap the cage into the groove on the nipple. The arms should extend over the hose length. When the cage has been correctly installed in the cage groove, the cage will be able to rotate in the groove. This step **MUST** be performed to ensure:

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.

