specializing in “AIR CONDITIONING, PARTS AND SYSTEMS” for your classic

“PERFECT FIT SERIES”
IN-DASH

HEAT/ COOL/ DEFROST

1967-72 FORD TRUCK

CONTROL & OPERATING INSTRUCTIONS

The controls on your new “Perfect Fit” system. Offers complete comfort capabilities in virtually every driving condition. This includes Temperature control in all of the modes.
This system also provides DEHUMIDIFICATION in the defrost mode and the ability to blend the air between Face, Heat, and Defrost modes.

THE PICTURE YOU SEE ABOVE SHOWS THE CONTROLS IN THE DEFROST MODE. THIS MEANS THAT THE AIR WILL BE DISTRIBUTED THROUGH THE DEFROST OUTLETS. THIS ALSO HAS THE TEMPERATURE LEVER IN THE COLDEST POSITION. WITH THE CONTROLS IN THIS POSITION YOU WILL GET THE AIR THROUGH THE DEFROST OUTLETS AND THE OUTLET TEMPERATURE AT THE COLDEST POSSIBLE TEMPERATURE.

CAUTION: ALL OF THE OUTSIDE VENTS MUST BE CLOSED WHEN THE SYSTEM IS IN THE A/C MODE. THIS WILL ALLOW THE A/C SYSTEM TO FUCTION AT ITS MAXIMUM PERFORMANCE LEVEL.

THE FOLLOWING SUMMARY WILL DESCRIBE EACH OF THE CONTROL LEVERS FUNCTION.

FAN SPEED SWITCH: There are 3 speeds plus Off. When the switch is in the off position it will disconnect the 12V power to the Blower Motor and the A/C Clutch. This will shut down the entire system. When the switch is moved to any of the blower speeds 1, 2 or 3 there is 12V supplied to the Micro-Switch that is mounted on the main housing.

DEFROST / HEAT / FACE DOOR CONTROL: When the Control Knob is PUSHED to the LEFT position the air is distributed to the DEFROST outlets and the drivers and passenger outlets. When the knob is MOVED to the CENTER position the air is distributed to the HEATER outlets. When the lever is moved to the RIGHT POSITION the air is distributed to the FACE outlets.

In the FACE and DEFFROST position the Compressor clutch is engaged and you have AIR CONDITIONING or DEHUMIDIFIED DEFROST.

TEMPERATURE CONTROL: The Temperature Knob as shown is in the COLDEST temperature position. As the lever is PUSHED to the right the temperature of the discharged air will rise to the HOTTEST point.

Note: The temperature lever will function in any of the modes.

specializing in “AIR CONDITIONING, PARTS AND SYSTEMS” for your classic

INSTALLATION INSTRUCTIONS
1969- 72 FORD PICKUP

Congratulations!! You have just purchased the highest quality, best performing A/C system ever designed for you Classic Truck. To obtain the high level of performance and dependability our systems are known for, pay close attention to the following instructions.

Before beginning the installation check the box for the correct components.

Evaporator
Face Duct Assembly
Flex Hose 2”dia. x 1ft.
Flex Hose 2”dia. x 2ft.
Flex Hose 2”dia. x 4ft. (2ea)
Sack Kit Hardware
Sack Kit Control
Glove Box
Air Inlet Block off

IMPORTANT INFORMATION

1. Before starting, read the instructions carefully and follow proper sequence.
2. Check condition of engine mounts. Excessive engine movement can damage hoses to A/C, heater, radiator, transcooler, and power steering systems.
3. Before starting, check vehicle interior electrical functions. i.e. interior lights, radio, horn, etc. When ready to start installation, disconnect battery.
4. Fittings. Use one or two drops of lubricant on O’rings, threads and rear of bump for O’ring where female nut rides. Do not use thread tape or sealants.
5. Always use two wrenches to tighten fittings. Try holding in one hand while squeezing together while other hand holds fitting in position.
6. Shaft seals in a small percentage of compressors will require as much as 3-4 hours run time to become leak free.
7. Compressors supplied in our complete systems are filled with proper amount of oil.
8. Compressor requires technician to hand turn 15-20 revolutions before and after charging with liquid from a charging station before running system. Compressors with damaged reed valves cannot be warranted.
9. Should you have any technical questions, or are suspect of missing, or defective parts, call us immediately. Our knowledgeable staff will be glad to assist you.

YOU CAN NOW BEGIN THE INSTALLATION

CAUTION: DISCONNECT BATTERY GROUND CABLE

Remove Glove box door and glove box. Retain the glove box door and all original hardware. Discard glove box housing.

Under glove box opening locate the Fresh Air Inlet duct.

Remove screws around the inlet flange.

Remove Inlet Duct and discard. Retain original hardware.

Located on engine side of the firewall.

Drain radiator, disconnect water valve cable from the valve, and then remove heater hoses from the heater connections. NOTE: RETAIN T- FITTING ON SUPPLY LINE.

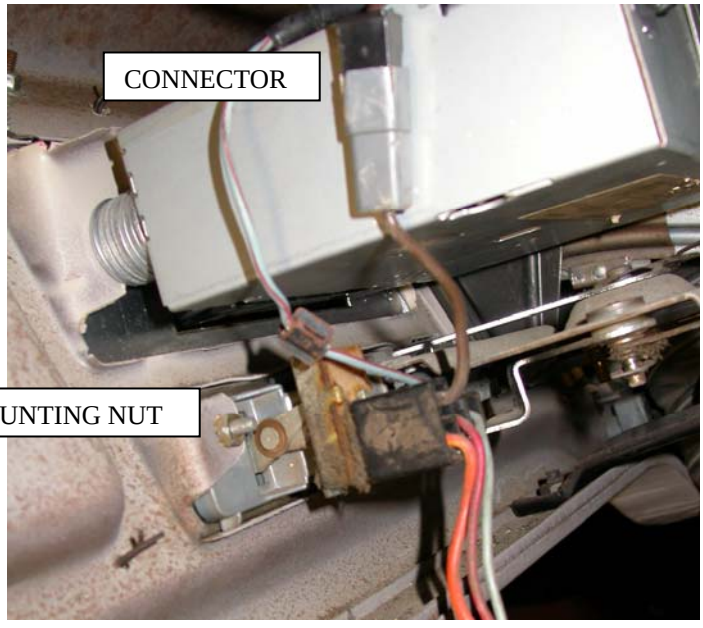
Also remove (3) nuts that attach heater assembly to the firewall.

Located on top of the heater assembly remove the defrost ducts and discard. Also disconnect control cable and discard the hardware.

Pull heater box out of the firewall holes and rotate to gain access to the resistor mounted on back of the heater.

Disconnect wires from the heater. And disconnect the door control cables.

Remove and discard heater assembly.



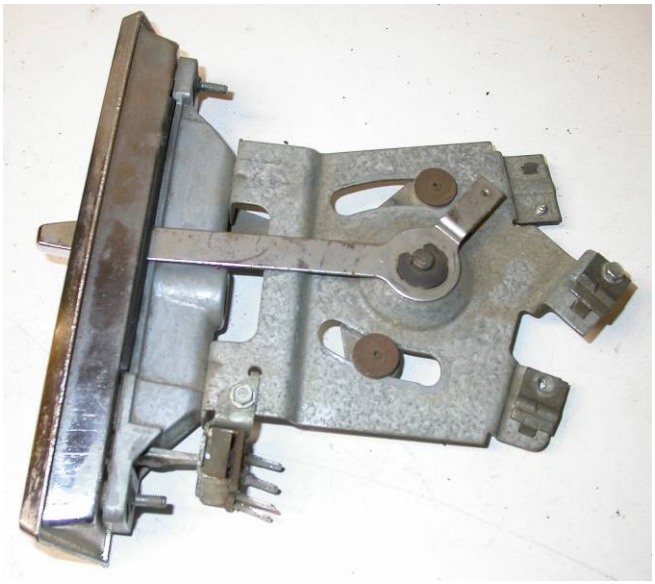
Locate the control panel. On the back side there are (2) nuts. One on each side of the control head.

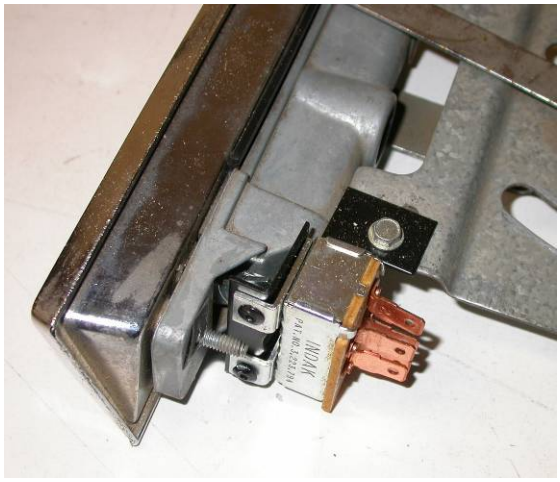
Disconnect power wire connector and electrical plug on the blower switch. Discard wire harness to the resistor.

Remove control head and retain the original hardware.

Remove original blower switch and the (3) control cables.

Discard the cables and switch, retain all original hardware.

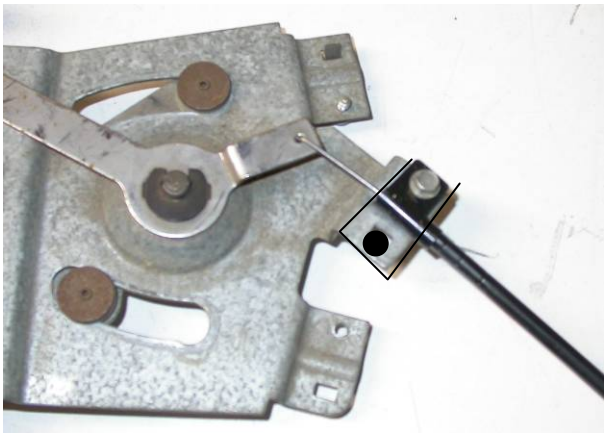


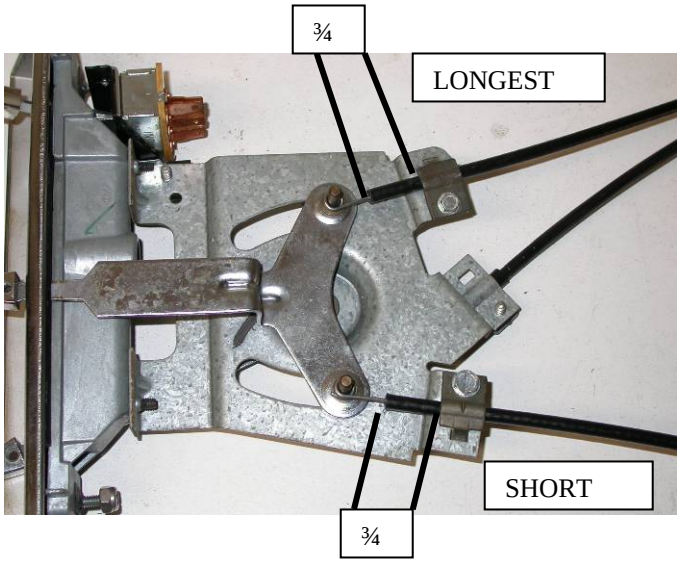


Install new blower switch using the original hardware and switch knob.

Locate the middle length control cable from the kit.

Using the original hardware attach the cable to top side of the control head as shown.





Locate the (2) remaining control cables.

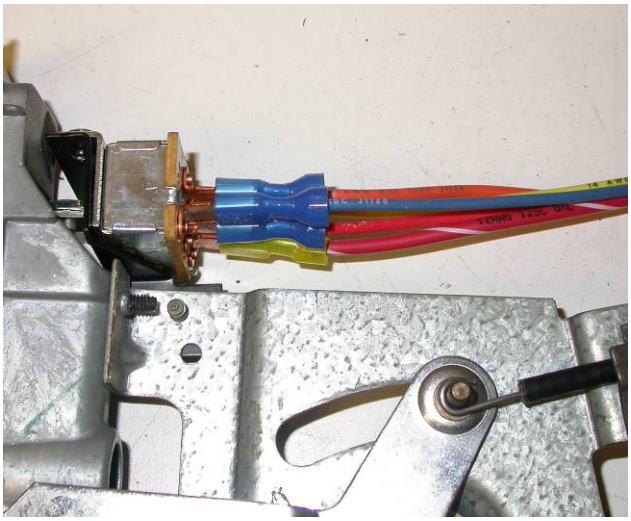
Attach both of the cables to bottom of the control head and attach to the control arm as shown. The end of the cable housing for both cables will be ¾”.

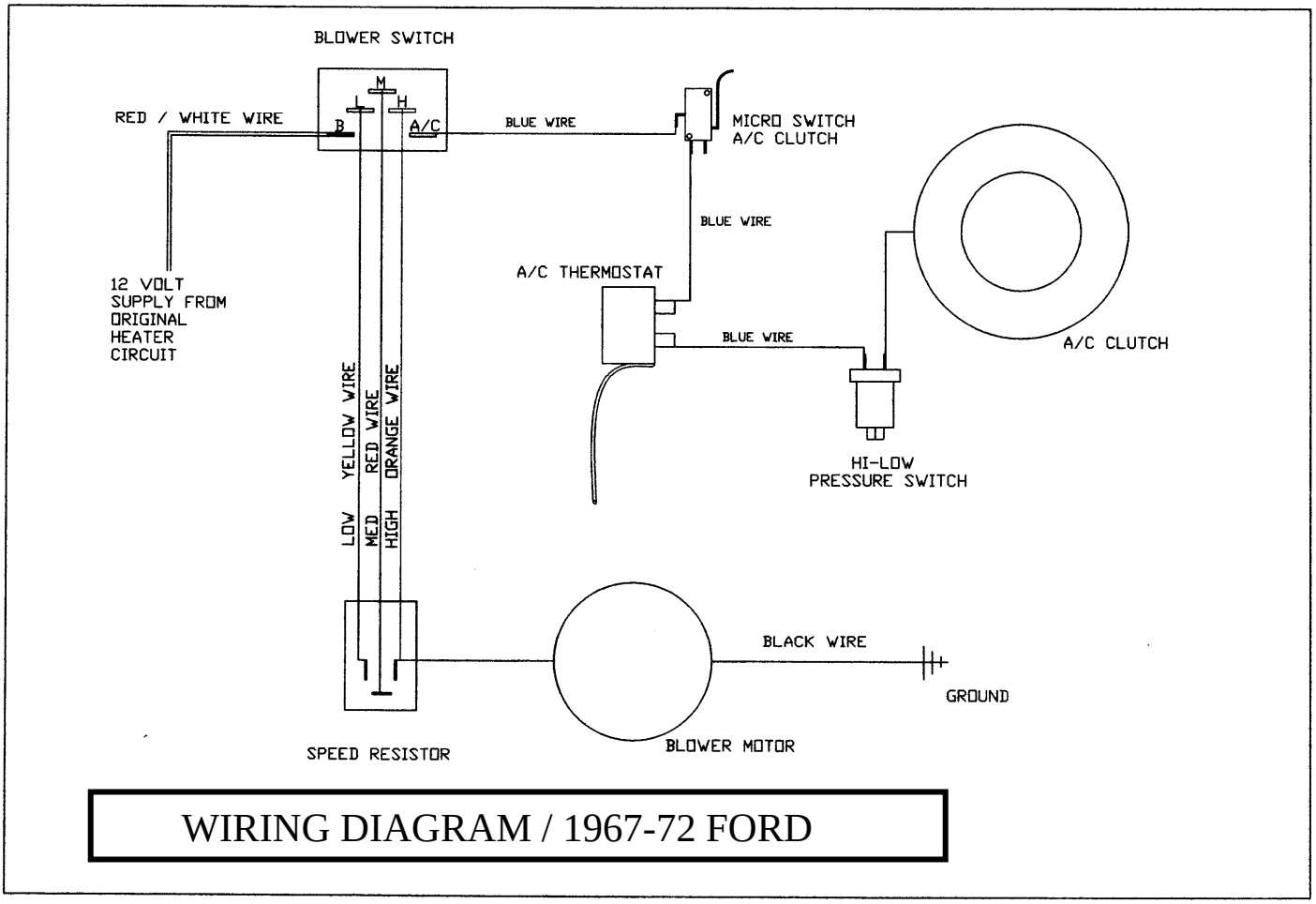
Attach using the original hardware.

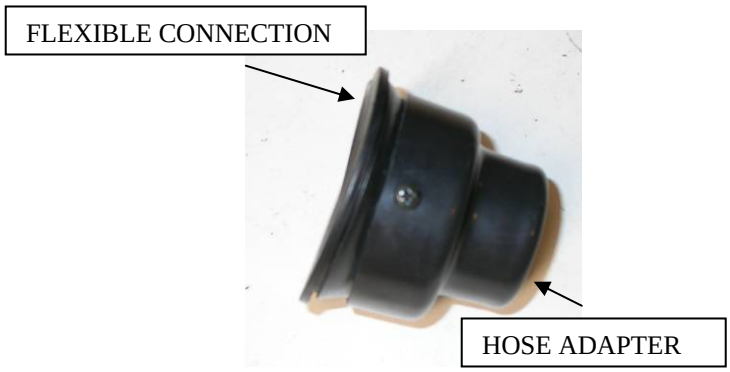
Set control assembly aside for later installation.

Locate wire harness and attach to the blower switch.

Refer to the wiring diagram below.







Remove original defrost duct hoses and flexible connections at top of the dash. Remove hoses from the flex hose adapter.

Locate in the hardware sack kit (2) hose adapters and (4) #8 x 3/8 pan head screws.

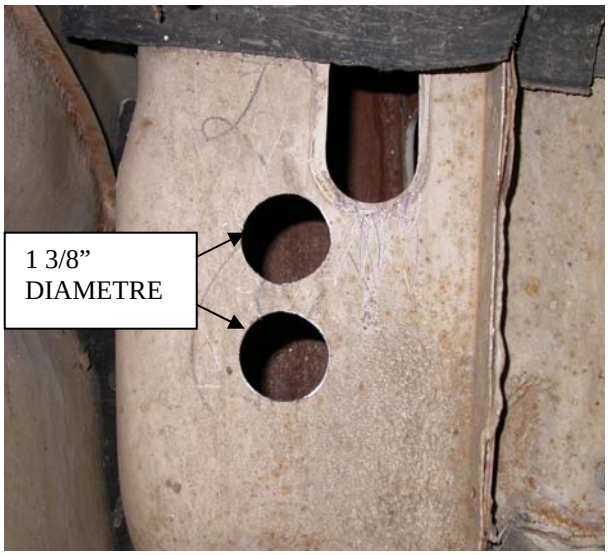
Insert flexible connector into hose adapter and attach to the hose adapter using the #8 screws.

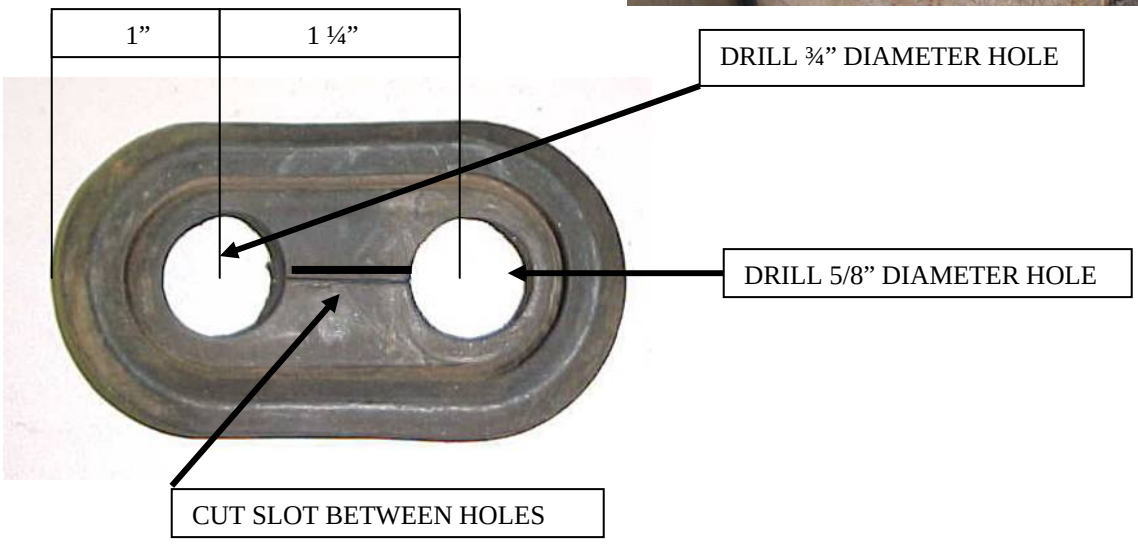
IT WILL BE NECESSARY TO REMOVE THE PASSENGER TIRE AND WHEEL FOR ACCESS INSIDE THE FENDER WELL.

Locate rubber oval plug on the air inlet plenum inside passenger fender well.

Carefully remove the plug and modify as shown in the picture below. Set aside for later installation.

Locate and drill (2) 1 3/8” diameter holes approximately as shown.

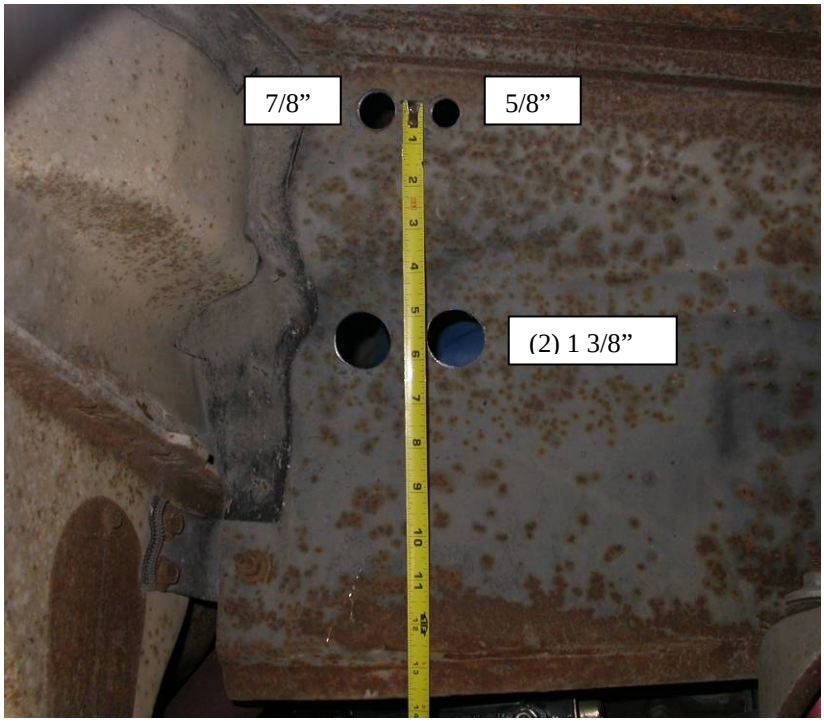




Holes that will be drilled through the inner fender panel need to be located approximately as shown.

The 7/8” diameter and the 5/8” diameter are 13 ½” from bottom edge of the fender. And 1 ¼” inch apart.

The (2) 1 3/8” diameter holes are 5 ¾” below the top holes and 1 ½” apart.



Modifications to the vehicle are complete. You can now begin installing your new Classic Auto Air “Perfect Fit Series” system.

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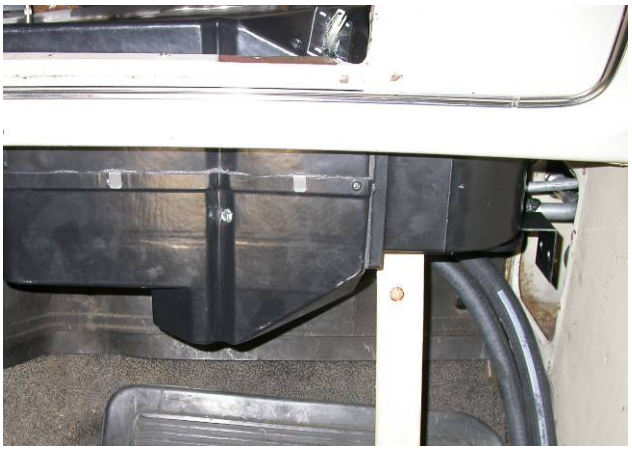
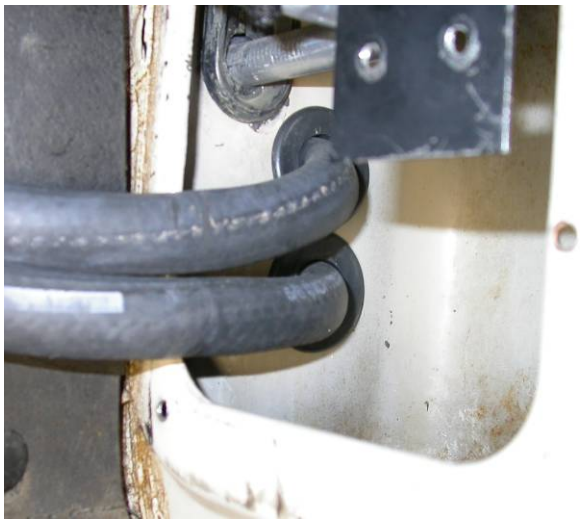
Locate (4) hose grommets and install them into the 1 3/8” diameter holes as shown.



Locate the evaporator and slide into place by inserting a/c tubes through the air inlet hole and out through oval hole into the fender well.

It may be necessary to support unit.



Route heater hoses through air inlet opening and insert through grommets in the air box.

Locate the air inlet block off and (2) #10 x 3/8" hex head screws.

Slide block off over the inlet and attach to the kick panel using the original hardware.

Using (2) #10 screws attach the blower bracket to block off as shown

Hold the evaporator level with the bottom of the instrument panel.

Attach lower evaporator brace to the firewall using (1) #10 x ¾" tek screw.

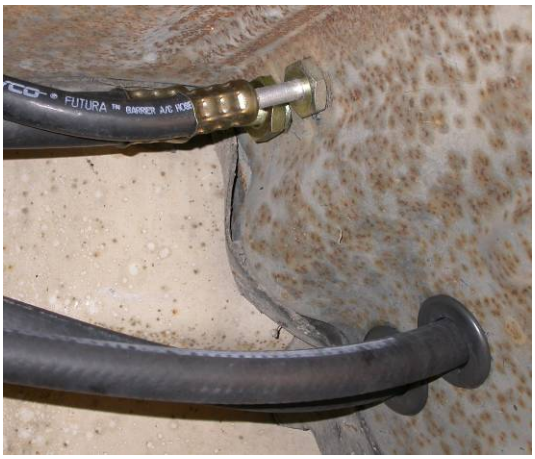
Attach upper evaporator bracket using (1) #10 x ¾” tek screw.

Locate the modified rubber oval plug.

Inside fender well, slide plug over the a/c tubes and snap in place.

Route heater hoses and insert through grommets in the inner fender.

Locate the short liquid and suction hoses.



Insert bulkhead end through holes previously drill in the inner fender. Attach using nut on engine side of the fender.

Connect 45 deg fittings to a/c tubes using o-rings and a few drops of mineral oil.

Attach the hoses together using (1) tywrap supplied in the kit.

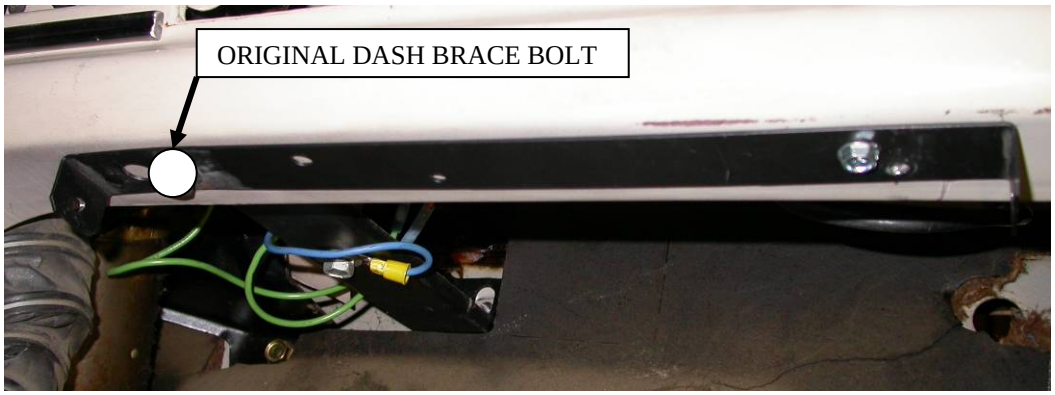
Locate in the hardware sack kit (2) 1” hole plugs.

Plug holes in firewall where the original heater tubes came through.

Locate (2) modified Defrost hose adaptors. Also locate the 2” dia. x 12” and 2” x 24” flex hose. WHEN CUTTING THE FLEX HOSE FIRMLY STRETCH THE HOSE BEFORE CUTTING.

Cut (1) piece 11” long and attach to one of the hose adaptor using (2) #8 x ½” pan head Philips screw. Use (1) piece 24” long and attach to the other hose adaptor using (2) #8 x ½” pan head philips screw.

Insert the 11” assembly in right defrost hole in top of the dash. The 24” assembly goes in the left hole.



Locate the center duct support bracket and (1) #10 x ¾” tek screw.

Remove the dash brace bolt and attach the brace through this bolt.

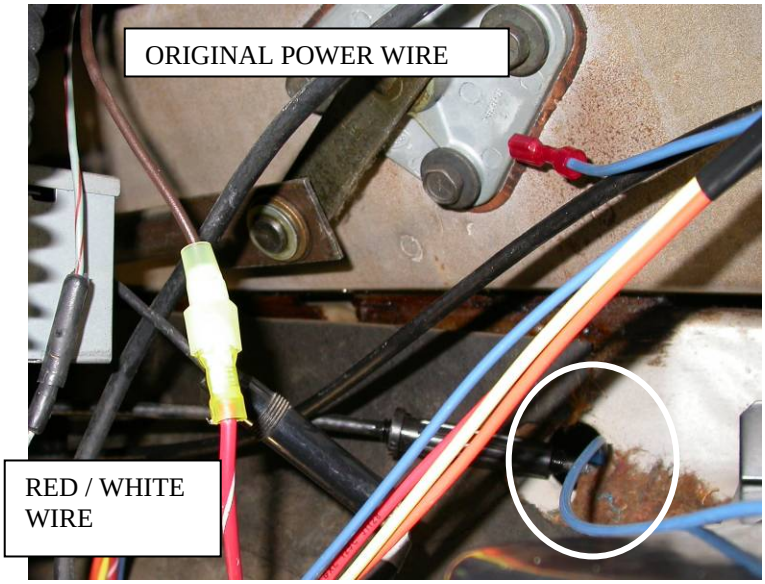
Use the #10 x ¾” tek screw to secure right side of the support bracket.

Reinstall control head using the original nuts.

Route wire harness over top of the evaporator and attach to the blower motor and the thermostat.

Route blue clutch wire out existing hole that the original temp cable used.

Also route temperature cable out the same hole.

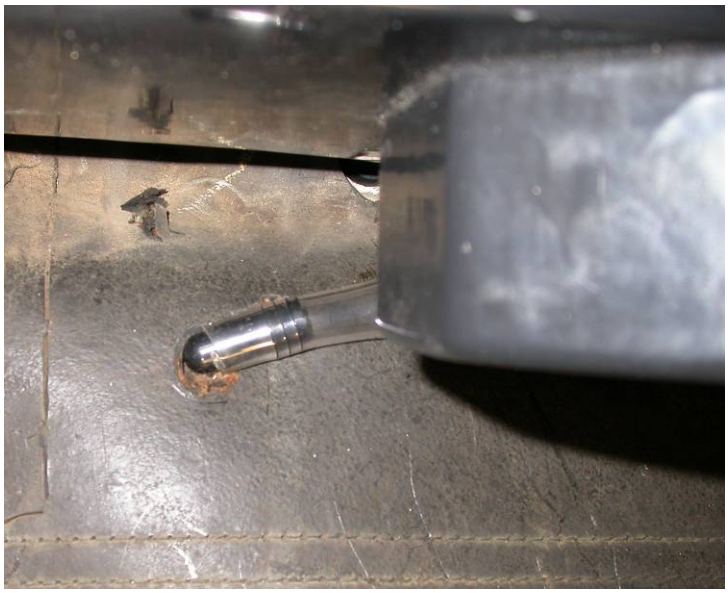


Also locate in the Hardware Sack Kit (1) #10 x ¾” Hex head tek screw. Locate black wire with ring terminal from the blower motor. Attach the wire as shown.

Locate and drill (1) 11/16 dia. hole in firewall under evaporator 4” and a little down from the heater connection.

Locate in the hardware sack kit (1) 9” piece of 5/8 dia. drain tube and (1) 90 degree drain elbow.

Attach over drian nipple and then cut hose so that 90 deg elbow goes out through the hole. Attach remainder of hose to elbow going through the firewall.



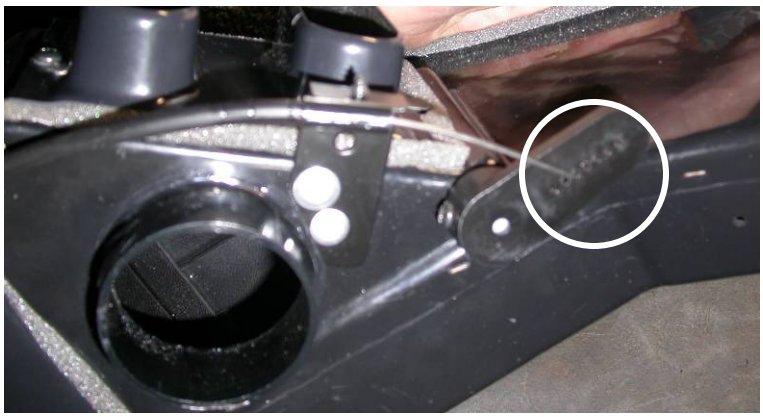
Locate the Face Duct Assembly from the unit box. Also locate (4) #8 x 3/8” pan head screws.

Route longest of the cables over the upper evaporator brace. Loop cable around and down to outlet of the evaporator.

Lay the face duct assembly from the kit on the floor of the truck.

Attach the cable to back of the face duct using (1) #8 x 3/8” pan head screw.

Insert the cable wire into third hole from center of the crack arm.



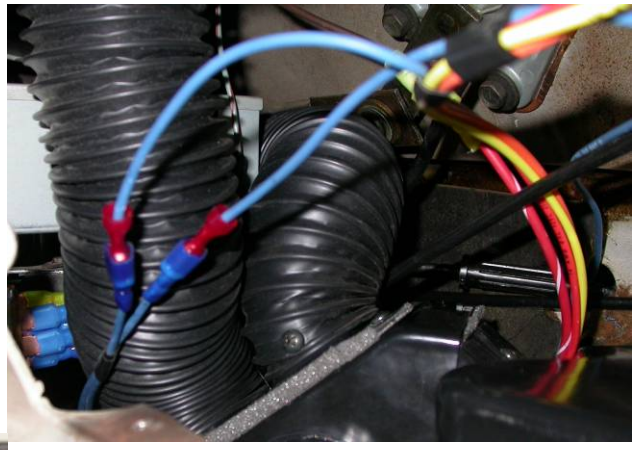
Slide the duct assembly over outlet on the evaporator.

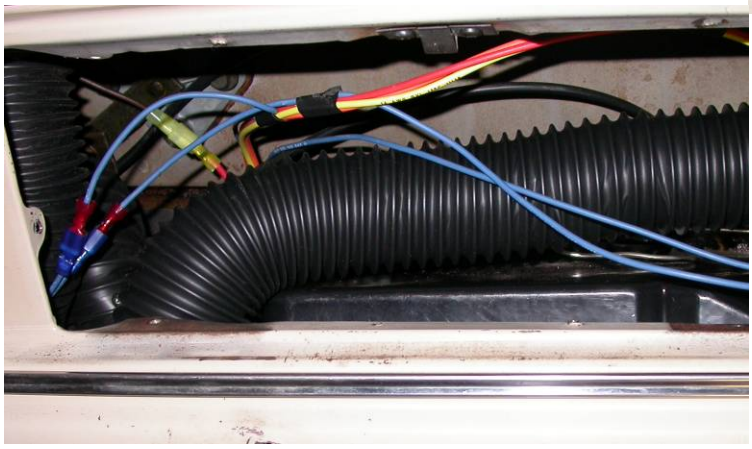
Attach front of the duct to the support brace using (2) #8 x 3/8” pan head screws.

Locate 2” dia. flex hose that is attached to the defrost hose adapters.

Attach over the defrost duct as shown.

Attach blue wires from the micro switch on side of the ducts to blue wires on the wire harness.

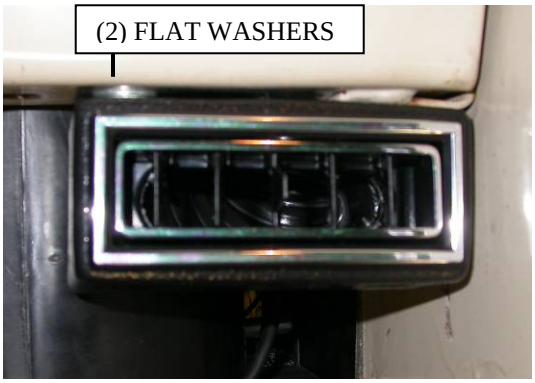




Locate the 2” x 48” flex hose and cut a piece 38”.

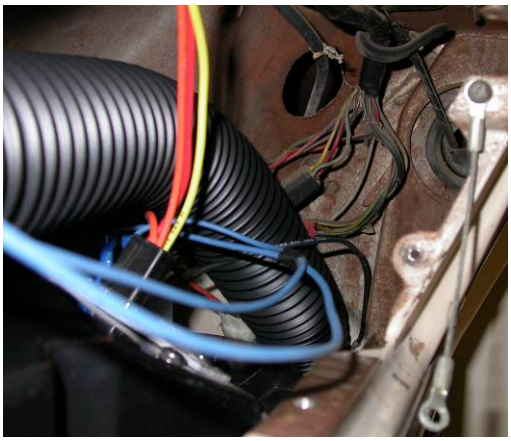
Attach to outlet on front of the duct and route over top of the evaporator to the passenger side.

Locate the passenger louver. Attach the housing to bottom of the dash using (2) #10 x ¾” tek screws and (2) flat washers on the left side, to space the housing level with the dash.



Route flex hose down and pull hose through face of the housing.

Attach hose to the louver assembly. Insert louver assembly into the housing.

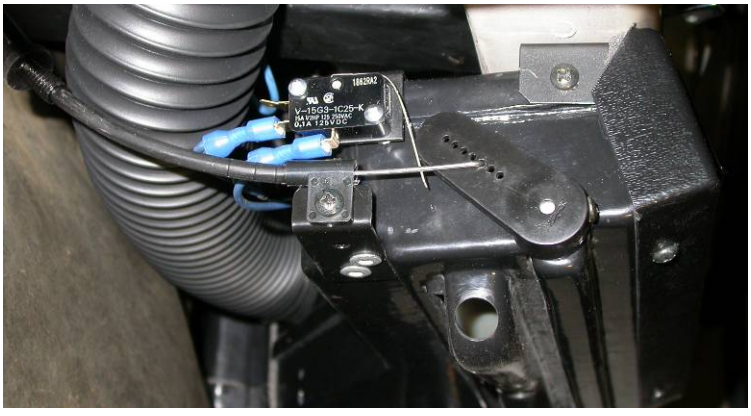


Locate the last of the under dash louver assemblies.

Attach housing to dash on drivers side of the steering wheel using same method as the passenger housing.

Locate the 2” x 48” long flex hose. Attach hose to back outlet on the face duct. Route up and behind instrument cluster, over and down to the drivers louver assembly. Attach to adapter on the back of the louver.

Locate Center Louver Bezel. Attach over front of outlet. Use (3) #8 x ½” pan head philips screws.



Attach remaining cable to the face duct.

Insert cable into the 3rd hole from the pivot of the crank arm. Attach the flag to bracket using (1) #8 x 3/8” pan head screw.

CAUTION: The control cables are equipped with inline adjusters. Adjust the Heat / Face door, and the Defrost / Face door cable so that the full travel of the Control cable, operates the door to its full travel.

The Micro Switch that is mounted on the Face / heat door is used to turn on the compressor clutch. This will occur when the control lever is in the face position. It may be necessary to adjust thin metal arm on the switch. Make sure that the Clutch Micro Switch is depressed when lever is in the face position.

Install new glove box using the original hardware.

Reinstall the Glove Box Door using the original hardware.

The engine compartment components should be installed at this time. Carefully follow the electrical diagram provided on page 5.

THE COMPRESSOR MOUNTING COMPONENTS WILL DIFFER DEPENDING ON THE ENGINE AND DRIVE ACCESSORIES THAT YOUR VEHICLE IS EQUIPT WITH. THE FOLLOWING INSTRUCTIONS SHOW THE PROPER INSTALLATION SEQUENCE FOR THIS VEHICLE

Remove original fan, fan shroud, drain and remove radiator. Retain all original hardware.

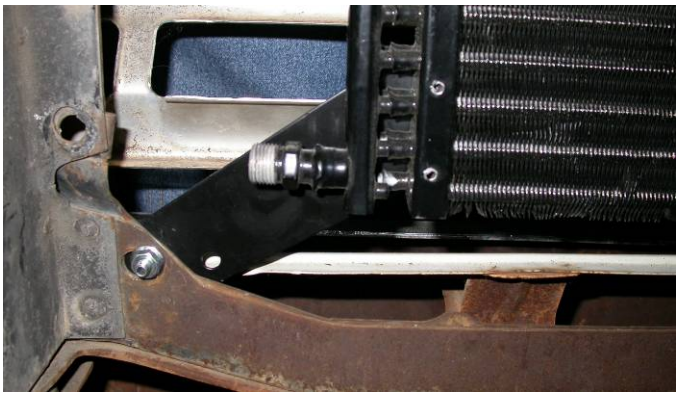
Locate the following components from the under hood components box.
Condenser, (4) Condenser mounting brackets and (8) #10 x 3/8 hex washer head screws.

Locate Condenser, (2) Lower condenser mounting brackets. Attach to bottom holes using (4) #10 x 3/8" hex head screws.

Locate top (2) condenser mounting brackets. Loosely attach to top holes using (4) #10 x 3/8" hex head screws.

Slide condenser assembly into the radiator bulkhead opening from the engine side. Condenser fittings will be on the drivers side. The mounting brackets will be in front of the bulkhead.

VIEW SHOWING UPPER BRACKETS FROM GRILLE SIDE OF BULKHEAD.



VIEW SHOWING LOWER BRACKETS FROM ENGINE SIDE OF BULKHEAD.

Locate (2) #10 x 3/4” tek screws, (2) ¼”-20 x 5/8” head screws, and flange nuts.

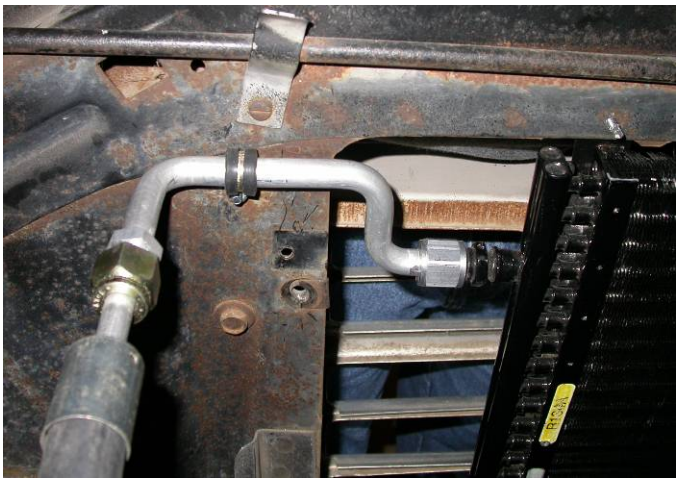
Attach lower condenser brackets to the existing holes using the ¼” – 20 x 5/8” hex bolt and flange nuts.

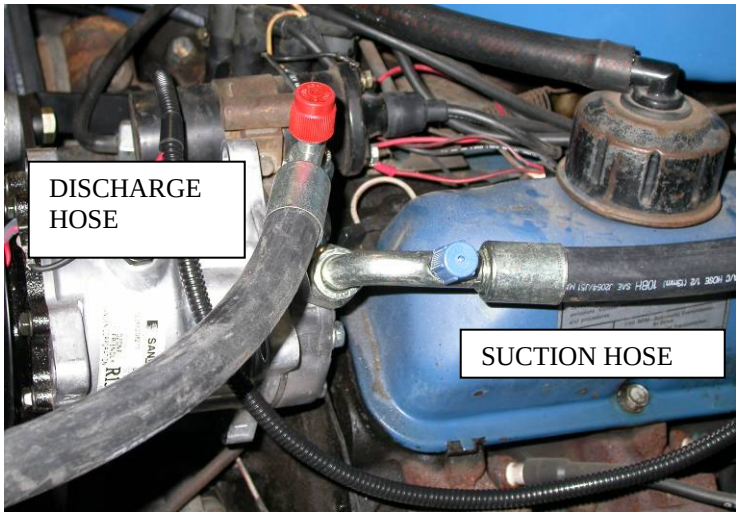
Attach upper condenser brackets to upper edge of the bulkhead using the #10 x 3/4” tek screws.

Locate the discharge tube, #8 o-ring, ½” clamp and (1) #10 screw and nut.

Attach tube to condenser fitting using the #8 o-ring and a few drops of mineral oil.

Using the clamp as a guide, drill a 3/16” dia hole and attach clamp with the screw and nut.





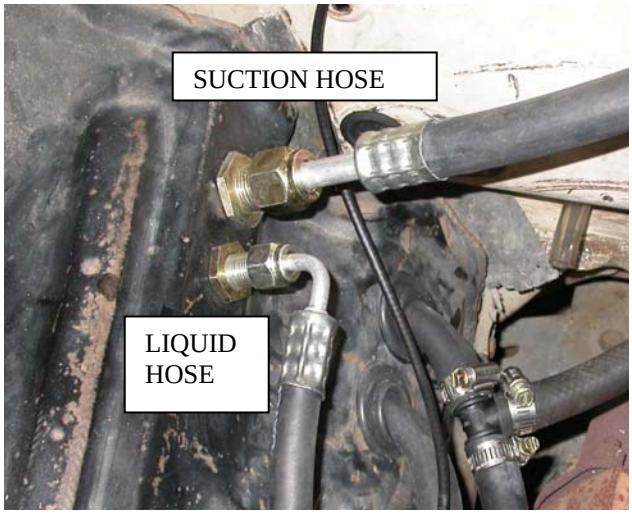
Locate the discharge hose, (2) #8 o-rings, the #10 suction hose assembly, and (2) #10 o-rings.

Attach the #8 hose to the compressor (service port) and straight end of hose to the discharge tube.

Attach using an o-ring and a few drops of mineral oil.

Attach suction hose (w/service port) to the compressor using a #10 o-ring and a few drops of mineral oil.

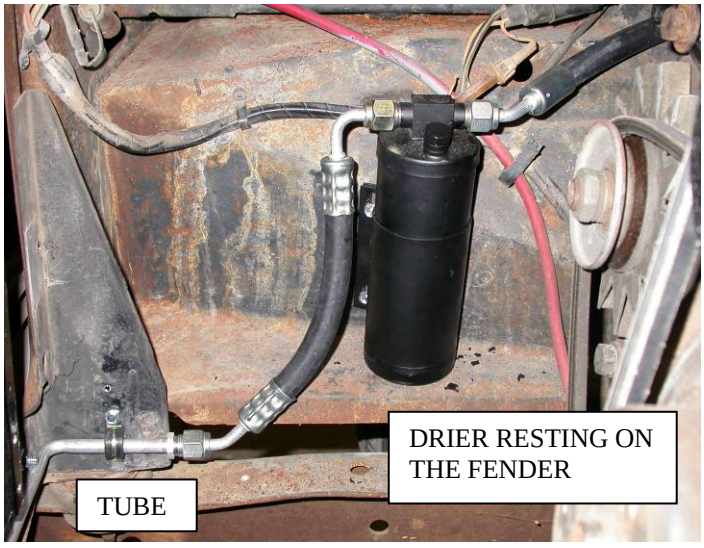
Route hose behind air cleaner and attach to the firewall using (1) #10 clamp and a tek screw.



Attach straight #10 fitting to the inner fender. Using #10 o-ring and a few drops of mineral oil.

Locate the long liquid tube, (1) #6 o-ring.

Attach end to the lower condenser fitting using #6 o-ring and a few drops of mineral oil.



Locate the receiver drier, drier mounting bracket, #6 hose clamp, (3) #10 tek screw, short liquid hose, long liquid hose and (4) #6 o-rings.

Loosely attach 45 deg fitting on short liquid hose to the liquid tube. The 90 deg end to inlet on the drier. Use #6 o-rings and a few drops of mineral oil on each fitting.

Loosely attach 45 deg fitting of long liquid hose to outlet on drier and other end to fitting on the inner fender.

Use hoses to locate the position of the drier. The drier will rest on the lower lip of the fender. Attach drier using the mounting bracket and (2) #10 tek screws to the inner fender .

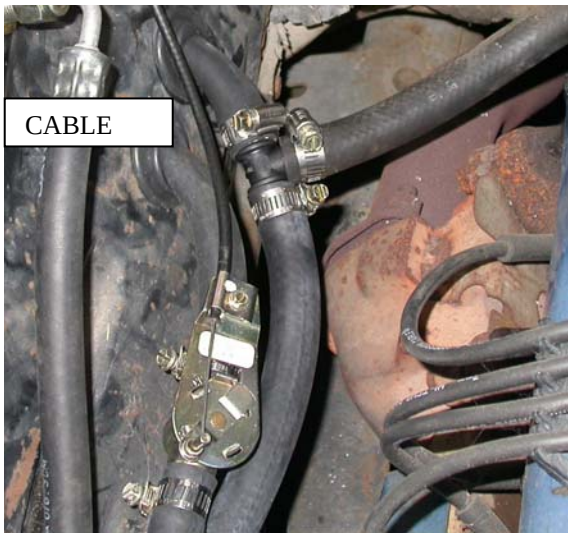
Clamp the liquid tube to the radiator support using #6 hose clamp and a #10 screw.

Tighten all #6 fittings.

Locate in Hardware Sack Kit the Water Valve and (3) worm gear clamps.

It is recommended that the heater hoses be replaced at this time.

Attach water valve to the front heater hose and attach to the heater hose that goes back to the water pump. Use the worm gear clamps supplied.



Locate the control cable that was passed through the firewall. Attach end to the water valve as shown. Be sure that the control knob is pushed all the way to the cold position and the water valve is in the full closed position.

Reuse the T-fitting on supply line from the back of the engine.

Reinstall the fan shroud, fan assembly, hookup radiator hoses and refill with coolant.

THE ENGINE COMPARTMENT OF YOUR SYSTEM IS COMPLETE. THE UNIT IS READY FOR EVACUATION AND CHARGING.

THIS SHOULD BE DONE BY A QUALIFIED AND CERTIFIED AIR CONDITIONING TECHNICIAN.

NOTE: ***COMPRESSOR IS SUPPLIED WITH THE CORRECT OIL CHARGE. DO NOT ADD OIL TO SYSTEM.***

134a SYSTEMS 24 oz OF REFRIGERANT
Recommend that power fuse is 25amp minimum

Congratulations you have completed the install of your CLASSIC AUTO AIR "Perfect Fit Series" system.

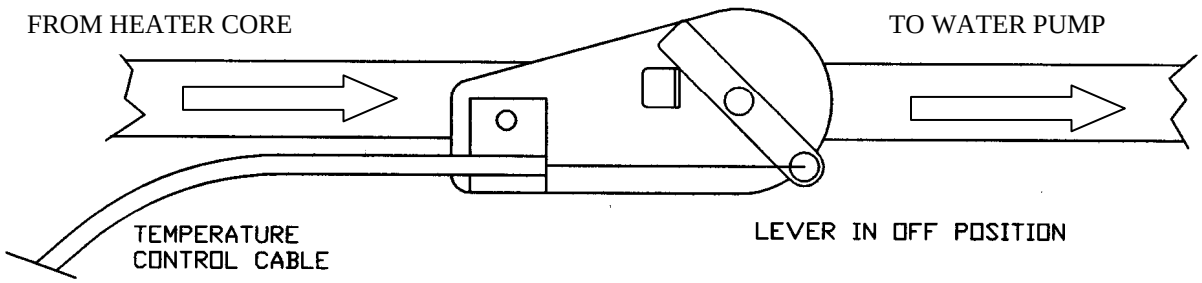
IMPORTANT

CAUTION: WATER VALVE MUST BE INSTALLED PER THE INSTRUCTIONS.

Classic Auto Air has done extensive testing on the correct method to install the water valve in order to get a repeatable and progressive temperature control.

Locate the **bottom** connection from the evaporator/heater unit off of the firewall and attach a 6” piece of 5/8” dia. heater hose with the supplied hose clamp. Next attach the inlet side of the water valve using another supplied hose clamp, (make sure the arrow on the water valve points toward the engine) Attach a heater hose from the outlet side of the water valve and route to the connection on the water pump.

NOTE: WATER VALVE = WATER PUMP



CAUTION: WATER VALVE MUST BE INSTALLED ON HEATER LINE ROUTED TO WATER PUMP.

NOTE: ***COMPRESSOR PURCHASED WITH KIT IS SUPPLIED WITH THE CORRECT OIL CHARGE. DO NOT ADD OIL TO SYSTEM.***

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