



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

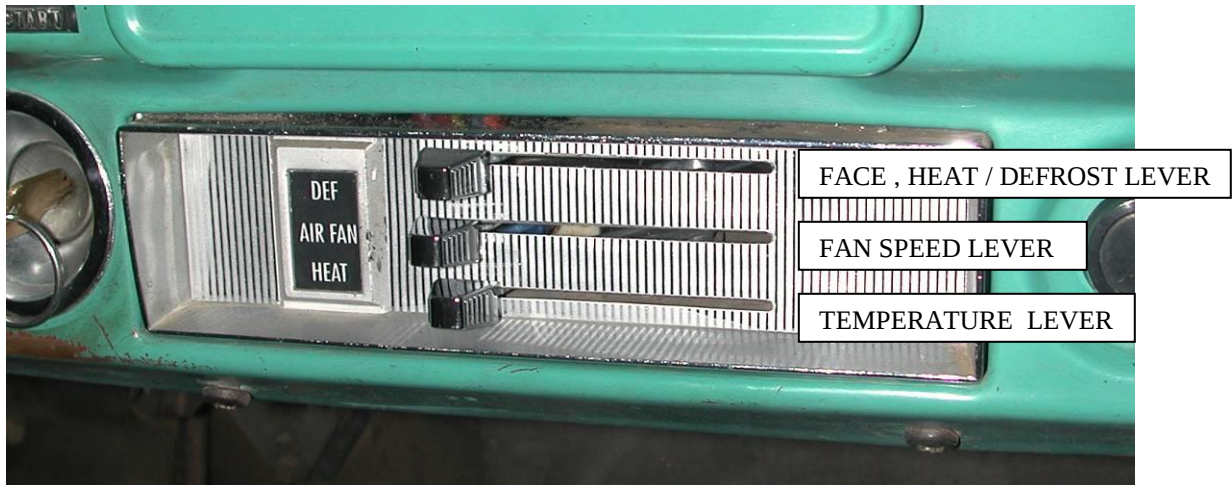
“PERFECT FIT” IN-DASH

HEAT/ COOL/ DEFROST

1967-72 CHEVROLET 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 simultaneously.



THE PICTURE YOU SEE ABOVE SHOWS THE CONTROLS IN THE FACE MODE. THIS MEANS THAT ALL OF THE AIR WILL BE DISTRIBUTED THROUGH THE DASH LOUVERS. THIS ALSO HAS THE TEMPERATURE LEVER IN THE COLD POSITION. WITH THE CONTROLS IN THIS POSITION YOU WILL GET THE AIR THROUGH THE DASH LOUVERS AT ROOM 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 FUNCTION AT ITS MAXIMUM PERFORMANCE LEVEL.

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

FAN SPEED LEVER: 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 which is mounted on the main housing.

FACE / HEAT, DEFROST LEVER: The lever as shown in the picture is in the Face position. The lever all the way to the left will engage the compressor for air conditioning mode. As this lever is moved towards the right, the clutch will disengage and it will change the air from the Face louvers and blend into the Heat / Defrost outlets. Only when the lever is in the far right position will the compressor engage and provide “Dehumidified” defrost.

TEMPERATURE CONTROL: The temperature lever 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.

AIR CONDITIONING MODE: The picture shows the controls in the Face Mode (air-flow out the dash louvers).

When Air Conditioning is required the compressor clutch must be activated. This is accomplished by pushing the lever all the way to the LEFT. When the compressor is activated the Temperature Lever will control the air from maximum cold through maximum heat.



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INSTALLATION INSTRUCTIONS **1967-72 CHEVROLET PICKUP**

Congratulations! ! You have just purchased the highest quality, best performing A/C system ever designed for you Classic Car. 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
Inlet Air Block Off Assembly
Firewall Block Off Assembly
Flex Hose 2"dia. x 3ft.
Flex Hose 2"dia. x 4ft x 2ea..
Flex Hose 2 ½"dia. x 2 ft.
Sack Kit Louver
Sack Kit Hardware
Sack Kit Control
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

Remove Glove box, Heater controls and Radio, set aside for reinstall.

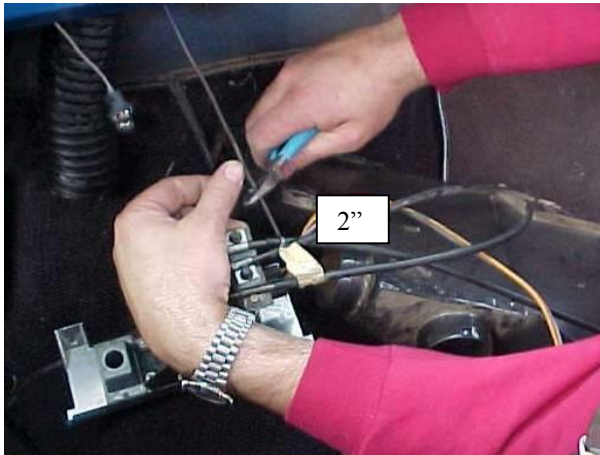


Removal of the Control Head can be accomplished by disconnecting the three control cables.

One attached to the Heat/Defrost door.



One attached to the Temperature door as shown.
And one attached to the Vent / Heat door located
under the housing.

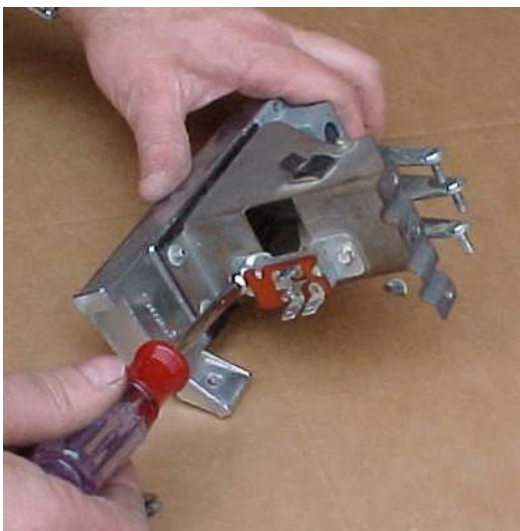


Lower control head and cut the Brown original wire 2''
from the switch plug as shown.

Disconnect power wire from blower motor and pull wire
through firewall as shown. Carefully cut and remove
original grommet to be reused later on page 10.

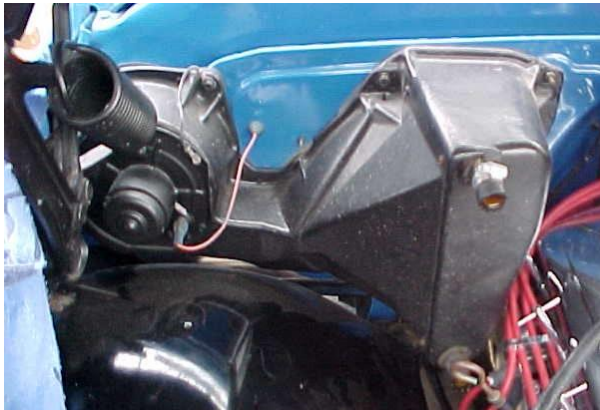


Remove the 3 cables, electrical harness,
Blower switch and discard. Retain the original
hardware.



Remove screws located around perimeter of the indash Heater Distribution Box and discard. There is one screw located on the firewall under the hood. This is at the center of the vehicle behind the motor. Remove and discard.

Carefully remove entire Heater Distribution Box along with the flex duct attached to the defrost diffusers.



Locate blower motor and Heater coil housing on the firewall (Passenger Side) in the engine compartment. Remove 2 nuts and 4 screws around perimeter of housing.

Drain coolant from radiator.

Remove Heater hoses from the coil connectors.

NOTE: It is necessary to remove the screws holding the wheel well in place. Allow the wheel; well to drop enough to remove the housing screws.

Remove the entire housing and discard. Be sure to reinstall wheel well using the original hardware.





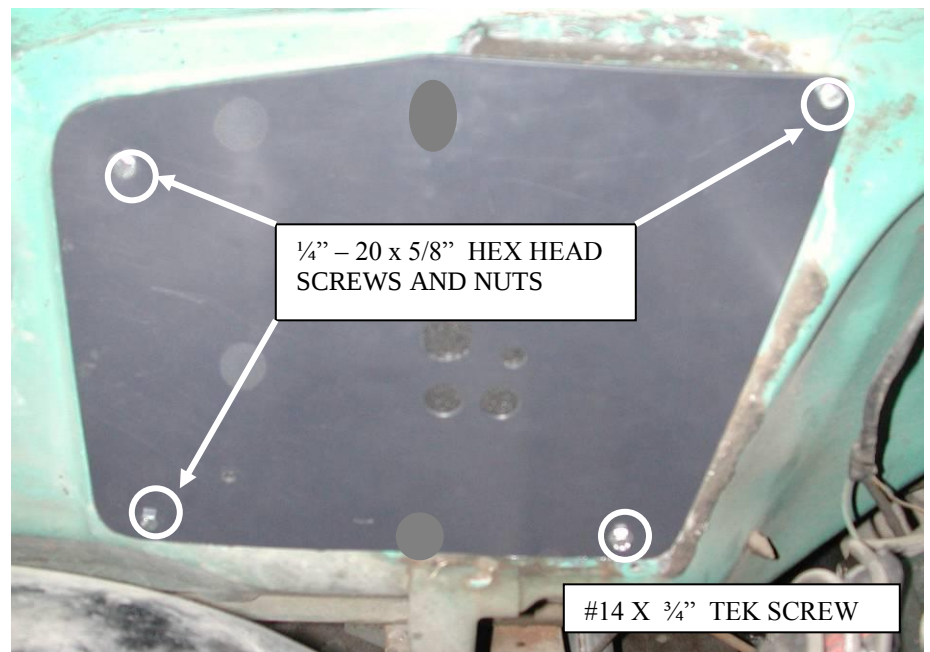
Locate and trim center of hole in the firewall as shown.

Discard the center metal piece.

Locate the firewall block off, (1) #14 X $\frac{3}{4}$ " tek screw, (3) $\frac{1}{4}$ "-20 x $\frac{5}{8}$ " hex head screws and (3) $\frac{1}{4}$ "-20 flange nuts from the kit.

Install block off over the hole in the firewall using the $\frac{1}{4}$ " screws and nut.

Install the #14 tek screw at the bottom right hole.

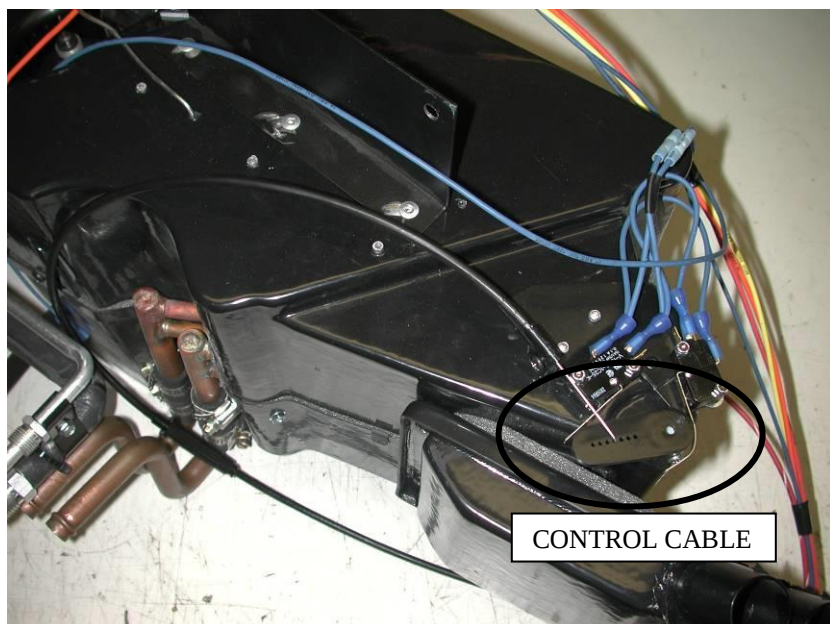


Locate Inlet Block off provided. Attach with (2) #10 x $\frac{3}{4}$ Tek screws on engine side of firewall, covering the round hole behind the hood hinge assembly.

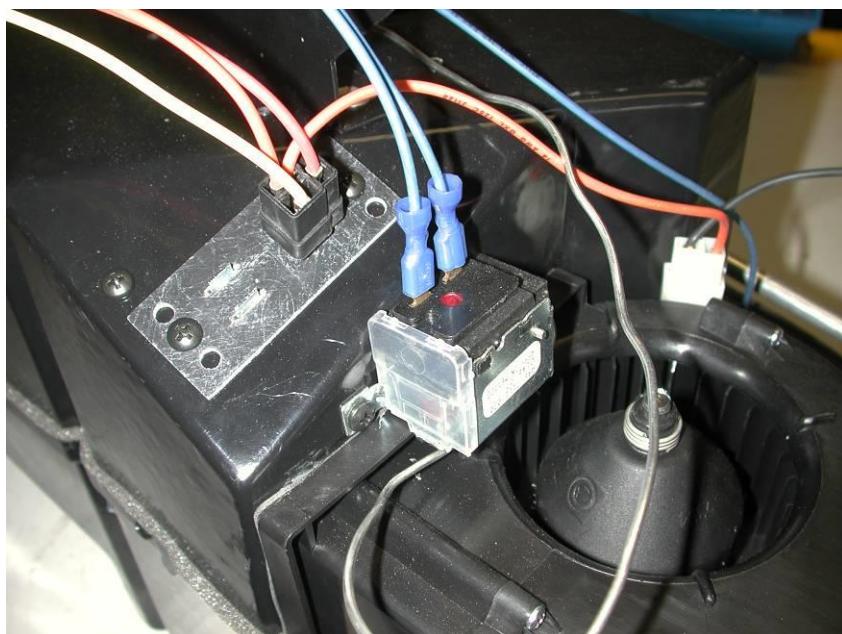
Locate Evaporator and place on bench.

Also locate the control cable, wire harness, defrost heat duct, (1) #8 x 3/8" pan head screw and (2) #10x 5/8" pan head screws.

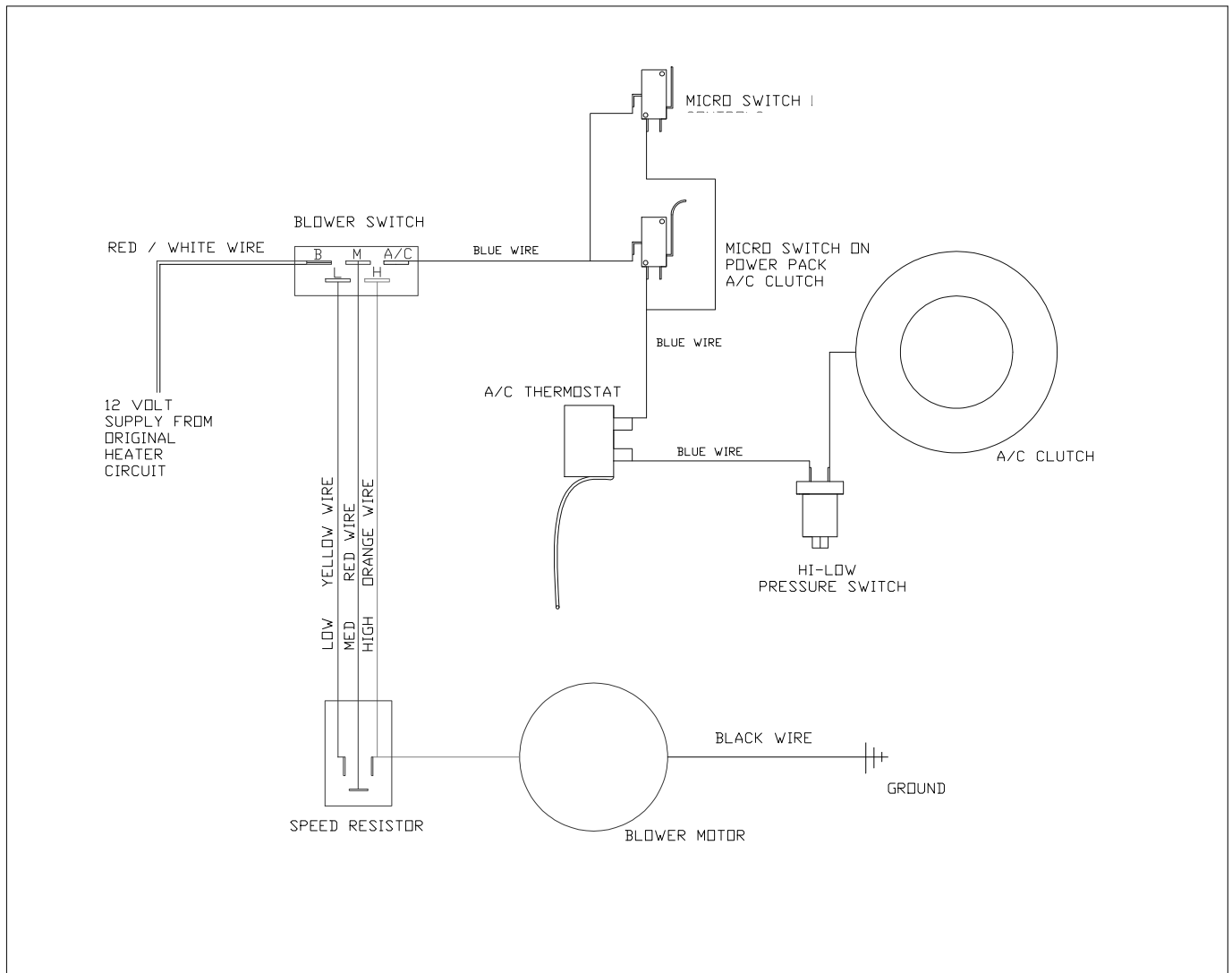
Attach the defrost duct to back of the unit using (2) #10 screws. Line up with the u-clips on the back of unit.



Attach control cable to door crank arm in the middle hole of the crank arm. Attach to the cable mounting bracket using the #8 screw.



Attach wire harness to the micro switches, and route wire harness to blower motor at other end of the unit. Attach to the resistor, blower motor and thermostat per the wiring diagram on next page.



Locate from kit the last remaining control cable.

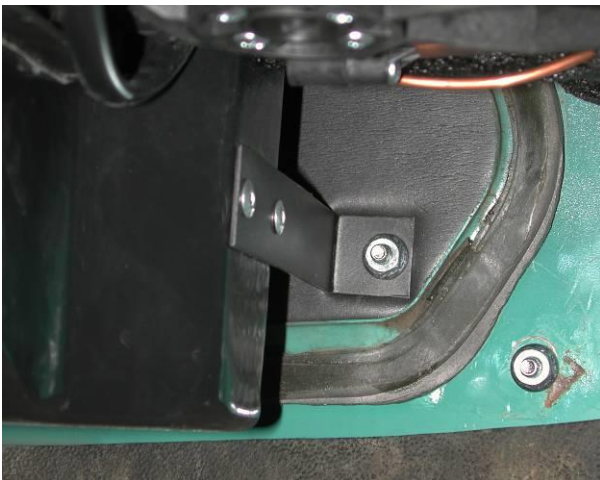
Insert through grommet hole in firewall block off from inside of the vehicle. The inline adjuster will be on the inside of the vehicle.

The (4) holes that are left in the firewall are for the a/c and heater tubes.

Locate the unit and slide in behind instrument panel and the firewall. Insert the hookup tubes through the firewall block off.

Holding the unit in a level position, and using the tubes to locate the unit side to side.

Attach through top unit support into the fresh air duct behind the glove box opening. Use (2) #14 x $\frac{3}{4}$ " tek screws from the hardware sack kit.



Locate in the Hardware Sack Kit (1) $\frac{1}{4}$ " – 20 x $\frac{5}{8}$ " hex screw and flange nut.

From engine side insert screw through firewall and through lower support bracket on the evaporator. Attach using flange nut from the inside of the vehicle.

Locate in the Hardware Sack Kit (1) 9" clear drain hose.

Drill (1) $\frac{11}{16}$ " dia. hole through firewall under the evaporator and over to the left approximately 3" and lower than the drain nipple as shown.

Insert through the hole and onto the drain nipple.



Locate 2" diameter flex hose 3ft long. Cut (1) piece 10" long and (1) piece 18" long.



Locate the round defrost hose adaptor and (2) #8 screws. Attach this to the 18" piece of hose.

Locate the oval defrost hose adaptor and (2) #8 screws. Attach this to the 10" piece of hose

Attach 18" assembly to left outlet on the defrost / heat duct.

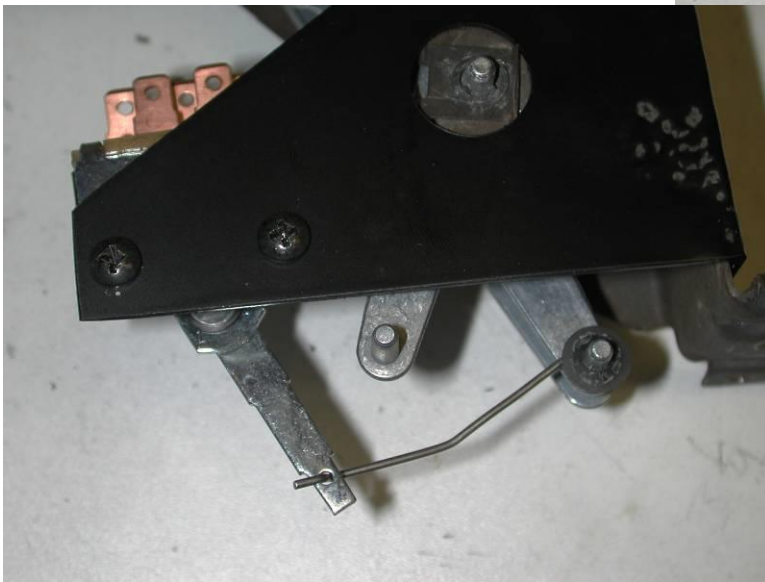


Attach 10" assembly to the right outlet.

The picture to the left shows the passenger defrost hook up. The drivers defrost hook up is the same.

Locate control head that was removed from the truck.

Locate in the control sack kit the blower switch mounting bracket. Using the original hardware attach bracket to bottom of the control head.



Locate the blower switch, control wire, (1) push nut, and (2) #8 x 3/8 pan head screws.

Attach blower switch to the control bracket as shown.

Attach wire through the blower switch hole and then over the center lever pin. Secure with push nut.

Locate brown wire that was cut off during the removal of the control head. Attach a 1/4" male spade to the end as shown.

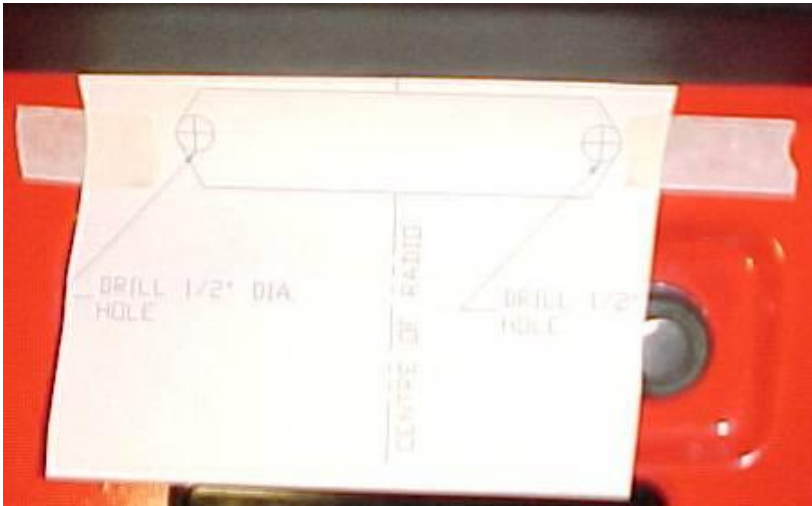


Locate in the control sack kit the cable clamp bracket. Using original hardware attach control cables hanging under the dash , to the control head. The cable that operates the face / def. door goes to the top lever and the cable that operates the temperature valve goes to the bottom.

Refer to wire diagram on page 7 hookup wire harness. Route blue clutch wire through hole in the firewall that the temperature cable is routed through.

CAUTION: The control cables are equipped with inline adjusters. Adjust the Defrost, Face / Heat door, and Water valve cable so that the full travel of the Control lever, operates the door to its maximum travel. Make sure that the water valve completely closes when the Lever is in the cold position.

The (2) Micro Switches that are mounted on the Defrost / heat door are used to turn on the compressor clutch. This will occur when the control lever is in the far right position and the far left position. It may be necessary to adjust the thin metal arm on the switch. Make sure that the Clutch Micro Switch is depressed when the lever is in either of these positions.



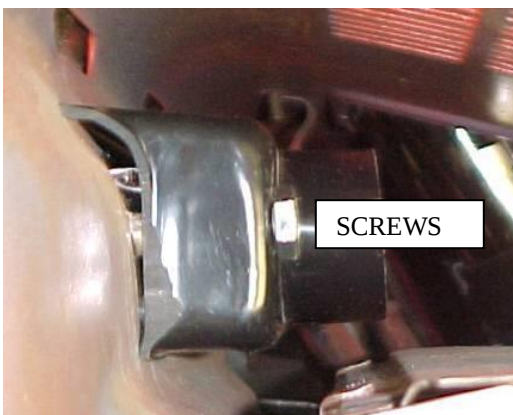
It is necessary to cut a hole in the instrument panel above the radio opening for the Center Louver. Locate in the instructions the Center Louver Template. Use the template by taping template to the instrument panel. Carefully follow directions on template.

Caution: The opening is very critical. It must be ruff cut and then filed to the desired size. The louver must barely fit through the opening.

Install Louver through the opening and attach using Center louver hose adaptor over the backside of louver.



Locate in the kit (1) piece of 2 1/2" diameter flex hose 2ft long, cut to 18". Attach to the center louver adaptor using (2) #8 x 3/8" pan head screws.



Attach using (2) 1/4" x 1/2" self cutting phillips screws.



On drivers side of instrument panel.
Using a 2 1/4" Dia hole saw locate and cut a hole as shown.

1 5/8"

1 3/4"

Locate 2" Dia. Ball Louver with the 2" Dia hose adaptor. And install in the hole previously cut. Unscrew vent portion from hose adaptor and instert through the front of dash and hose adaptor in back of dash and screw together holding firmly in place



On the passenger side of instrument panel.
Using a 2 1/4" Dia. hole saw locate and cut a hole as shown.
Locate a 2" Dia. Ball Louver with the 2" Dia hose adaptor. And install in the hole previously cut.

1 3/4"

Install the Face Duct Assembly on to the Evaporator. Be sure that the S-clips are installed over flange. Route 2" dia. Flex hose from the drivers louver assembly behind the instruments and attach to the left hose adaptor on top of the face duct. Route the 2" dia. Flex hose from the passengers louver over the top of the unit and attach to the right outlet. Route the 2 1/2" dia. Flex duct from the center louver to the 2 1/2" outlet on the front of the face duct.



Install new Glove Box into opening in the instrument panel as shown. Attach with original screws.

Reinstall the Glove Box Door using original hardware.

Caution: Carefully check under the

Instrument Panel for all cables, electrical harness, or Flex Ducting that might interfere with the safe operation of the vehicle.

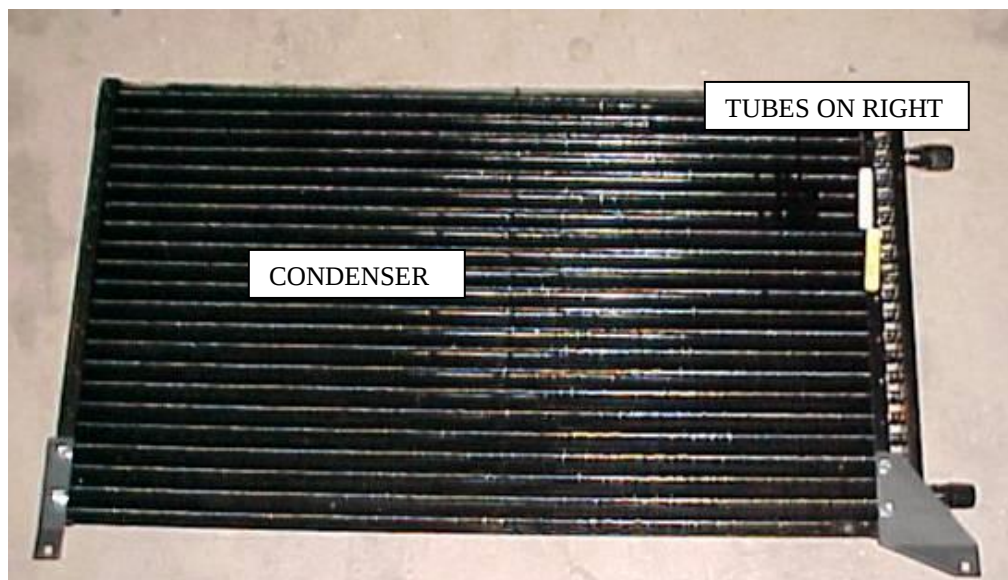
IT IS NOW TIME TO INSTALL THE COMPRESSOR AND THE CONDENSER REMOVE BATTERY AND SET ASIDE.

Remove the hood latch assembly.
Retain all hardware.



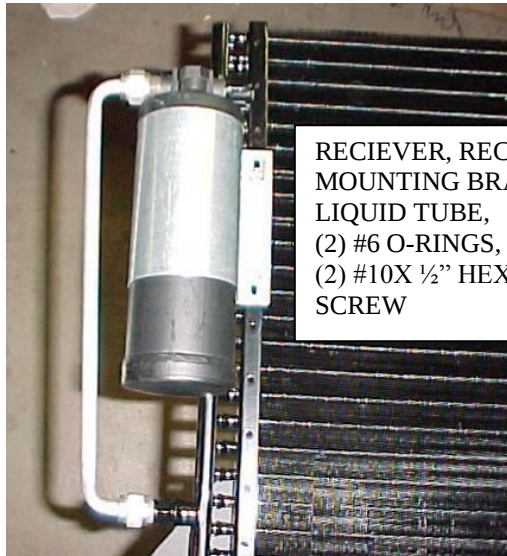
Remove the drivers and the passengers side upper radiator attachment bolts. And retain the hardware.

Locate condenser coil, drivers mounting bracket, passengers mounting bracket, and (4) #10 x 1/2" hex head screws. Attach brackets to the coil as shown. Locate the following components. Receiver drier, receiver mounting bracket, liquid tube, (2) #6 o-rings, and (2) #10 x 1/2" hex head screw.



DRIVERS MOUTING BRACKET

PASSENGERS MOUNTING BRACKET

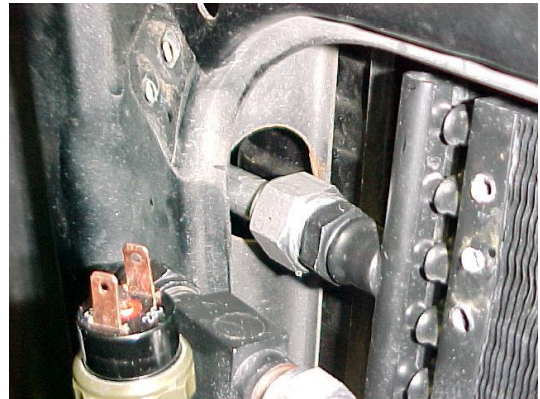


RECIEVER, RECIEVER
MOUNTING BRACKET,
LIQUID TUBE,
(2) #6 O-RINGS, AND
(2) #10X 1/2" HEX HEAD
SCREW

Attach receiver to the condenser as shown using 4th hole from the top. Use a few drops of mineral oil at the o-ring connections.

This picture shows the condenser installed. It is necessary to drill a 1 3/8" dia. hole directly in line with the upper tube connection.

Place condenser assembly in place and locate the hole. Remove condenser assembly and drill hole.



Install condenser assembly. Attach lower (2) brackets to the bulkhead using (2) 1/4-20 x 5/8" hex head screws, and (2) 1/4-20 flange nuts. Tighten securely.



Locate Upper Drivers mounting bracket, (2) #10 x 1/2" hex head screws, (1) 1/4-20 x 5/8" hex head screw, and (1) 1/4-20 flange nut.

Attach bracket to the condenser and bulkhead as shown. tighten securely.

Locate the Liquid Tube Assembly, (2) 1 1/2" dia. flat washers, and (1) #6 o-ring.

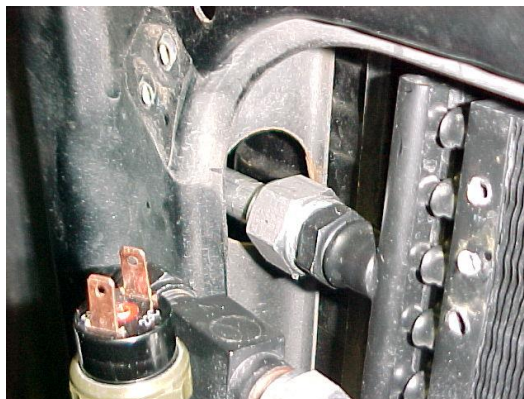
Attach the tube to the drier using the o-ring and a few drops of mineral oil. Using the washers insert bulkhead fitting through the bulkhead. Attach with nut and tighten fittings securely.



BEHIND AND UNDER BATTERY BOX

Locate the Discharge Tube ring.

Insert tube between battery radiator. Then through hole drilled and attach to the (1) #8 o-ring and a few



and (1) #8 o-

box, and the previously condenser using drops of mineral

oil.



Locate the discharge hose and (2) #8 o-rings. Attach it to the discharge tube and route over to the compressor.

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

Locate the High / Low pressure switch and wire assembly.

Attach to the port on the top of the receiver using a few drops of mineral oil.

Route the wires through the hole along the discharge tube.



One of white wires from the pressure switch will be routed along the discharge hose and attached to compressor clutch using a bullet connector. The second wire will route along the liquid tube and attach to blue wire from the thermostat attach using 1/4" male spade connector.



Locate the passenger upper mounting bracket, (2) #10 x 1/2" hex head screw, (1) 1/4"-20 x 5/8" hex head screw, and (1) 1/4"-20 flange nut. Attach to the condenser and bulkhead as shown.

Reattach hood latch assembly and radiator support brackets using original hardware.

Locate the liquid hose and attach straight fitting to bulkhead under the battery box. Attach using a few drops of mineral oil.



Route liquid hose from bulkhead along fender to #6 fitting on the firewall.

Attach using a few drops of mineral oil.

Locate water valve from the control sack kit.

Cut 6" of heater hose from the return line and attach water valve using the (3) worm gear clamps provided. Attach the control cable. Adjust so valve is completely closed when lever is in the cold position.

Locate the Suction Hose and (2) #10 o-rings.

Attach straight end to fitting at firewall using (1) o-ring and a few drops of mineral oil. The other end route to compressor and attach using (1) o-ring and a few drops of mineral oil. Tighten fittings securely.



***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.***

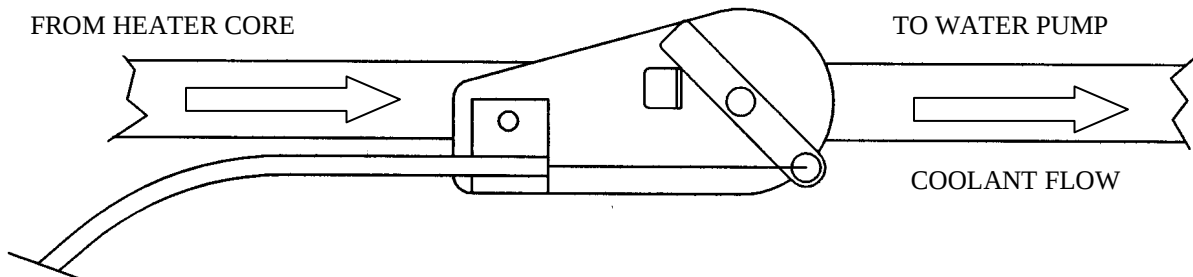
IMPORTANT

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***

CENTRE LOUVER TEMPLATE

0020I-1

LOCATE ALONG EDGE OF PADDED DASH



CENTRE OF RADIO

DRILL 1/2" DIA.
HOLE

DRILL 1/2" DIA.
HOLE