Congratulations...

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

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 During the installation you might find the opportunity to repair or upgrade non-working or out of date components.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
1957 CHEVROLET SEDAN
WITH 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, Heat, and Defrost 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 main housing.

HEAT / DEFROST DOOR CONTROL: When the Control Knob is PUSHED to the bottom position the air is distributed to the DEFROST outlets and the drivers and passenger outlets. When the knob is PULLED to the TOP the air is distributed to the HEATER outlets. The lever can be moved any position from the top to the bottom. This will give blend between the defrost and the heat outlets.

FACE DOOR CONTROL: When the Control Knob is pushed all the way to the right the air is distributed to the FACE outlets. In this position the Compressor clutch is engaged and you have A/C.

NOTE: THE FACE DOOR LEVER MUST BE IN THE RIGHT POSITION TO HAVE DEHUMIDIFIED DEFROST.

TEMPERATURE CONTROL: The Temperature Knob 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.
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 DEFROST MODE. THIS MEANS THAT THE AIR WILL BE DISTRIBUTED THROUGH THE DEFROST OUTLETS. THIS ALSO HAS THE TEMPERATURE LEVER IN THE COLD POSITION. WITH THE CONTROLS IN THIS POSITION YOU WILL GET THE AIR THROUGH THE DEFROST 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.

**HEAT / DEFROST DOOR CONTROL:** When the Control Knob is pushed in the air is distributed to the defrost and the drivers and passenger outlets. When the knob is pulled out the air will go to the floor. The knob can be moved any position from the in position to all of the way out. This will give blend between the defrost and the heat outlets.

**FACE DOOR CONTROL:** When the Control Knob is pushed all the way in the air is distributed to the floor outlets. When the Knob is pulled out the air is distributed to the Face outlets. In the out position the Compressor clutch is engaged and you have A/C.

**NOTE:** THE HEAT / DEFROST DOOR CONTROL AND THE FACE DOOR CONTROL MUST BE PULLED OUT IN ORDER TO HAVE A/C.

**TEMPERATURE CONTROL:** The Temperature Knob as shown is in the COLDEST temperature position. As the lever is pulled out the temperature of the discharged air will rise to the HOTTEST point.

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

Remove the glove box door and glove box. Discard glove box and retain all of the original hardware.

**CAUTION: DISCONNECT BATTERY CABLES**

Locate battery next to the radiator, remove and retain original hardware.

**DRAIN RADIATOR**

The next few steps are for the deluxe heater.

Remove the heater hoses from the heater core and water valve. Discard the original hose clamps.

Remove and discard original water valve. Retain original hardware.

Locate in hardware sack kit the water valve cover plate. Attach using original hardware.

Remove (3) screws as shown. Discard hardware.
Located on both sides of blower you will find the heater box retaining brackets.

Remove and retain these brackets. The blower assembly can now be removed and discarded.

**NOTE: Retain heater box retainer brackets.**

Locate behind the glove box opening the Heat / Defrost cable. Disconnect the cable and discard hardware.

Located on top of the heater box is the electrical resistor connection. Disconnect wiring.

Located under the heater box and around edge to the top (4) screws. Remove and discard hardware.

Remove the Heater Box Assembly and discard.

**NOTE: FOLLOWING STEPS ARE TYPICAL DRIVERS AND PASSENGERS SIDE OF VEHICLE. VEHICLES EQUIPT WITH DELUXE CONTROLS DO NOT REMOVE DRIVERS CABLE.**

Located in the engine compartment and under fender behind hood hinge spring is the Fresh Air cable.

Disconnect cable and retain hardware.
Locate the control head. Remove the control. Retain control and original hardware. **NOTE: When removing the control head identify the power wire to the switch. Label this wire. The electrical in the new unit will attach to this wire.**

Locate in the Control Sack Kit (2) Vent Cable Assemblies, and (4) #10 x ¾” tek screws.

Insert new cable through the hole that original control cables routed through above the air inlet.

The cable will attach under the hood to the fresh air door using original hardware.

The other end of cable attaches to under side of the instrument panel. Use (2) of the #10 tek screws. **Note: Attach drivers side now. The passenger side will set on floor and be attached after new system is installed.**

**NOTE: STANDARD HEATER ONLY**

Unscrew original passenger side vent cable from under the dash. Let cable set on floor of the car. Retain original hardware.

Locate behind glove box opening the Heat / Defrost cable. Disconnect the cable and discard hardware.

Located on top of the heater box is the electrical resistor connection. Disconnect wiring.

Locate under the hood and on firewall the heater blower motor assembly.

Remove (3) nuts around motor discard original hardware. Cut electrical wires.

Remove and discard heater assembly.
Remove the Panel Retaining Brackets and retain. Remove and discard Panel.

Remove and discard the original Control Assembly.

Remove and retain original hardware.

NOTE: When removing the control head identify power wire to the switch. Label this wire. The electrical in the new unit will attach to this wire.

**ALL MODIFICATIONS TO THE VEHICLE ARE COMPLETE YOU CAN NOW BEGIN INSTALLING YOUR CLASSIC AIR “PERFECT FIT SERIES”**.

Locate the Firewall Block off Plate.

Attach over the hole in firewall using original Panel Retaining Brackets.

Locate the Evaporator and set on a bench.

Locate the Wire Harness supplied in kit and install onto the unit as shown in diagram below.

Place evaporator on floor of the car. Locate blue wire from the thermostat and route through hole to left of the large hole in the block off plate.
Raise Evaporator into position. Insert Heater Tube hookups through holes, and also studs on the mounting brackets through the firewall Block off Plate and attach using (4) ¼-20 Flange Nuts.

Locate above the Evaporator (2) bulk head fittings. Remove the nuts and o-rings. Insert these through (2) holes and attach with nuts and o-rings from engine side of block off plate. Located on front of the blower motor is the Support Bracket.

Attach bracket through the exiting hole using (1) ¼” – 20 x 5/8” hex head screw and flange nut.

Locate in the hardware sack kit (2) #10 x ¾” hex washer head tek screws.

Reattach kick panel vent knob as shown. Locate in the Hardware Sack Kit (1) 9” clear drain hose.

Drill (1) 11/16” dia. hole through firewall under evaporator and over to the left approximately 3” and lower than the drain nipple as shown.

Insert through hole and onto the drain nipple. Locate longest of the control cables supplied in kit. Push through hole in firewall block off just to left of the heater tubes. Let cable hang in place.
Locate the face duct assembly, and (1) #10 x 5/8” pan head screw.

Locate next longest of the control cables supplied in kit. Attach to the Face / Defrost door using (1) #10 x 5/8” pan head screw. **NOTE: CABLE INSERTS INTO THE 3rd HOLE FROM THE CENTER OF THE DOOR.**

Locate shortest of the control cables supplied in kit. Attach to the Face / Heat door using (1) #10 x 5/8” pan head screw. **NOTE: CABLE INSERTS INTO 3rd HOLE FROM THE CENTER OF THE DOOR.**

Locate the Center Duct Assembly.

Set on floor under the glove box opening.

Locate the control cable that connects to Defrost / Face door.

Insert cable between evaporator and the firewall.

Attach the Center Duct Assembly to the Evaporator. Be sure that the defrost duct is aligned with original defrost diffuser.

Locate in the hardware sack kit (2) #10 x ¾” hex head tek screws.

Attach Duct Assembly to bottom of the dash as shown.

Connect blue wires from micro switch to the wire harness as shown.
Locate the Center Louver Assembly.

Locate in the hardware sack kit (4) #8 x ½” pan Head Phillips Screws.

On passenger side of dash, above the blower, locate Black Ground wire from the blower motor. Secure to body using (1) #10 x ¾” hex head tek screw.

Locate the Side Ball Louver and (2) #10 x ¾” hex head tek screws.

Remove ball assembly from housing. Attach housing top to under side of the dash as shown.

Reinstall ball louver, locate the 2” dia. flex hose 36”. Cut 30” of hose and attach it to the Center Duct outlet as shown.

Route hose over to Passenger side Ball Louver and attach it to hose adaptor on the back.
Locate in the hardware sack kit the Drivers Side Ball Louver Assembly, and (2) #10 x ¾” hex head tek screws.

Remove ball assembly from housing. Attach housing top to under side of the dash as shown. Reinstall ball louver.

Located on back side of Center Duct Assembly is the hose adaptor for drivers side louver.

Cut 42” of 2” dia. flex hose. Attach it over the hose adaptor and route over and behind instruments and attach on to Drivers Ball Louver Assembly. Locate behind control opening find the (3) cables and the wire harness. Pull through the opening.

Attach the red / white power wire to wire identified from the original blower switch.
STANDARD HEATER CONTROL.

Locate in the Control Sack Kit the lower control switch mounting bracket. Locate (3) Push Pull cables behind control head.

Insert cable attached to the Defrost / Face door through center hole and attach with nut provided. Tighten securely.

Insert shortest of the cables that is attached to Heat / Face door through left hole and attach with nut provided. Tighten securely.

Insert last cable that is hooked to the water valve through right hole and attach with nut provided. Tighten securely.

Locate the Control Cover Bezel, (3) Cable Knobs and (4) #8 x ½” pan head Phillips screws. Attach the wire harness to the blower switch per the wiring diagram.

Place Control bezel over the cable shafts and up into place. Attach to the Instrument panel through top holes using (2) #8 x ½” pan head phillips screws.

Aline the control cable mounting bracket to lower holes in the control bezel. Attach to the lower edge of instrument panel using (2) #8 x ½” pan head phillips screws. Attach Control Knobs to the control shafts as shown above. Tighten securely using an allen wrench.
DELUXE HEATER CONTROLS
Locate the original control head. Remove blower switch and the original cables. Retain the original cable clips.

The light bulb assembly from original blower switch will be used. Cut the wire at plug and attach (1) ¼” male spade connector. Attach bulb assembly to the original wire harness.

Locate in the control sack kit the Blower Switch, and (2) #6 pan head screws.

Insert blower switch through face bezel and locate in the center and against the edge as shown.

Drill (2) 1/8” dia. holes and attach using the #6 screws.

Locate in the control sack kit the Black Blower Switch knob. Attach to the switch as shown.

Holding control head at the opening in the instrument panel, attach the cables. Insert cable attached to the Defrost / Face door to lever labeled DEFROST. Attach using original hardware and push nut provided. Tighten securely.

Insert shortest of the cables that is attached to Heat / Face door to lever labeled HEAT. Attach using original hardware and push nut provided. Tighten securely.

Insert last cable that is hooked to the water valve to right lever. Attach with original hardware and push nut provided. Tighten securely.

Attach wire harness to the blower switch per the Wiring Diagram.

Reinstall original control head using the original hardware.
Locate Glove Box provided in the kit, original glove box door and hardware. Attach glove box door using original hardware.

Insert glove box through opening as shown.

Attach using (2) original screws one on both sides.

INSTALL THE COMPRESSOR ADAPTOR KIT AND COMPRESSOR AT THIS TIME PER THE MANUFACTURERS DIRECTIONS.

NOTE: THIS INSTALL IS CORRECT FOR A 283CID V8 ENGINE, WITH ALTERNATOR CONVERSION ON DRIVERS SIDE OF VEHICLE. IF YOUR VEHICLE IS EQUIPTED WITH A DIFFERENT ENGINE PACKAGE IT WILL BE NECESSARY TO ROUTE THE HOSES DIFFERENT.
Locate the radiator bulkhead hole template. Tape the template to the bulkhead as shown. Carefully drill the (1) 5/8” dia. hole and the ¾” dia hole.

Locate the Condenser supplied in kit, (2) Mounting Brackets Left, (2) Mounting Brackets Right, and (8) #10 x 1/4” hex head screws. Attach left and right brackets 4th hole from the top, and 4th hole from the bottom.

Turn the condenser over. Locate the Liquid Tube (Condenser to Drier), Liquid Tube (Receiver to Bulkhead), Discharge Tube, (3) #6 o-rings, (1) #8 o-ring, Receiver Drier, the Drier Mounting bracket, and (2) #10 x 3/8” hex head screws.

Attach components listed above to the condenser. Install all tubes with o-rings and a few drops of mineral oil.

Place the Condenser Assembly in front of the radiator and insert the mounting brackets between the radiator and the radiator mounting brackets.

Use the liquid and suction tubes to set the height of the condenser. Install the bulkhead nuts and tighten securely.

Tighten the radiator mounting bolts.

Locate the Hi / Low Pressure safety switch. Attach switch to the port on top of the drier using a few drops of mineral oil. Tighten securely.
Route wires through to the engine compartment. Route the wires along discharge hose to the compressor. Connect the clutch wire to one of the White wires. The other White wire route along suction hose and attach to blue clutch wire coming from the thermostat.

Locate the Suction tube, tube support bracket, clamp, and #10 x ½ screw and nut. Attach support bracket to the bottom unit stud. Attach tube to the #10 fitting on the blockoff using (1) #10 o-ring and a few drops of mineral oil. Clamp other end of the tube to the support bracket using the #10 screw and nut.

Locate the Long Liquid Tube and (2) #6 o-rings. Attach one end to #6 fitting on the blockoff. Route tube along inner fender and attach other end to the #6 fitting on the radiator bulkhead using (1) #6 o-ring and a few drops of mineral oil.

Locate Discharge Hose and (2) #8 o-rings. Attach using a few drops of mineral oil.

The 90 deg. end with service port goes on compressor and other end is connected to fitting at the bulkhead.

Locate the Suction Hose, and (2) #10 o-rings. Attach using a few drops of mineral oil.

The 90 deg. end goes on compressor as shown. Straight end will attach to #10 fitting from the Evaporator.

Locate in the hardware sack kit a Water Valve, and (3) #10 worm gear clamps. Cut off 6” of the heater hose return line. Attach the water valve between the cut off piece and the return line using the worm gear clamps supplied. Attach temperature cable to the water valve.

The supply line attaches to the outboard heater tube, see TDS for info.

Reinstall Battery and the battery box using 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

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