



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

“PERFECT FIT”

IN-DASH

HEAT/ COOL/ DEFROST

1960 - 1963 CHEVROLET PICKUP

DELUXE CONTROLS

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 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 LEVER IN THE COLD POSITION. WITH THE CONTROLS IN THIS POSITION YOU WILL GET THE AIR THROUGH THE FACE OUTLETS WITH THE COMPRESSOR ON.

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 main housing.

FACE AND FLOOR / DEFROST MODE: When the Control Lever is in the upper position it will direct the air to the floor / and defrost ducts. The cable can be moved any position from top to bottom. This will give blend between all distribution outlets.

DEFROST MODE: When the Control Lever is in the upper position the compressor is not on and the system is not running in the Dehumidification mode. The lever must be pushed down and this will engage the clutch.

TEMPERATURE CONTROL: The Temperature Lever as shown is in the COLDEST temperature position. As the lever is pushed down 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 Control Lever the Face Mode (air-flow out the face outlets).

When the Mode control lever is in the top position the Air Conditioning is activated the compressor clutch is on. When the compressor is activated the Temperature Lever will control the air from maximum cold through maximum heat.



specializing in "AIR CONDITIONING, PARTS AND SYSTEMS" for your classic

INSTALLATION INSTRUCTIONS 1960-63 CHEVROLET 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 – 1 ea.

Flex Hose 2"dia x 2ft – 3 ea.

Flex Hose 2"dia. x 3ft. – 1ea.

Flex Hose 2"dia. x 4ft. – 1ea.

Sack Kit Hardware

Kit Control

Glove Box

Firewall Block Off (2)

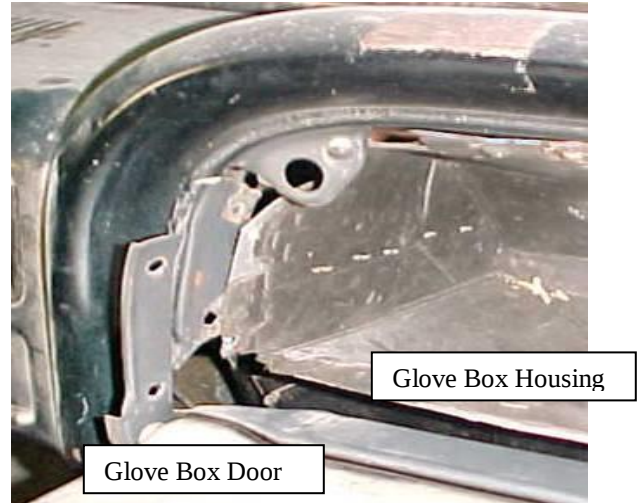
IMPORTANT INFORMATION

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 the Glove box door and glove box. Retain the glove box door and it's original hardware. Discard the glove box housing.



THIS SERIES OF TRUCK COMES EQUIPT WITH A STANDARD HEATER OR A DELUXE HEATER. IF YOUR TRUCK HAS THE DELUXE HEATER SYSTEM FOLLOW THE NEXT 8 STEPS FOR REMOVAL OF HEATER AND VEHICLE PREPARATION FOR THE NEW A/C, HEATING UNIT.



Under the glove box opening locate the defrost / floor distribution box. Remove (3) screws around the housing flange. Remove the (2) control cables. One cable is attached to the floor / defrost door. One cable is attached to the air shutoff door.

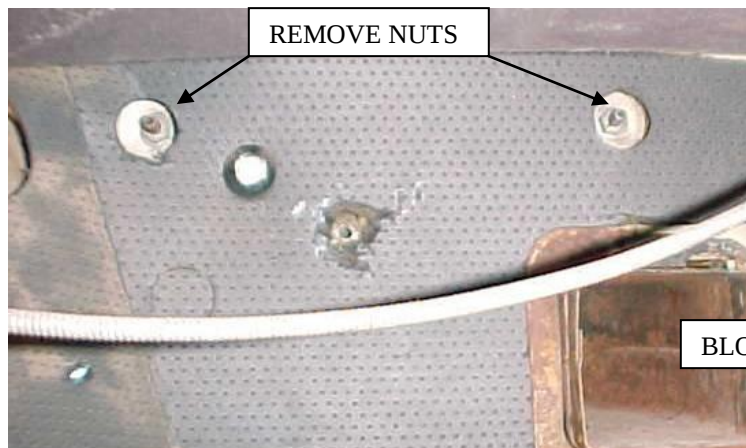
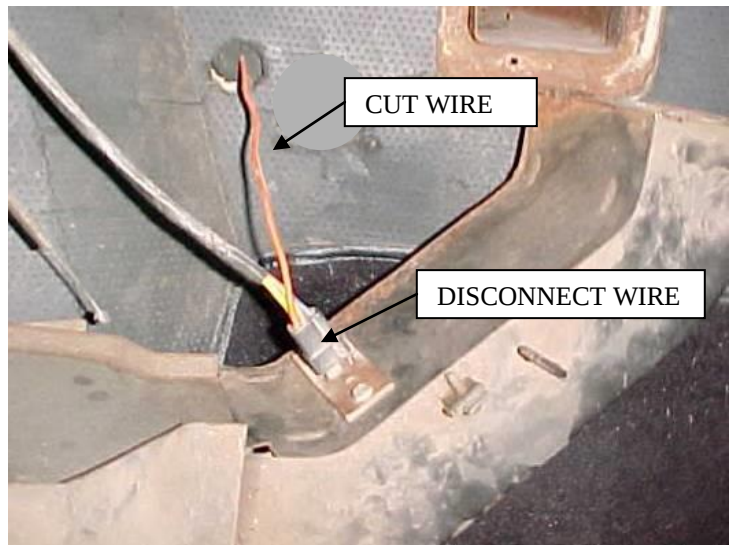
On left side of the housing remove and discard the support screw.



Rotate the housing.

Located on the back is a speed control resistor
Disconnect wire connector. Cut the wire that goes through firewall and connects to the original heater motor.

Remove and discard housing.



Locate (2) nuts above the blower outlet.
Remove and discard.



Drain radiator and then remove heater hoses from the heater connections. Also remove (5) screws that attach the heater assembly to firewall.

Discard original heater assembly and retain the original hardware.



5 SCREWS REMOVE AND RETAIN

NOTE: THE 5 TH SCREW IS ON LEFT SIDE OF THE HEATER BOX.

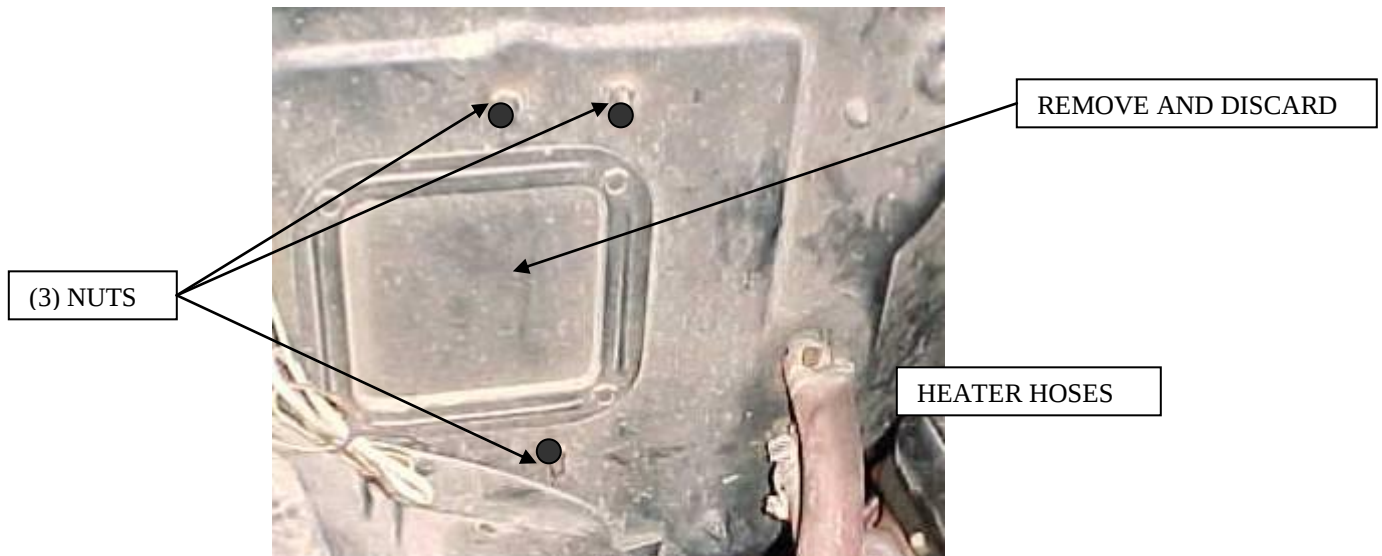
Remove (2) Philips Screws as shown along top edge of controls.
Also remove Philips Screw that attaches the brace for the control assembly.
Set aside for later modifications and reinstallation. Retain all of the original hardware.



IF YOUR TRUCK HAS THE STANDARD HEATER SYSTEM FOLLOW THE NEXT 6 STEPS FOR REMOVAL OF HEATER AND VEHICLE PREPARATION FOR THE NEW A/C, HEATING UNIT.

Drain radiator and disconnect Heater Hoses from heater assembly.

Locate (3) nuts that attach the heater assembly to firewall. Remove and discard.



Locate original Firewall Cover as shown. Remove and discard. Retain the original hardware.



Locate attachment screw on left of heater housing, remove and discard. Also disconnect Control Cable for Heat / defrost door at the heater assembly.

Remove complete Heater Assembly from vehicle and discard.



Remove (2) Philips Screws as shown along top edge of controls.

Also remove Philips Screw that attaches the brace for the control assembly.

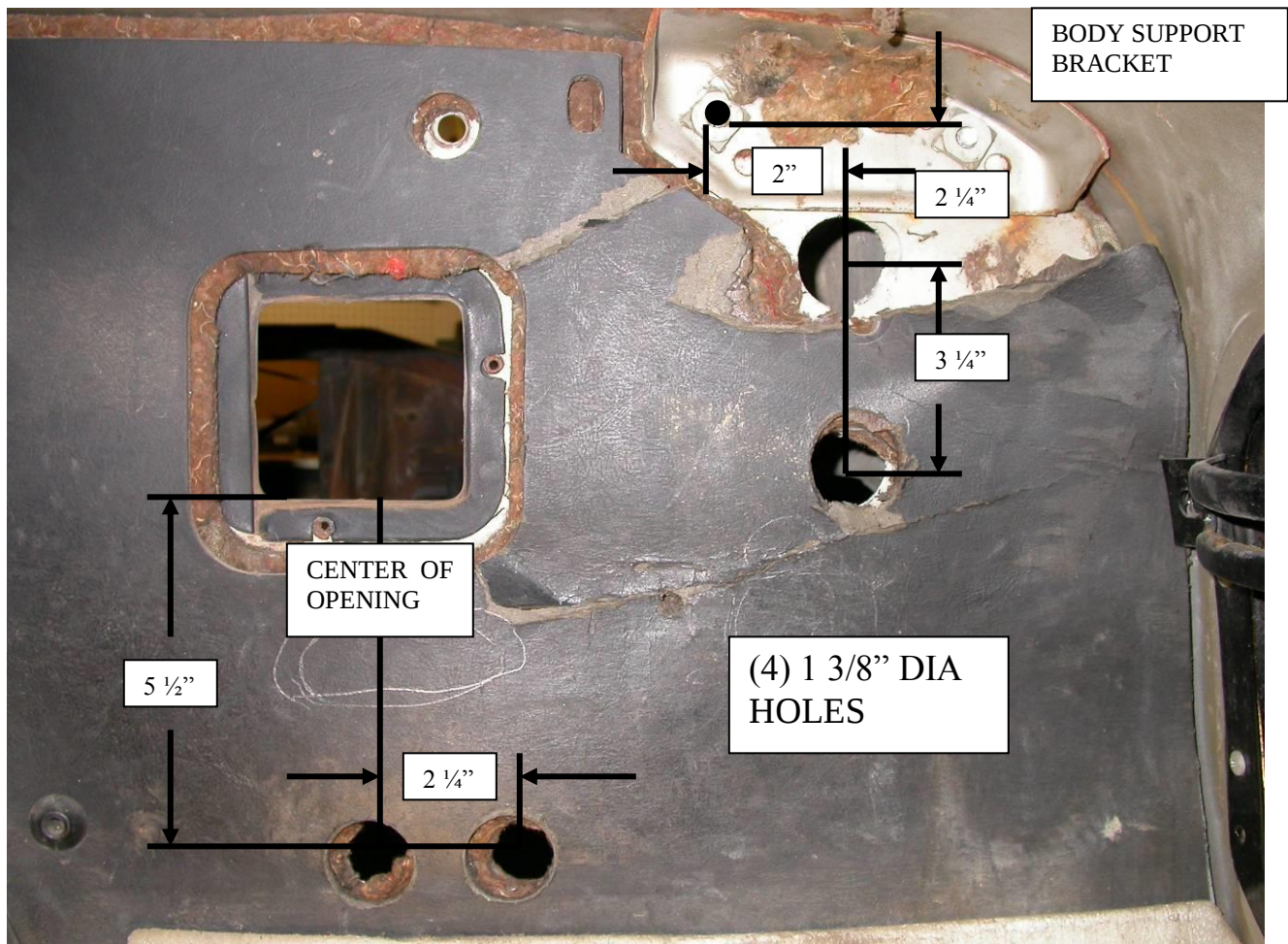
Discard original control head. Retain all of the original hardware.



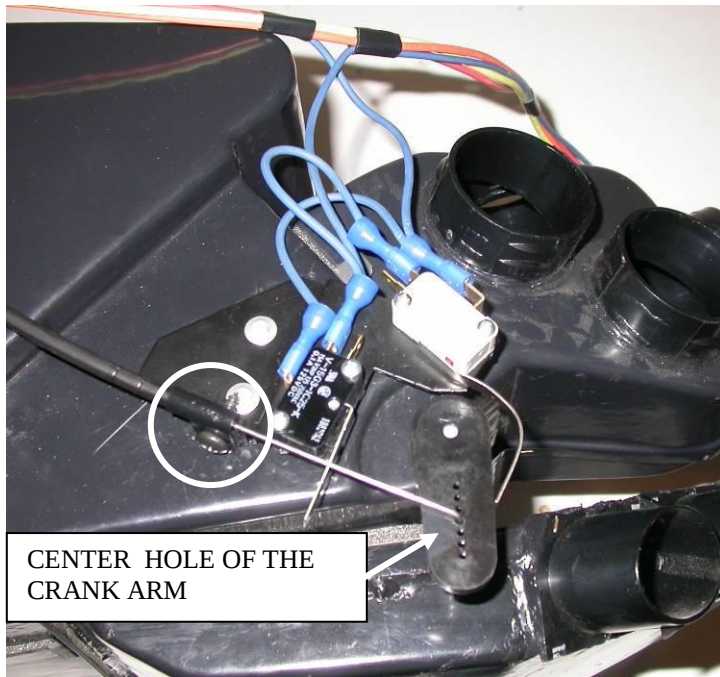


When removing control head disconnect electrical plug at blower switch. Cut Brown wire off the back of the connector housing as shown.
Discard original wire harness.

Behind glove box opening the following modifications to firewall are required.
Hole locations are for heater and air conditioning hoses. Carefully lay out as shown.
Cut (4) 1 3/8" holes using a good quality hole saw.



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



CENTER HOLE OF THE
CRANK ARM

Locate the Evaporator from kit. Carefully set the evaporator on a bench.

Locate in Control Sack Kit shortest of (2) control cables. Insert cable in to door crank arm as shown. Using (1) #10 x 5/8" pan head phillips screw, attach cable by mounting tab.

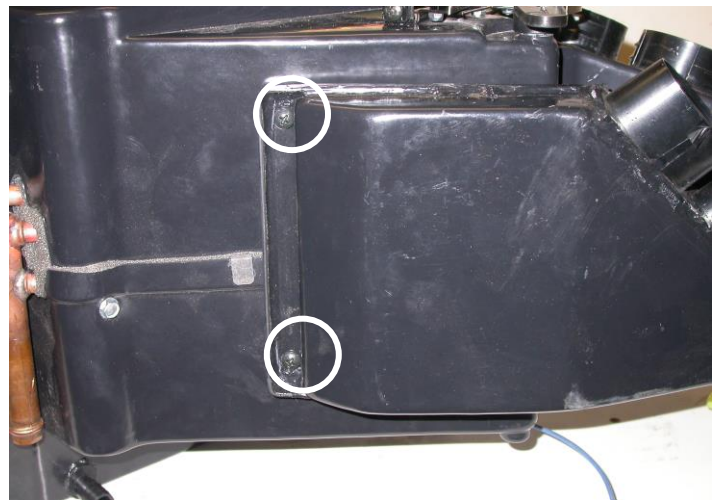
For trucks with “Deluxe Controls”, cable uses a clamp supplied in kit.

Locate wire harness from the control sack kit. Attach (4) blue wires to the micro switches in parallel. Refer to the wiring diagram on page 16.

Attach resistor plug to resistor by the motor. Attach (2) blue wires to thermostat and 2 pin blower connector to the blower motor.

Locate defrost / heat duct assembly from the kit and (2) #10 x 5/8" pan head screws.

Attach duct to back of the evaporator through the metal u-clips.

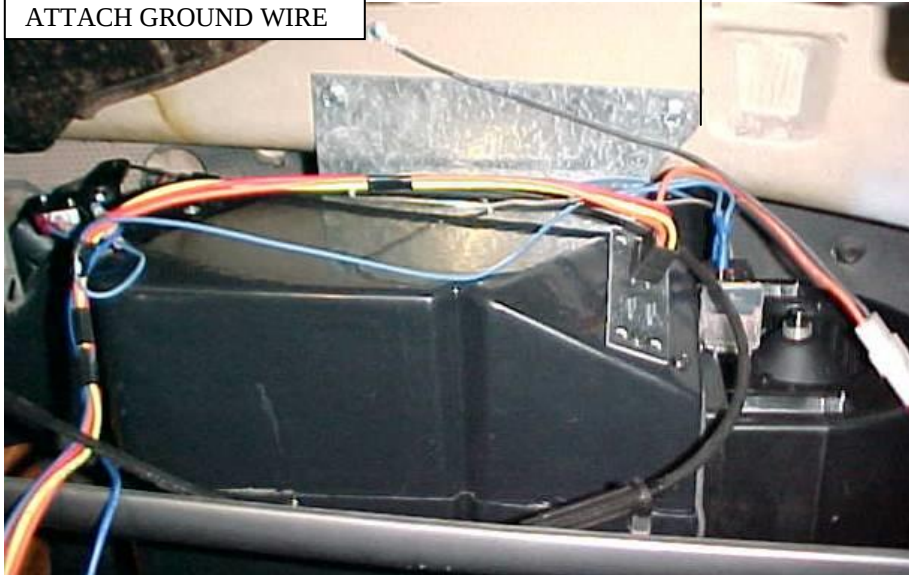


Carefully slide Evaporator into position behind glove box opening.(see picture on next page.)
Allow approximately 1/8" between the top of Evaporator and the body.
Line edge of the mounting bracket to edge of the indentation in body.

Locate in Hardware Sack Kit (2) #14 x 3/4" Hex Head Tek Screws. Attach evaporator to the body.

LINE UP THE BRACKET TO THE EDGE
OF THE INDENTATION IN THE BODY.

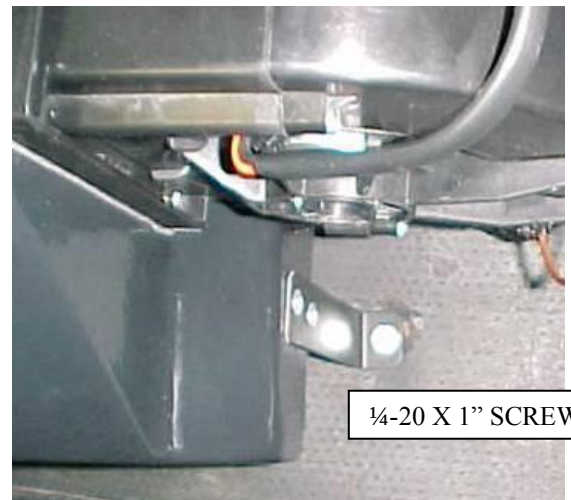
ATTACH GROUND WIRE



Locate in Hardware Sack Kit (1)
#10 x $\frac{3}{4}$ " Hex Head Tek Screw.
Locate Black wire with Ring
Terminal from blower motor.
Attach the wire as shown.

Locate on Evaporator the bracket to the right and
under the blower motor as shown.

Drill $\frac{9}{32}$ " Dia. hole through bracket, insulation
and the floor.



$\frac{1}{4}$ -20 X 1" SCREW



$\frac{1}{4}$ -20 FLANGE NUT

Locate from hardware sack kit (1) $\frac{1}{4}$ - 20 x 1" hex head screw and (1) $\frac{1}{4}$ -
20 flange nut. Insert screw through the drilled hole. Attach nut from
behind passenger front tire. Tighten securely.

Locate support bracket, (1) #10 x $\frac{3}{4}$ " tek screw,
and (2) #8 x $\frac{3}{8}$ " pan head screws from hardware
sack kit.

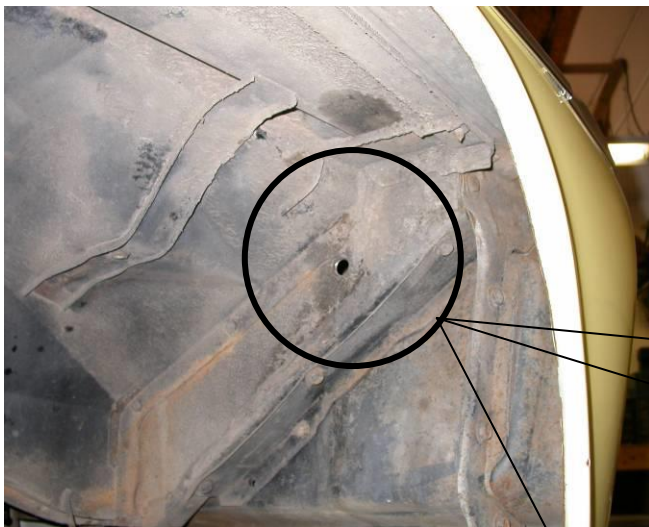
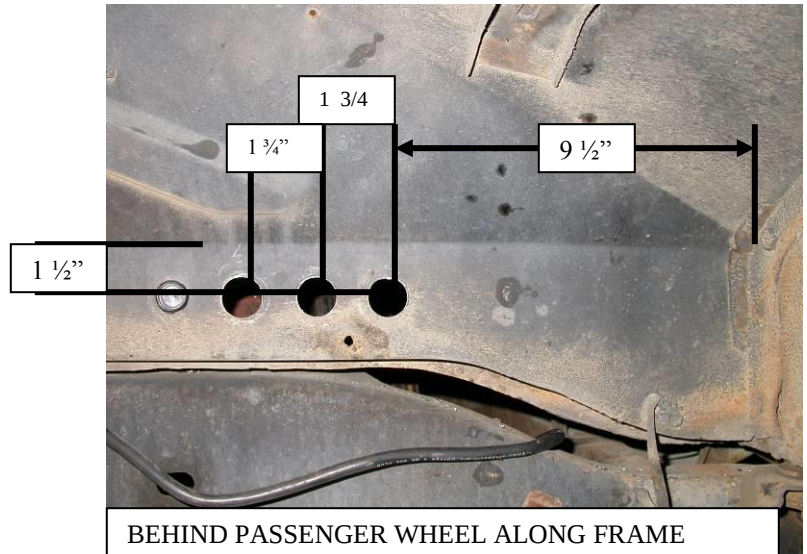
Attach bracket to firewall using the #10 screw.
Attach to bottom of the unit using the (2) #8
screws.



Remove the passenger wheel.

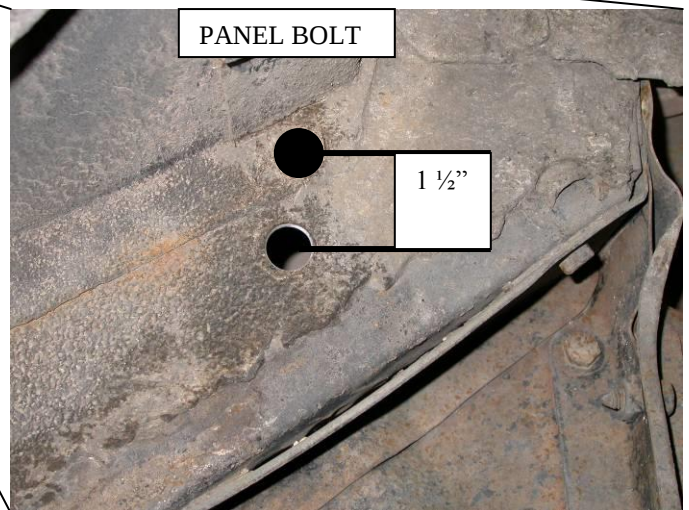
Locate and drill (3) $\frac{7}{8}$ " diameter holes in inner fender panel as shown in picture to the left.

The $9\frac{1}{2}$ " dimension is located at the junction of fender panel and radiator bulkhead panel.



Locate the panel bolt behind the passenger head light.

Measure $1\frac{1}{2}$ " down and drill (1) hole $\frac{5}{8}$ " diameter.



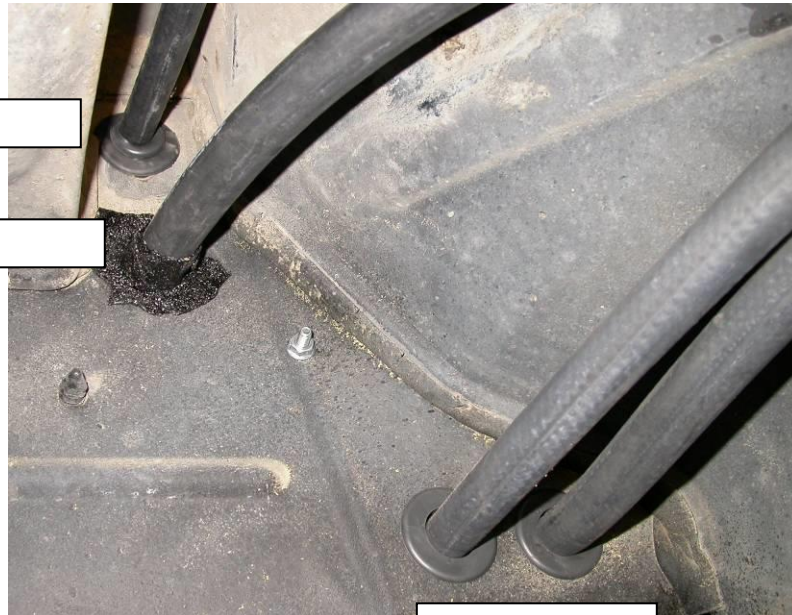


Locate (3) hole grommets from the hardware sack kit.

Install grommets into previously drilled holes in firewall.
Leave one hole without a grommet.

LIQUID HOSE

SUCTION HOSE



HEATER HOSES

BLUE CLUTCH
WIRE



Locate 42" long liquid hose (smallest diameter) with 90 degree and 45 degree fittings.

From inner fender insert 90 degree end through top hole with the grommet. And attach to the expansion valve using (1) #6 o-ring and a few drops of mineral oil.

Route blue clutch wire from thermostat through the grommet as shown.

Locate the suction hose.

Insert 90 degree fitting end of hose from inner fender and attach to evaporator coil as shown. Use a #10 o-ring and a few drops of mineral oil.

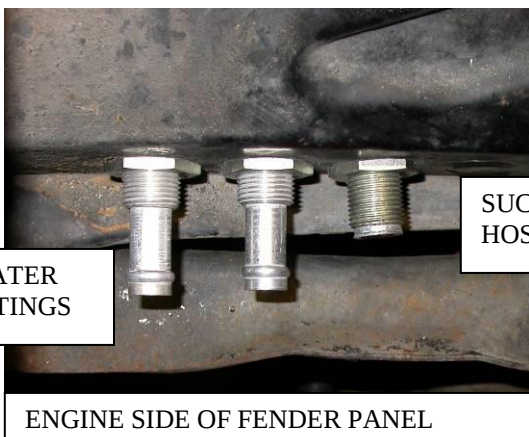
Locate (1) #8 worm gear clamp and carefully attach sensing bulb from expansion valve to the metal on the suction fitting.



Be sure that the sensing bulb is off set from bottom of tube. As shown in the picture

Locate in hardware sack kit the refrigerant tape. And wrap all exposed metal surfaces to prevent condensation.

Also seal hose to the firewall using refrigerant tape.



Locate (2) heater hose bulkhead fittings from hardware sack kit.

Insert though the front (2) 7/8" dia holes previously drilled and attach using the nuts provided.



Insert bulkhead fitting on suction hose from under the inner fender panel. Attach using the nut provided.

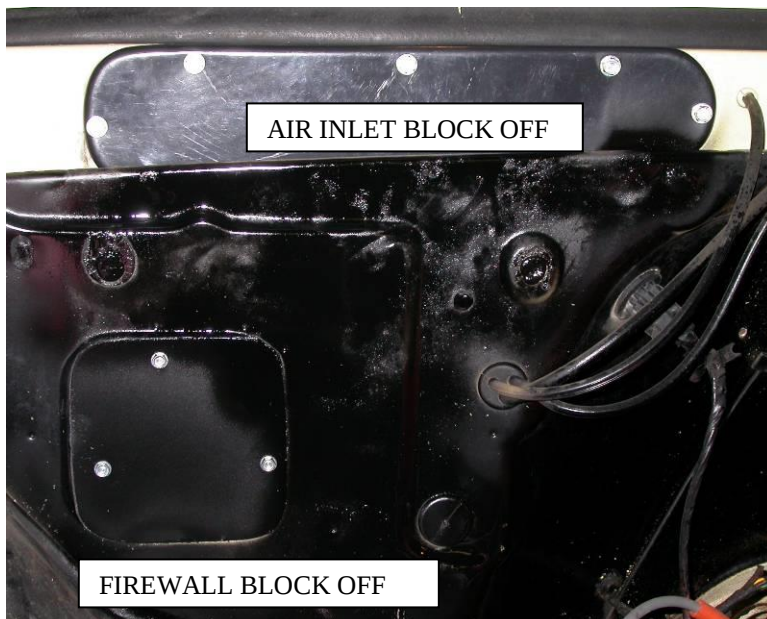
Locate (2) 40" pieces of heater hose and (2) #8 worm gear clamps from the kit. Attach hoses to bulkhead fittings using worm gear clamps.

Route heater hoses across to firewall and insert through lower (2) grommets into the interior of truck. (refer to picture on page 9).



Route heater hoses up and attach to heater tubes on back of evaporator using (2) #8 worm gear clamps.

Access clamps through hole in firewall.



Locate firewall block off and air inlet block off from the kit.

Attach over the holes using (3) #10 x $\frac{3}{4}$ " tek screws on firewall block off, and #14 x $\frac{3}{4}$ " tek screws on air inlet block off.

Locate and drill (1) hole 11/16" diameter to the left and slightly down from drain nipple on bottom of evaporator.

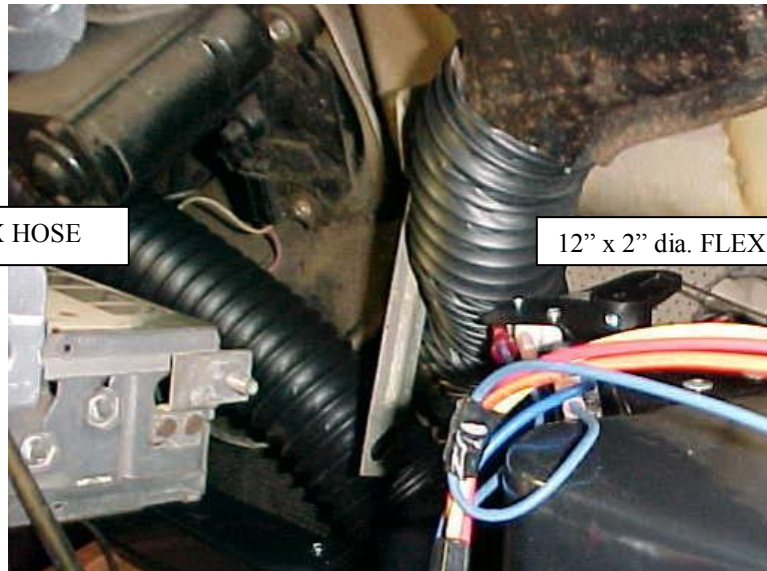
Locate the drain tube from hardware sack kit and attach to drain nipple and then insert through hole.



Locate in kit (1) piece of 2" dia.x 1 ft. of flex hose and (1) piece of 2" dia. x 2ft. flex hose

Use (1) piece 12" long, install it between right hose adaptor on defrost / heat duct and the passenger side defrost plenum.

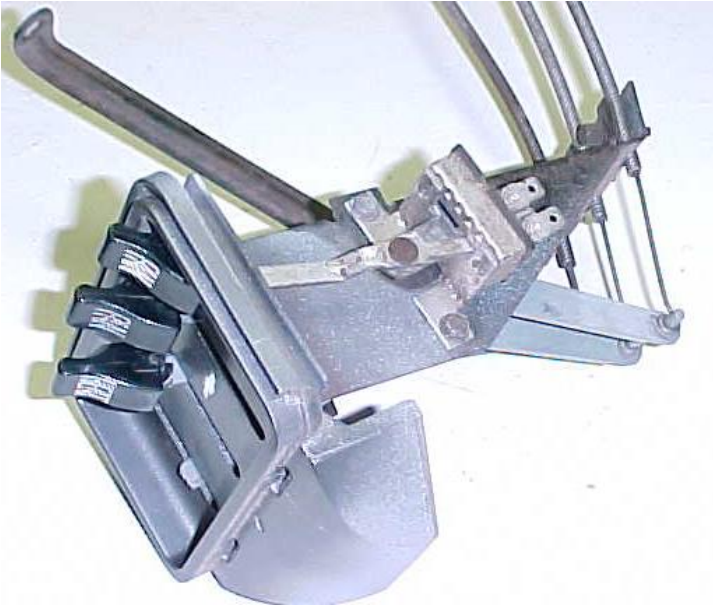
Cut off (1) piece 18" long and install it between left hose adaptor on defrost / heat duct and the drivers side defrost plenum.



18" x 2" dia FLEX HOSE

12" x 2" dia. FLEX HOSE

Locate Original Control Assembly that was set aside for modifications.

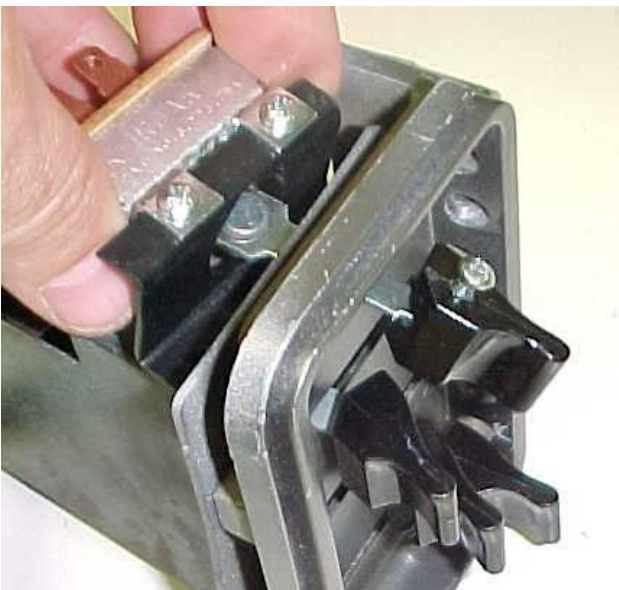


Remove blower switch knob and blower switch. Discard switch, knob.

Remove and discard all three original cables. Retain all cable clips and fasteners.

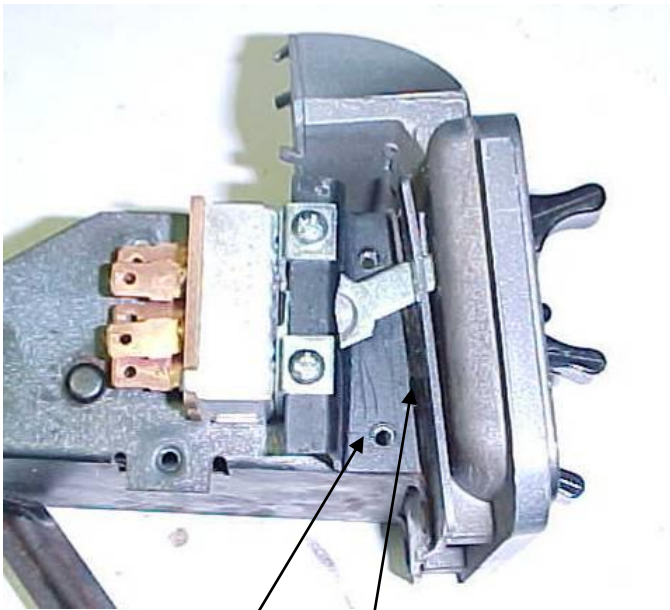
Locate in control sack kit the following items.

- 1) Blower switch assembly
- 2) Control knob (fan)
- 3) Micro- switch Assembly
- 4) Temp cable



Place control assembly on it's side. Insert Blower Switch through slot in the control face.

Rotating the switch for clearance slide new fan knob over the end of lever and tighten (1) #8 x 3/8" pan head screw securely.



ALIGN WITH EDGES.
DRILL 7/64" DIA.
INSTALL #6 SCREWS

Place mounting bracket on side of control head. Align edges with the control. Drill (2) 7/64" dia. holes through switch bracket and into control bracket.

Locate in the control sack kit (2) #8 x 3/8" pan head screws. Attach switch assembly to the control head.



Remove center cable clamp and discard. Locate micro-switch assembly. Attach to Control Head where center cable clip was. Use (1) #10 x 5/8" pan head phillips screw.

Pictures below shows the proper sequence for the micro- switch operation.

NO SWITCH ENGAGEMENT

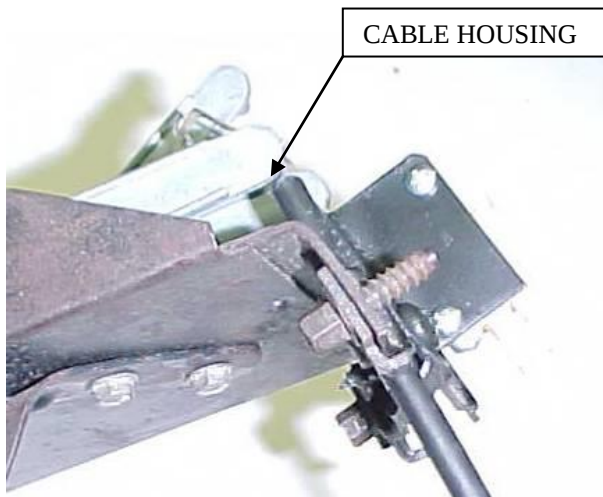


SWITCH ENGAGED



SWITCH ENGAGED / END



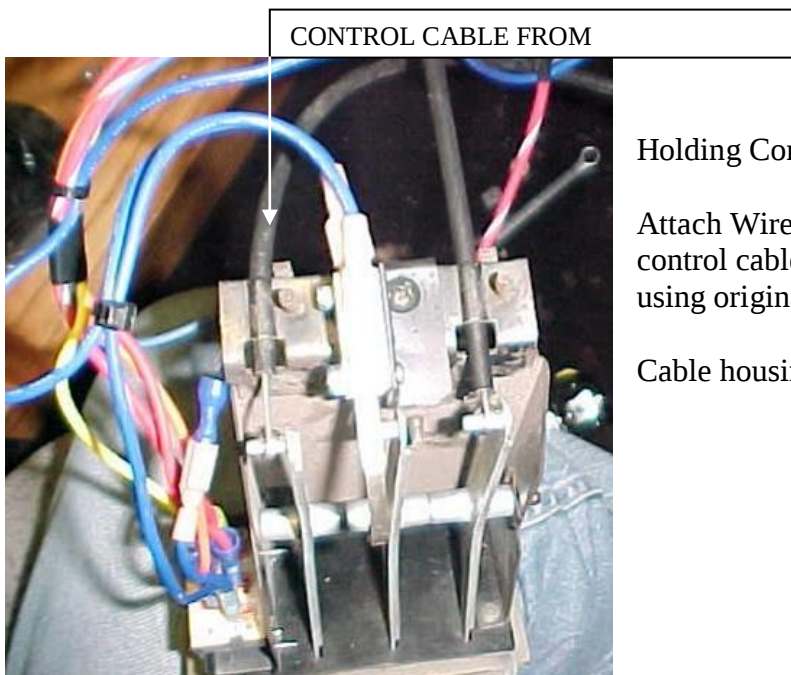


Locate in control sack kit. Last remaining Control Cable.

Attach to control head using the original cable clamp and fastener.

Locate Cable housing so that it just touches the lever arm.

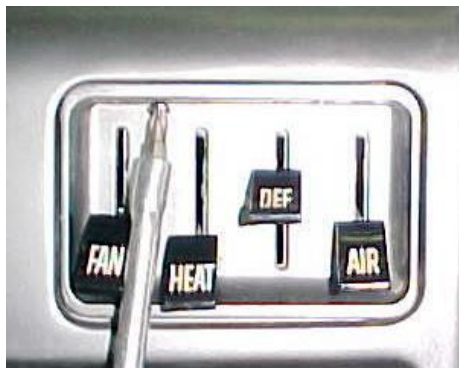
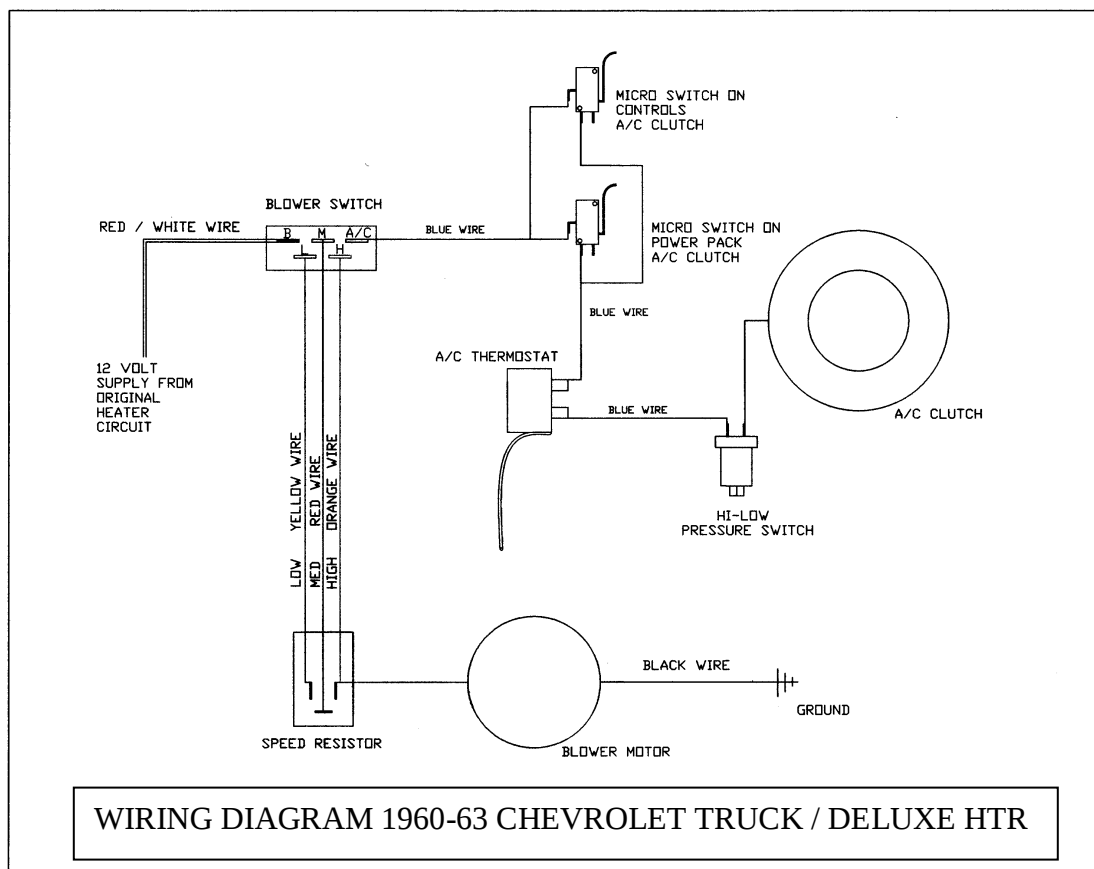
Picture to the right shows order that the knobs should be in for the new Climate Control System.



Holding Control in front of the glove box opening.

Attach Wire harness using diagram next page. Attach control cable from evaporator to the Control Assembly using original cable clamp and fastener.

Cable housing should be aligned with edge of the bracket.



Reinstall control head using original hardware.

Route cables behind radio and to left of radio brace.
Reattach radio support brace.

RED / WHITE STRIP WIRE





Attach a male insulated 1/4" spade terminal to the brown wire that was cut on page 6.

Connect to Red / White stripe wire that comes from the new blower switch. (Note: Last picture page 13)

NOTE: CHECK "HEAT" LEVER FOR SMOOTH OPERATION AND FULL DOOR TRAVEL. Route temperature control cable behind heat duct and down to the heater hoses below the unit. Insert cable through right grommet and out into wheel well.



Locate center louver assembly and (2) #10 tek screws from hardware sack kit.

Attach back of the assembly to bottom of dash using (2) # 10 screws. Be sure to center the assembly under radio.

Attach front louver bezel using (2) #8 x 3/8" pan head screws provided.





Locate (2) pieces of the 2" diameter flex hose 1ft long.

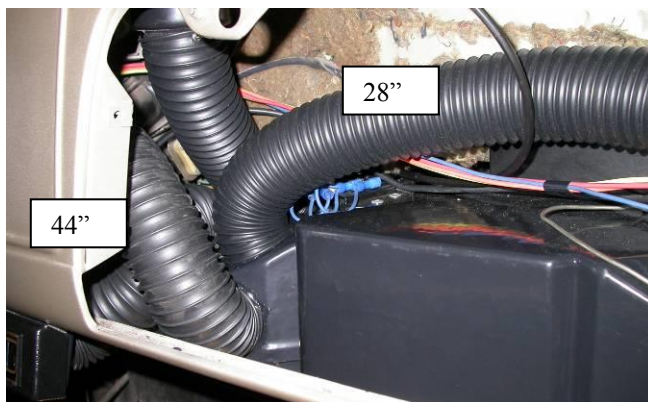
Cut both pieces 13" long. Be sure that hose is firmly pulled when measuring for cutting.

Attach hoses to center hose adapters and route left one to side outlet and right one over to top left one.

Locate passenger under dash louver and (2) #10 x 3/4" tek screws.

Install housing to bottom of dash next to kick panel.

Insert louver into housing and snap into place.



Locate the 2" x 36" flex hose.

Cut 28" of 2" flex hose.

Attach one end to right top outlet on duct.

Route flex hose up and over evaporator behind glove box.

Attach other end to hose adapter on back of passenger louver.



Locate the 2" x 48" flex hose. Cut the 2" flex hose to 44" long.

Attach to last outlet on face duct. Route over radio and across behind instruments to drivers side of steering column.

Locate last louver assembly and (2) #10 x 3/4" tek screws.

Attach housing to bottom of the dash using #10 screws.

Insert louver into housing and snap into place.

Attach 44" flex hose to back hose adaptor.

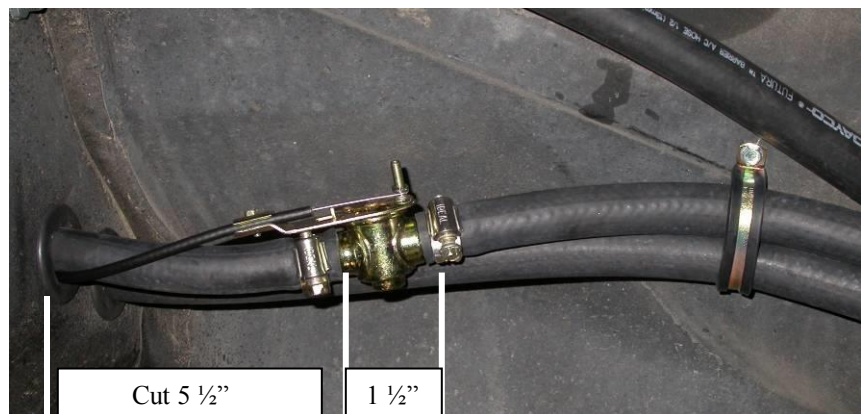


Locate in the kit, the new glove box.

Install along with Glove Box Door using original hardware.

Locate water control valve, (2) #8 worm gear clamps, (1) double hose clamp, and (1) #10 screw and nut.

Cut 5 1/2" from the firewall. Install water valve using the worm gear clamps. Attach temperature cable and adjust so that when knob is all the way in water valve is off.



Using double hose clamp, with screw and nut, attach heater hose to the fender.

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

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

The engine compartment components should be installed at this time. Carefully follow the electrical diagram provided on page 16.

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



Remove bulkhead supports on drivers and passenger side. Retain all of original hardware.

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



CAUTION: IF VEHICLE IS EQUIPTED WITH A (4) BLADE FAN IT IS NECESSARY TO UPGRADE TO A (6) BLADE FAN.

Locate following components from the under hood components box.

Condenser

Receiver Drier / Hi –Low pressure switch

Drier mounting bracket

Discharge Hose.

Liquid Hose (2)

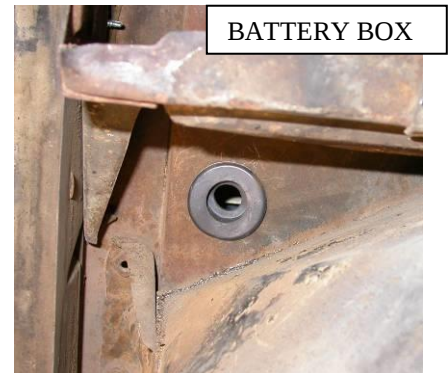
Right and Left condenser mounting brackets

(4) #10 x 3/8 hex washer head screws

(2) #10 x 3/4" tek screws

Locate and cut (1) 1 3/8" dia. hole under battery box in radiator bulkhead.

Locate (1) grommet supplied and install into the hole.



Attach Hi / Low pressure switch to top of drier using a few drops of mineral oil.

Using drier bracket and #10 tek screws install drier assembly to passenger side radiator bulkhead between core opening and the grille.

Locate #6 liquid hose with 90 deg bulkhead fitting on one end.



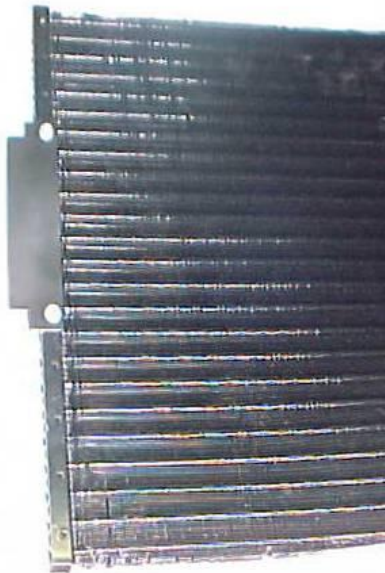
Attach end with bulkhead through hole behind the head light previously drilled. Straight end connects to drier using (1) #6 o-ring and a few drops of mineral oil.

Attach the switch & boot to top of the receiver drier.

Locate under fender the liquid hose from firewall.

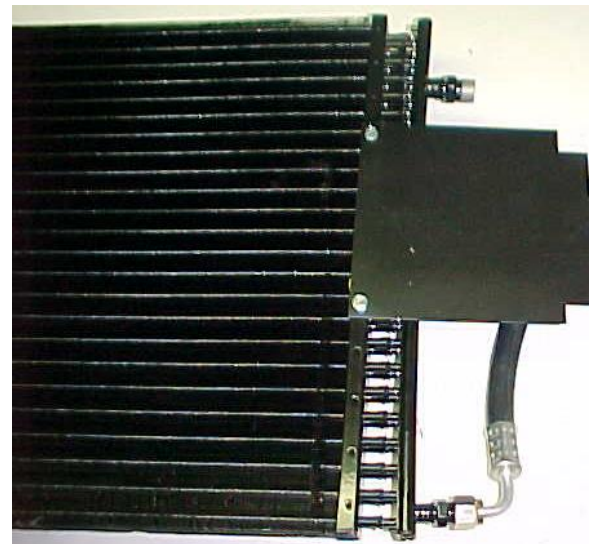
Route over body brace and attach to bulkhead fitting behind head light using (1) #6 o-ring and a few drops of mineral oil.

Drill (1) ½" dia hole to the left of fitting and install plastic grommet from kit. Route one wire from pressure switch through the grommet and connect to blue wire from thermostat.



Locate Condenser, short condenser mounting bracket, long condenser mounting bracket, and #6 liquid hose assembly.

Attach hose To lower connection on condenser. Use #6 o-ring and a few drops of mineral oil.



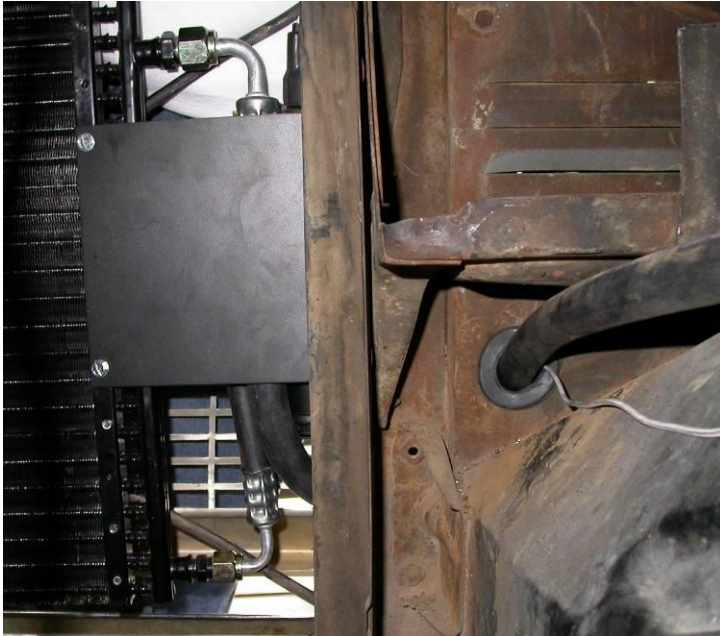
Attach brackets to condenser using (4) #10 x 3/8" hex head screws. Brackets are located in 4th hole from the top of condenser.



Place condenser assembly from engine side of bulkhead into the opening in bulkhead.

Condenser mounting brackets are designed to be clamped between the fan shroud mounting bracket and the bulkhead. Top (2) bolts need to be removed and others loosened. Slide condenser between and rest condenser brackets on the second set of bolts. The 2 top bolts can now be reinstalled. Tighten all mounting bolts.

Attach #6 hose to drier inlet using (1) #6 o-ring and a few drops of mineral oil.



Locate the discharge hose assembly.

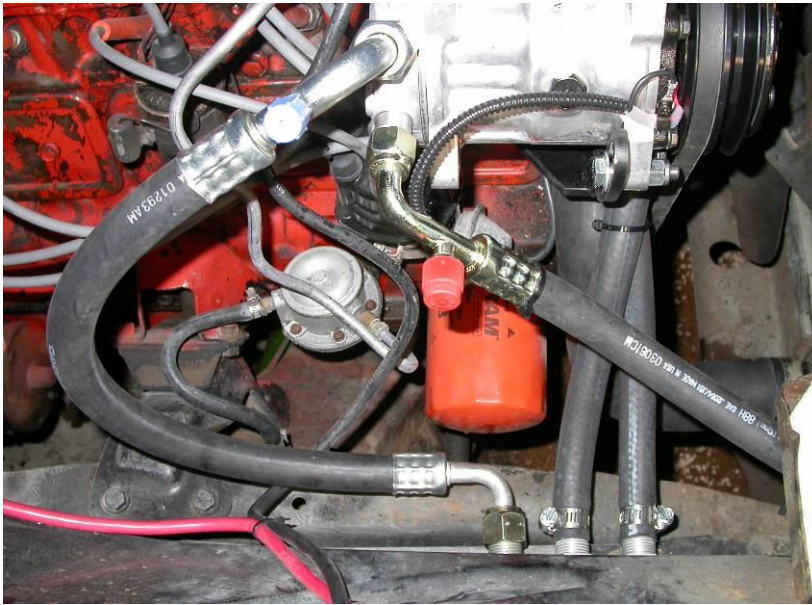
Insert end without the service port through grommet and around front of the bulkhead.

The hose will route between drier and condenser mounting bracket. Attach to upper condenser fitting using (1) #8 o-ring and a few drops of mineral oil.

Insert second wire from pressure switch through same grommet as the hose. This will hookup to the compressor clutch.

Reinstall battery, original fan (or 6 blade heavy duty), fan shroud, and radiator. Use the original hardware.





Locate the suction hose and attach to compressor using (1) # 10 o-ring. Also attach discharge hose to compressor using (1) #8 o-ring adding a few drops of mineral oil to each connection. Tighten securely.

Route suction hose assembly from compressor to #10 bulkhead fitting on fender. Use (1) #10 o-ring and a few drops of mineral oil. Tighten both ends securely.

Reinstall the Bulkhead support cover both sides, and the Hood Latch mounting bracket. Use the original hardware.

***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***

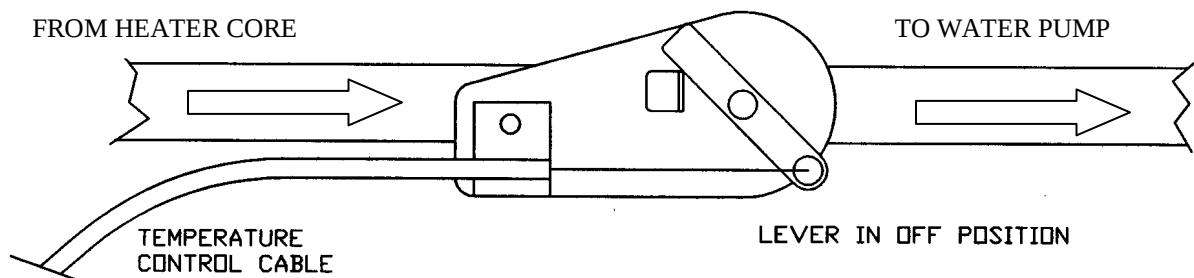
IMPORTANT

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***