

Installation Manual

1957-60 FORD PICKUP

DOCUMENT #1-1070

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Congratulations...

You have just purchased the highest quality, best performing A/C system ever designed for your vehicle.

Congratulations! ! You have just purchased the highest quality, best performing A/C system ever designed for your 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



Check List, Pre-Installation:

- ☐ Before beginning the installation check the shipping box for the correct components. YOUR BOXED UNIT INCLUDES A LIST OF MAJOR COMPONENTS AND A LIST OF BAGGED PARTS. We have a 5 stage check process to make sure you have everything you'll need.
- ☐ **If your vehicle has been or is being modified, some procedures will need to be adjusted to fit your particular application.**
- ☐ A basic cleaning of the engine compartment and interior before beginning will make things go more smoothly.
- ☐ Check condition of engine mounts. Excessive engine movement can damage hoses to A/C and/or heater.
- ☐ Before starting, check vehicle interior electrical functions (interior lights, radio, horn, etc). Make a note of anything that does not work as it's supposed to. During the installation you might find the opportunity to repair or upgrade non-working or out of date components. When you're ready to start the installation, **DISCONNECT THE BATTERY FIRST.**
- ☐ Drain the radiator. Retain the coolant and reuse, or dispose of properly.
- ☐ SAFETY FIRST: Wear eye protection while drilling/cutting, deburr sharp edges, and never get in a hurry or force a part.
- ☐ Tools: Your installation only requires the basic tools everyone has in their garage, nothing exotic or specific to A/C or Heat equipment.

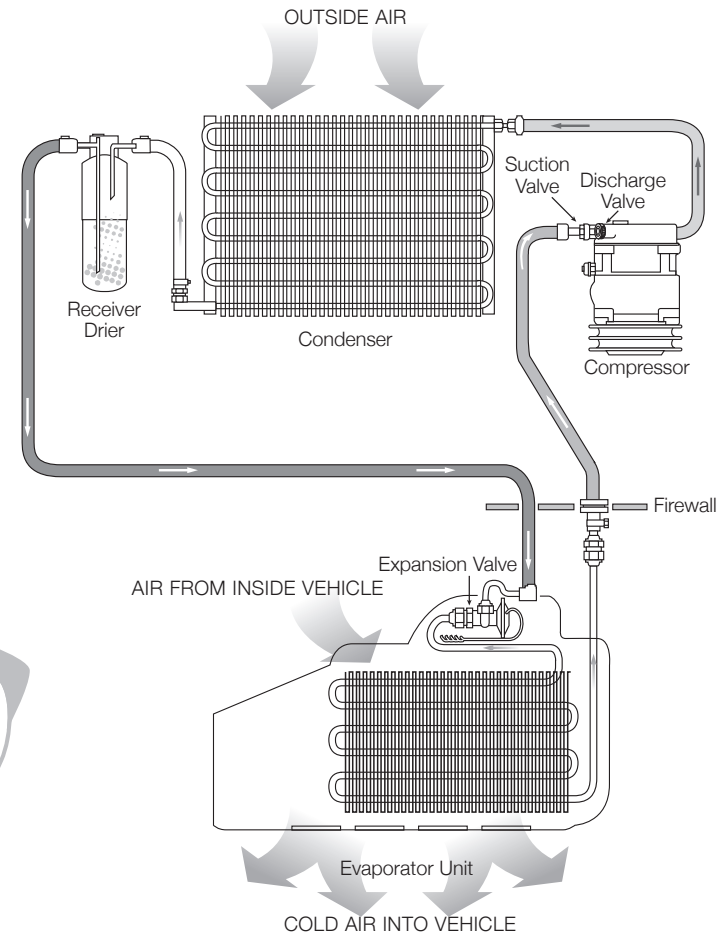
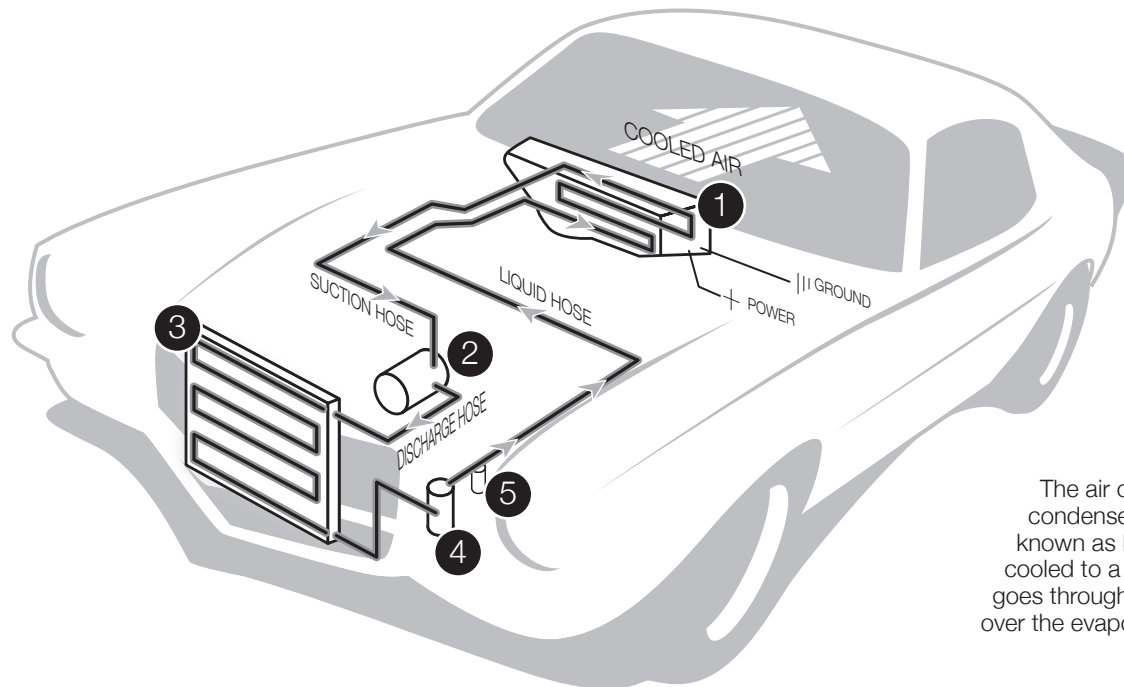
Procedures, During Installation:

- ☐ Fittings: Use one or two drops of mineral oil (supplied with your kit) on ALL rubber o-rings, threads and where o-rings seat in fittings. Do not use thread tape or sealants.
- ☐ Measure twice (or more), cut once
- ☐ **Should you have any technical questions, or feel you have defective components (or missing items), call us immediately, we will be glad to assist you. Our toll-free number is listed on every page, we're here to help!**

CAUTION: DISCONNECT BATTERY GROUND CABLE
YOU CAN NOW BEGIN THE INSTALLATION...

A Basic Overview of Automotive A/C....

- 1 **Evaporator with Blower Fan** In order to remove the heat from the air in the vehicle, the A/C evaporator allows the refrigerant to absorb the heat from the air passing over it. The blower fan moves cool air out into the car interior.
- 2 **Compressor** The compressor pumps and circulates the refrigerant through the system.
- 3 **Condenser** The condenser is a heat exchanger mounted at the front of the vehicle. Heat drawn out of the interior of the car is expelled here.
- 4 **Receiver/Drier** The drier not only dries refrigerant, it also filters the refrigerant and stores it under certain operating conditions.
- 5 **High Pressure Switch** A pressure switch is used to shut down the system if high or low pressure is detected, basically it acts as a safety switch.



The air conditioning system in your car is comprised of a compressor, condenser, expansion valve, receiver/drier, and evaporator. Refrigerant (also known as Freon) is compressed in the compressor. In the condenser, gas is cooled to a liquid state and travels to the expansion valve. As the liquid refrigerant goes through the expansion valve it rapidly cools in the evaporator. A fan blows over the evaporator and cools the air that blows out your vents

**“PERFECT FIT SERIES”
IN-DASH
HEAT/ COOL/ DEFROST**

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.



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



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.



Disconnect the battery ground cable. Remove battery and battery tray.

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

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

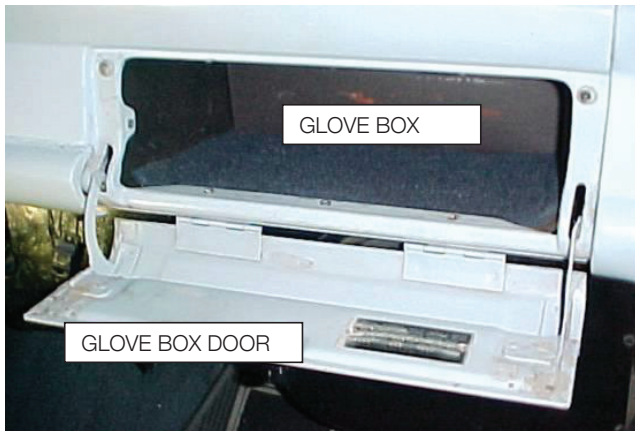
The truck will either be equipped with a Standard Heater Assembly, or a Deluxe Heater Assembly.

Locate control cable connected between original switch to the heater assembly. Remove and discard. Disconnect resistor wire assembly, remove and discard. Remove and discard the original blower switch.

Carefully remove the heater box from the firewall. Discard original hardware.

If truck is equipped with the deluxe heater. Remove the fresh inlet flange. Retain original hardware.

Locate in hardware sack kit the inlet block off. Install over inlet hole using original hardware.



Locate in the instructions a Firewall Drill Template. Tape to engine side of the firewall. Locate template to the original holes as shown below.

Enlarge original heater tube hole to 1" dia.

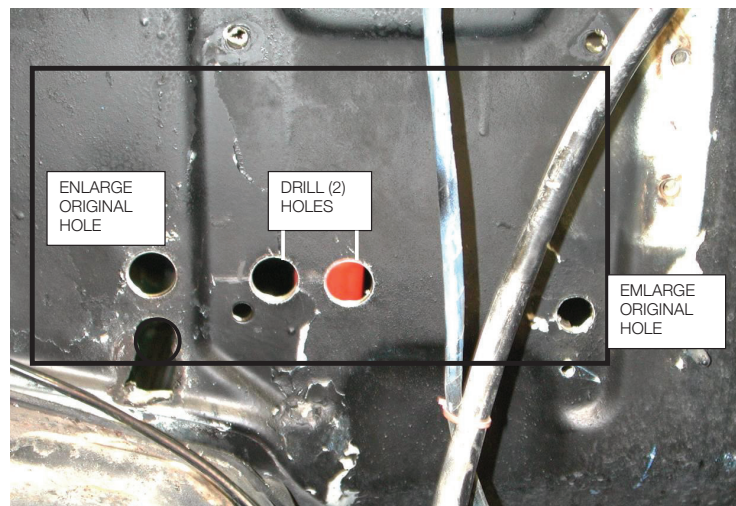
Enlarge original heater mounting hole to 13/16" dia.

Drill new heater tube holes to 7/8" dia.

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

Locate in the unit box (2) Defrost Diffusers, and (2) #10 -32 nuts.

Attach diffusers to under side of defrost outlet slots by inserting the bracket through the slot and using a #10 nut on the original





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

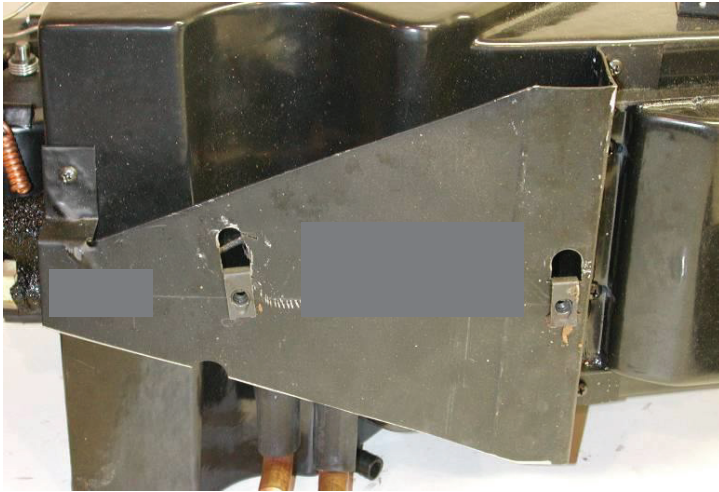
Attach Face duct over outlet flange. Be sure that the s-clips attach to flange.

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 control sack kit the wiring harness. Attach to evaporator using the wiring diagram.

Notice (2) ¼ - 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 (2) ¼" – 20 x 1" hex head screws and (2) flat washers.

Pull the a/c tubes and heater connections through the firewall.





Locate in the hardware sack kit (2) #10 x $\frac{3}{4}$ tek screw.

Attach Support bracket under glove box opening to bottom of the dash using (1) #10 x $\frac{3}{4}$ tek screw.

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

Route electrical harness across top of unit and down to center of the cab.

Locate in the hardware sack kit (1) 9" piece of $\frac{1}{2}$ " dia. drain tube.

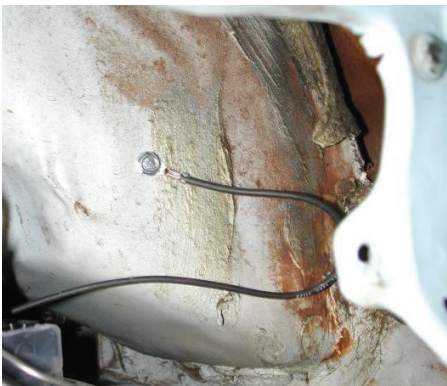
Attach over drain nipple and through the hole previously drilled.

Locate in the unit box the 2" dia. x 3ft. flex hose.

Cut (2) pieces 15" long.

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

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



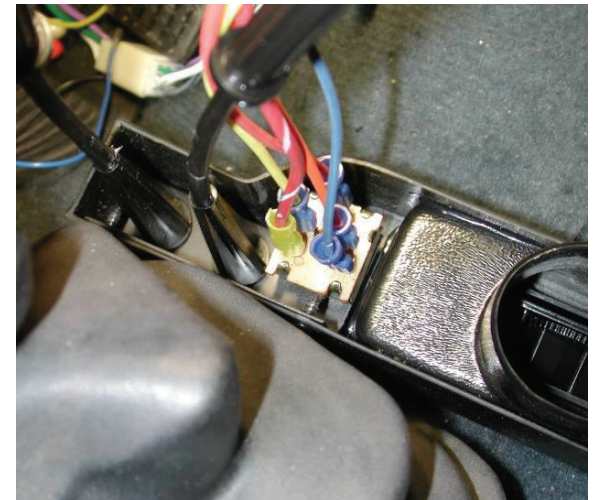
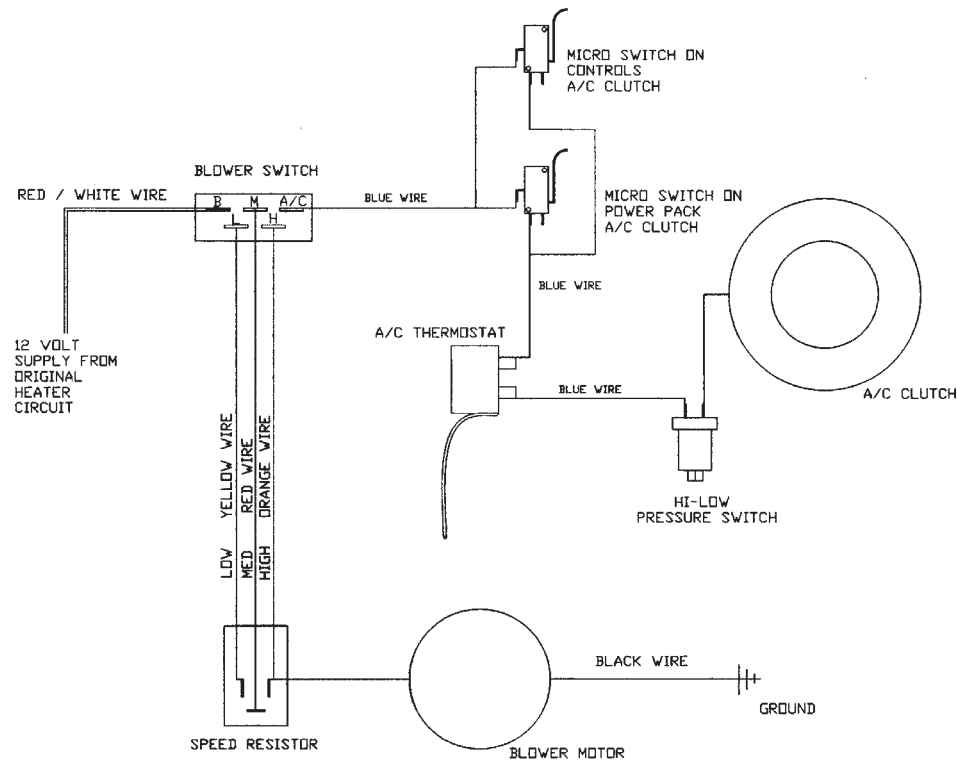
Locate wire that attached to the original blower switch. Cut off the terminal and attach a ¼" male spade connector.

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

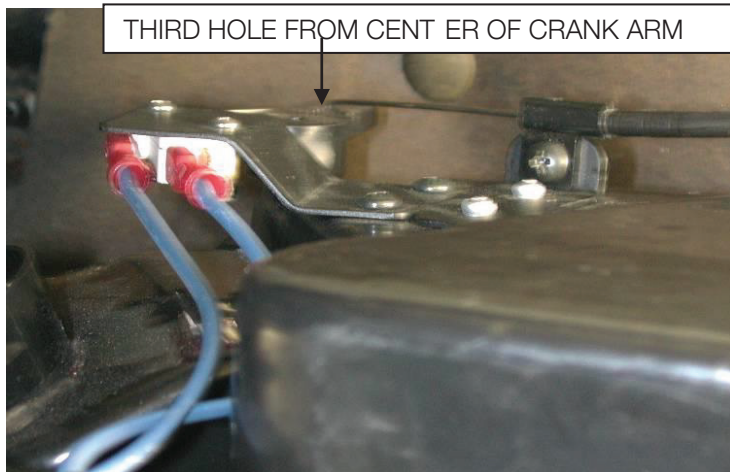
Also locate clutch wire from the thermostat, route over top of evaporator and out through bottom hole that original heater mounted through.

Locate Center Control and Louver Assembly and (2)
#10 x ¾" tek screws.

Attach wires from the unit to switch as shown. Refer to the wiring diagram for correct connections.



WIRING DIAGRAM 1957-60 FORD TRUCK



Attach (2) 3/16" spade terminals on blue wires to the micro switch located on top of the unit.

Route the HEAT cable over to top of the evaporator. Attach the cable to bracket using (1) #8 x 1/2 pan head screw.

NOTE: Insert cable in third hole from center of the crank arm.

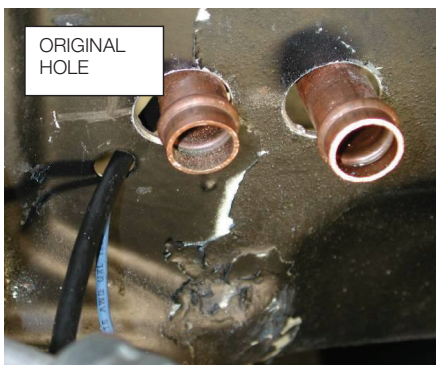
Attach assembly to bottom of the instrument panel using the (2) #10 tek screws.

Locate 12" flex hose, attach to center louver and to left outlet on center duct assembly.

Locate in the hardware sack kit. Passenger side Ball Louver and 2" dia. x 36" flex hose

Locate (2) #10 x 3/4" hex head tek screw. Remove Ball Louver from the housing and attach Housing Assembly to bottom of the instrument panel using (2) #10 tek screw through holes in the louver housing.





Reattach ball louver to the hose adaptor.

Attach 36" of flex hose to hose adapter on rear of passenger 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 locate 2" dia. x 48" flex hose and attach to hose adapter using (1) #10 x 5/8" screw.

Attach the housing to drivers side instrument panel using (2) #10 x 3/4" Tek screws.

Reinstall the ball louver assembly.

Attach 48" hose to hose adapter on rear of the Drivers Louver Assembly and route up and to the center outlet on top of the center duct assembly.

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

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 Heat control knob 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 the thin metal arm on the switch. Make sure that the 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 6.

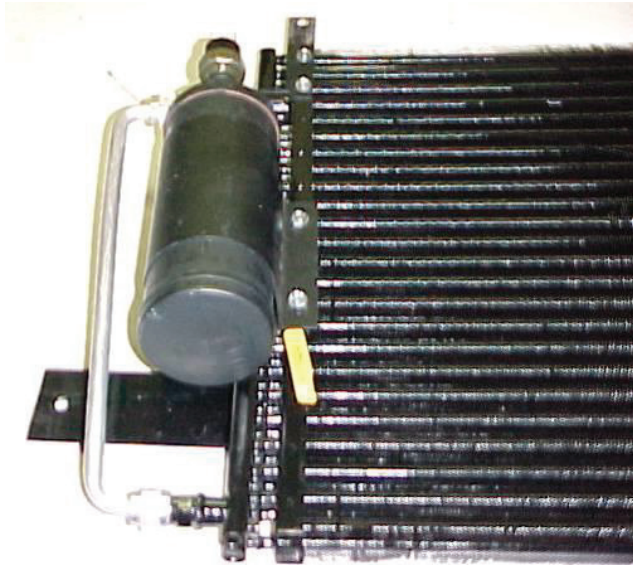
THE COMPRESSOR MOUNTING COMPONENTS WILL DIFFER DEPENDING ON THE ENGINE AND DRIVE ACCESSORIES THAT YOUR VEHICLE IS EQUIPPED WITH. THE FOLLOWING INSTRUCTIONS SHOW THE PROPER INSTALLATION SEQUENCE FOR THIS VEHICLE

Locate the following components from the under hood components box.

- Condenser
- Receiver Drier / Hi -Low pressure switch
- Drier mounting bracket
- Discharge Tube
- Liquid Tubes (2)
- (2) Condenser mounting brackets top
- (2) Condenser mounting brackets bottom
- (10) #10 x 3/8 hex washer head screws
- (3) #6 o-ring
- (1) #8 o-ring

Place the condenser on the bench with fittings on the left side.





Attach drier, drier mounting bracket and liquid tube to condenser using (2) #10 screws, (2) #6 o-ring and a few drops of mineral oil on the connections.

Attach top (2) condenser mounting brackets to the condenser as shown. Use (2) #10 screws.

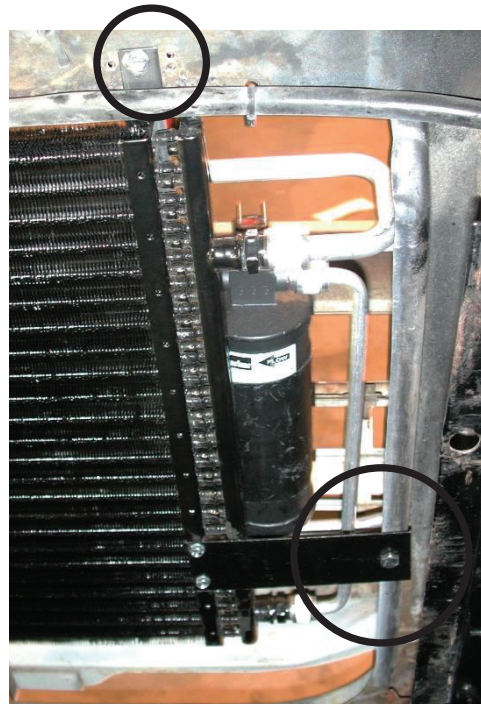
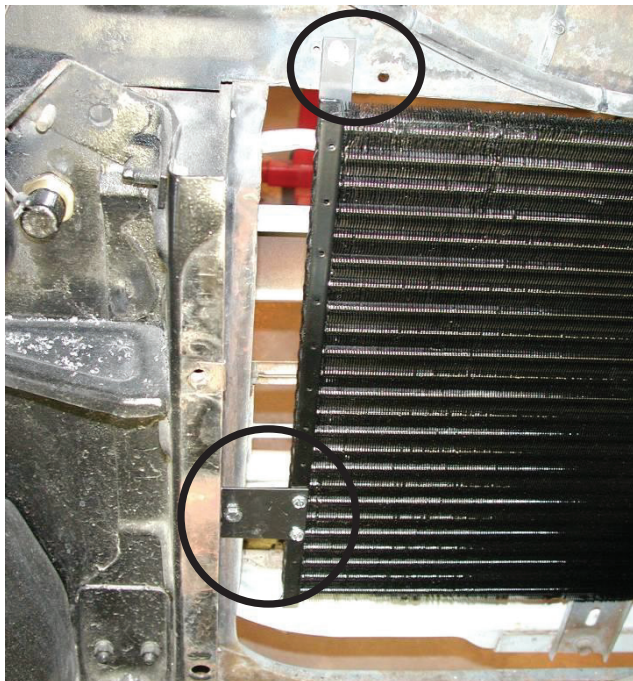
Attach bottom (2) condenser mounting brackets to backside of condenser on third hole from bottom of the condenser using (2) #10 screws.

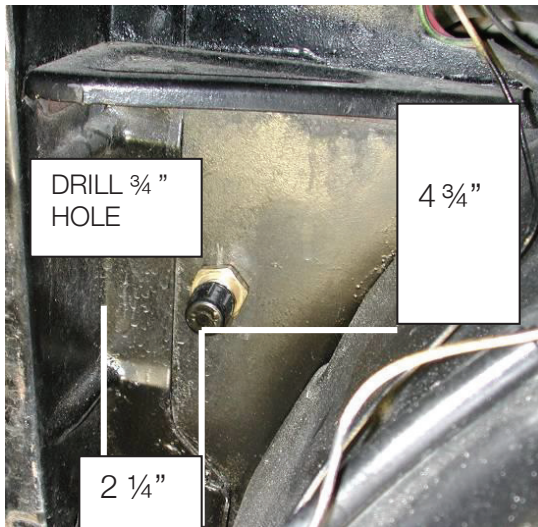
NOTE: LONGEST OF THE BOTTOM BRACKETS ATTACH TO LEFT SIDE

Slide condenser assembly between the Radiator and the radiator bulkhead.

Locate the condenser assembly on the radiator bulkhead. On passenger side line up condenser bracket to the flange as shown. Attach upper brackets to the bulkhead using (2) #10 tek screw.

Drill lower mounting holes through brackets and attach using (2) 1/4"-20 x 5/8" hex screw and (2) 1/4"-20 flange nuts. Tighten securely.





Located on the passenger side of the radiator bulkhead drill (1) hole $\frac{3}{4}$ " dia.

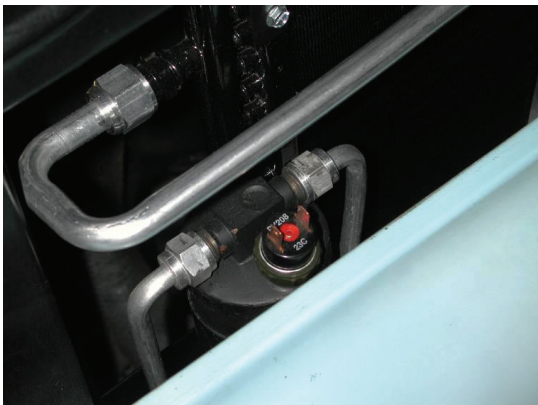
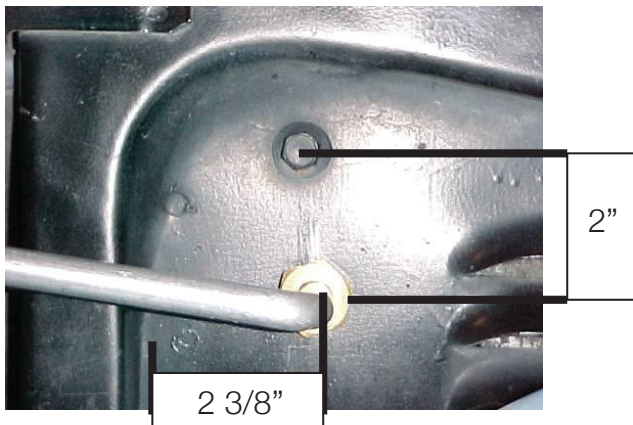
Locate on the drivers side of the radiator bulkhead drill (1) hole $\frac{7}{8}$ " dia.

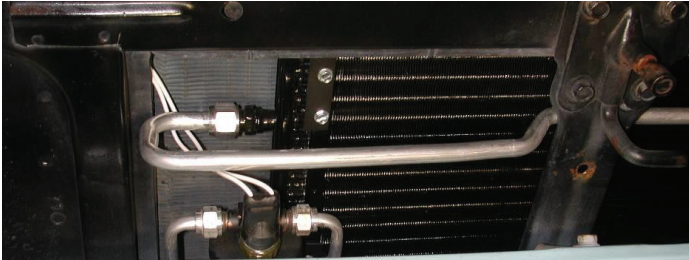
Locate in the under hood kit (1) #6 liquid tube, (1) #8 discharge tube, (1) #6 o-ring, and (2) #8 o-ring.

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

Route below drier and attach through $\frac{3}{4}$ " dia hole previously drilled in the passenger side bulkhead.

Attach using nut from the bulkhead fitting assembly.





Attach the #8 discharge tube to the condenser using (1) #8 o-ring and a few drops of mineral oil. Route tube across front of condenser and behind the hood latch assembly. Attach through the 7/8" hole previously drilled in drivers side bulkhead. Attach using nut from the bulkhead fitting assembly.

Locate the Hi/Low pressure switch and attach it to the drier port.

When installing the discharge tube it is necessary to remove the lower condenser mounting screws, and insert the tube from the bottom.

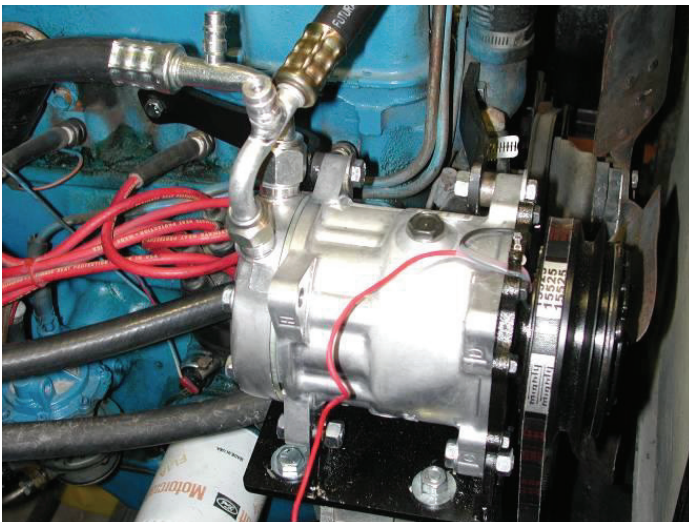
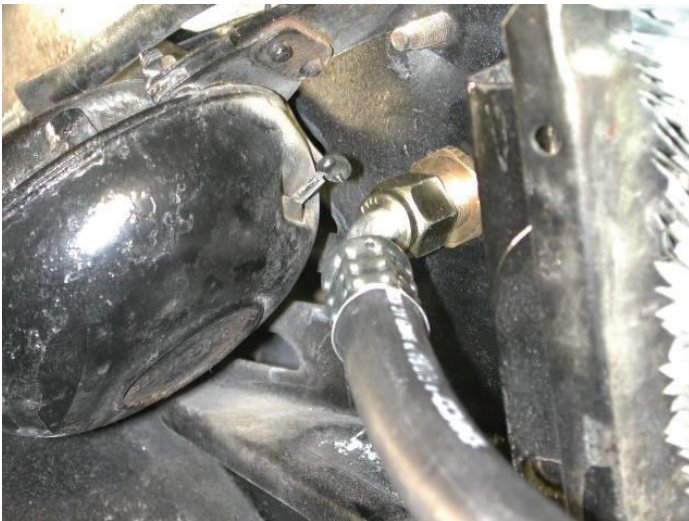
Reinstall the radiator using original hardware.

Route discharge hose from the bulkhead over to the compressor and attach end with service port to 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 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 fitting using (1) #10 o-ring and few drops of mineral oil.





Tighten all fittings securely. Hookup heater hoses to the connections coming through the firewall.

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

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

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 the water valve and then to the remaining hose that goes back to the engine. Use the worm gear clamps supplied.

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

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

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

Reinstall battery, 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!

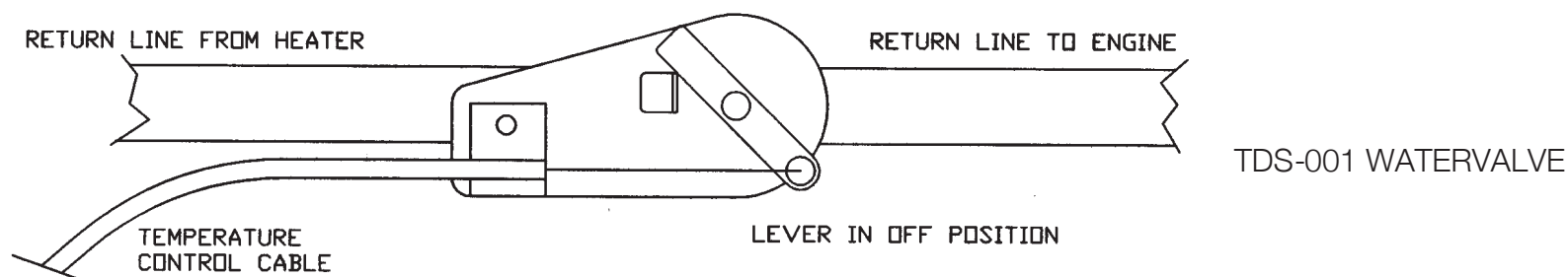
CAUTION: WATER VALVE MUST BE INSTALLED PER THE INSTRUCTIONS.

This data sheet covers the proper installation of the "Temperature Control Water Valve" that is supplied in your Air Conditioning , Heating, and Defrost unit. 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.

It is necessary to locate the "Supply Line" from the engine on the vehicle and route a hose directly to the heater connection.

NOTE: The supply line will be coming from the engine block after the water has passed through and absorbed heat from the engine. Typically it is located next to the return radiator hose from the engine to the top of the radiator.

Locate the "Return Line" from the heater connection. Cut 6" of 5/8" dia. heater hose and attach it to the inlet side of the water valve. Attach this assembly to the return heater connection. Attach a heater hose from the outlet side of the water valve and route to the return connection on engine. NOTE: The return connection is typically located on the water pump.

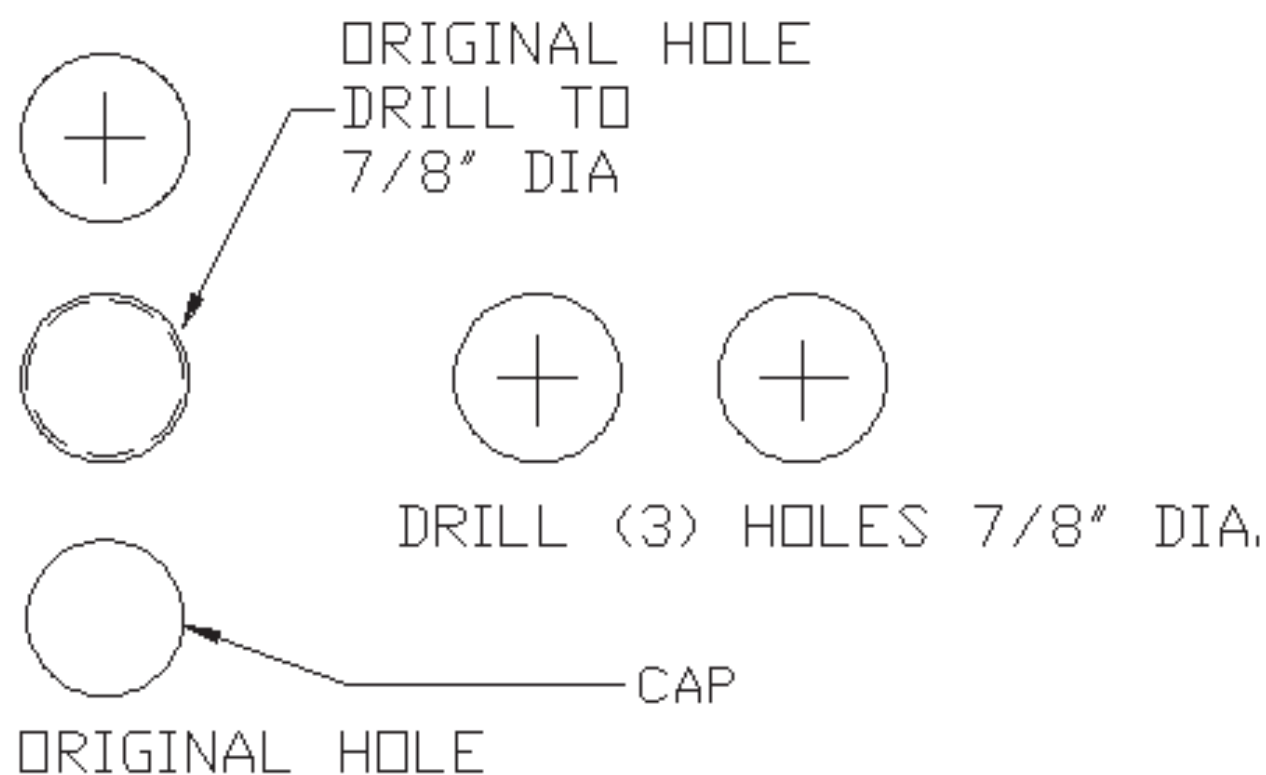


CAUTION: WATER VALVE MUST BE INSTALLED ON HEATER LINE ROUTED TO WATER PUMP.

**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**

FIREWALL DRILL TEMPLATE 1960 FORD TRUCK



ORIGINAL HOLE
DRILL TO
13/16" DIA



