Installation Manual

1963-64 FORD GALAXIE

DOCUMENT #1-1085

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 During the installation you might find the opportunity to repair or upgrade non-working or out of date components.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:

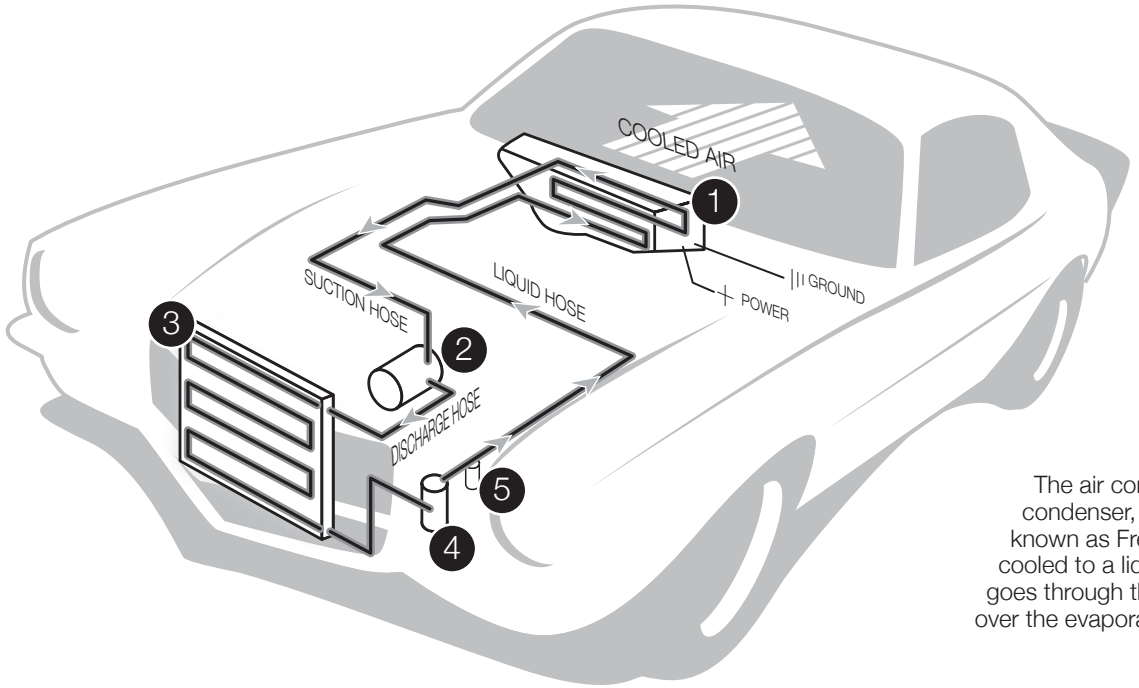
- ☐ Fittings: Use one or two drops of mineral oil (supplied with your kit) on ALL rubber o-rings, threads and where o-rings seat in fittings. Do not use thread tape or sealants.
- ☐ Measure twice (or more), cut once
- ☐ **Should you have any technical questions, or feel you have defective components (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!**

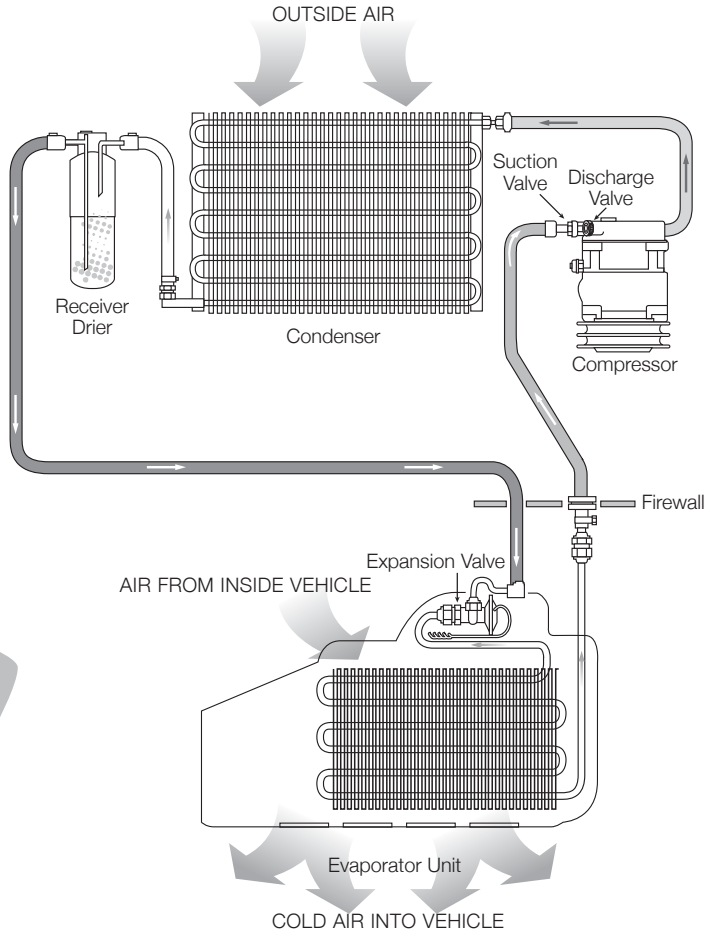
CAUTION: DISCONNECT BATTERY GROUND CABLE

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.



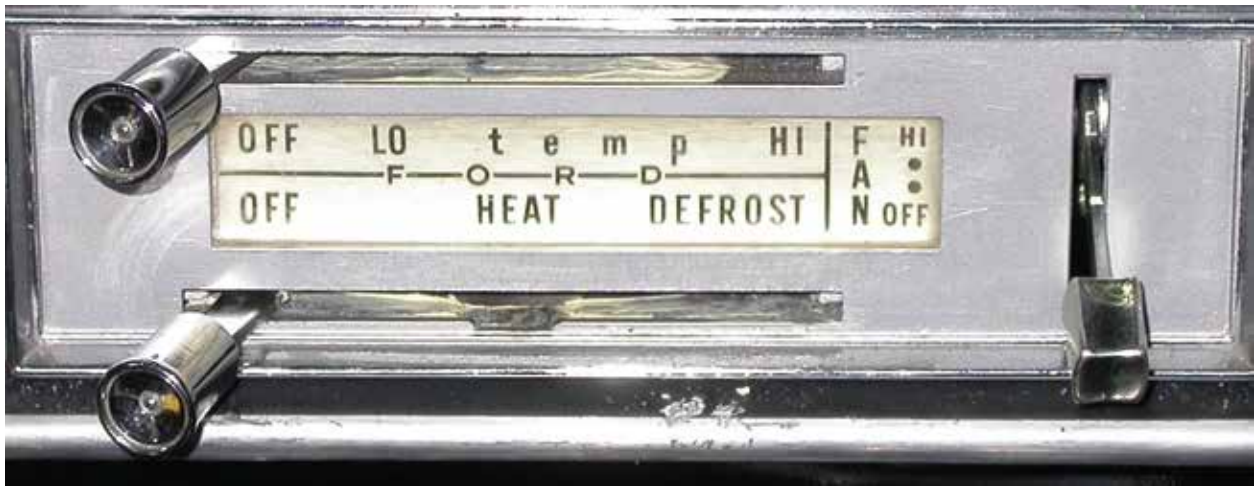


The air conditioning system in your car is comprised of a compressor, condenser, expansion valve, receiver/drier, and evaporator. Refrigerant (also known as Freon) is compressed in the compressor. In the condenser, gas is cooled to a liquid state and travels to the expansion valve. As the liquid refrigerant 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. 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.

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.

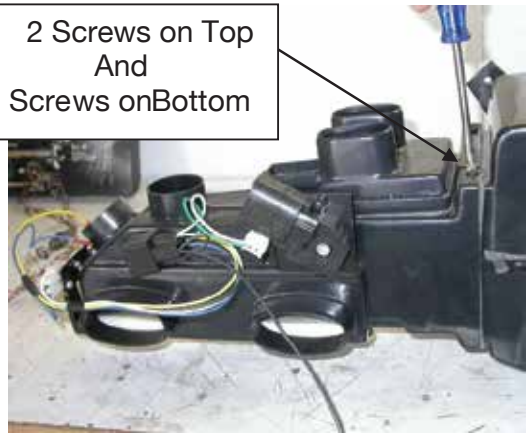
Disconnect electrical plug from resistor on the heater box.

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 1/2” hole through firewall.



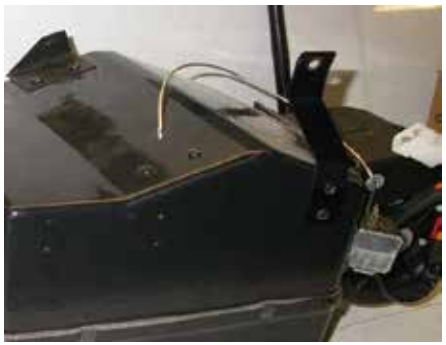
Remove and discard air inlet duct.

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 ¾” 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 x 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) ¼-20 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 ¾” Tek screw.

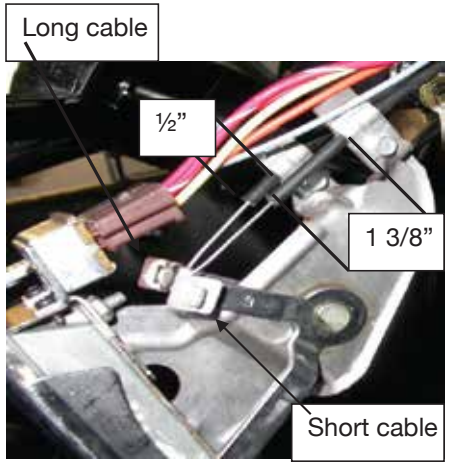
Drill a 11/16” hole ½” lower than the evaporator drain tube.

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.

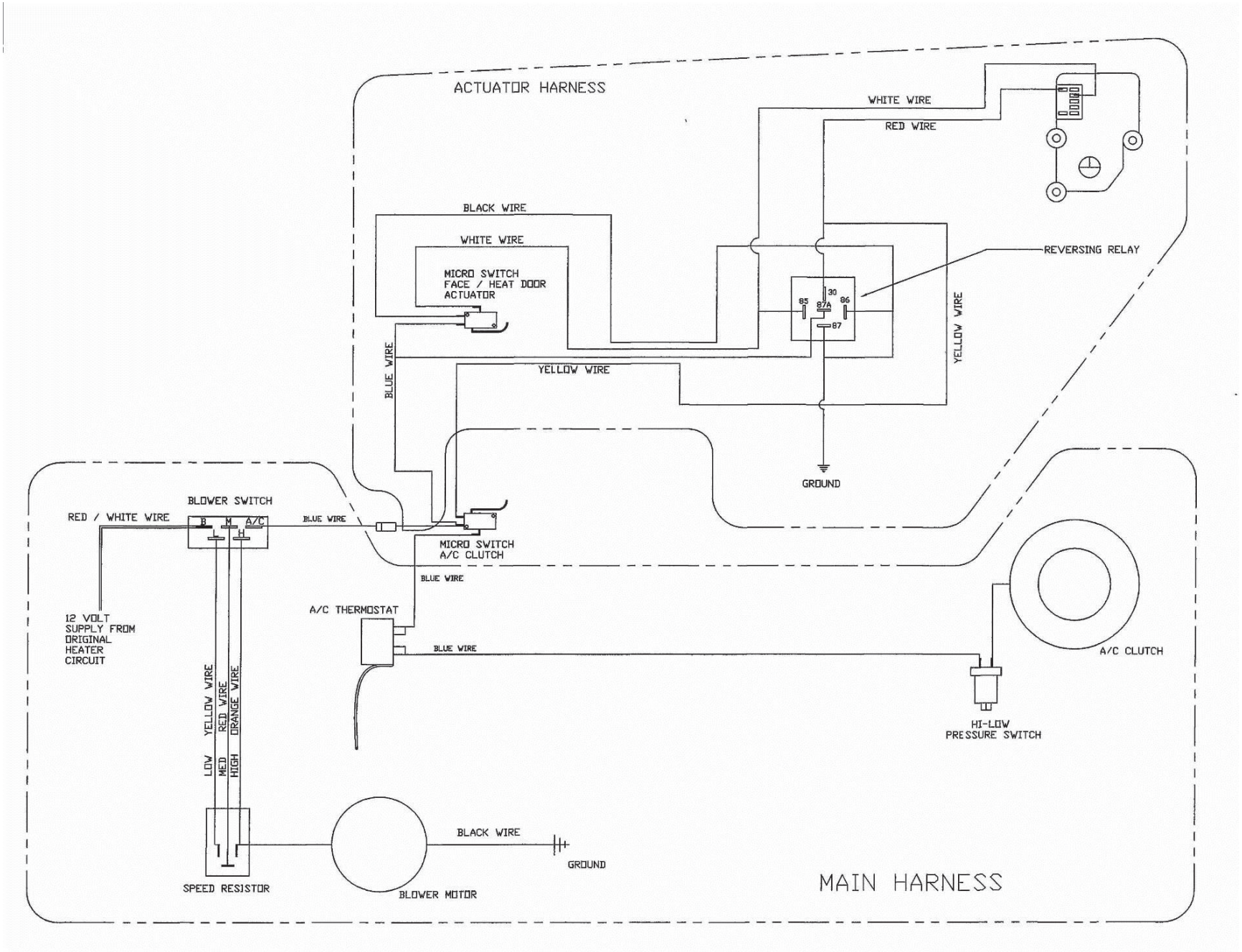
Using original cable clip and hardware attach short cable the bottom control lever. Adjust cable to 1 3/8”as shown.

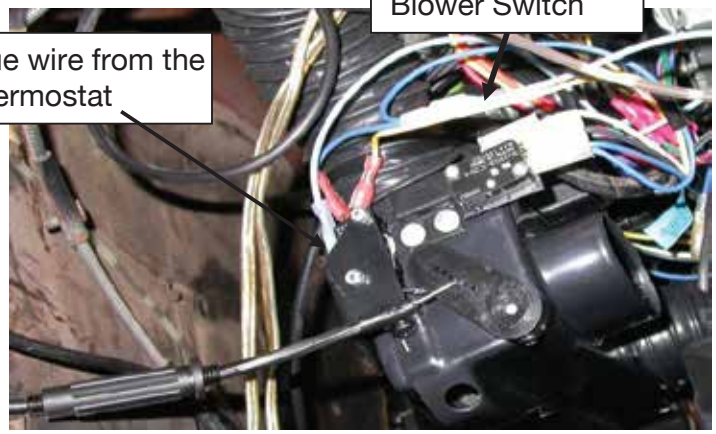
Insert electrical wiring and control cables through the dash hole and reinstall the control head.

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


ACTUATOR HARNESS
WHITE WIRE
RED WIRE
BLACK WIRE
WHITE WIRE
MICRO SWITCH
FACE / HEAT DOOR
ACTUATOR
REVERSING RELAY
85
30
87A
86
87
YELLOW WIRE
BLUE WIRE
YELLOW WIRE
GROUND
BLOWER SWITCH
RED / WHITE WIRE
B
M
A/C
H
BLUE WIRE
MICRO SWITCH
A/C CLUTCH
BLUE WIRE
12 VOLT
SUPPLY FROM
ORIGINAL
HEATER
CIRCUIT
A/C THERMOSTAT
BLUE WIRE
A/C CLUTCH
HI-LOW
PRESSURE SWITCH
LOW
MED
HIGH
YELLOW WIRE
RED WIRE
ORANGE WIRE
BLACK WIRE
GROUND
SPEED RESISTOR
BLOWER MOTOR
MAIN HARNESS



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 ¼" male spade connector.

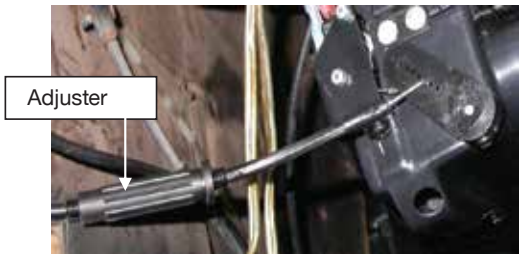
Plug red/white wire from a/c wire harness to this wire. This is your power wire for the system.

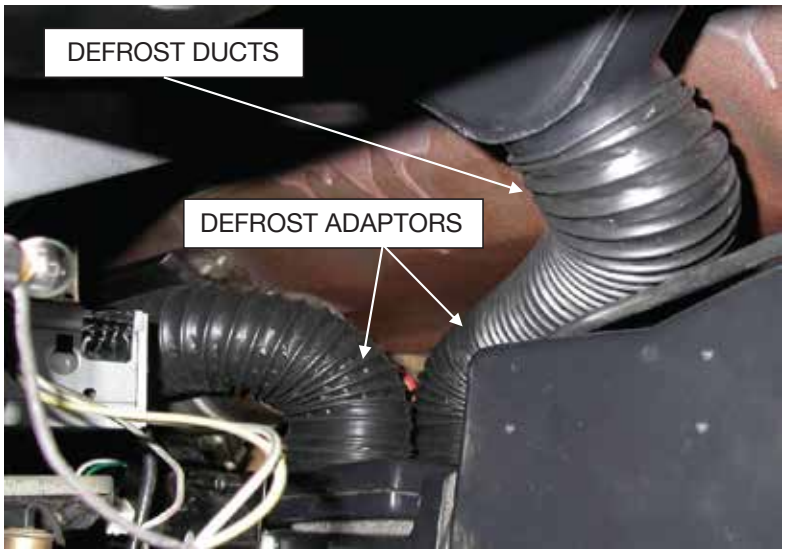
Locate (2) blue wires along the wire harness, route wires to side of the duct assembly.

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.





Route short cable from control head around to the Heat / Face door.

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 in the hardware sack kit the (4) remote louver assemblies, and the #10 x ¾” hex head tek screws.

Mount the (2) remote louver assemblies with 2.5” dia flex hose desired location of center dash.

Mount the (2) remote louver assemblies with 2” dia flex hose desired location of Driver side and Passenger side of dash.

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.

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.

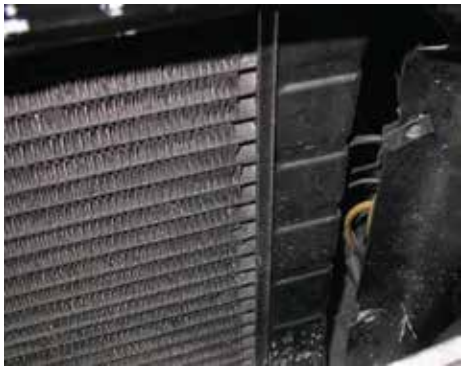
Attach liquid tube to drier and condenser using (2) #6 orings and a drop of mineral oil from tube furnished in kit.

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) ¼-20 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) ¼-20 x 5/8 bolts.

Attach lower left bracket using (1) ¼-20 x 1 bolt and ¼-20 nut furnished in kit.

Attach liquid tube to drier using (1) #6 oring

Attach (1) #8 clamp and (1) #10 Tek screw to And a drop of mineral oil and Tighten fitting.

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.

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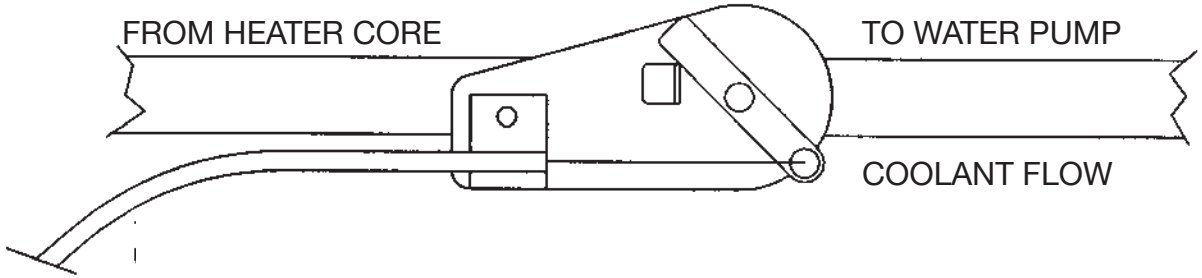
Classic Auto Air has done extensive testing on the correct method to install the water valve in order to get a repeatable and progressive temperature control.

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

New A/C System Preparation... A MUST READ!

Please read through these procedures before completing this new A/C system charging operation.
A licensed A/C technician should be utilized for these procedures to insure that your new system will perform at it's peak, and that your compressor will not be damaged.

1) Your radiator/cooling system is an integral part of your new system. Please insure that you have a 50/50 mix of distilled water and antifreeze. The heater coil **MUST** be purged (cycle heater control valve) to make sure no water, without antifreeze, is in the heater coil before you charge the A/C system.
2) Evacuate the system for 45 minutes (minimum).
3) **Your new compressor MUST be hand-turned 15-20 revolutions before and after charging with liquid. Failure to do this may cause the reed valves to become damaged** (this damage is NOT covered by your warranty).
4) Your new system requires 134a refrigerant. It will require 1.5 lbs (or 24 oz).
5) Your new compressor comes charged with oil - NO additional oil is needed.
6) Insure that the new belt is tight.
7) **DO NOT CHARGE SYSTEM WITH LIQUID REFRIGERANT!**

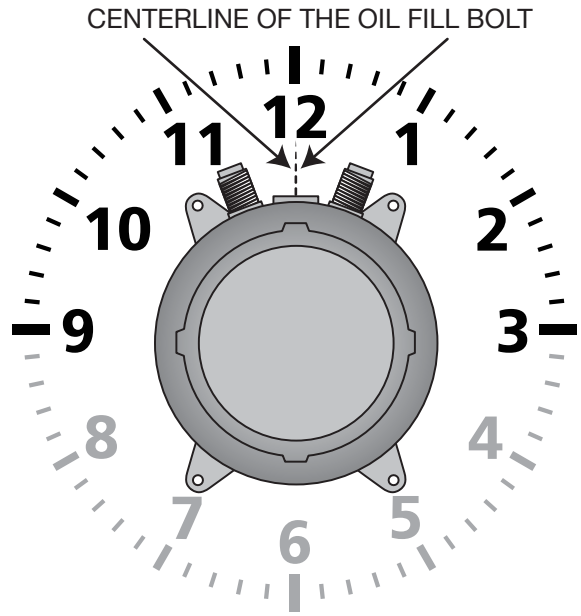
RECOMMENDED TEST CONDITIONS: (After system has been fully charged and tested for basic operation)

- Determine the temperature outside of the car
- Connect gauges or service equipment to high/low charging ports
- Place blower fan switch on medium
- Close all doors and windows on vehicle
- Place shop fan directly in front of condenser
- Run engine idle up to approx. 1500 rpm

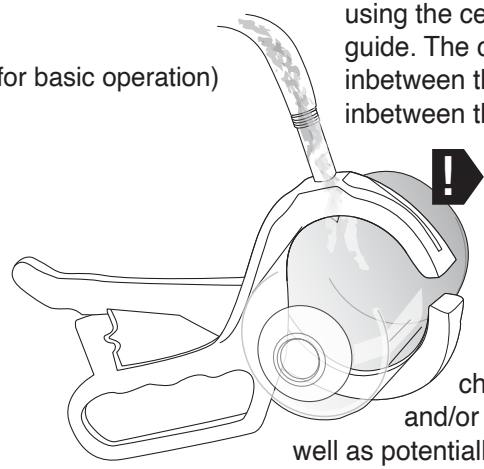
ACCEPTABLE OPERATING PRESSURE RANGES:

1. HIGH-SIDE PRESSURES (150-275 PSI)
2. LOW-SIDE PRESSURES (10-25 PSI in a steady state)

Readings above are based on an ambient temperature of 90° with an adequate airflow on condenser



CAUTION! When mounting your compressor and/or adjusting the belt use caution. Mount by using the centerline of the oil fill plug as your guide. The compressor can ONLY be mounted inbetween the 9 to 3 positions. DO NOT mount inbetween the 4 to 8 positions.



Do NOT tilt, shake or turn refrigerant can upside-down OR use a charging station to install refrigerant while the engine is running. Doing so will direct liquid refrigerant into the compressor piston chamber, causing damage to reed valves and/or pistons and/or other components, as well as potentially seizing the compressor. Allow a minimum of 30 minutes for liquid to "boil off." You must hand turn the compressor hub (not the pulley) a minimum of 15 complete revolutions prior to starting the engine with the clutch engaged.

TROUBLESHOOTING GUIDE

TEST CONDITIONS USED TO DETERMINE SYSTEM OPERATION

(THESE TEST CONDITIONS WILL SIMULATE THE AFFECT OF DRIVING THE VEHICLE AND GIVE THE TECHNICIAN THE THREE CRITICAL READINGS THAT THEY WILL NEED TO DIAGNOSE ANY POTENTIAL PROBLEMS).

B. CONNECT GAUGES OR SERVICE EQUIPMENT TO HIGH/LOW CHARGING PORTS.

C. PLACE BLOWER FAN SWITCH ON MEDIUM.

D. CLOSE ALL DOORS AND WINDOWS ON VEHICLE.

E. PLACE SHOP FAN IN FRONT OF CONDENSER.

F. RUN ENGINE IDLE UP TO 1500 RPM.

ACCEPTABLE OPERATING PRESSURE RANGES (R134A TYPE)

1. HIGH-SIDE PRESSURES (150-275 PSI) **Note- general rule of thumb is two times the ambient (daytime) temperature, plus 15-20%.*
2. LOW-SIDE PRESSURES (10-25 PSI in a steady state).

CHARGE AS FOLLOWS: R134A = 24 OZ.
NO ADDITIONAL OIL IS NECESSARY IN OUR NEW COMPRESSORS.

TYPICAL PROBLEMS ENCOUNTERED IN CHARGING SYSTEMS

NOISY COMPRESSOR. A noisy compressor is generally caused by charging a compressor with liquid or overcharging

A. If the system is overcharged both gauges will read abnormally high readings. This is causing a feedback pressure on the compressor causing it to rattle or shake from the increased cylinder head pressures. System must be evacuated and re-charged to exact weight specifications.

B. Heater control valve installation - Installing the heater control valve in the incorrect hose. Usually when this occurs the system will cool at idle then start to warm up when raising the RPM's of the motor. THE HEATER CONTROL IS A DIRECTIONAL VALVE; MAKE SURE THE WATER FLOW IS WITH THE DIRECTION OF THE ARROW. As the engine heats up that water transfers the heat to the coil, thus overpowering the a/c coil. A leaking or faulty valve will have a more pronounced affect on the unit's cooling ability. Installing the valve improperly (such as having the flow reversed) will also allow water to flow through, thus inhibiting cooling. Check for heat transfer by disconnecting hoses from the system completely. By running down the road with the hoses looped backed through the motor, you eliminate the possibility of heat transfer to the unit.

C. Evaporator freezing - Freezing can occur both externally and internally on an evaporator core. External freeze up occurs when the coil cannot effectively displace the condensation on the outside fins and the water forms ice (the evaporator core resembles a block of solid ice), it restricts the flow of air that can pass through it, which gives the illusion of the air not functioning. The common cause of external freezing is the setting of the thermostat and the presence of high humidity in the passenger compartment. All door and window seals should be checked in the event of constant freeze-up. A thermostat is provided with all units to control the cycling of the compressor.

D. Internal freeze up occurs when there is too much moisture inside the system. The symptoms of internal freeze up often surface after extended highway driving. The volume of air stays constant, but the temperature of the air gradually rises. When this freezing occurs the low side pressure will drop, eventually going into a vacuum. At this point, the system should be checked by a professional who will evacuate the system and the drier will have to be changed.

E. Inadequate airflow to condenser - The condenser works best in front of the radiator with a large supply of fresh air. Abnormally high pressures will result from improper airflow. Check the airflow requirements by placing a large capacity fan in front of the condenser and running cool water over the surface. If the pressures drop significantly, this will indicate the need for better airflow.

F. Incorrect or inadequate condenser capacity - Incorrect condenser capacity will cause abnormally high head pressures. A quick test that can be performed is to run cool water over the condenser while the system is operating, if the pressures decrease significantly, it is likely a airflow or capacity problem.

G. Expansion valve failure - An expansion valve failure is generally caused by dirt or debris entering the system during assembly. If an expansion valve fails it will be indicated by abnormal gauge readings. A valve that is blocked will be indicated by high side that is unusually high, while the low side will be unusually low or may even go into a vacuum. A valve that is stuck open will be indicated by both the high and low pressures rising to unusually high readings, seeming to move toward equal readings on the gauges.

H. Restrictions in system - A restriction in the cooling system will cause abnormal readings on the gauges. A high-side restriction (between the compressor and the drier inlet) will be indicated by the discharge gauges reading excessively high. These simple tests can be performed by a local shop and can help determine the extent of the systems problem.

Trouble Shooting Your Classic Auto Air A/C System

PROBLEM: system is not cooling properly
ISSUE: cold at idle, warmer when raising engine RPM's

Make sure the Water Valve is positioned correctly

The water valve is a directional valve and should be installed with the arrow pointing towards the water pump, it should be connected to the heater hose that runs from the heater core to the water pump. If the water valve is connected to the incorrect hose it allows water to circulate through the system via the heater core over powering the cooling effect of the A/C coil, (normally the air conditioning is functioning properly).

Step 1: Check placement of the water valve, correct if needed. (In some cases changing the location of the water valve may not fix the above problem.) Continue to next step.

Step 2 If changing the location of the water valve does not rectify the issue, then possibly the water valve is permanently damaged and may need to be replaced. To check the integrity of the water valve completely remove the water hoses for the heater core and "loop" together. (This will remove the heater system completely from the possibilities) If the system now cools, replace the water valve

Verify Adequate Air Flow to Condenser

For an air conditioning system to function properly there has to be adequate airflow across the condenser. The function of the condenser is to dissipate heat, without proper airflow your system will not cool correctly in the cabin of your vehicle.

Step 1: connect gauges to a/C hoses. The pressures should be: with the ambient temp is 90, low side pressures should be between 10-25 psi, high side pressures should be between 150-275 psi

Step 2: IF the low side pressures are normal and the high side pressures are high then there might be an airflow issue, continue to next step.

To test air flow to Condenser do the following three tests:

1. Place a piece of paper on the condenser with the car in idle and see if paper is held in place.
2. With car in idle, attach gages, and place a large capacity fan in front of the condenser. What happens to the pressures?
3. With car still in idle and gages attached, pour water down the front of the condenser. What happens to the pressures?

If the paper is held in place you are at least getting some air flow. If the high side decreases during test 2 & 3 then your condenser is not getting enough air which is causing your system to not cool properly. To correct this issue you will need a more powerful mechanical fan.

Step 3: Confirm correct Refrigerant charge in System

All of our systems should be charged with 24 oz or 1.5 lbs of R134A Refrigerant only. If overcharged you will need to evacuate the system and recharge with the correct amount.*

What measurements mean:

Low Temp and High Pressure seem to be equal...

You have a malfunctioning expansion valve that is stuck open.

High Side is extremely high and Low Side is extremely low (possibly into vacuum)...

There is a blockage in the system. Remove hoses and blow compressed air through in both directions. If pressures don't change its possible that your expansion valve is stuck closed and would have to be replaced.

*Compressor Concerns:

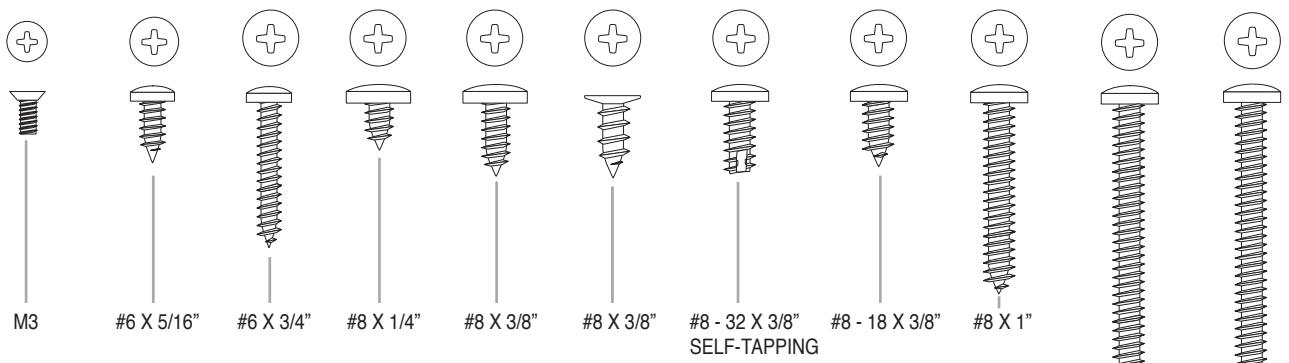
This is often misdiagnosed as a problem for the system not cooling properly. If you have a noisy compressor it is due to improper charging of refrigerant. An overcharged (more than 24 oz or 1.5 lbs R134A) compressor can cause rattling. If charged with pure liquid there is a high probability you have bent reed valves that are causing tapping sound.

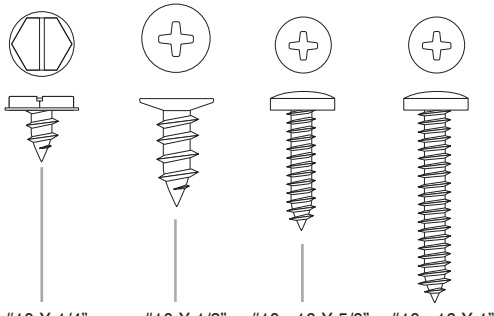
SCAN QR code
with your mobile camera

Get the technical support you want the moment you need it, with no wait times. Simply **SCAN** the **QR code** and be directly taken to our support section to troubleshoot all things A/C.

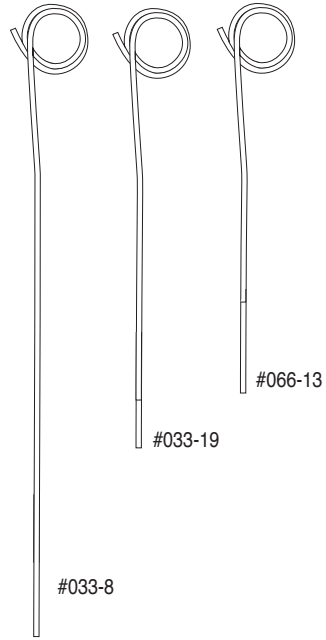
Classic Auto Air Hardware Reference Guide

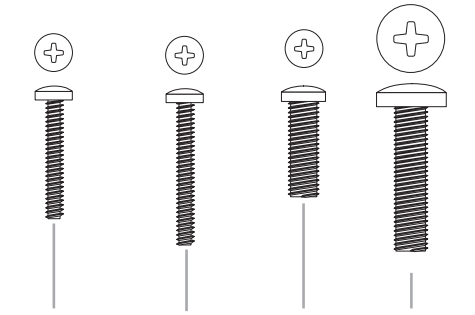
This is our basic line-up of hardware. No single kit will not contain all of these, but you can use this guide to match-up hardware for shape and size (all of these are actual size.)

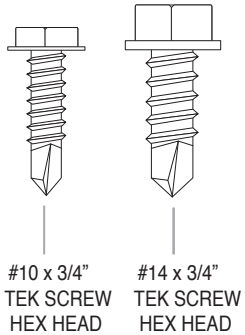


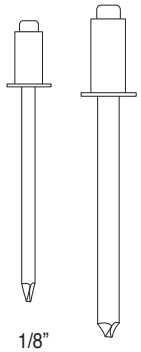


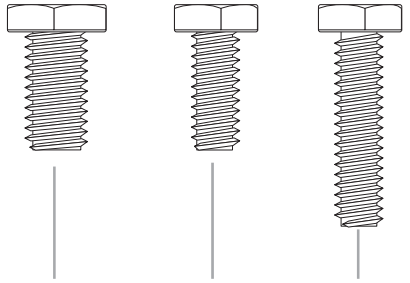
CONNECTING WIRE







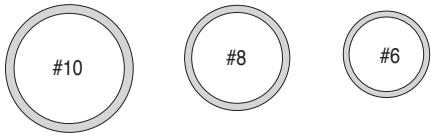


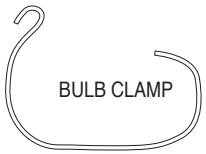


LOCK NUTS

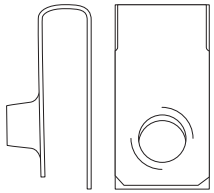
NUTS AND WASHERS

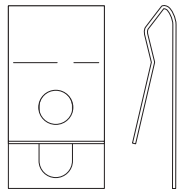
ORINGS

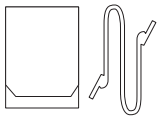


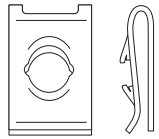


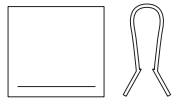
CLIPS



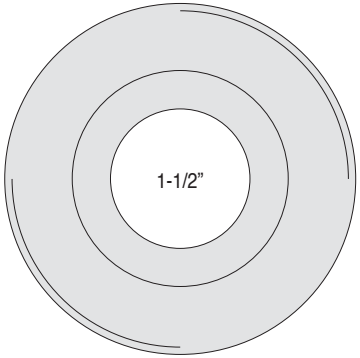


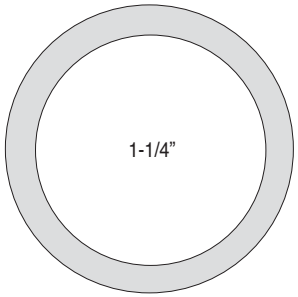


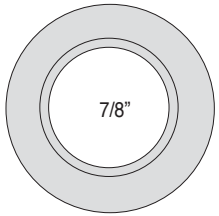




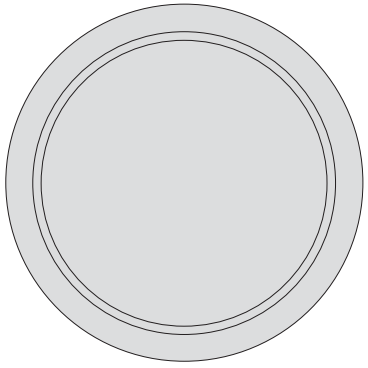
GROMMETS

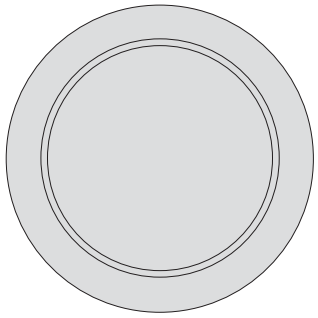


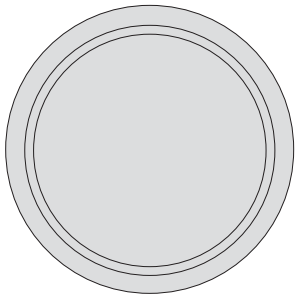


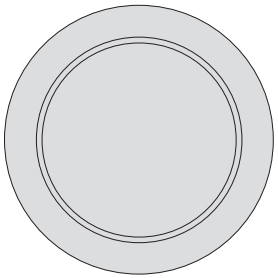


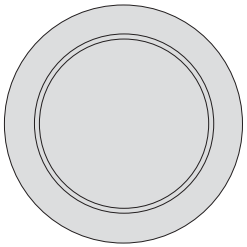
HOLE PLUGS

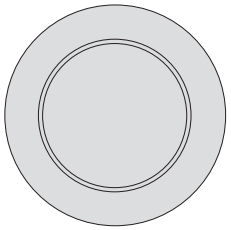


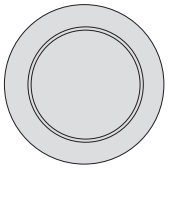




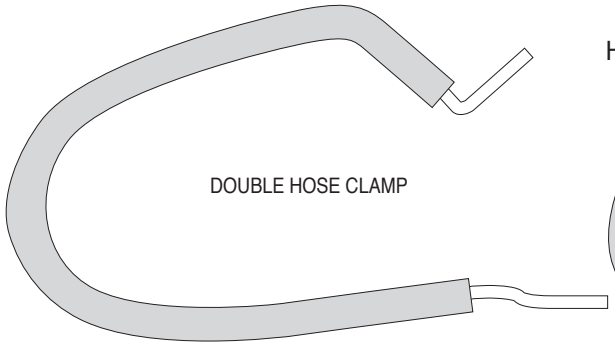


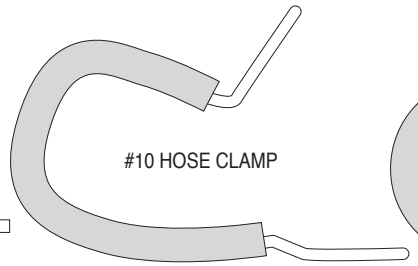


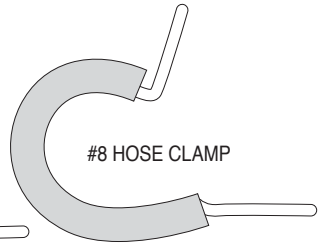


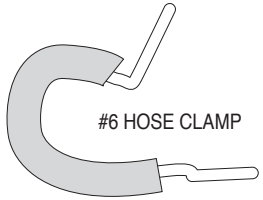


HOSE CLAMPS









IF YOU PRINTED THIS MANUAL
PLEASE READ THIS...

Just as a cautionary step, please measure this box and make sure it is 1" x 1". Some copiers/printers may not print at 100% of actual size.

CUT OUT TEMPLATE

DRILL 1 1/2" HOLE

64 GALAXIE FIRWALL - TEMPLATE