### CHEVROLET



# SERVICE NEWS

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### 1961 CORVAIR AIR CONDITIONING

Air Conditioning is now available for all 1961 Corvair passenger cars, except the Lakewood station wagon. This "Deluxe" air conditioning system (fig. 1) is available either "factory installed" or as an Accessory Unit, for installation by Chevrolet dealership personnel.

Corvair air conditioning utilizes a three-speed blower to recirculate cooled air within the passenger compartment. The desired degree of cooling is selected by positioning the control panel pull-knob, located at the right side of the centrally located control panel. Movement of the "cool air" pull-knob, through linkage connection, changes the thermostatic switch contact point setting. The thermostatic switch senses air temperature at the outlet side of the evaporator and depending on point setting governs amount of cooling.

The thermostatic switch contact point set is series connected in the power source of the electro-magnetic drive clutch used on the air conditioner compressor, thereby controlling frequency and duration of compressor clutch engagement (cycling). With the compressor clutch engaged, the compressor is belt driven by the engine crankshaft pulley.

The evaporator and expansion valve assembly is housed beneath the right side of the instrument panel. The blower motor is mounted to the inboard end of the evaporator housing and is ducted to cold air outlet nozzles located on the vertical face of the centrally mounted control panel. The remainder of the system components are located

in the engine compartment, and tubing is routed along the vehicle underbody to complete the refrigerant circuit to the forward mounted evaporator.

From a service standpoint, the basic design of the Corvair "Deluxe" system is similar to the "Cool Pack" system currently available for 1961 Passenger Cars. Removal and installation procedures differ, but service information on the individual components is generally the same. Therefore, the Cool Pack information contained in the 1961 Passenger Car Shop Manual may be used as a guide. Only the differences in service information will be covered here.

#### GENERAL DESCRIPTION

#### **COMPRESSOR**

Located in the engine compartment, the compressor (fig. 2) is belt driven from the crankshaft pulley. In outward appearance, except for color, the compressor appears to be the same as used on other 1961 Chevrolet air conditioning systems. However, the green painted Corvair compressor rotates in the opposite direction to those compressors used in all other Chevrolet applications, therefore it is not interchangeable with another compressor. As viewed from the pulley end, this Corvair compressor rotates counter-clockwise.

Evacuating and charging procedures for the system will be somewhat simpler than in other 1961

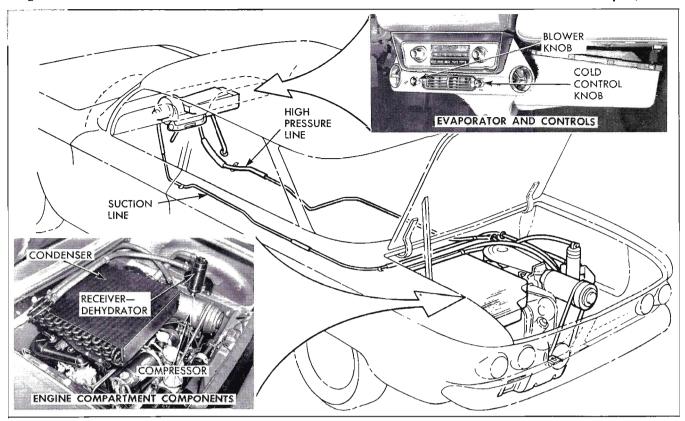


Fig. 1-Air Conditioning Installed in 1961 Corvair

systems in that the compressor fittings block has a cored valve in both the high and the low pressure gauge ports. No compressor hand shut-off valves are necessary, thereby eliminating many steps in the existing procedures.

#### **CONDENSER**

The condenser (fig. 1) is bracket mounted to the top of the engine and is shrouded so that outside air entering the engine blower must first pass through the condenser.

#### RECEIVER-DEHYDRATOR

The receiver-dehydrator, with its sight glass, is mounted at the right side of the engine compartment, on the rear quarter inner panel (fig. 2).

#### **EVAPORATOR**

The evaporator assembly (fig. 1) including the thermostatic expansion valve (which has no equalizer line) is located beneath the instrument panel, as are the thermostatic switch and blower motor. Removal and installation procedures are new for these assemblies.

#### **ELECTRICAL SYSTEM**

A selenium rectifier, shown in the system (fig. 7) and on wiring diagram (fig. 10), acts in the electrical circuit as a night blower cutback switch.

When the headlights are turned on, the air conditioning blower will be allowed to run no faster than MEDIUM speed.

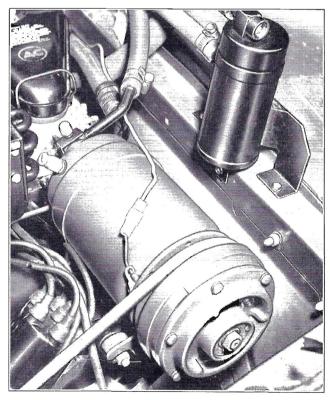


Fig. 2—Compressor and Receiver-Dehydrator Installed

The "High" blower circuit is protected by an SFE-20 in-line fuse located on top of the instrument panel lower flange, at the left of the radio panel. The compressor circuit utilizes the 10 ampere fuse at the "HEATER" location in the junction block.

#### **OPERATING INSTRUCTIONS**

The Corvair air conditioner, a recirculating type, has two knobs to provide control of cool air flow. The air flow can be directed through the two front ball outlets and the center outlet bezel.

Always operate the Air Conditioning System with all windows and vents closed to eliminate drafts, wind and road noise. Cover plates furnished should remain installed over the two engine air recirculating slots during the season when cooling is required. These plates should be removed and stowed on top of the rear sill for the winter, see fig. 3.

#### AIR CONDITIONER CONTROLS

FAN —Rotate knob to provide the desired blower speed, low, medium or high. The fan will operate no higher than MED speed when headlights are on.

COOL—Pull knob fully out to provide maximum cooling. Intermediate positions provide moderate cooling.

NOTE: If engine tends to stall during air conditioner operation, pull the manual choke out just enough to obtain smooth idle.

CAUTION: Momentary engine overheating may

occur if the air conditioner is being operated during extended periods of long uphill pulls or during extreme outside temperatures. Should the "Temp-Press" light come on under such conditions, stop the car and turn off the air conditioner. Check the engine fan belt for excessive looseness and the engine oil for proper level. If these items are satisfactory, start the car, then continue to drive and operate the air conditioner as long as the "Temp-Press" light remains off.

### GENERAL INFORMATION—INSPECTION AND PERIODIC SERVICE

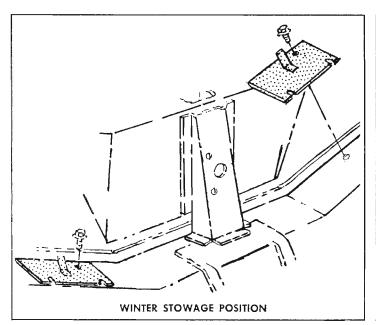
Information presented under the above same headings, on Pages 15-5 through 15-10 of the 1961 Passenger Car Shop Manual, is applicable to the 1961 Corvair air conditioning system except for those references to the hot gas valve.

In addition, to assure proper lubrication of the refrigerant seals in the system it is recommended that the system be run for several moments each week while set for maximum cooling.

### MAINTENANCE AND ADJUSTMENTS PERFORMANCE TEST

The following conditions must be present in order to compare the performance of the system being tested with the standards below.

- 1. Vehicle doors and windows closed.
- 2. Engine compartment lid up.
- 3. Large fan placed at left side of vehicle just above rear fender level so that during tests fan



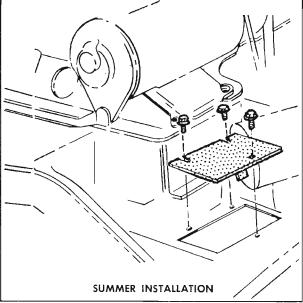


Fig. 3—Air Recirculating Slot Covers

- air stream flows across top of condenser toward right side of vehicle.
- 4. Vehicle in NEUTRAL with engine running at 1500 rpm.
- 5. Air Conditioning controls set for:
  - a) Maximum cooling
  - b) High blower speed
- 6. Heater off.
- 7. Gauge set installed.
- 8. System settled out (run-in approximately 10 minutes).
- 9. Shop air temperature checked and recorded as the existing "ambient air temperature" reading for use in conjunction with the "Performance Data" shown below.
- Thermometer placed in the right hand diffuser outlet.

#### **Standard Performance Data**

Ambient Air Temperature	70°	80°	90°	100°	110°	120°
Engine RPM	<del>-</del>		15	00 —		>
Compressor Head Press.*	130- 140	152- 162	182- 192	220- 230	252- 262	300- 310
Compressor Suction Press.*	14	17.5	18	21	21.5	23
Discharge Air Temp. at Right Hand Outlet*	36-41	37-42	38-43	40-45	40-45	41-46

<sup>\*</sup>When compressor clutch disengages.

#### THERMOSTATIC SWITCH

Some adjustment is possible on this switch, located on the blower motor mounting bracket, in the event that an otherwise properly operating switch is not maintaining the proper suction pressure shown in the chart above. The adjustment screw is located beneath the fiber cover on the end of the switch opposite the thermostatic element.

#### **Check and Adjustment**

- 1. Before attempting to adjust the thermostatic switch, check to be sure that the adjustment lever on the switch is in maximum COLD position (fully forward toward the front of the car) when the COLD control knob on the control panel is pulled fully out. Readjust the bowden cable, if necessary (Fig. 4). Then, if system still fails the performance test, proceed as follows:
- 2. Install the gauge set and set up vehicle as shown under "Performance Test."
- 3. Carefully remove the fiberboard cover by sliding it toward the left side of the vehicle.

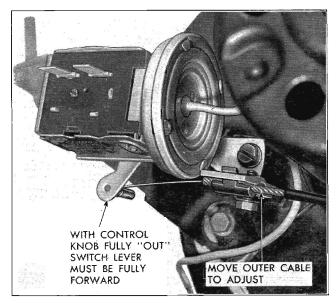


Fig. 4—Bowden Cable (Thermostatic Switch)
Adjustment

Using a small screwdriver, turn the adjustment screw (fig. 5) back and forth to check its performance. Use of a small mirror may aid in locating the adjustment screw.

- If compressor continues to operate regardless of the screw adjustment, it indicates that the points are fused which will lead to evaporator freeze-up. Replace the switch.
- If the compressor does not operate regardless of the position of the switch, a loss of thermostat bellows action is indicated. Replace the switch.
- Check the screw threads for stripped or otherwise damaged threads.

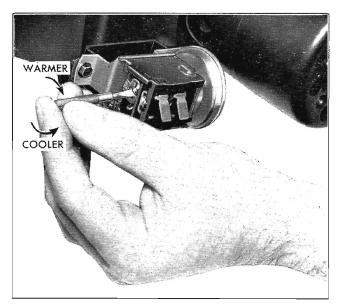


Fig. 5-Thermostatic Switch Adjustment

- 4. The suction side of the system, read on the low pressure gauge, should pull down to the pressure shown in the Performance Data chart, under the appropriate ambient air temperature heading.
  - NOTE: Providing that a fan is utilized as in Step 3 of "Performance Test," ambient air temperature will be considered the temperature of the shop at the time the switch is being set.
- 5. If, at the end of each cooling cycle, the low side has pulled down lower than the prescribed pressure, turn the adjusting screw clockwise in single turn increments until the suction pressure rises to the correct pressure.
- 6. If the pressure is more than it should be, turn the adjusting screw counterclockwise until the proper pressure is reached.
  - CAUTION: When checking and adjusting this valve, make certain that the adjustment lever is being held in the fully forward position described in Step 1 above.
- 7. After adjusting the switch, observe the operation of the system for several minutes. Then if the operation is satisfactory, remove the gauge set.
- 8. Replace the fiberboard cover over the adjustment screw. Check to see that the bowden cable is still in proper adjustment (lever fully forward when the COLD knob is pulled fully out).

#### SYSTEM SERVICE OPERATIONS

Generally, the information contained under this heading in the 1961 Passenger Car Shop Manual may be followed when working on the 1961 Corvair Air Conditioning System. Only operations which differ will be covered here.

#### **System Operating Capacity**

Freon Charge	5 lbs. or 5 Cans
Oil Charge	13 oz. of 1000 Viscosity Oil

### INSTALLING GAUGE SET TO CHECK SYSTEM OPERATION

- 1. Install gauge adapter J-5420 onto the high pressure hose on the gauge set and J-6163 gauge adapter onto the low pressure hose.
- 2. With engine stopped, remove the caps from the cored valve gauge connectors on the compressor fittings block.

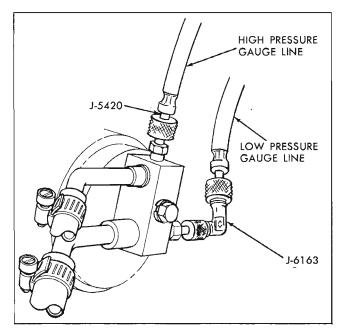


Fig. 6—Compressor Fittings Block with Gauge Lines Installed

3. Connect the gauge line adapters to the threaded connectors on the compressor fittings block, see Figure 6.

#### **EVACUATING AND CHARGING THE SYSTEM**

Information contained on Pages 15-19 through 15-23 of the 1961 Passenger Car Shop Manual concerning evacuating and charging procedures will apply to the 1961 Corvair Air Conditioning System except that any reference to compressor hand shutoff valves may be disregarded when following the outlined procedures. This applies to both Vacuum Pump and Charging Station methods for evacuating and charging the system.

NOTE: All refrigerant lines in the system use high pressure type hose clamps. When checking the system for freon leaks the short length of hose used in the suction line beneath the rear seat cushion should not be overlooked.

#### CHECKING AND ADDING OIL

Procedures for checking and adding oil also are correct as covered in the 1961 Passenger Car Shop Manual. Again, however, references to hand shut-off valves may be ignored when following the procedure. Also, remember that gauge adapters must be used when installing gauge lines to the compressor gauge fittings.

NOTE: When checking compressor oil level with the compressor installed on the vehicle, care must be taken to guard against spraying or dripping oil on the engine shrouding.

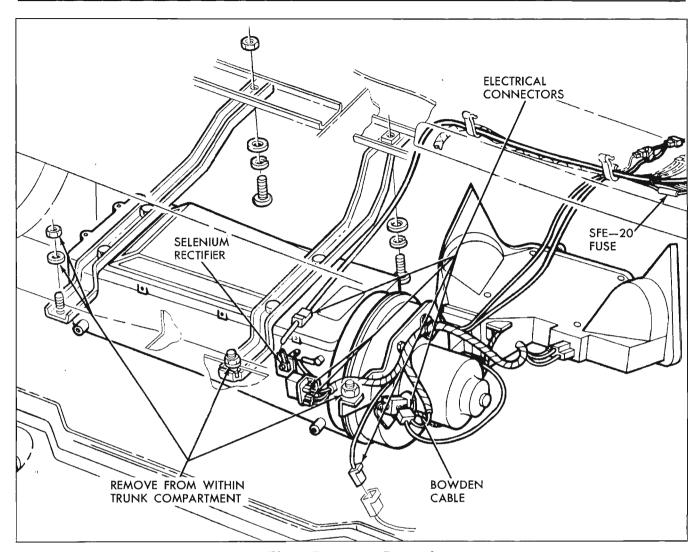


Fig. 7-Evaporator Removal

### COMPONENT PARTS SERVICE OPERATIONS

#### **EVAPORATOR**

#### Removal from Vehicle (Refer to Fig. 7)

- 1. Purge the system of refrigerant.
- 2. Disconnect electrical connections from the thermostatic switch and blower motor and the bowden cable from thermostatic switch.
- 3. In trunk compartment, remove 3 stud nuts attaching right and left evaporator brackets and blower bracket to body panel.
  - NOTE: Evaporator case must be supported before removing these nuts.
- 4. While still supporting the evaporator case, remove the two screws attaching the mounting brackets to the instrument panel and the screw attaching the control assembly to the blower case. Carefully lower evaporator case

- and blower assembly, withdrawing blower flange from control assembly.
- 5. Pull evaporator case and blower assembly out far enough so that the electrical connectors to the compressor relay and the selenium rectifier yellow wire may be removed. Remove both drain tubes.
- 6. Disconnect the high and low pressure lines at the evaporator. Immediately cap lines to prevent entrance of moisture.
  - CAUTION: Even though the system has been purged, safety goggles should be worn when disconnecting refrigerant lines. Goggles will eliminate the possibility of eye damage from latent freon in the system.
- 7. Remove the unit from the vehicle.

#### **Core Replacement**

1. Remove the thirteen screws attaching the cover to the evaporator case.

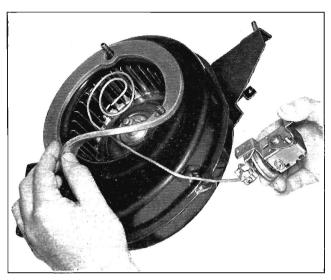


Fig. 8-Thermostatic Switch and Capillary Tube

2. Lift the evaporator core assembly (including cover and mounting brackets) out of the evaporator case.

NOTE: Removal of the expansion valve or thermostatic switch may be performed at this time.

- 3. Remove the six screws attaching the cover and mounting brackets to the core.
- 4. Remove expansion valve from core and install on replacement core. See "Expansion Valve-Replacement."
- 5. Re-install the core and expansion valve assembly into the evaporator case, by reversing the removal procedure.

NOTE: If the blower housing was disassembled from the evaporator case, position the thermostatic switch capillary tube (fig. 8) and reassemble the blower to the evaporator case, before installing the evaporator core assembly into the evaporator case.

#### Installation in Vehicle

- 1. Install the hose clamp connections.
- 2. Install the two drain tubes, and the wiring connectors to the relay and selenium rectifier assembly.
- 3. Install evaporator case and blower assembly in vehicle, carefully guiding blower case flange into control assembly.
- 4. Install the two screws attaching the evaporator case to the instrument panel and the single screw attaching the blower case to the control assembly. With the evaporator supported, replace 3 stud nuts and washers attaching case

- and blower brackets to the body panel within the trunk compartment.
- 5. Install wiring connector and bowden cable on thermostatic switch and wiring connector on blower motor.

Check for proper adjustment on bowden cable to thermostatic switch, see Fig. 4.

#### **EXPANSION VALVE**

#### Replacement

- 1. Remove the evaporator case from the vehicle and the core from the case as previously described.
- 2. Disconnect the pipe fittings from the expansion valve and remove the valve and capillary tubing. Note the position of the felt baffle on the core and expansion valve.
- 3. Install the new expansion valve and capillary tubing. Cement felt baffle in proper position on new valve.

NOTE: Locate expansion valve bulb in same location as found on original unit. Bulb must contact pipe along its entire length. The insulation must be replaced with no air leaks.

4. Insert evaporator assembly in the evaporator case and install in vehicle.

### THERMOSTATIC SWITCH OR BLOWER MOTOR

#### Replacement

- 1. Remove electrical leads at thermostatic switch and blower motor.
- 2. Remove the bowden cable at the thermostatic switch and remove the two thermostatic switch mounting screws.
- 3. From luggage compartment side of dash, remove the nut from the blower motor bracket stud. Remove the 5 screws in the blower motor mounting plate, then withdraw the blower motor assembly from the blower housing.

NOTE: If a new blower motor is to be installed, disassemble the vaned blower assembly from the motor being removed.

- 4. If the thermostatic switch is to be removed, remove nuts from the two lower studs attaching the blower housing to the evaporator case. Pull lightly on the lower portion of the blower housing to achieve a slight opening between the blower housing and evaporator case, thereby permitting withdrawal of the thermostatic switch capillary tube.
- 5. To install a new blower motor or thermostatic

switch, reverse the removal procedure described above.

NOTE: The thermostatic switch capillary tube should be routed between the blower case and rubber gasket and should be formed into a circular shape in the air passage between the evaporator and blower. Switch operation should be checked after installation is completed.

#### **CONTROL PANEL ASSEMBLY**

#### Removal

- 1. From the underside of the central panel, remove the four long screws that attach the control panel assembly to the radio case.
- 2. Lower assembly and unplug wiring connectors from assembly and relay.
- 3. Remove bowden cable from thermostatic switch.
- 4. Control panel assembly may now be removed from vehicle.

#### Installation

- 1. Reinstall wiring connectors to rear of control assembly and to the relay.
- 2. Carefully place the control assembly in the proper position, making sure that the blower case flange is correctly installed in the control assembly.
- 3. Replace the four control assembly to radio case attaching screws.
- 4. Attach bowden cable to the thermostatic switch and check for proper adjustment.

#### **BLOWER SWITCH REPLACEMENT**

- 1. Remove the control assembly from the vehicle as outlined under "Control Assembly—Removal" except that it will not be necessary to remove the wiring connectors and bowden cable.
- 2. Remove the seven philips head screws attaching the cover to the assembly. Fold the cover back, being careful not to rip the rubber gasket at the rear of the assembly. The gasket need not be unstapled from the cover.
- 3. Pull control knob off of the blower switch.
- 4. Using Tool J-7673 (Windshield wiper Control and Light Switch Nut Wrench), remove the spanner nut attaching the blower switch to the control assembly case.
- 5. Remove the switch from the case and remove

- wiring connectors. Note location of the connectors before removal.
- 6. Replace the wiring connectors in their proper place on a new switch and reinstall the switch in the case using Tool J-7673 to tighten spanner nut.
- Replace control knob and control assembly cover.
- 8. Reinstall control assembly.

#### **COMPRESSOR**

Despite the fact that the compressor is a reverse rotating model, and, therefore, not interchangeable with models used on other Chevrolet Air Conditioning Systems, service information is basically the same.

#### Removal

NOTE: If the compressor is being removed to gain access to engine components or to service only the compressor clutch coil or pulley assembly, it will not be necessary to purge the system. In that case, disregard steps 1 and 2 below.

- 1. Purge the refrigerant from the system.
- 2. Remove the bolt attaching the fittings block to the front of the compressor and remove the block. Cap the openings in the block and swing the lines and fittings block out of the way.
- 3. Remove the nut from the compressor mounting bracket pivot bolt and remove the compressor-to-adjusting bracket attaching parts. Remove the compressor drive belt.
- 4. Disconnect the compressor electrical feed and ground wires.
- 5. Remove the three bolts attaching the triangular bracket to the front of compressor.
- 6. Work the long pivot bolt forward until the threaded end is moved out of the compressor rear mounting boss. Lift the compressor from the vehicle, or reposition in compartment if service work is to be done with the refrigerant lines connected.
- 7. Since the service compressor will be received less the clutch actuating coil parts and clutch pulley assembly, these components, if in satisfactory condition, should be removed from the malfunctioning compressor and installed on the new compressor. Remove clutch pulley assembly and clutch actuating coil parts from compressor as described under "Clutch Pulley Assembly" and "Clutch Actuating Coil Replacement" in the 1961 Passenger Car Shop

Manual. The clutch should be disassembled and inspected as described under "Clutch Pulley Assembly."

NOTE: Drain and measure oil in the compressor when it is removed.

#### Installation

- 1. After installing coil and clutch pulley assembly on new compressor, drain oil from compressor until only the amount remains which was drained from the old compressor. (Original oil charge in service compressor is 13 oz. Example: if 7 oz. was drained from the old compressor, drain 6 oz. from the new compressor, leaving 7 oz.)
- 2. Remove the valve cover shipping plate and "O" rings. Install the connector to the new compressor using new "O" rings. Torque the attaching bolt to 21 to 30 ft. lbs. Install the cover plate and "O" rings removed from new compressor onto old compressor in preparation for its return shipment.

NOTE: Disregard Steps 1 and 2 if compressor was removed to gain access to engine.

- 3. Support the compressor on the mounting bracket and work the mounting bracket pivot bolt rearward, through the compressor rear mounting boss. Loosely install the washer and nut on the pivot bolt.
- 4. Install the three bolts attaching the triangular bracket to the front of compressor.
- 5. Connect the compressor electrical feed and ground wires.
- 6. Install compressor drive belt and compressor-to-adjusting bracket attaching parts.
- 7. Adjust belt tension, then tighten pivot bolt nut to apply light pressure on rubber mounting.

#### Compressor Belt Tension Adjustment

Adjust compressor belt tension to give 1/2" to 3/4" deflection under a 15 lb. load, measured midway between the compressor pulley and the crankshaft pulley.

#### Checking Compressor Clutch Air Gap

Air gap between the coil housing and the rotor plate should be checked through the  $\%_{16}$ " hole in the O.D. of the pulley assembly (to the rear of pulley groove). Energize clutch coil and insert non-magnetic feeler gauges, tool J-9228, available from Kent-Moore Organization. Clearance should be between .025" and .035" (.025" preferred).

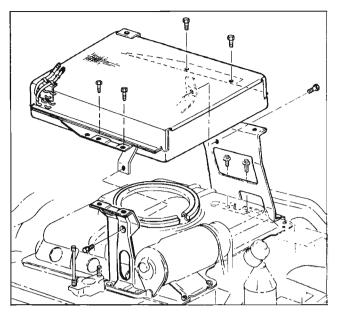


Fig. 9-Condenser Removal

#### **CONDENSER**

#### Replacement

- 1. Purge the system of refrigerant.
- 2. Remove the two refrigerant lines from the condenser and cap the lines immediately.
- 3. Remove screw attaching clip and hoses to condenser.
- 4. Remove the three screws on each side of the condenser which attach the condenser and shroud assembly to the mounting brackets (fig. 9).
- 5. Remove the condenser assembly from the vehicle.
- 6. All screws attaching the shroud to the condenser core may now be removed and the core detached from the shroud.
- 7. Attach the shroud to the new condenser core and install the assembly onto the mounting brackets.
- 8. Replace the refrigerant hoses.
- 9. Evacuate and charge the system.

#### **ENGINE ACCESS PROCEDURE**

NOTE: It is not necessary to disconnect refrigerant lines or purge the refrigerant from the system if the condenser and shroud assembly are to be moved only enough to permit access to the engine (i.e., fan belt replacement or carburetor adjustment).

- 1. Loosen the compressor bracket bolts and allow compressor to move in toward engine.
- 2. Remove the compressor belt.
- 3. Remove the six screws attaching the con-

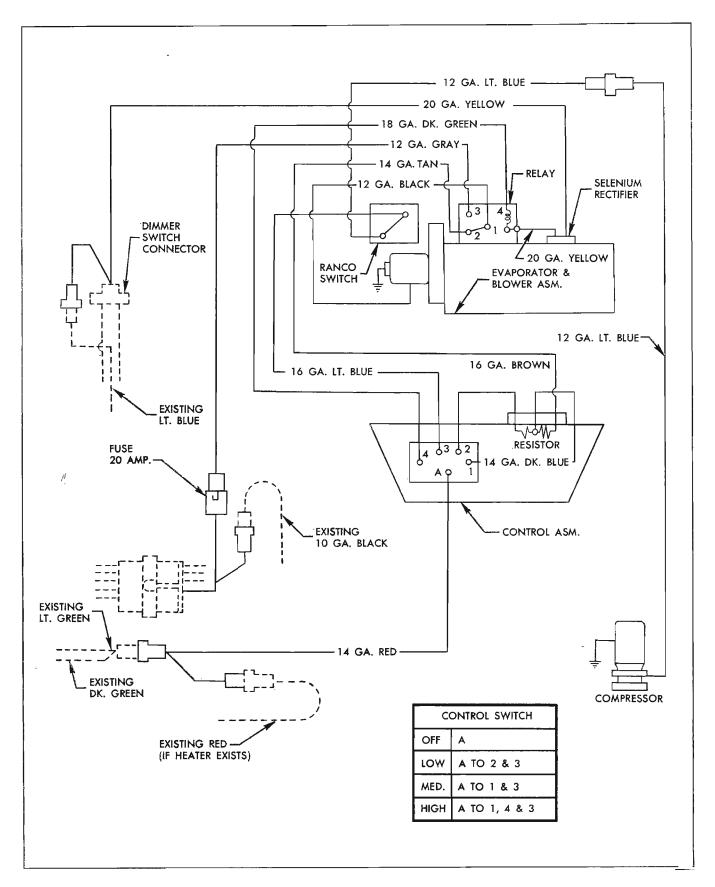


Fig. 10-Corvair Air Conditioner Wiring Diagram

denser and shroud assembly to the brackets.

- 4. Carefully lift the assembly from the engine and rotate it toward right rear of vehicle as far as the refrigerant lines will permit.

  Leave the condenser in this position until the engine work is completed, then re-install the
  - condenser assembly on the engine.

    CAUTION: Do not remove refrigerant lines.
- 5. Install screws attaching the condenser and shroud assembly to its mounting brackets.
- 6. Install the compressor belt and adjust belt tension.

#### RECEIVER-DEHYDRATOR

#### Replacement

- 1. Purge the system of refrigerant.
- 2. Remove refrigerant lines and cap the lines immediately.
- 3. Remove the three screws attaching the receiver-dehydrator to the right quarter sheet metal.
- 4. Install the new receiver-dehydrator and connect the refrigerant lines.
  - NOTE: Do not uncap the new receiver-dehydrator until the last instant before installation.
- 5. Evacuate and charge the system.

# Corvair Engine Starting Motor —Easy to Remove and Install

Recently the Chevrolet Technical Service Department reviewed Corvair engine starting motor removal and installation procedures. Starting motor replacement is really easy *if* the proper procedure is followed and *if* the proper tools are used. Listed below is the step by step procedure which is a little more detailed than the procedure listed on page 8-20 of the 1961 Corvair Shop Manual:

- 1. Disconnect battery ground cable at battery—for your own sake—who wants to do a welding job underneath the car?
- 2. Jack-up rear of vehicle and place on jack stands.
- 3. Disconnect the rear throttle control rod from the bell crank at the transmission, and from the cross-shaft in the engine compartment. This allows the rod to be moved out of the way when removing the starter.
- 4. Disconnect the three wires at the starter sole-

- noid. It helps to have a 1/4" drive midget socket set for removing the nuts from the terminal posts of the two smaller gauge wires.
- 5. With a \(^8\)'' drive-\(^9\)<sub>16</sub>'' shallow socket on a 9'' extension with ratchet, remove the two starter mounting bolts. Be sure to remove the upper bolt first; this also makes the job easier. Then pull the starter forward and out of the engine assembly. There are no clearance problems even when the vehicle is equipped with a direct air heater.

Reinstallation of the starter is the reverse of the removal steps—so the job isn't so tough after all, is it! Naturally, this job could also be performed on a hoist, if the dealer's service area is so equipped.

## Corvair Heater Blower Motor Removal

Dealer Service Technicians are in some instances experiencing difficulty in removing the 1961 Corvair Direct Air Heater blower motor due to its location in the vehicle. Correct blower motor removal procedure is shown on page 11-29 of the 1961 Corvair Shop Manual, however, some additional suggestions might assist in making this job easier.

It is not necessary to remove the Power Train assembly, and it is not necessary to remove the heater mixing chamber from its mounting. After the vehicle has been raised, the blower motor lead wire is disconnected and the five 1/4" hex. head screws attaching the blower motor assembly to the mixing chamber are then removed, freeing the motor assembly from the mixing chamber. The next step is to rotate the blower motor assembly so that it clears the Power Train assembly. It is usually necessary to disconnect the right hot air hose assembly at the engine lower shroud. It is our experience that time will be saved by removing the three 1/4" hex. head screws which retain the hose flange to the engine shroud rather than to disconnect this hose by removing the clamp which attaches the hose to the hose flange. Then the heater motor assembly is removed rearward over the engine exhaust pipe and muffler assembly.

Reinstallation of the blower motor assembly is the reverse of the above procedure. However, one additional suggestion is that if the right hot air hose were removed by the preferred method indicated above, reinstallation can be a lot easier if the upper screw hole in the hose flange is slotted and this particular screw installed loosely prior to installing the flange to engine lower shroud. Then install the other two screws and tighten all three. Thus, the entire job is not so tough after all.

	NORMAL SERVICE PLUG	COLDER PLUG	HOTTER PLUG
VEHICLE & ENGINE	(Used in Current Production)	(For Continuous Heavy Duty Operation)	(For City Type Operation
Passenger—283 V8, 235 cu. in. 6 cyl.	AC 45	AC C43 Com. (Preferred) AC 44	AC 46
Passenger—348 V8 W/Standard Cam (Includes 3 X 2 Carburetor Engines Except "FH", "FJ", & "GD")	AC 44N*	AC 43N*	
Passenger—348 V8 W/Hi-Lift Cam (Incl. 3 X 2 Carburetor Engines Serial Suffix "FH", "FJ", & "GD")	AC 43N*	AC C42N Com.*	AC 44N*
Corvette—283 V8 W/Single or Dual 4 Barrel Carburetors	AC 45	AC C43N Com. (HD) AC C42-1 Com. (Road Racing)	AC 46
Corvette—283 V8 (Fuel Injection)	AC 44	AC C43N Com. (HD) AC C42-1 Com. (Road Racing)	AC 45 or AC 46
Corvair & Corvair "95" (Except—98 hp Hi-Perf. RPO 649 & Monza Power- glide Engines Serial Suffix "ZH", & "ZJ")	AC 46FF**	AC 44FF** (HD) AC 42FF** (Road Racing)	
Corvair—All 98 hp Hi-Perf. RPO 649 Engines			
80 hp Monza Powerglide Engines Serial Suffix "ZH", & "ZJ" only	AC 44FF**	AC42FF**	
Truck—10, 20, 30, 40, & 50 Series—235 cu. in. & Light Duty 283 V8	AC 45	AC C43 Com.	AC 46
Truck-60 Series-261 cu. ir & Heavy Duty 283 V8	AC C42-1 Com.		AC C43 Com.
Truck—70 & 80 Series 348 V8	AC C42N Com.*		AC 43N*

<sup>\*</sup>This plug has a longer reach to compensate for the water jacket which encircles the plug base, and is identified by the suffix "N".

#### 1961 CORVAIR REAR AXLE RATIOS

The following chart is presented to clarify the availability of optional rear axle ratios for 1961 Corvair models. The axle line-up shown in this chart supersedes any previously published information that may conflict.

BODY STYLE	All Engines Except 9 w/Powergli	98HP Super Turbo-Air de (RPO649)	98 HP Super Turbo-Air w/Powerglide (RPO649)		
	Standard Axle (With All Trans.	Optional Axle (With All Trans.)	Standard Axle	Optional Axle	
Sedans and Coupes	3.27	3.55 (or) 3.89	3.55	3.89	
Lakewood	3.55	3.89			
Greenbrier	3.89	None			

<sup>\*\*</sup>This plug has a  $\frac{1}{2}''$  threaded length because of its use in aluminum heads.