



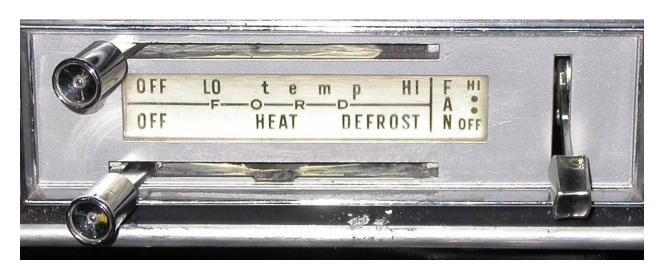
specializing in "AIR CONDITIONING, PARTS AND SYSTEMS" for your classic

# "PERFECT FIT" IN-DASH 1-1085

### HEAT/ COOL/ DEFROST 1963-64 FORD GALAXIE

#### **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.



THE PICTURE YOU SEE ABOVE SHOWS THE CONTROLS IN THE A/C MODE. THIS MEANS THAT THE AIR WILL BE DISTRIBUTED THROUGH THE FACE OUTLETS. THIS ALSO HAS THE TEMPERATURE LEVER IN THE HOT POSITION. WITH THE CONTROLS IN THIS POSITION YOU WILL GET THE AIR THROUGH THE FACE OUTLETS AT THE COLDEST TEMPERATURE.

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

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

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

FACE / DEFROST / HEAT DOOR CONTROL: When the Control Knob is pushed all the way to the LEFT the air is distributed to the FACE outlets. In the FACE position the compressor is engaged. When the knob is pushed to the MIDDLE of the controls the air will go to the DEFROST outlets. In the Defrost position the compressor clutch is engaged for dehumidification. When the knob is pushed all the way to the RIGHT the air will go to the HEAT outlets.

**TEMPERATURE CONTROL:** The Temperature Knob as shown is at the HOTTEST temperature position. As the lever is PUSHED to the LEFT the temperature of the discharged air will FALL to the COLDEST point.

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





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

### INSTALLATION INSTRUCTIONS 1964 FORD GALAXIE

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
Distribution Duct Assembly
Flex Hose 2"dia. x (1) 2ft (2) 3ft (1) 4ft
Flex Hose 2 1/2" dia. x (2) 1ft.
Block off Air Inlet
Firewall Blockoff
Sack Kit Hardware
Sack Kit Control
Control Cables (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, trans cooler, 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-ring, 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.

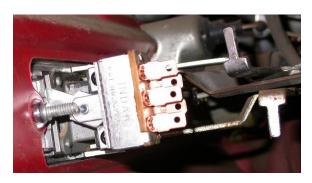
  Compressors with damaged reed valves cannot be warranted.
- 9. Should you have any technical questions, or are suspect of missing, or defective parts, call us immediately. Our knowledgeable staff will be glad to assist you.

#### YOU CAN NOW BEGIN THE INSTALLATION



### Disconnect battery ground cable. Drain radiator and remove cap.

Carefully remove and retain screws and glove box.



From behind the dash remove and retain the two nuts that hold the control head to the dash.



Remove cables from back of the control head. Retain original hardware for the cable clamps.

Disconnect wiring from the switch and light.

Remove and retain the control head.



Remove the two heater lines from heater core.

Remove the three nuts on the firewall holding the heater housing to firewall.



Remove control cable from center of O.E heater. Discard the cable.

Remove the defrost duct hoses and discard.



Disconnect electrical plug from resistor on the heater

Discard the heater housing assembly.



Remove blower access cover from the firewall and Discard.



Locate blower motor service hole on the firewall. Using Template supplied, cut out and locate on firewall as shown. Drill a 1 3/8" hole through firewall.



Remove and discard air inlet duct.

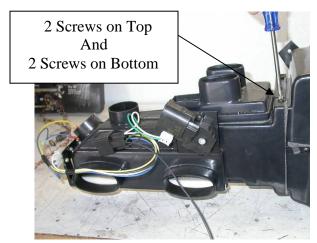


Locate the air Inlet Block Off Plate, and attach as shown using (4) #10 x 3/4" tek screws.



Locate the (2) defroster ducts and (4) #6 x % Black Phillips head screws, and attach as shown.

Remove and Discard the O.E. Defroster Ducts, New Ducts are Supplied in Kit.



Place evaporator on the bench and attach Distribution assembly onto the evaporator using (4)  $\#10 \times 5/8$ " pan head screws.



Locate the Top Front Mounting Bracket and (2) #8 x 3/8" Black Phillips Head Screws, and attach as shown.

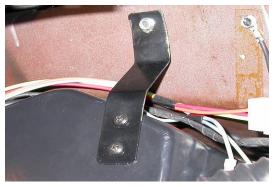
Installing the evaporator. Slide evaporator under instrument panel and up into place.



Insert heater Tubes and a/c tubes through hole in the firewall as shown.

On engine side of firewall attach evaporator to the firewall original heater mounting holes using (3) 1/4-20 nuts and fender washers.

Locate (1) Grommet, and (1) 1 1/8" Cap Plug and Install over A/C Tubes as shown.



Inside the vehicle, attach the Front Mounting Bracket to the cowl using (1) #10 Tek Screw as shown.



Install the blower support brace, as shown using (2) #8 x 3/8" screws, and (1) #10 x 3/4" Tek screw.



Drill a 11/16" hole  $\frac{1}{2}$ " lower than the evaporator drain tube.

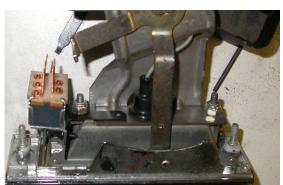
Install 6" piece of drain tube through the hole previously drilled and attach to the drain tube on the evaporator.



Locate firewall cover plate and using the (5) original screws Install cover.

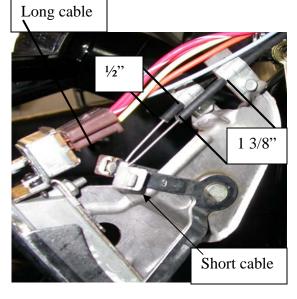


Remove and discard old blower switch from the original control head. Retain the hardware.



Locate blower switch assembly provided in the kit.

Attach switch using the original hardware as shown, and attach O.E. knob to switch.



Using wire harness supplied in kit, Attach harness to blower switch, refer to wiring diagram on next page.

Using the (2) control cables from the kit.

Using original cable clip and hardware attach longest of the control cables to the top lever. Adjust cable to ½" as shown.

Using original cable clip and hardware attach short cable the bottom control lever. Adjust cable to 1 3/8" as shown.



Insert electrical wiring and control cables through the dash hole and reinstall the control head.

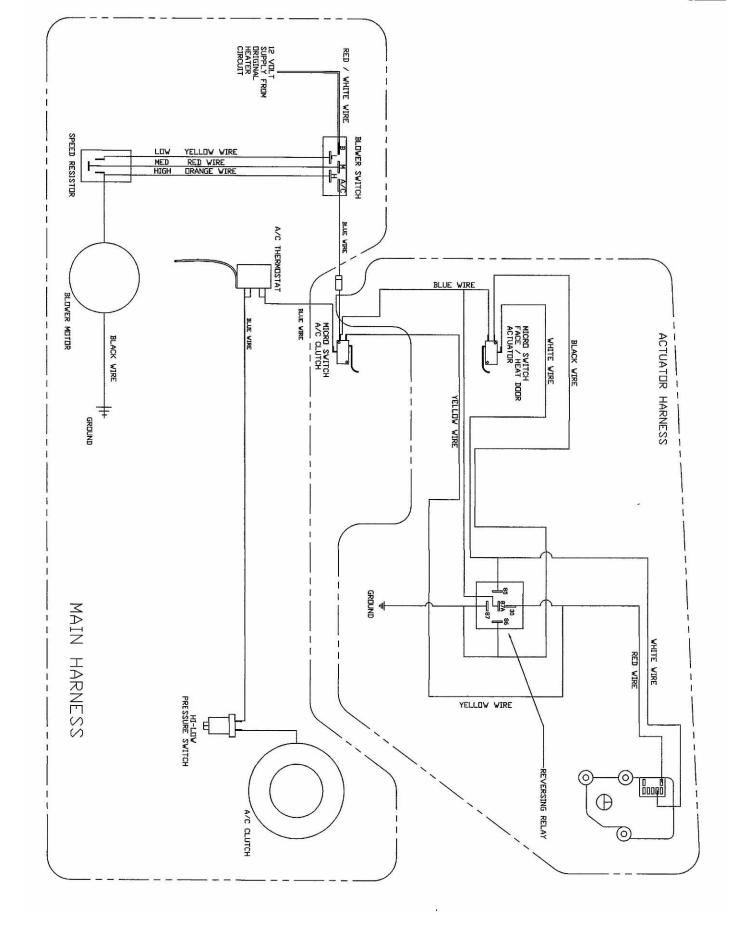


Plug the control head light connector into control head.

Slide control head into place. Attach using the original hardware.



Route the longest Bowden cable through the original mounting hole shown





Route a/c wire harness from blower switch across the evaporator and plug in to blower motor connector.

Plug the two blue spade connectors in to the thermostat, and route the long blue wire out through the firewall at the top O.E hole by blower motor.

Refer to electrical diagram.



Attach black ground wire from wire harness to the body using (1) #10 Tek screw as shown.



Locate black wire with spade connector that was attached to the original blower resistor. Cut off the connector and add a 1/4" male spade connector.

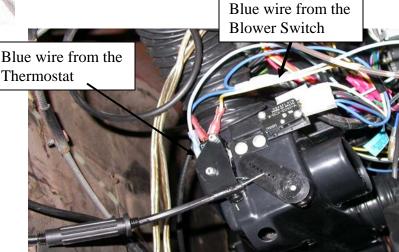
Plug red/white wire from a/c wire harness to this wire. This is your power wire for the system.

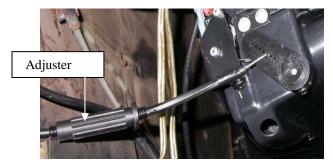
Locate (2) blue wires along the wire harness, route wires to side of the duct assembly.

Attach blue wire from blower switch to the pigtail with two blue wires on the micro switch.

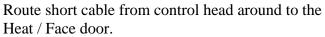
Attach blue wire from thermostat to the open terminal on the left side of micro switch.

Refer to the wiring diagram.









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

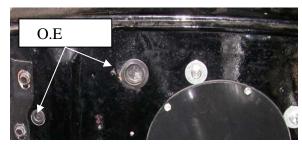
Check adjustment of the door by moving the control lever from left to right. Be sure that when lever is in the center that the micro switch on the right is depressed. Adjust cable movement using the adjuster on cable.

Attach the control cable routed through original heater mounting hole to the water valve.

Adjust cable so that when temp lever is all the way to the left the water valve is closed.

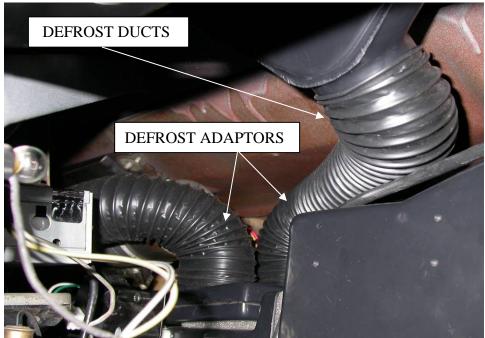
Locate (2) worm gear clamps, cut heater hose 6" from firewall and attach water valve to heater return line to the water pump.

## CAUTION: ATTACHING WATER VALVE TO THE INTAKE MANIFOLD WATER FITTING MAY DAMAGE VALVE.



Locate (1) 1 1/8" and (1) ½"dia cap plugs and install over O.E holes as shown.

The a/c blue wire will be routed through the 1 1/8' plug.



Locate 2" dia flex hose (1) piece 2ft and (1) piece 3ft long.

Cut hose to 17".

Attach to passenger defrost duct using (1) #8 screw and the other end to the defrost adapter on the unit.

Attach 3ft hose to the drivers side defroster duct using (1) #8 screw and the other end to the defrost adapter on the unit.



Locate 2" dia flex hose and (2) tyraps.

Cut (1) piece 44" long and attach to outlet on the right of distribution duct. Run hose to passenger side of dash.

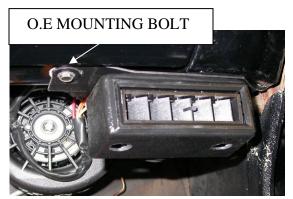
Attach (1) piece 36" long to outlet on the left of distribution duct. Run hose to driver's side of dash.



Install bezel on driver's side of dash as shown.



Attach duct hose to louver and snap louver into bezel.



Install bezel assembly on passenger side of dash using O.E bolt and (1) #10 Tek screw as shown, and attach duct hose to louver as shown above.



Locate the (2) 2 ½"x 12"duct hose.

Slide hoses over front outlets on the distribution duct, and the center louver adaptor.

Attach adaptor to lower dash panel using (2) #10 Tek screws.



Attach center louver assembly to adaptor using (2) # 8 phillips screws.

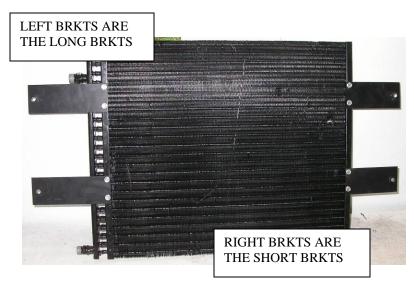


Install original Glove Box using original hardware as shown.

**Caution:** Carefully check under the Instrument Panel for all cables, electrical harness, or Flex Hoses that might interfere with the safe operation of the vehicle.

Install the compressor drive kit at this time.

The engine compartment components should be installed at this time. Carefully follow the electrical diagram provided on page 10.



Using the following components from the condenser kit. Condenser, (2) left condenser mounting bracket, (2) right condenser mounting brackets and (8) #10 x 3/8" screws. Place condenser on the bench with fittings on the left side. Large fitting at top.

Attach condenser brackets to the sides of the condenser. Using the #10 screws. Top brackets will be the third hole from top, and the bottom brackets will be forth hole from the bottom as shown.



Turn condenser over so that fittings are on the right side.

Attach the drier, drier mounting bracket in the fifth hole from the bottom of condenser, using (2) #10 x 3/8" hex screws.

Attach liquid tube to drier and condenser using (2) #6 orings and a drop of mineral oil from tube furnished in kit.

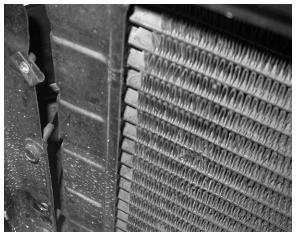
Tighten both fittings using backup wrench. **CAUTION DO NOT OVER TIGHTEN FITTINGS.** 

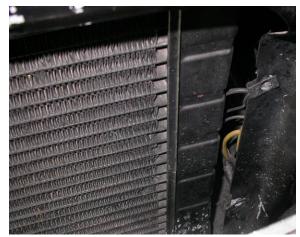


Remove and retain hood seal as shown

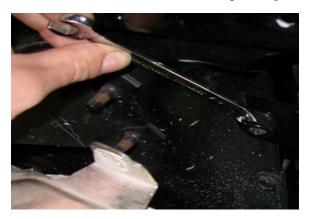


Remove and retain hood latch and mounting hardware as shown





Install the (3) <sup>1</sup>/<sub>4</sub>-20 j-clips on to the radiator cowl, (2) on the drivers side, and (1) on the passenger side as shown.





Install condenser in front of radiator, and attach to j-clips using (3)  $\frac{1}{4}$ -20 x 5/8 bolts. Attach lower left bracket using (1)  $\frac{1}{4}$ -20 x 1 bolt and  $\frac{1}{4}$ -20 nut furnished in kit.



Attach liquid tube to drier using (1) #6 oring to And a drop of mineral oil and Tighten fitting.



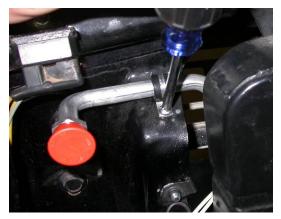
Attach (1) #8 clamp and (1) #10 Tek screw Install radiator cowl to hold liquid tube as shown.

High pressure switch to tube using a drop of mineral oil and tighten.

#### CAUTION DO NOT OVER TIGHTEN FITTINGS OR SWITCH.

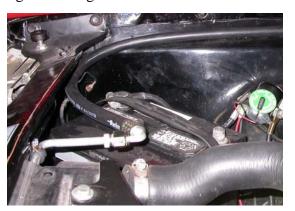


Install the discharge tube using (1) #8 oring And a drop of mineral oil and tighten fitting.



Install (1) #8 clamp and (1) #10-32 screw And nut To radiator cowl as shown.

Install the #6 liquid hose to the condenser tube using (1) #6 oring and a drop of mineral oil and tighten fitting as shown.





Route liquid hose along fender well to the evaporator fitting and attach using (1) #6 oring and a drop of mineral oil and tighten fitting.

REINSTALL RADIATOR HOOD LATCH AND SEAL USING THE ORIGINAL HARDWARE.

### **BIG BLOCK HOSE ROUTING**



Locate #10 suction hose and (2) #10 o-rings add a drop of mineral oil to o-rings and attach hose to fitting on the evaporator end and route hose with the service port end to the compressor as shown.

Note: hose routes through to radiator overflow tank bracket.



Install #8 discharge hose and (2) #8 o-ring and a few drops of mineral oil. Attach end of the hose with 45 deg fitting to the condenser fitting and end with the service port to compressor.

Locate (2) white wires tywraped to the discharge tube. Route along the discharge hose. Cut one of the wires and attach female bullet connector provided and plug into the compressor clutch wire. The other white wire route along liquid tube and connect to blue wire routed through the firewall using a butt splicer.



Install (1) #16 hose clamp and (1) #14 clamp on suction and liquid hose and attach to fender well using (1) #10 Tek screw as shown.

#### SMALL BLOCK HOSE ROUTING





Attach the #8 discharge hose to compressor using (1) #8 o-ring and a drop of mineral oil. Route the other end of the #8 hose and attach to condenser fitting using (1) #8 o-ring and a Drop of mineral oil.

Attach the suction hose to the compressor using (1) #10 o-ring and a drop of mineral oil, and route hose assembly along firewall to evaporator and attach using (1) #10 o-ring and a drop of mineral oil. Using (1) #16 hose clamp and (1) Tek screw attach suction hose to the center of firewall.

NOTE: DO NOT OVER TIGHTEN FITTINGS

CAUTION: CHECK AROUND ENGINE TO BE SURE THAT THERE IS NOTHING THAT WILL INTERFER WITH SAFE OPERATION OF THE VEHICLE.

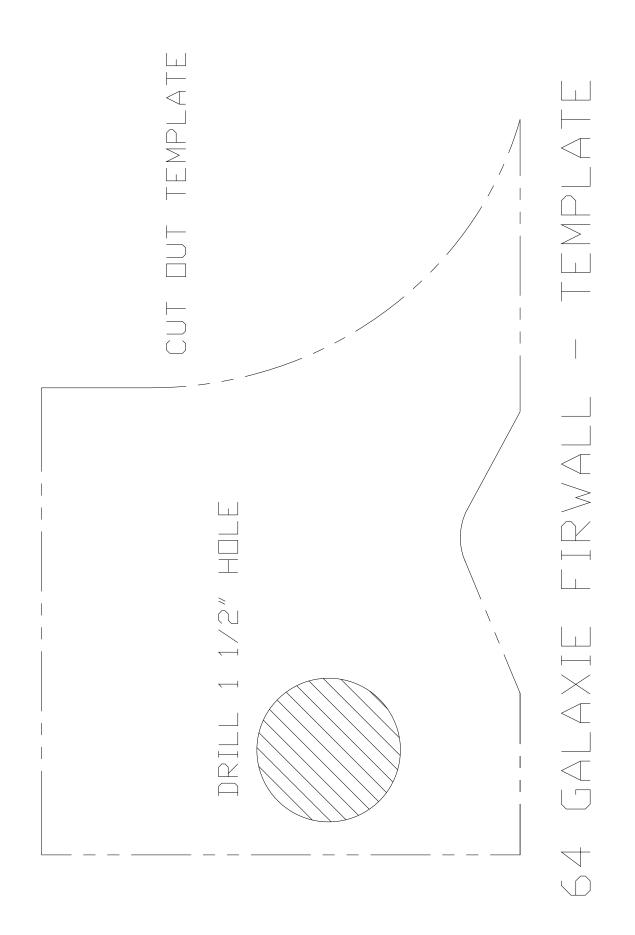
THE ENGINE COMPARTMENT OF YOUR SYSTEM IS COMPLETE.
THE UNIT IS READY FOR EVACUATION AND CHARGING.

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.



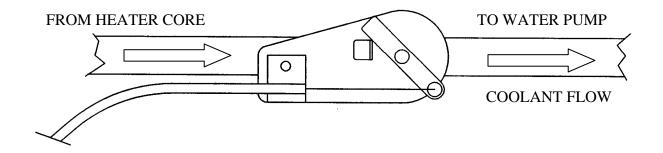
# **IMPORTANT**

### **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