

**TEREX 760/860B TIER 3  
BACKHOE LOADER  
INSTALLATION INSTRUCTIONS**



**1-800-267-2665  
1-888-267-3745 (FAX)**

## EVAPORATOR ASSEMBLY



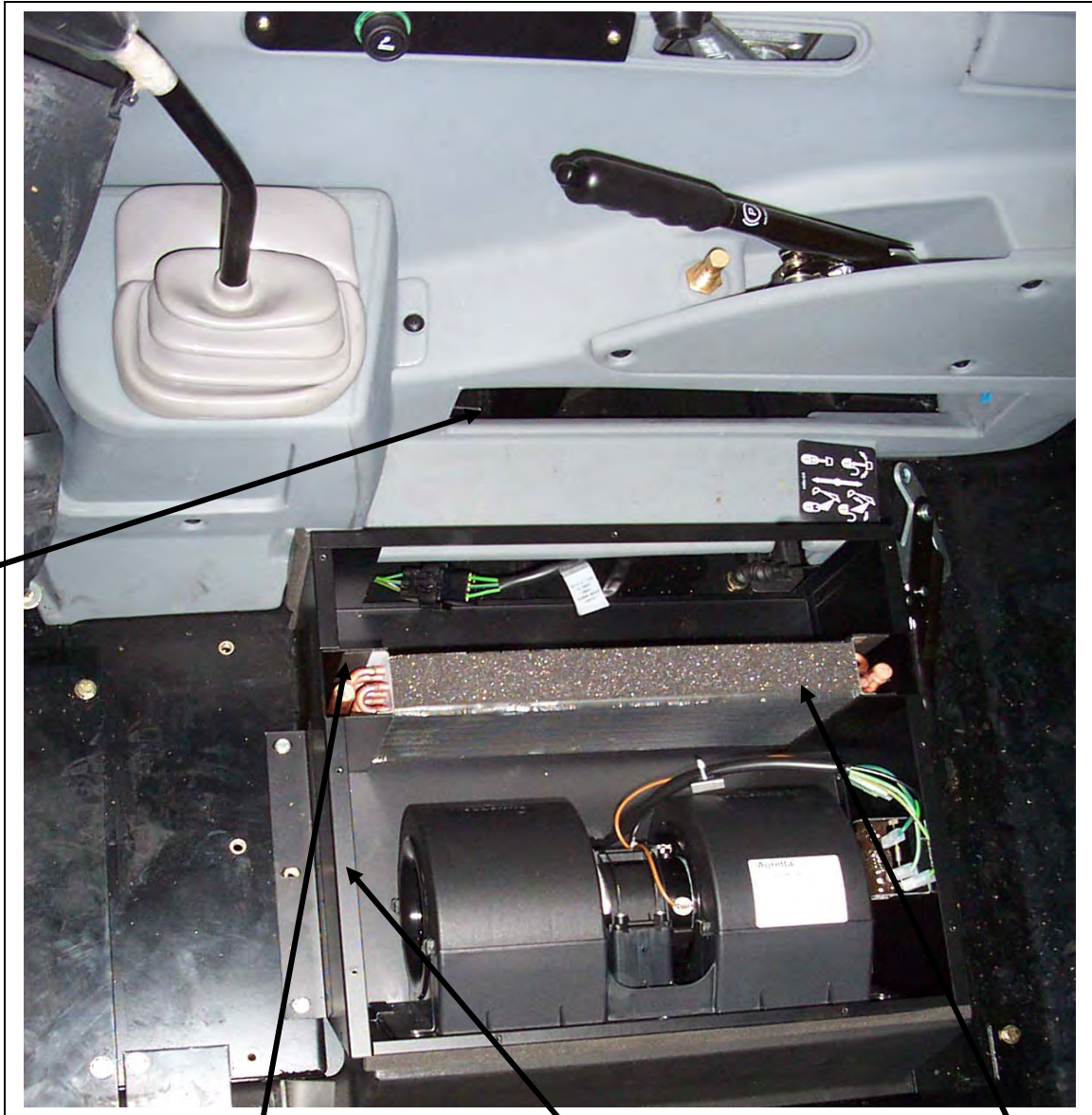
Floor mat removed

Inside air recirculation louver

Seat removed



2<sup>nd</sup> inside air recirculation louver must be removed to remove the seat frame from the heat/AC box.



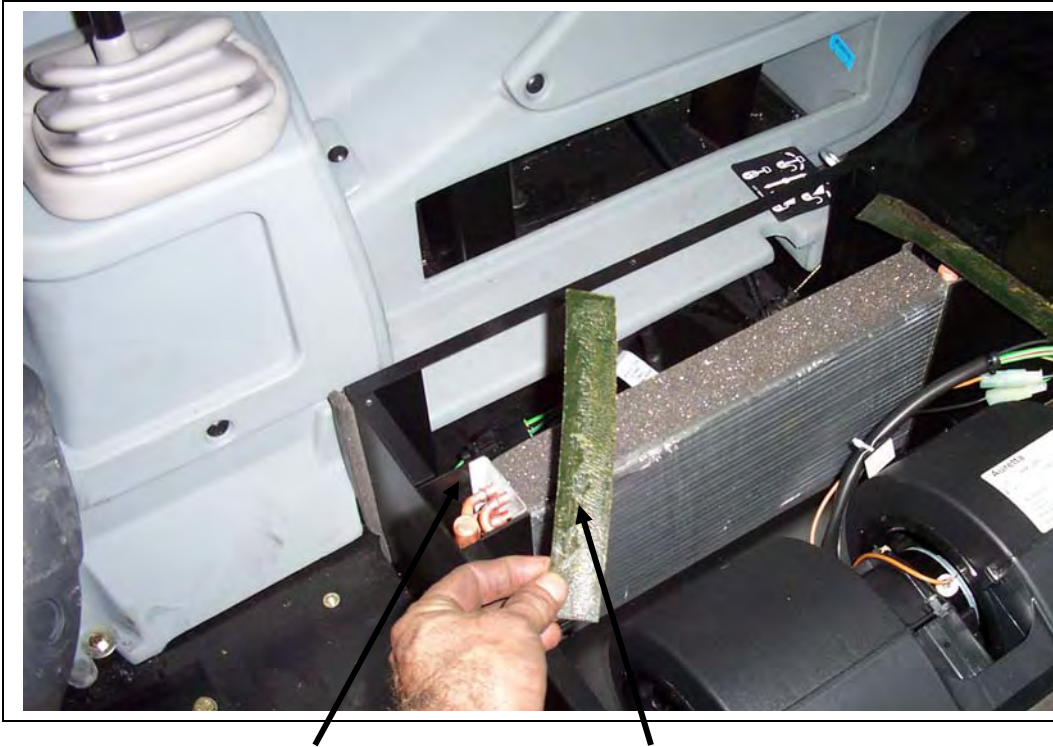
Inside air  
recirculation  
louver  
removed

Tar paper gasket  
material

Seat frame and heat/AC  
box lid removed

Factory heater coil





Tar paper gasket was here( same on other end of coil)

Tar paper gasket material removed from between heater coil flange and the heater box mount flange



Copper glue in drain tubes. Drill a 1/2" hole through both layers of the box floor . Glue in using epoxy

2 2" holes drilled for A/C coil fittings to go through

Outer layer of heat/ AC box

Inner layer of heat/AC box



Copper glue in drain tube

2 2" holes overlapping for AC coil fittings and expansion valve to go through.



Thermostat probe run before A/C coil is installed

The gap between the two metal layers of the heat/AC box sealed with tar tape





AC coil flange slips in between heat coil flange and mount bracket

A/C coil installed

Thermostat probe installed between 1<sup>st</sup> and 2<sup>nd</sup> rows of tubes, 2" in from the fitting end of the coil about 6" deep



The expansion valve is turned about 90° to point forward and then tightened into place

Drain tube extensions

1/2" nut on AC coil



Drain tubes with restrictors installed ready to attach to the drain tube extensions



New stop location for inside air control handle. Drill a new hole the same size as the original hole.

Original stop location



Stop pin in place on inside air recirculation louver. – NOTE: The louver can't shut tight.



Remove the louver veins from the rectangular bezel on the second inside air recirculation louver. The bezel will be re-installed without the veins.

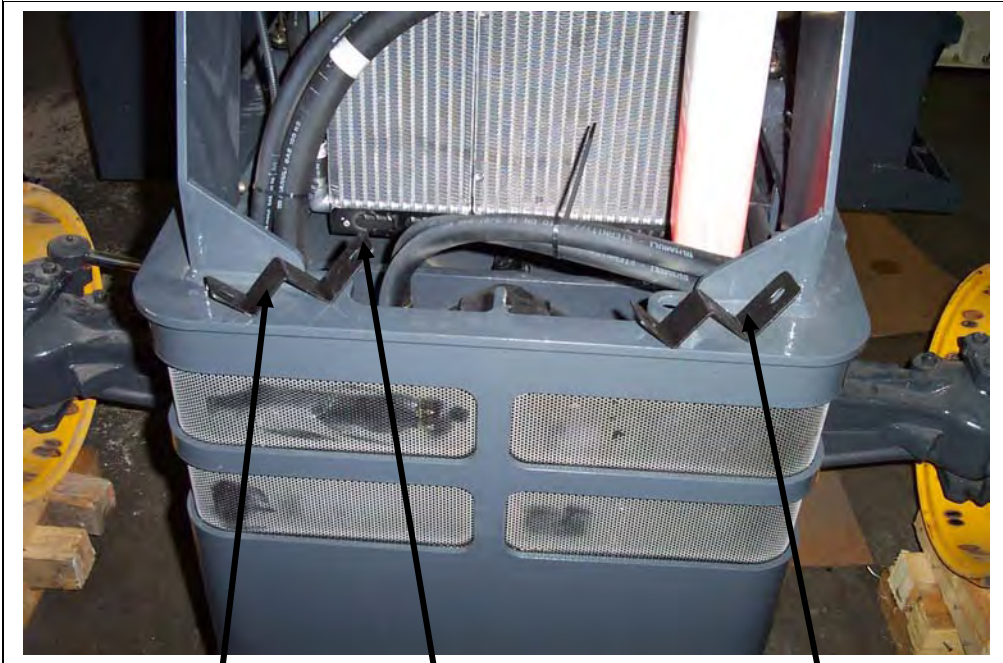


## CONDENSER



Lower oil cooler frame has two M6 threaded holes for mounting the lower condenser brackets. One on each side. Similar location to top holes.

**\*\*Picture shows older machine\*\***



Condenser bolt  
to shorter side.

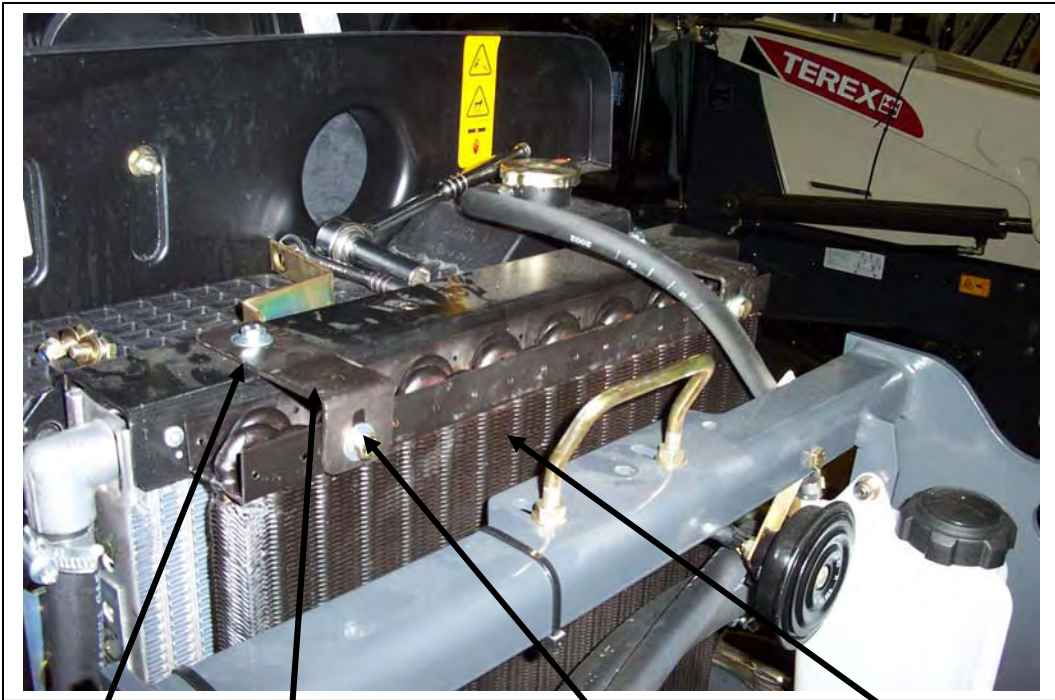
Longer side bolts to oil  
cooler frame.

Lower condenser  
mount brackets

**\*\*Picture shows older machine.\*\***



Lower condenser mount brackets installed loosely.



M6 hardware

Upper condenser  
mount brackets

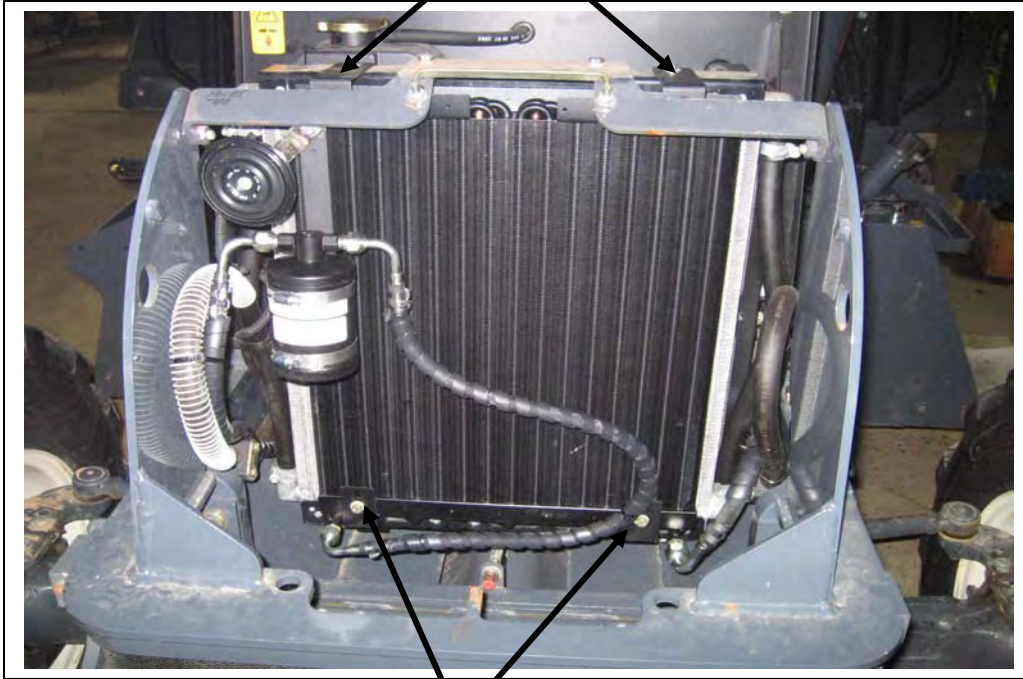
1/4" hardware securing  
condenser to all four  
mount brackets

Condenser coil

\*\*Picture shows older machine.\*\*



Upper condenser brackets.

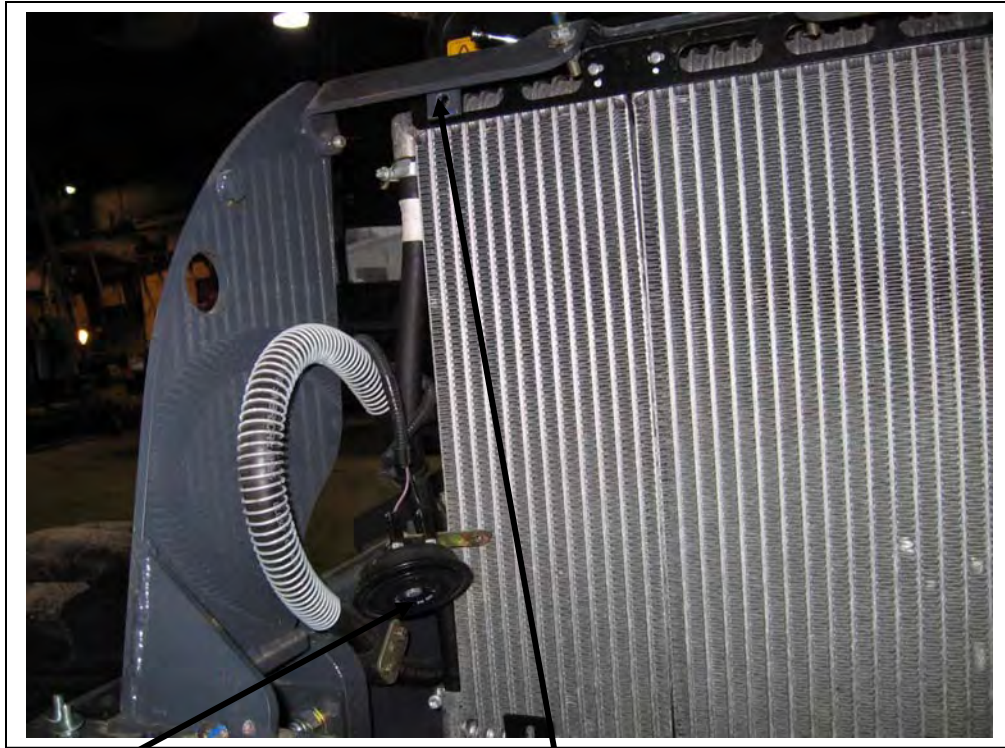


Lower condenser brackets

Position condenser for easy cleaning between the condenser and oil cooler, then tighten down all M6 and 1/4" mount bolts.

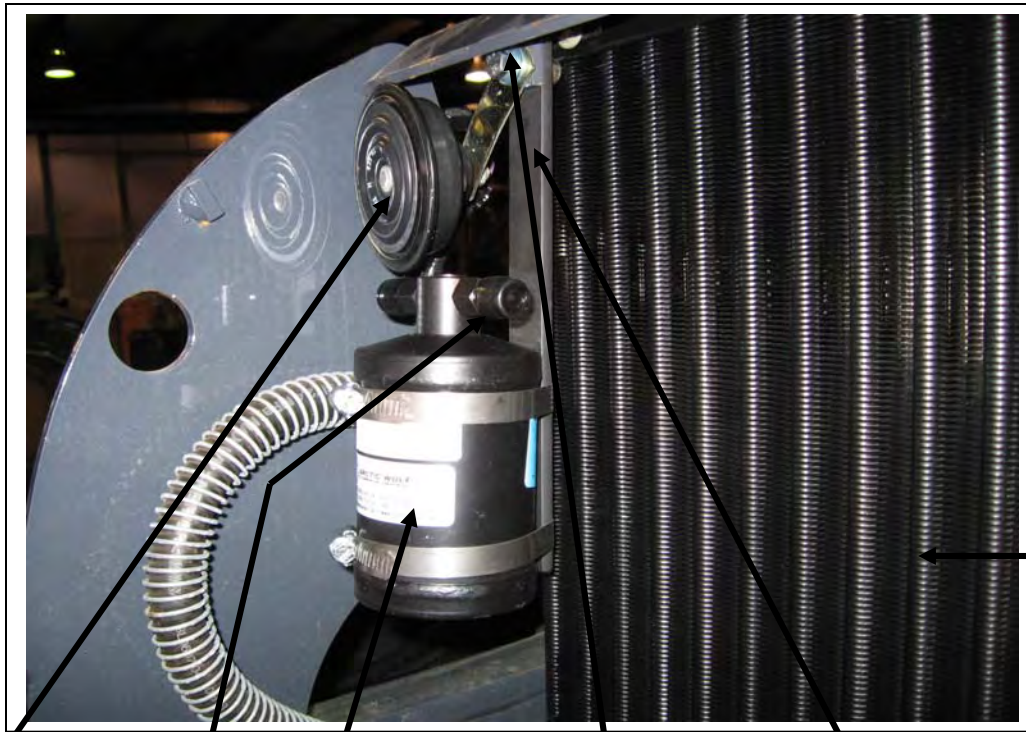


RECEIVER DRIER



Horn removed from mount point.

Mount point for drier bracket. Install drier bracket after condenser installed only. Place drier bracket on radiator side of mount point.



Horn

Receiver drier.  
Inlet side of drier.

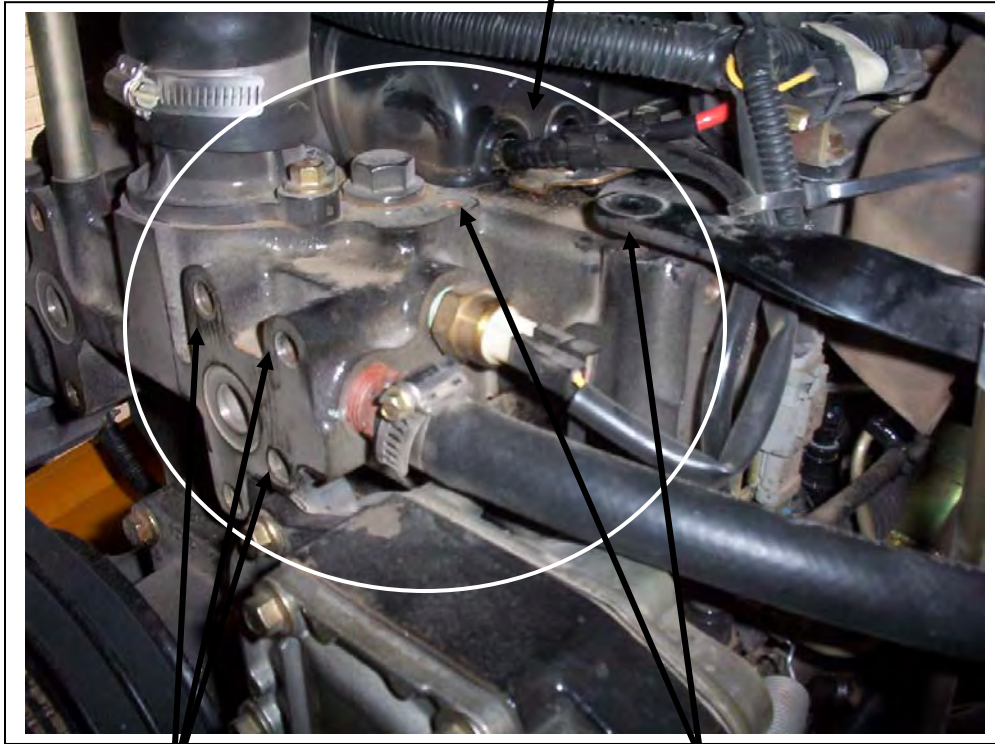
M8 x 20mm bolt.

Drier bracket on back side of mount point. Bracket has an M8 threaded

Condenser coil

# COMPRESSOR MOUNT

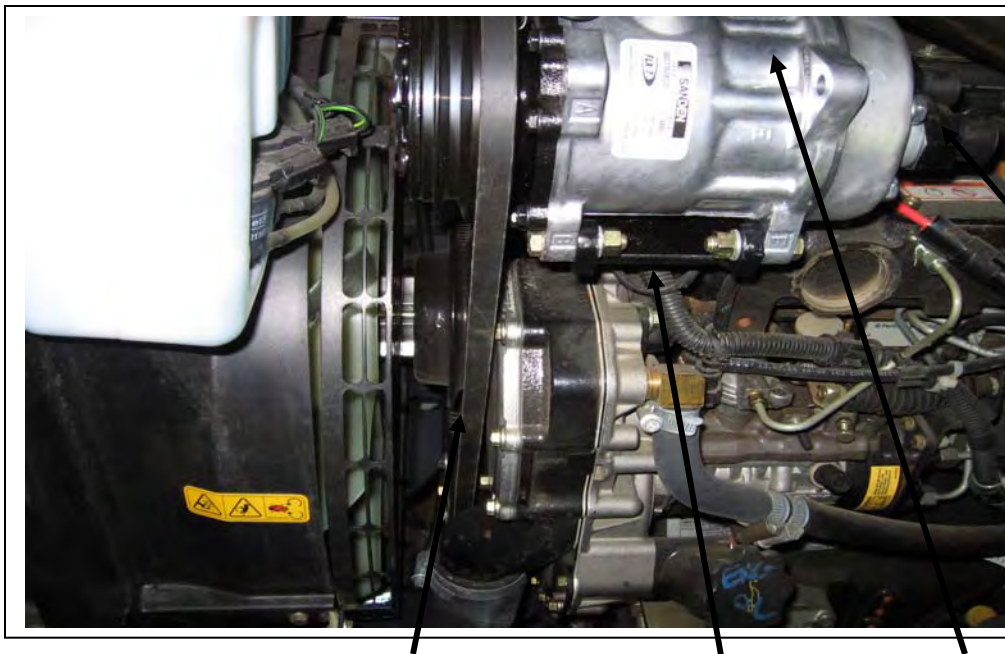
Compressor mount location.



Mount bolt to these three M10 holes.

Mount bolts to these two M8 holes.

\*\*NOTE: Slightly different engine configuration shown.

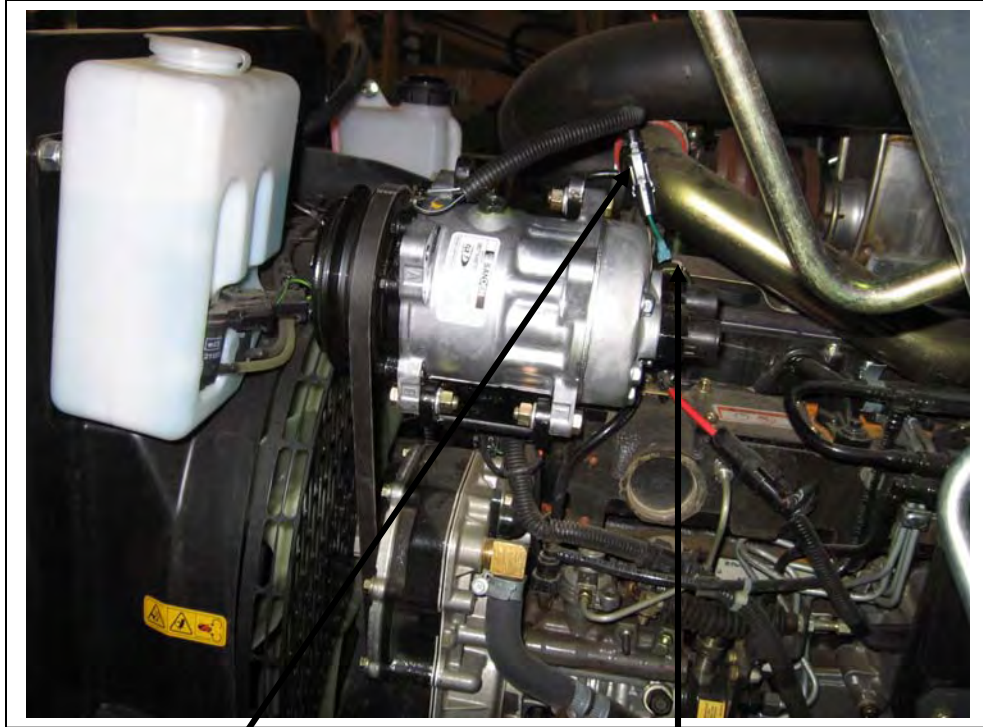


Horizontal O ring pad installed.

17670 belt on rear groove of compressor.

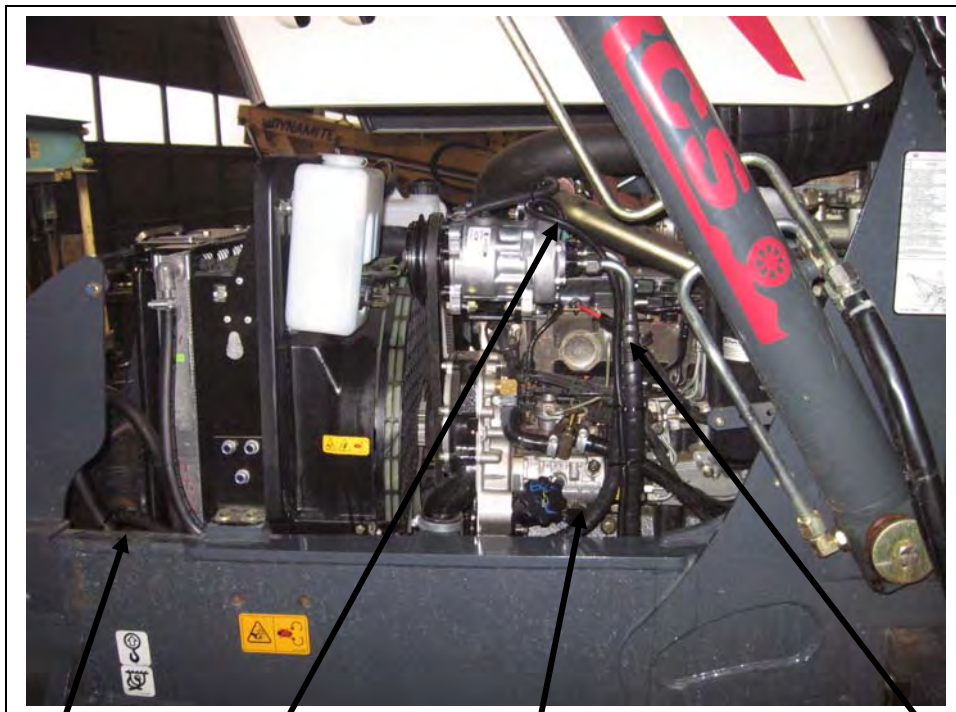
Compressor. mount.





Compressor clutch wire attached to binary switch.

Binary switch on Horizontal O ring pad.



13/32" hose going to condenser inlet fitting.

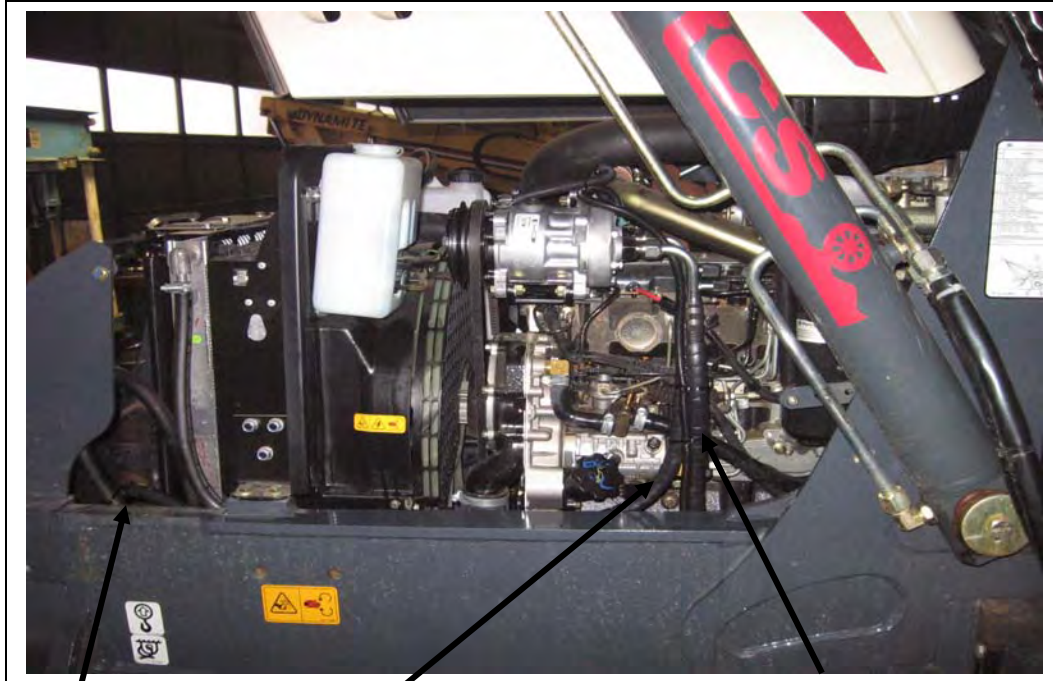
Clutch wire.

13/32" hose with 90° fitting with 134a access port.

The 1/2" hose has been changed to a straight fitting and is run back over top of the fuel filter and then down.



## HOSE RUNS



13/32" hose going to condenser inlet fitting.

13/32 hose with 90° fitting with 134a access port.

1/2" hose has had a change to a straight fitting and is run back over top of the fuel filter and then down.



5/16" hose between condenser and drier.

13/32" 90° fitting at condenser inlet.



5/16" 90° fitting at drier outlet on long 5.16" hose.

5/16" 90° fitting at condenser outlet

5/16" 90° fitting at drier inlet



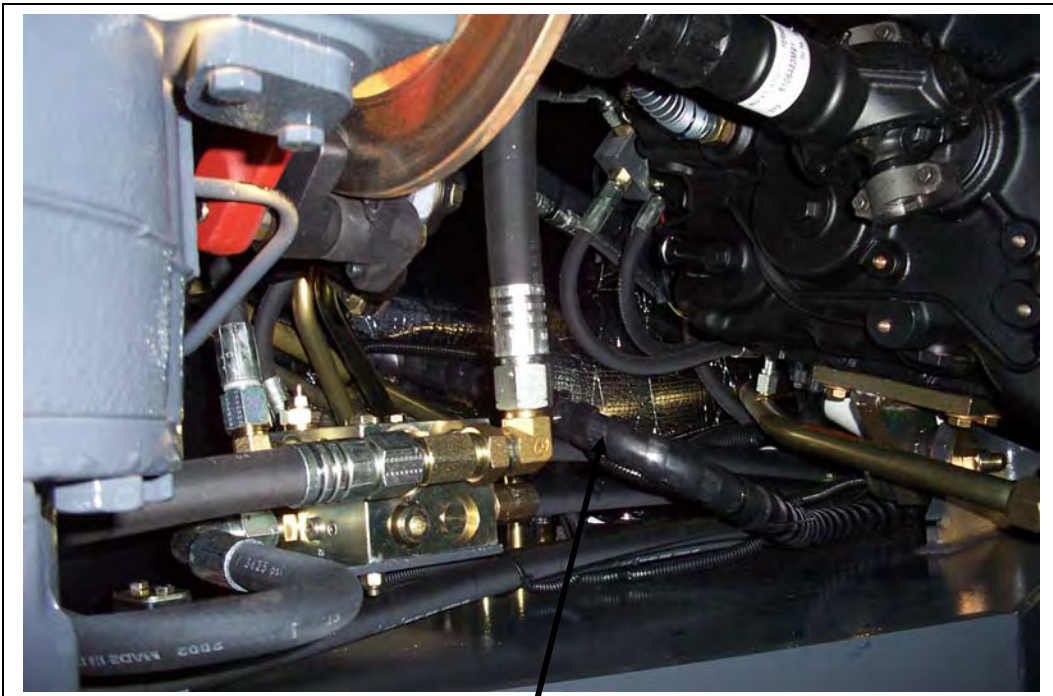
Clutch wire run along with 1/2" hose all the way to the heat/AC box

1/2" hose running down beside engine on left side and then towards the rear axle



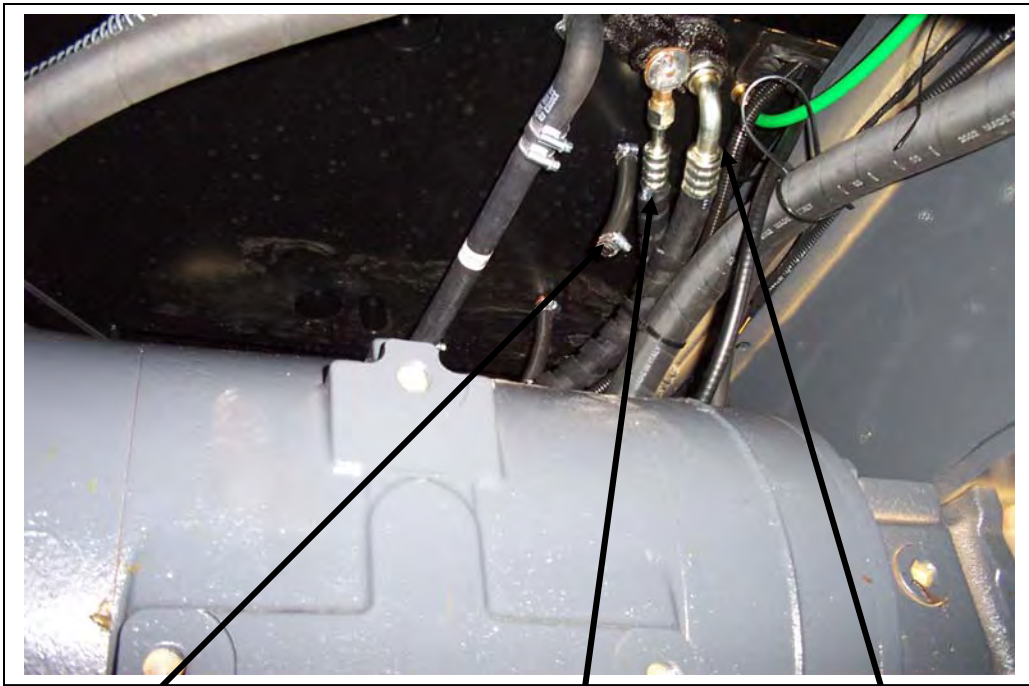


5/16" hose running along the right main frame rail from the drier back towards the rear axle



1/2" hose running up and over the rear axle and heading to the right side of the machine to the AC fittings at the heat/AC box.

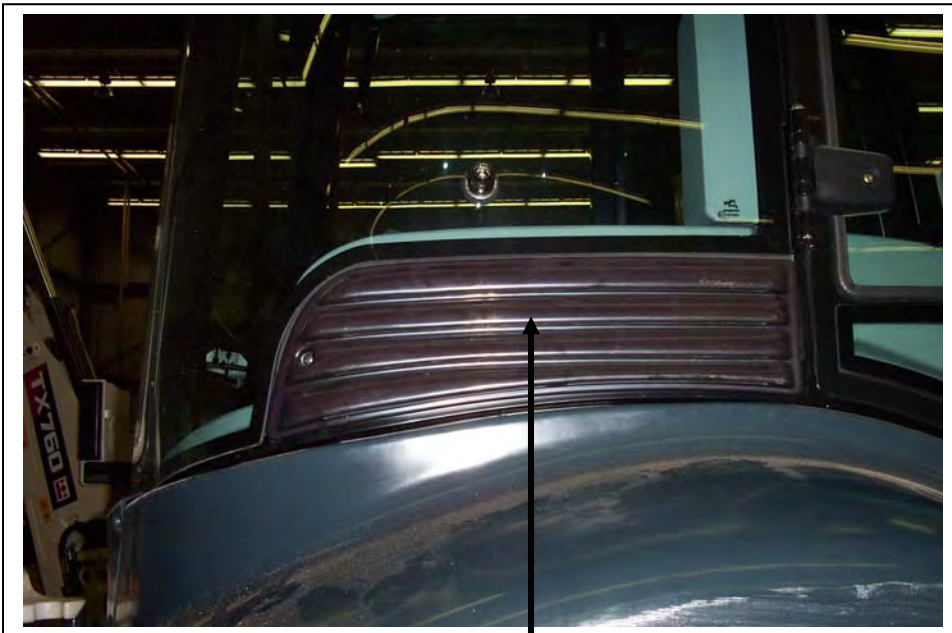




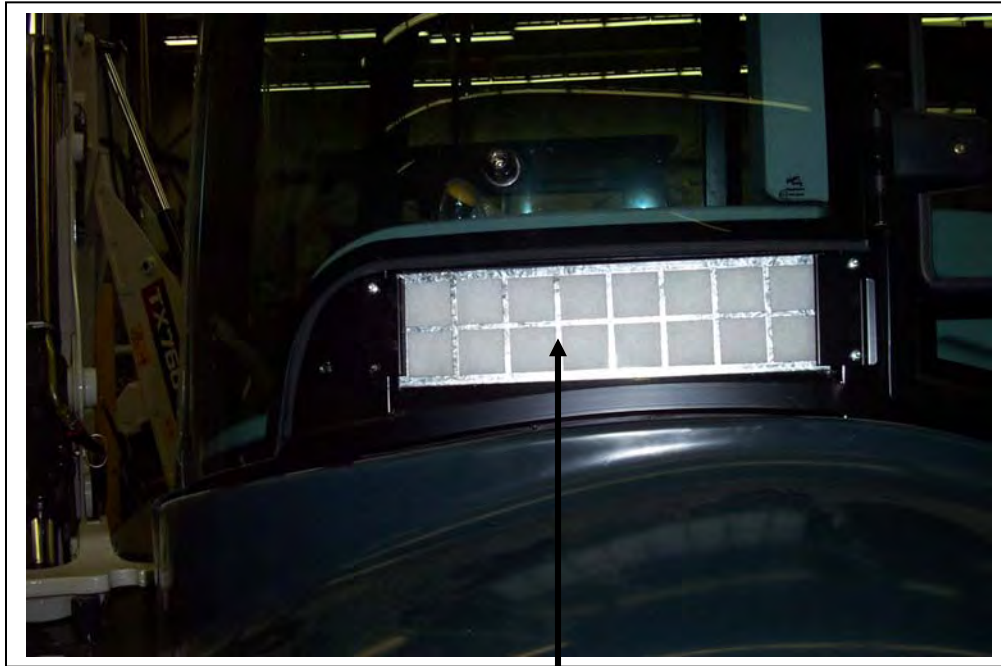
Drain tubes c/w restrictors

5/16" fitting on expansion valve

1/2" 90° fitting at evap coil valve



Outside air intake filter cover



Outside air intake filter



1/16" x 2 1/2" foam tape covering all but the bottom two intake holes for the outside air.



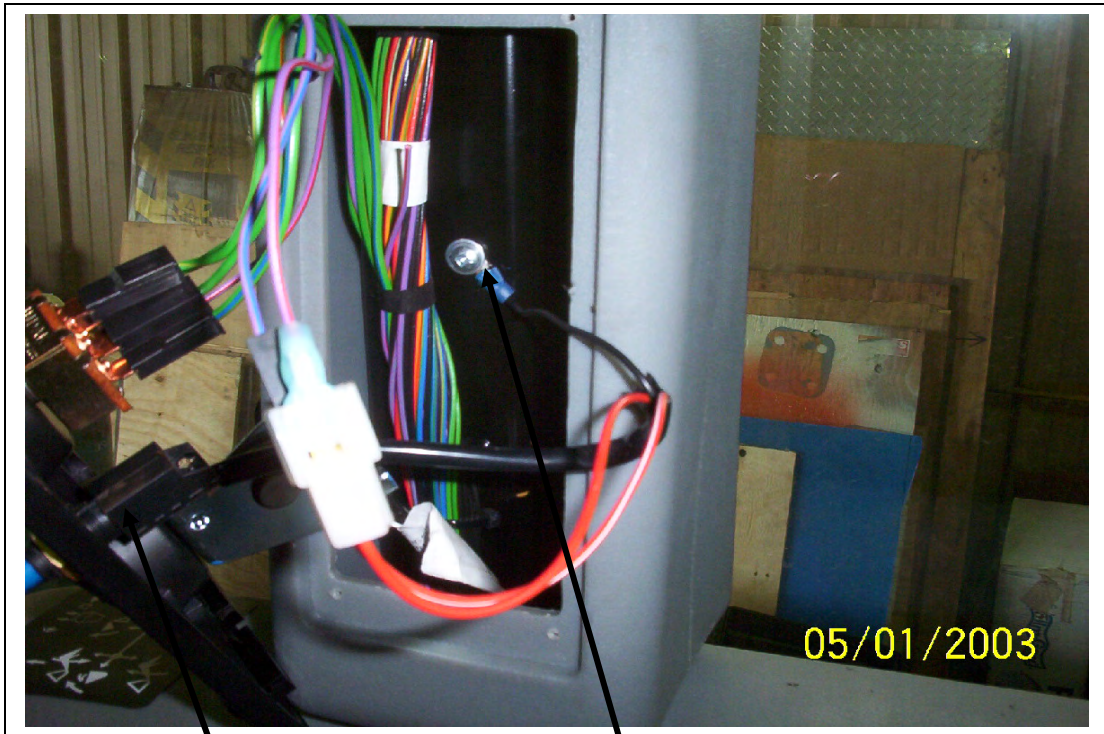
## ELECTRICAL



Heat/AC control panel unscrewed from frame

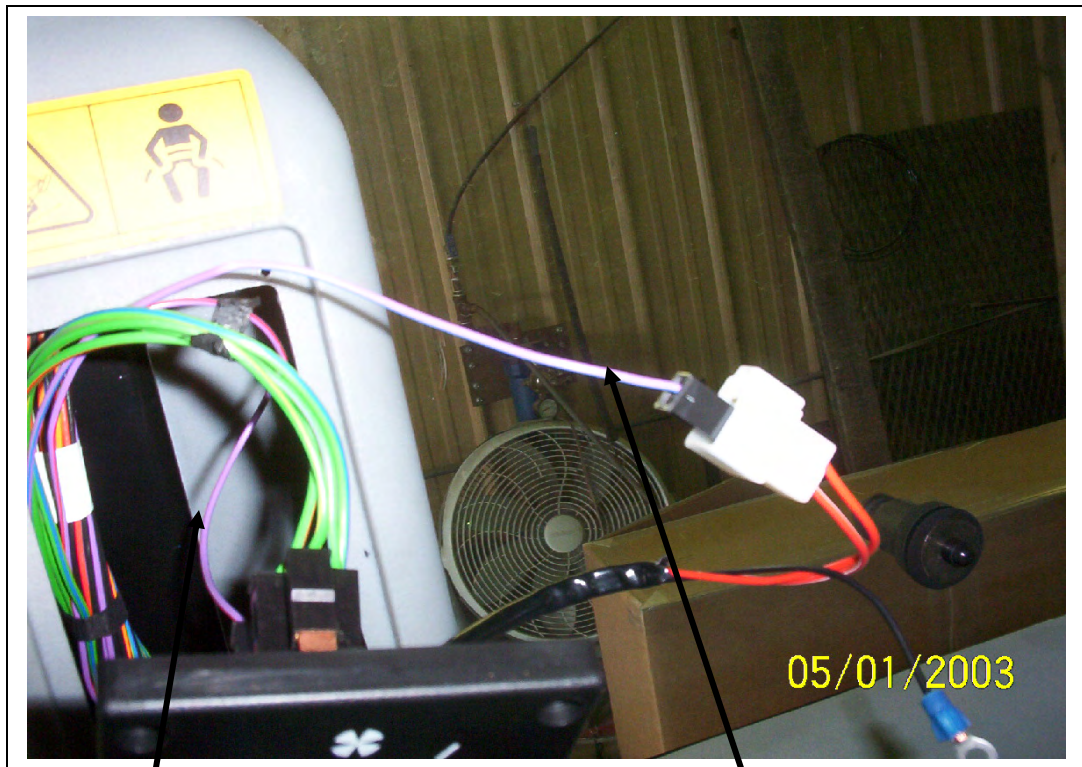


5/8" hole drilled for AC on/off pushbutton switch



A/C switch mounted on switch panel

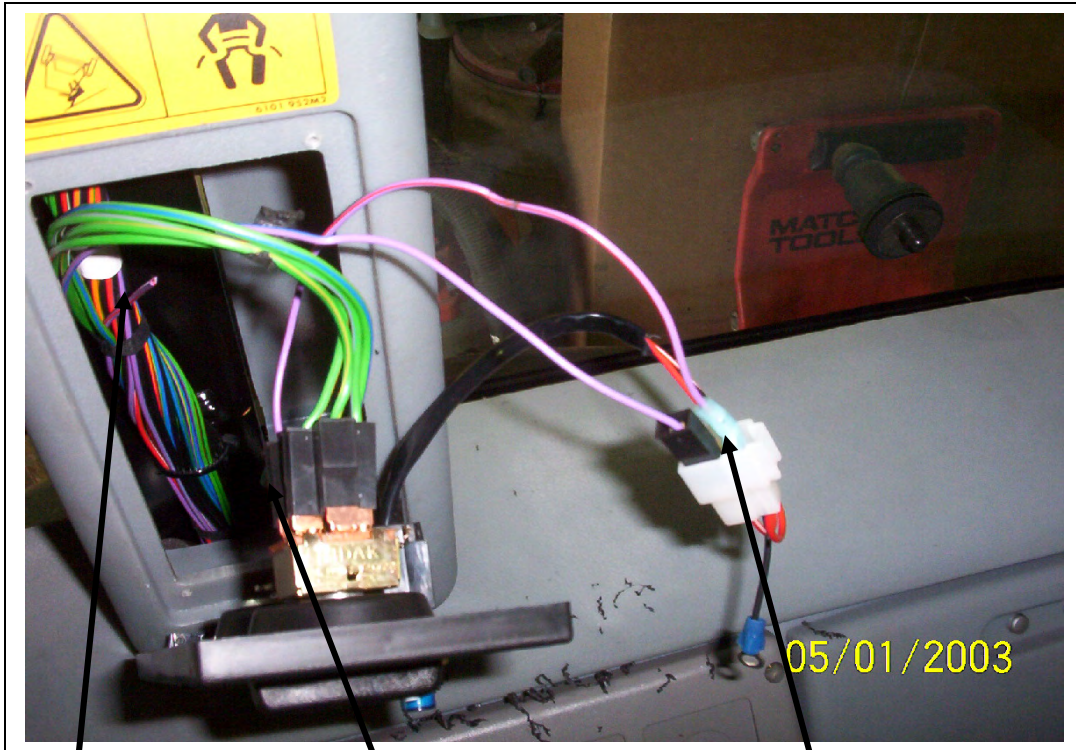
Ground wire for A/C switch screwed to cab post with self drilling screw.



Wire to run from blower switch clutch terminal to red wire on A/C switch.

Wire running from red with white tracer on A/C switch to the electrical plug behind the inside air intake louver.

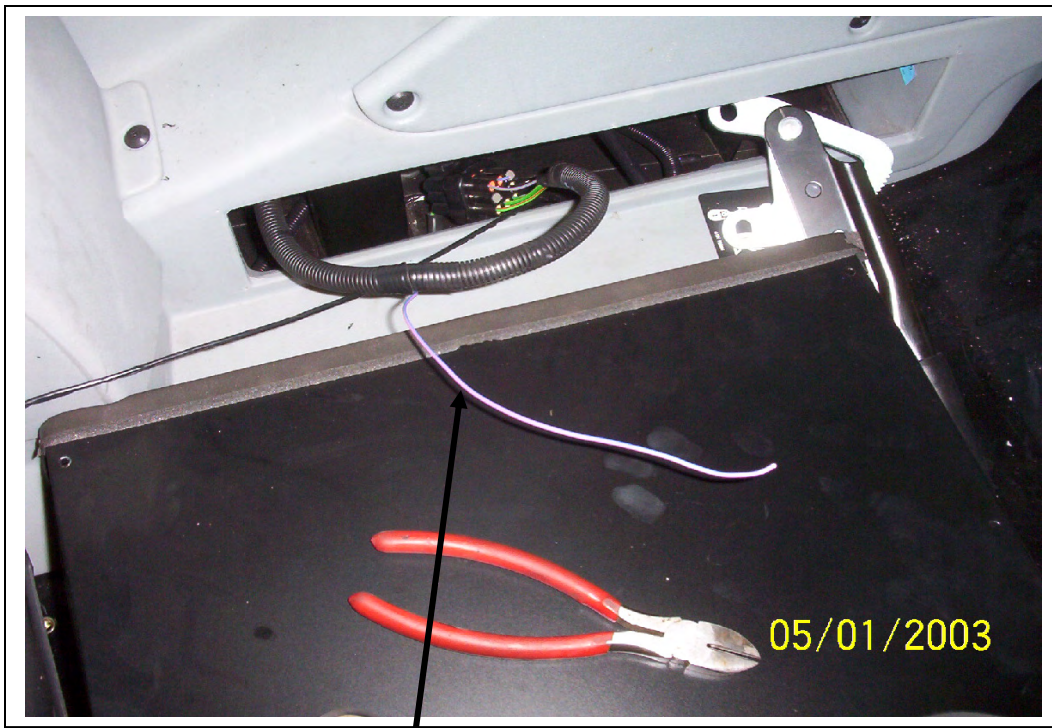




Wire cut out of bundle to run to the red wire on the A/C switch

Clutch terminal on blower switch.

Female quick disconnect installed on wire cut out of bundle.

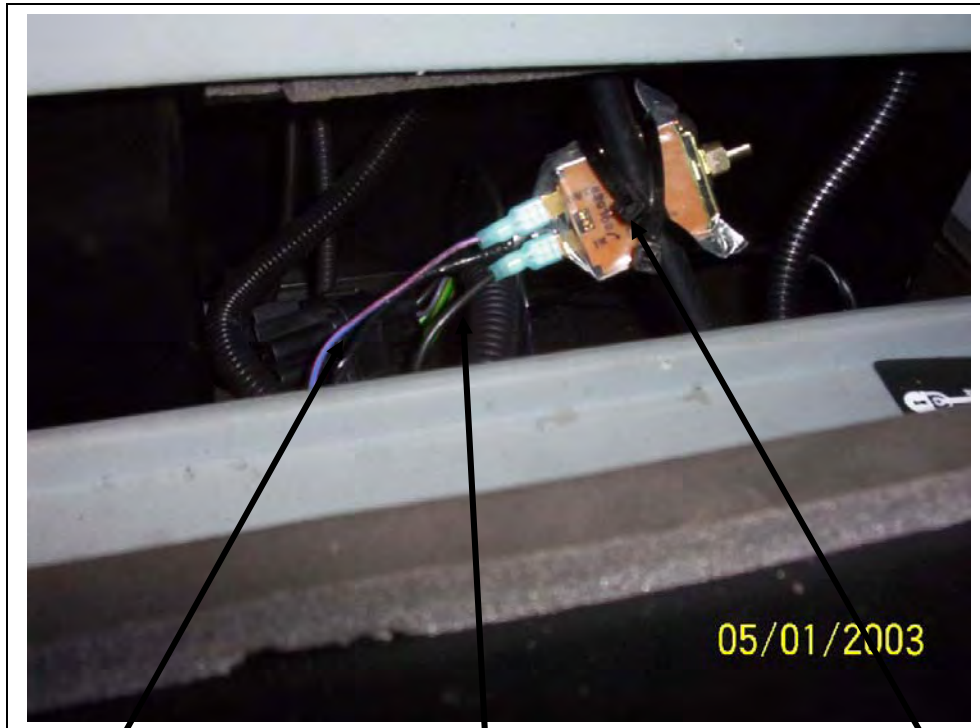


Wire from switch panel that is connected to the A/C switch. Remove from electrical plug and pull out of loom as shown. Install female quick disconnect terminal.



Wire from A/C switch on control panel.

Clutch wire running to binary switch at compressor.



Wire from switch panel cut out of wire bundle and connected to the thermostat.

Black clutch wire to binary at compressor.

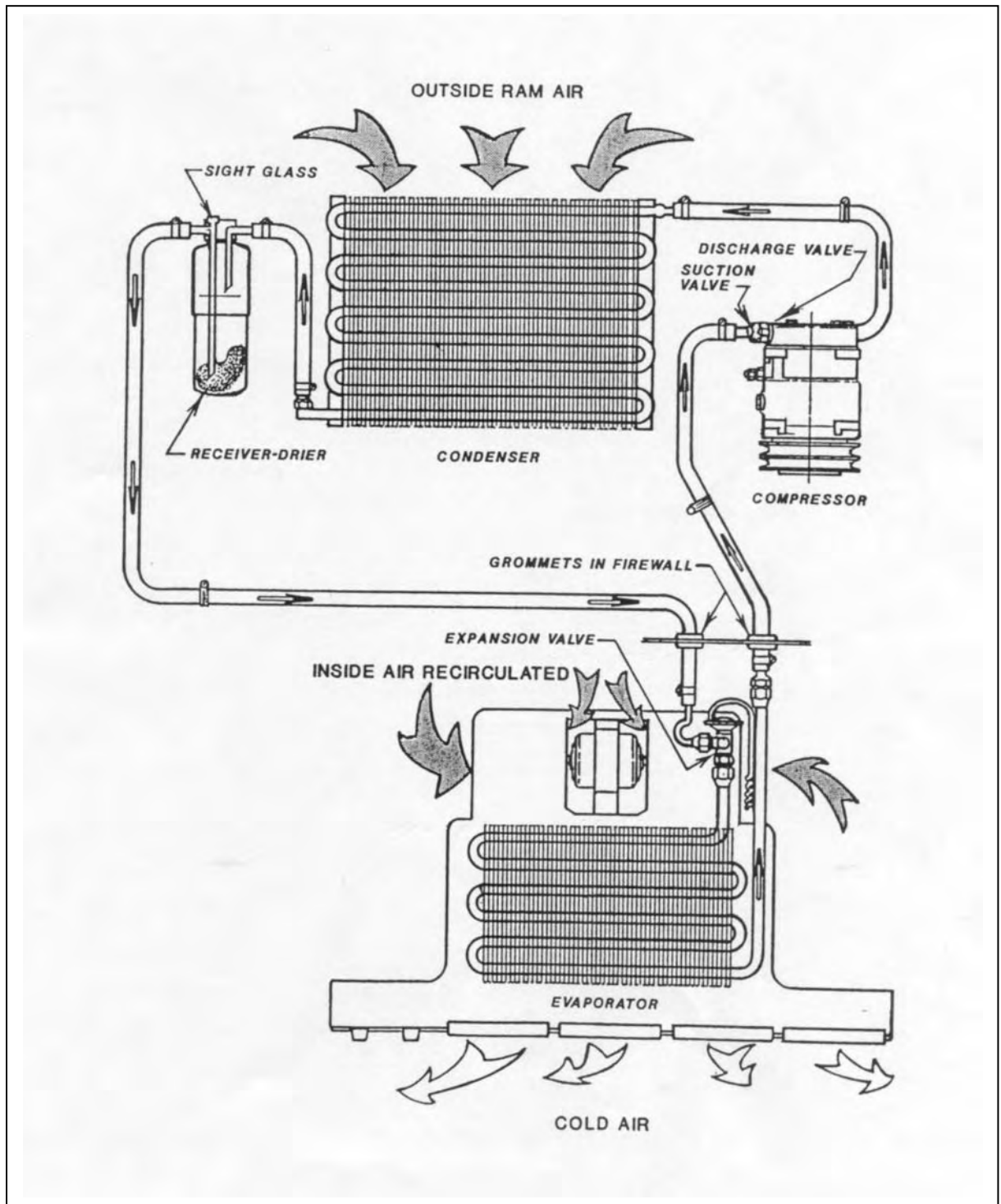
Thermostat tied to control cable behind inside air intake louver.





Thermostat probe run before  
AC coil installed

## Refrigerant Flow Pattern in a Standard Air Conditioning System





Final checks and charging:

1. Pressure test the system with nitrogen to at least 250 PSI and check all fitting and connections for leaks. The complete electrical system can be tested while there is pressure in the system as well.
2. Vacuum the system out with a good vacuum pump for ½ hour to 45 minutes. Ensure the system holds a vacuum to double check it for leaks. Add 4 oz of PAG oil to the system. Charge the system with 2 1/2 lbs of new 134A refrigerant. Run the system to test it. Check the temperature at the louvers. Add 134A refrigerant in 2 oz increments and check the air temp. A charge of 2 AND ¾ lbs should be about right.
3. Check that the thermostat is cycling the compressor off before coil freeze up problems can occur. The thermostat can be adjusted with the adjustment screw under the plastic cap on the body of the thermostat. See the thermostat setting procedures at the end of this instruction manual.

## 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.

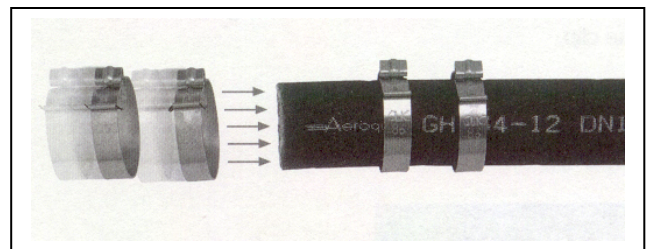
If the thermostat doesn't cycle off after a reasonable cool down period, and the air outlet temperature has dropped below 40° F, the cut in and cut out settings should be adjusted until the compressor is cycling on and off regularly. Let the system run for a decent time period (at least 15 min) and then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

## Aeroquip E-Z Clip Assembly Instructions

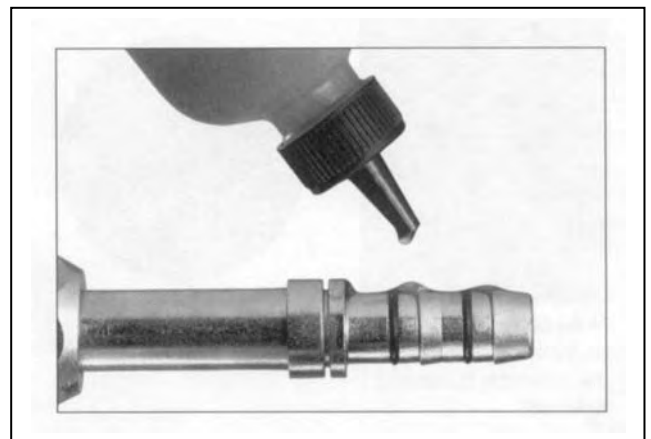
Step 1. Cut the hose to proper length with an appropriate cutting tool. Aeroquip's hand held hose cutter has been specially designed for cutting all non-wire reinforced hose, such as GH-134 Multi-Refrigerant hose. Be sure the cut is made square to the hose length.



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.

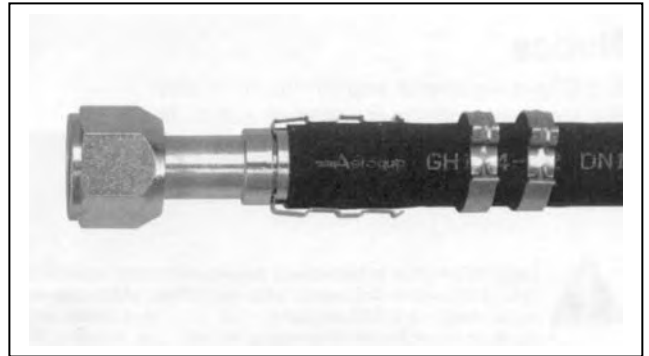


Step 4. Insert the nipple into the hose. To ensure that the nipple is fully inserted, check the gap between the cut end of the hose and the shoulder on the nipple. Care should be taken to avoid kinking or other damage to the hose during nipple insertion. NOTE: Be sure to wipe excess oil from the nipple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

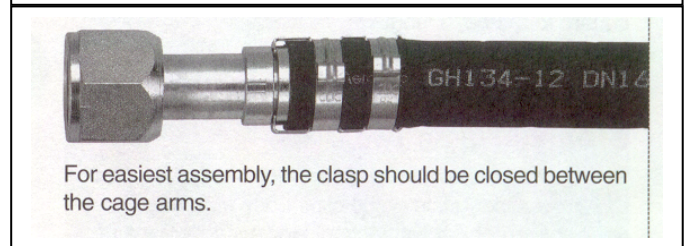
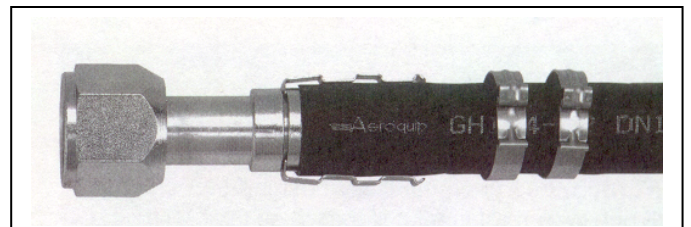


Step 5. Snap the cage into the groove on the nipple. The arms should extend over the hose length. When the cage has been correctly installed in the cage groove, the cage will be able to rotate in the groove. This step **MUST** be performed to ensure:

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.

