



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

## **“PERFECT FIT” IN-DASH**

HEAT/ COOL/ DEFROST  
**1953 - 56 FORD PICKUP**

### 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 the ability to blend the air between Face and Heat / Defrost modes.



THE PICTURE YOU SEE ABOVE SHOWS THE CONTROLS IN THE FACE MODE. THIS MEANS THAT THE AIR WILL BE DISTRIBUTED THROUGH THE FACE OUTLETS. THIS ALSO HAS THE TEMPERATURE KNOB IN THE COLD POSITION.

**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 FUNCTION 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 duct housing.

***TEMPERATURE CONTROL:*** The temperature Knob as shown is in the COLDEST temperature position. As the knob is pulled out the temperature of the discharged air will rise to the HOTTEST point.

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

***AIR CONDITIONING MODE:*** The picture shows the Heat Knob in the A/C Mode (air-flow out the FACE outlets).

When the Mode control knob is in this position the Air Conditioning is activated and the compressor clutch is on. When the compressor is activated the Temperature Knob will control the air from maximum cold through maximum heat.

***HEAT MODE:*** The Heat Knob is shown in the A/C position. As the Knob is pulled out the air will blend to the Heat / Defrost Mode. When the knob is in the this position the Temperature Knob will change the discharge air from full cold through maximum heat.



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## ***INSTALLATION INSTRUCTIONS 1953 -56 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

Flex Hose 2"dia. x 2ft. – 3ea.

Flex Hose 2"dia. x 3ft. – 1ea.

Flex Hose 2"dia. x 4ft. – 1ea.

Sack Kit Hardware

Sack Kit Control

Defrost / Heat Duct

Face Duct

Glove Box

### ***IMPORTANT INFORMATION***

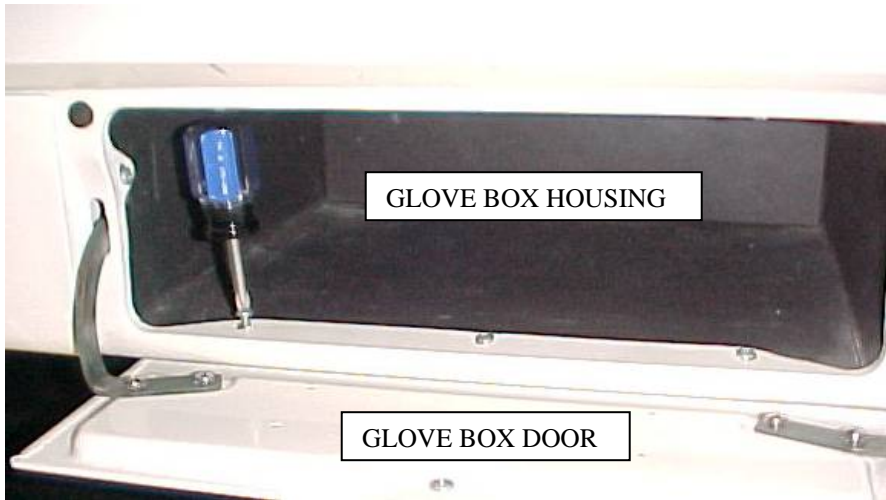
1. Before starting, read the instructions carefully and follow proper sequence.
2. Check condition of engine mounts. Excessive engine movement can damage hoses to A/C, heater, radiator, transcooler, and power steering systems.
3. Before starting, check vehicle interior electrical functions. i.e. interior 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***

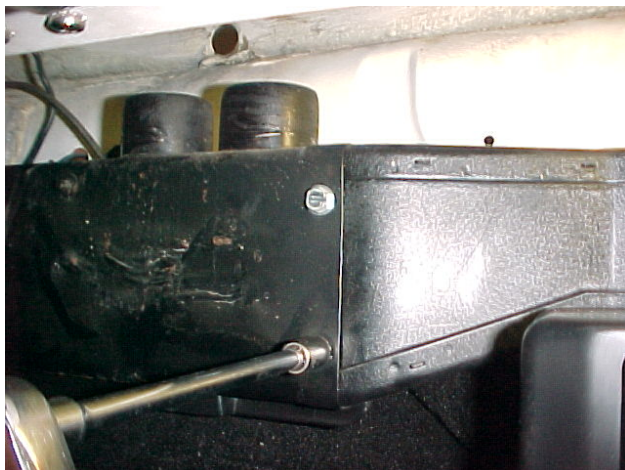
Disconnect the battery ground cable. Battery is located under floor on the passenger side.

Drain radiator and disconnect Heater hoses from heater connections on the firewall.



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

Located behind glove box are the defrost duct hoses. Remove the entire hose and discard.



Locate on front of the heater assembly (2) screws that hold heater to the distribution assembly.

Remove and discard.

Locate along firewall in the engine compartment behind air cleaner (1)  
Hex head nut and washer.

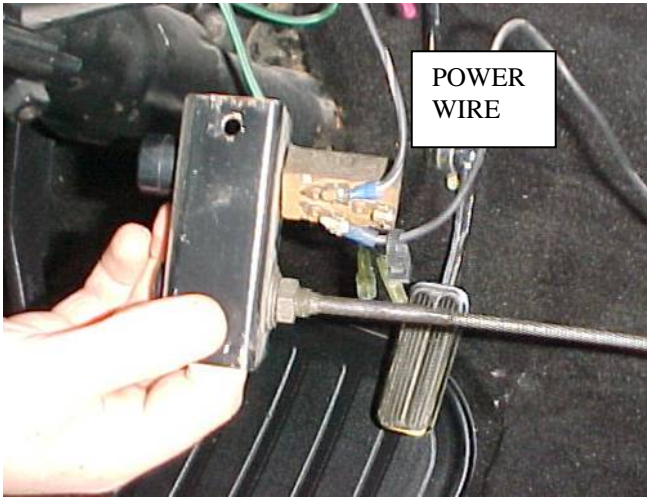
Remove and discard.



Drop the air distribution assembly to the floor and disconnect control cable.

Locate under instrument panel the control bracket assembly.





Identify power wire that feeds power to the switch. This is the wire that will hook to the new controls on your system.

Discard the entire assembly.

Located on firewall in the engine compartment there are (4) nuts that hold original heater in place. Remove these nuts and discard.

Disconnect wires from the heater.

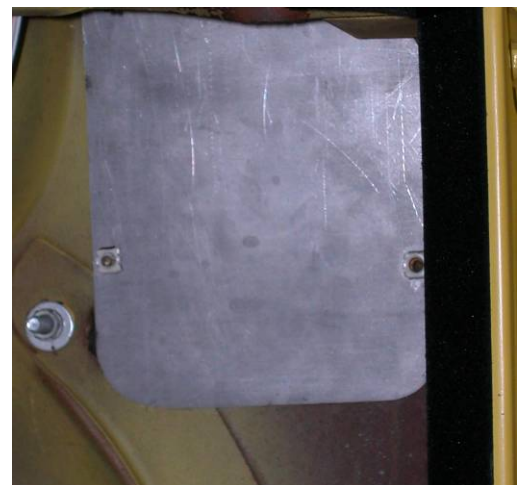
Remove and discard heater assembly.



If vehicle is equipped with the deluxe heater. Remove the air inlet box from the passenger side.

Retain original hardware. Remove the square nuts from the original cage nuts off the air inlet. These will be reused on the new blockoff.

Locate the air inlet block off. Attach over the louvers using the original hardware.



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

Locate Evaporator Assembly and Face Duct from the kit. Place on work bench.

Attach Face duct over outlet flange. Be sure that the s-clips attach to flange.



Locate Defrost / Heat duct and (2) #10 x 5/8” pan head screws.

Attach duct to back of the evaporator and onto metal bracket as shown.

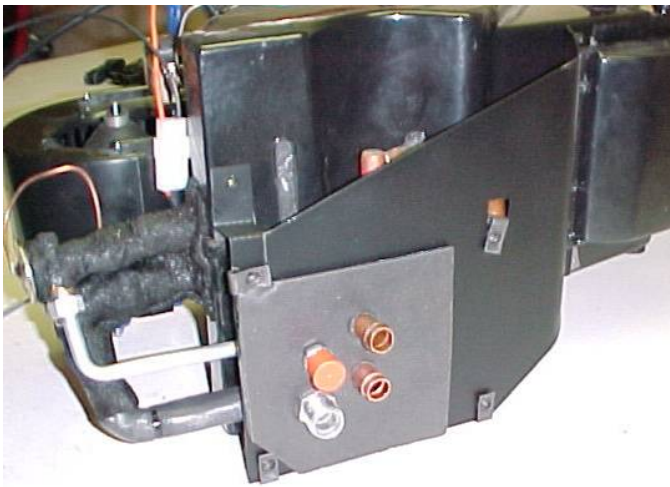
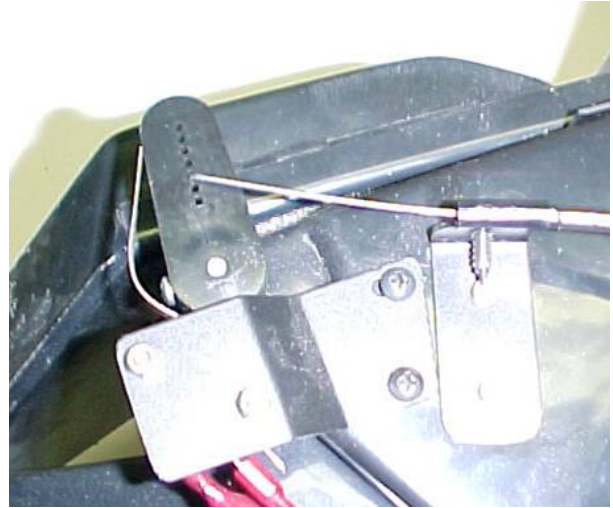
Locate (1) #8 x 3/8” pan head screw.

Place unit upside down on bench and fasten together face and defrost / heat duct using the #8 screw.



Locate in the Control Sack Kit the heat control cable and (1) #10 x 5/8" pan head Phillips screw.

Attach cable to the evaporator using the #10 screw. End of cable inserts through third hole from center of the crank arm.



Notice (4) 1/4" - 20 j-clips on back of the evaporator.

Insert evaporator assembly up and behind the glove box opening.

Line up j-clips with original heater holes in the firewall.

From engine side of the firewall attach unit using (4) 1/4" - 20 x 5/8" hex head screws and (4) flat washers.



(2) 1/4" - 20 x 5/8"  
HEX HEAD SCREWS  
& FLAT WASHERS

(2) 1/4" - 20 x 5/8"  
HEX HEAD SCREWS  
& FLAT WASHERS





Locate in the hardware sack kit (1) #10 x 3/4 tek screw and (1) #10 x 1/2 hex head screw.

Locate the Support bracket attached to evaporator under the glove box opening.

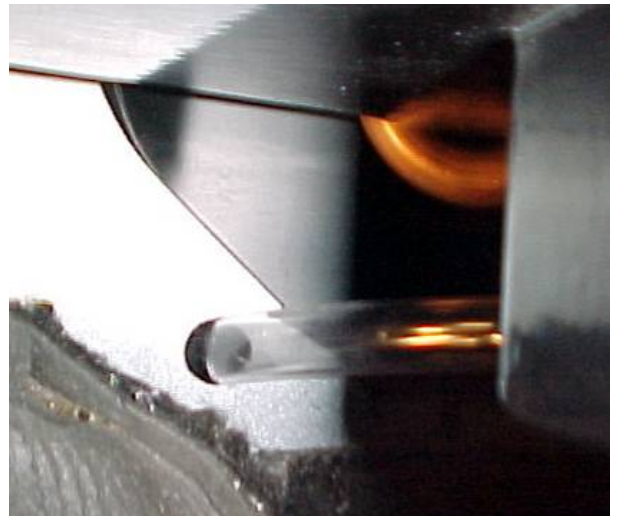
Drill 5/32" dia. hole through hole in the bracket and into the instrument panel. Attach with #10 x 1/2 screw.

Locate Black wire with Ring Terminal from the blower motor. Attach wire to the body as shown.

Locate in the hardware sack kit (1) 9" piece of 5/8 dia. drain tube.

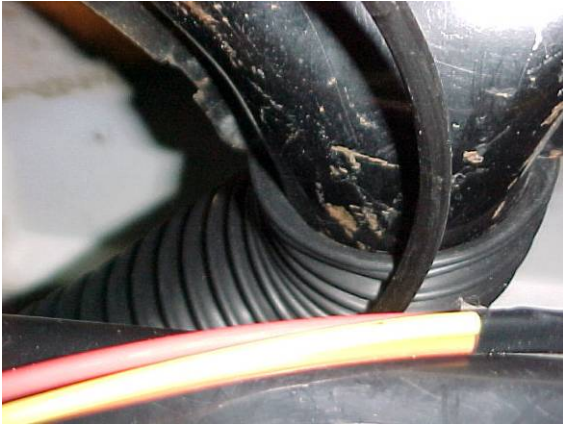
Drill (1) 11/16" dia. hole in firewall just to the left of the mounting bracket and slightly down from drain nipple.

Attach over drain nipple and through hole previously drilled.



Locate in the unit box the 2" dia. flex hose 2ft. x 2ea.

Attach over defrost duct outlets located on the center duct as shown.



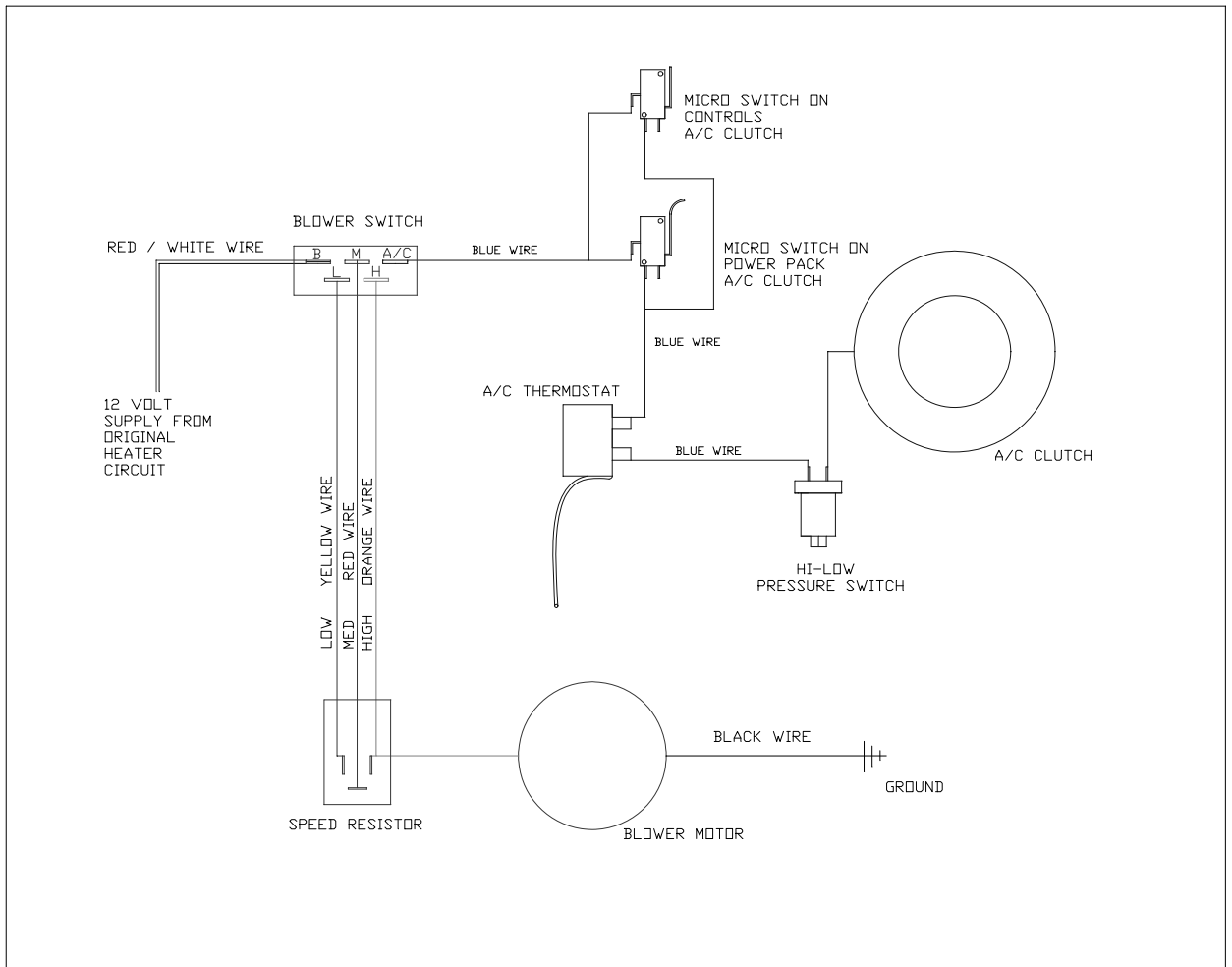
Route both pieces of flex hose up and attach them to the original defrost diffusers.

**NOTE: THE ORIGINAL DRIVERS AND PASSENGERS DIFFUSER ARE THE SAME.**

Locate wire that attached to the original blower switch that was identified on page 4. Cut off the terminal and attach a 1/4" male spade connector.

Locate red / white stripped wire on wire harness and plug it into the original power wire.

Also locate clutch wire from the thermostat, route over top of evaporator and out through bottom hole that original heater tubes went through.





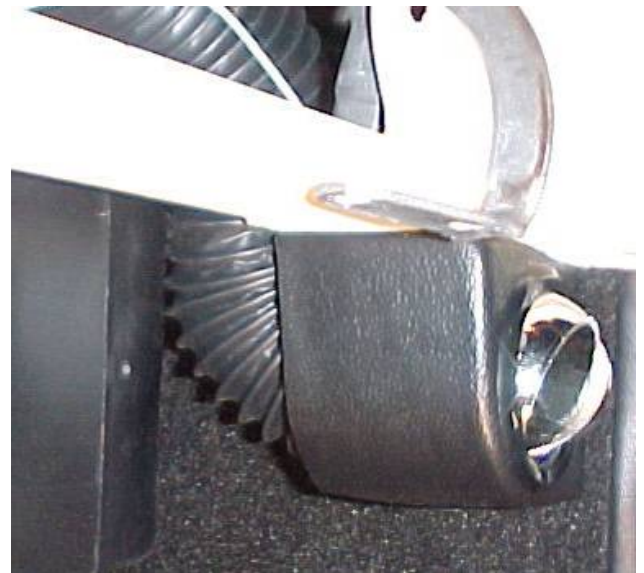
Locate in the hardware sack kit. Passenger side Ball Louver and 2" dia. x 4ft. flex hose

Locate (1) #10 x 3/4" hex head tek screw. Under the instrument panel there is a screw that attaches the glove box door hinge, this lines up with one of the holes in the Ball louver remove and retain this screw. Remove Ball Louver from housing and attach Housing to bottom of instrument panel using the original screw. Use the #10 tek screw through the second hole on louver housing.

Reattach ball louver to the hose adapter.

Attach 4ft flex hose to hose adapter on rear of the Louver.

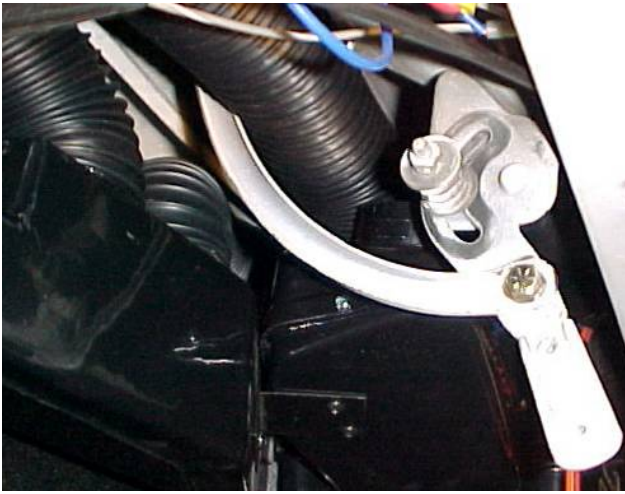
Route flex hose up and over evaporator and attach to right outlet on top of the center duct assembly.



Locate drivers side louver. Remove ball louver and attach housing to the drivers side instrument panel using (2) #10 x 3/4" Tek screws.

Reinstall the ball louver assembly.

Locate 2" dia. x 36" flex hose and attach to hose adapter on back of the louver.



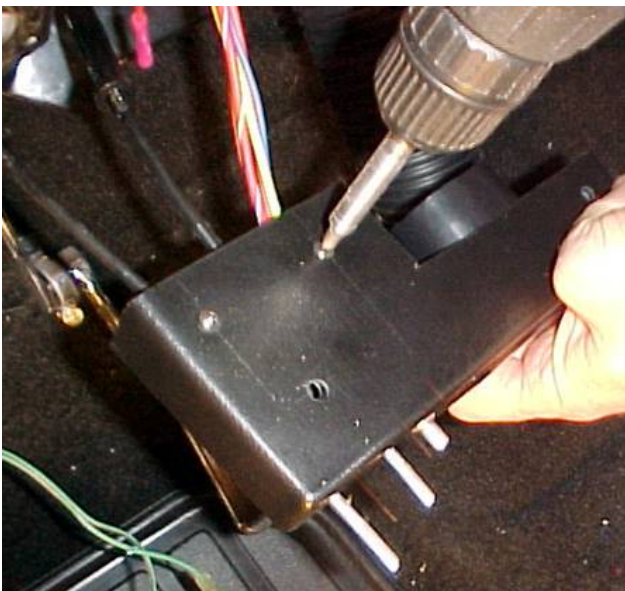
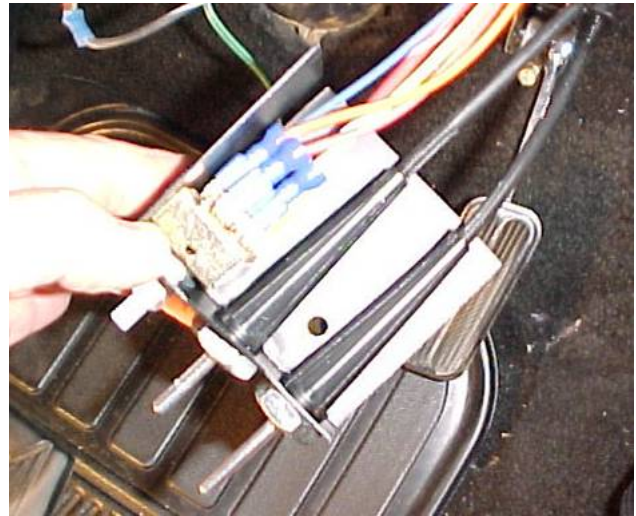
Route flex hose from drivers louver up and behind instruments and then through center of Fresh Air Vent lever then down and connect to center outlet on the Center Duct assembly

Locate in the Control Sack kit the Control Bracket Assembly.

Locate wire harness and cable that is attached to the Evaporator.

Attach wire harness to control assembly using the Wiring Diagram on page 8.

Attach control cable to the hole in the bracket.



Locate the Center Louver Assembly.

Slide control assembly through back of the center louver assembly and line up (3) holes on the top.

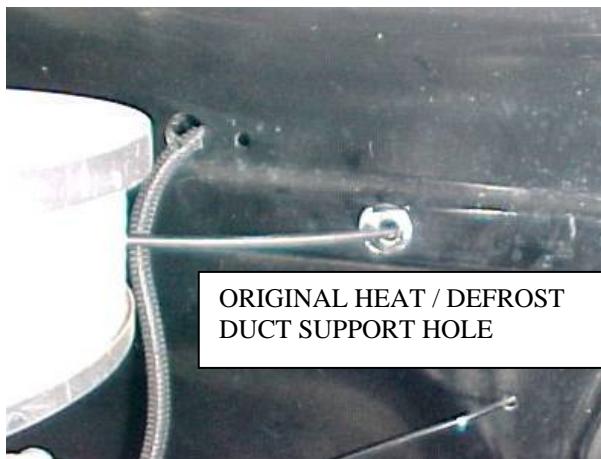
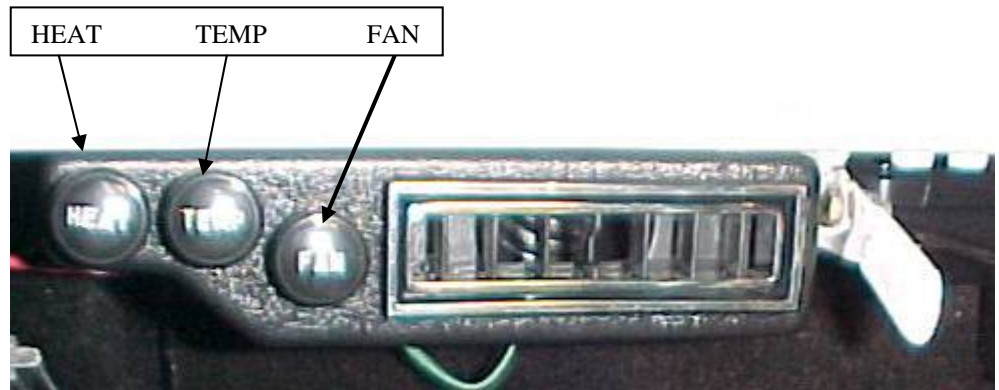
Attach together using (2) #8 x 1/2" pan head Phillips screws.

Attach Center Louver assembly to bottom of instrument panel between fresh air vent handle and the steering column using (2) #10 x 3/4" hex head tek screws from the hardware sack kit.



Locate in the Control Sack Kit (3) Control Knobs.

Attach to the Center Louver assembly as shown.



Locate Temperature Cable attached to the control head. Route this cable straight towards firewall and out through original hole that supported the original heater and defrost ducts.

Locate remaining 2" dia. x 24" flex hose. Attach hose to hose adaptor on rear of the Center Louver Assembly and route up and behind the vent lever arm assembly.

Other end of the hose connects to left hose adaptor on the face duct.





Locate New Glove Box and install into the opening using original hardware.

Install Glove Box Door using the original hardware.

**CAUTION:** The control cables are equipped with inline adjusters. Adjust the Defrost, Heat /Face door to its full travel. Make sure that the water valve completely closes when cable is in the cold position.

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 the lever is in the face position.

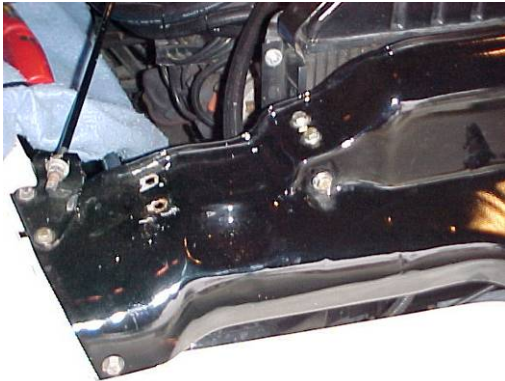
***The engine compartment components should be installed at this time. Carefully follow the electrical diagram provided on page 8.***

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

Locate following components from the under hood components box.

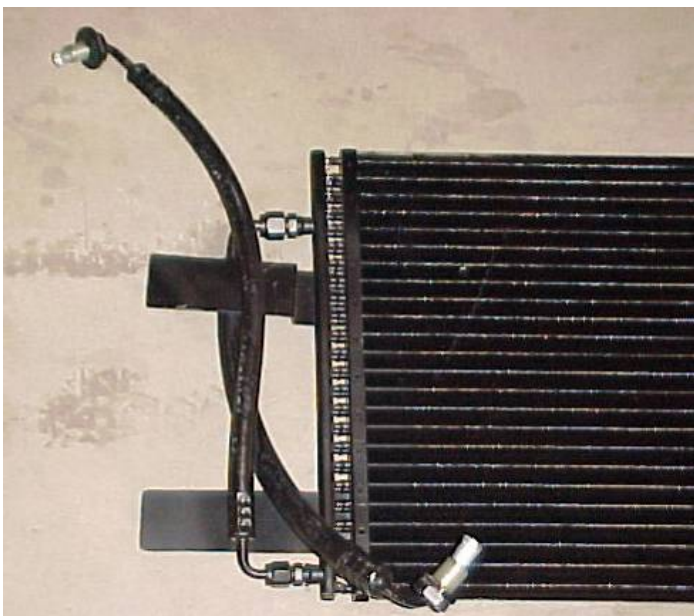
- Condenser
- Receiver Drier / Hi –Low pressure switch
- Drier mounting bracket
- Discharge Hose Assembly
- Liquid Hose Assembly
- (4) Condenser mounting brackets
- (8) #10 x 3/8 hex washer head screws

Remove the Hood Latch panel assembly



Remove (13) screws and retain original hardware.

Remove the top radiator mounting bolts and retain. The lower radiator bolts just loosen.



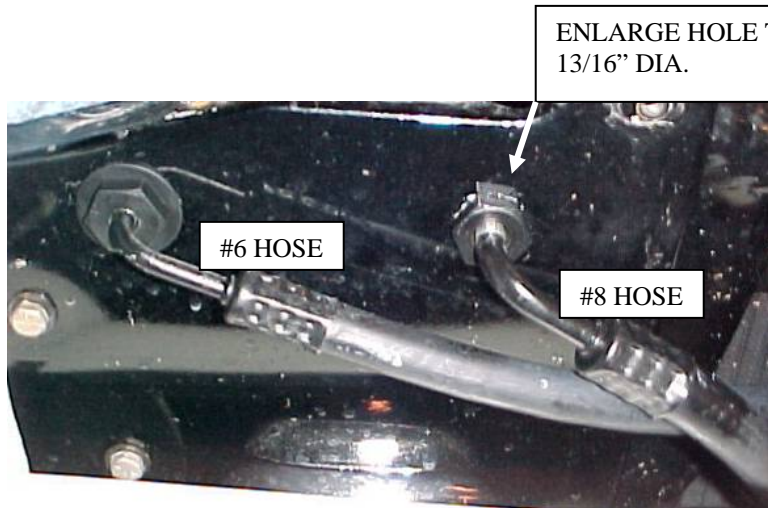
Locate Condenser, (2) Left side, (2) Right side condenser mounting brackets, Liquid Hose (Condenser to Bulkhead), and Discharge Hose ( Condenser to Bulkhead). Attach these components on condenser as shown. Use (8) #10 x 3/8" hex head screws. Use (1) #6 o-ring, (1) #8 o-ring and a few drops of mineral oil. Attach condenser brackets to radiator side of the condenser using (2) #10 x 3/8" hex washer head screws for each bracket. The top bracket 4<sup>th</sup> hole from the top. The bottom bracket 2<sup>nd</sup> hole from the bottom.

NOTE: THE LEFT HAND BRACKETS ARE THE SHORT ONES AND ATTACH IN THE SAME VERTICAL LOCATION.

Slide condenser assembly between Radiator and the radiator bulkhead.

Reinstall the upper radiator mounting bolts tighten securely.

Note: Condenser top edge should be even with the radiator bulkhead.



Locate on the radiator bulkhead on passenger side (2) holes. Enlarge the right hole to 13/16" dia.

Route hoses around radiator support and up through holes in the bulkhead. Attach using the bulkhead fitting nuts.

Tighten securely.

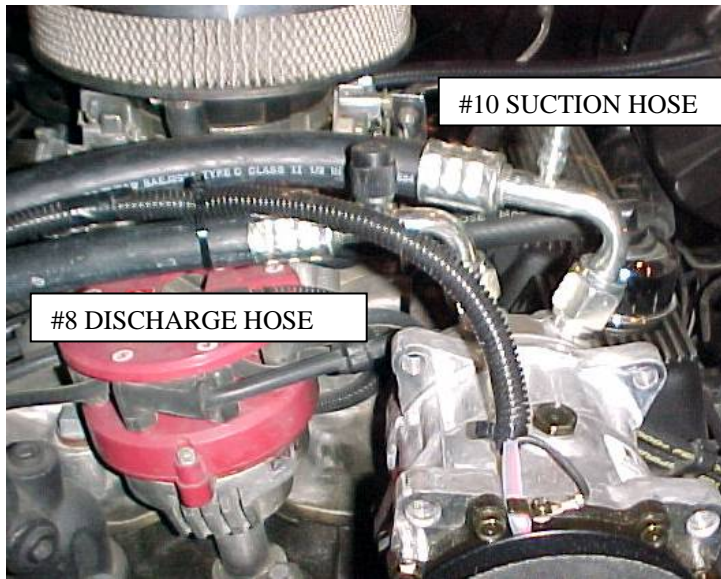
Reinstall Hood Latch panel assembly using the original hardware.

Locate in the under hood kit (1) #6 liquid hose, (1) #8 hose assembly, (1) #6 o-ring, and (2) #8 o-ring.

Attach hose to the bulkhead fitting using o-ring and a few drops of mineral oil for each connection.







Route discharge hose end with service port over to compressor and attach to the compressor using (1) #8 o-ring and a few drops of mineral oil. Tighten securely.

Locate the #10 suction hose.

Attach hose end with service port to the compressor using (1) #10 o-ring and a few drops of mineral oil.

Route suction hose from compressor to #10 fitting at the firewall. Attach to the fitting using (1) #10 o-ring and few drops of mineral oil.

Locate Receiver / Drier, pressure switch, Drier Mounting bracket, Liquid Hose, (3) #6 o-rings and (2) #10 x 3/4" tek screws.

Attach pressure switch to drier. Loosely attach Drier to liquid hose using (1) #6 o-ring and a few drops of mineral oil. Attach other end to #6 fitting at the firewall using (1) #6 o-ring and a few drops of mineral oil. This will position the Drier to the firewall. Attach Drier assembly to firewall using (2) # 10 x 3/4" tek screws.

Route #6 Liquid hose along fender skirt up and attach to inlet on the drier using (1) #6 o-ring and a few drops of mineral oil.

Tighten all fittings securely.



It is recommended that the heater hoses be replaced at this time. Hookup the heater hoses to the connections coming through the firewall.

NOTE: SUPPLY LINE FROM ENGINE WILL BE HOOKED TO THE LOWER FITTING USING A WORM GEAR CLAMP.

Locate in the Hardware Sack Kit the Water Valve and (3) worm gear clamps. Cut 6" off of the return heater hose and attach to the connector then to water valve and then to remaining hose that goes back to the engine. Use the worm gear clamps supplied.

Locate Temperature Control Cable and attach it to the water valve as shown. Set cable so that

Temp knob is pushed all the way in and the water valve is in its fully closed position.

Locate electrical plug that attaches to the Pressure switch on the drier, attach to switch.

There are two white wires attached to the pressure switch route one of them to the compressor clutch and attach a Female bullet connector. Other wire route along Liquid hose and attach to clutch wire at the firewall. Secure wires with tywraps provided.

Use same refrigeration tape to seal around the cable and clutch wire.

Reconnect battery, fan shroud, 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.***

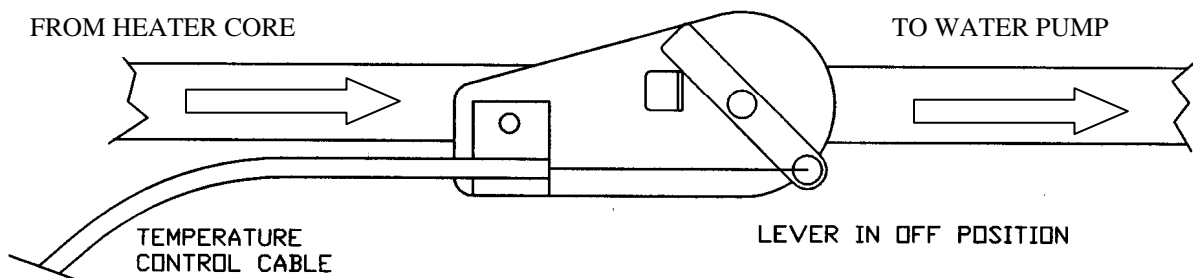
# **IMPORTANT**

**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.***

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