

SERVICING

*On-the-Car
Service*



for 1959 through 1961
AIR CONDITIONING SYSTEMS

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CHEVROLET MOTOR DIVISION

GENERAL MOTORS CORPORATION

CHEVROLET A/C

ALL WEATHER

COOL PACK

CORVAIR



FOREWORD

THIS BOOKLET CONTAINS A COMPLETE REVIEW OF THE DISCUSSIONAL SLIDEFILM, ON THE CAR SERVICE FOR 1959 THROUGH 1961 AIR CONDITIONING SYSTEMS. KEEP AT LEAST ONE COPY OF THIS BOOKLET IN THE SERVICE DEPARTMENT FILE OF TECHNICAL INFORMATION

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On-the-Car Service



for 1959 through 1961 AIR CONDITIONING SYSTEMS

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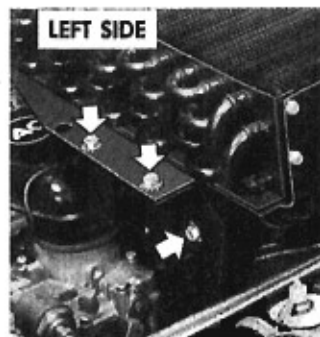
This presentation is primarily concerned with the important steps in checking the air conditioning systems and the most frequently performed On-the-Car Services. The procedures apply to the 1959 through 1961 All Weather and Cool Pack systems and the new 1961 unit available for all Corvair 2- and 4-door models.

The Service information is covered in the following order:

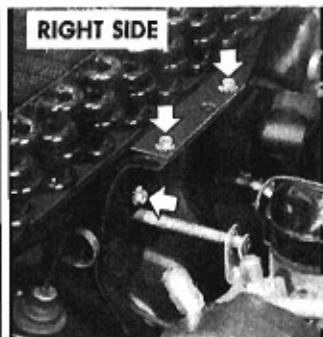
- AIR CONDITIONING SYSTEMS
 - Corvair
 - All Weather
 - Cool Pack
- SYSTEM INSPECTION AND MINOR SERVICE
- RECHARGING PROCEDURES
 - Purging
 - Evacuating
 - Charging
- PERFORMANCE TEST
- EVALUATING GAUGE READINGS AND MINOR ADJUSTMENTS
 - Partial Oil Charge



Before we begin the inspection and service, let's first take a look at the THREE air conditioning systems available as a factory optional accessory installed in the assembly plant or as a dealer-installed accessory.



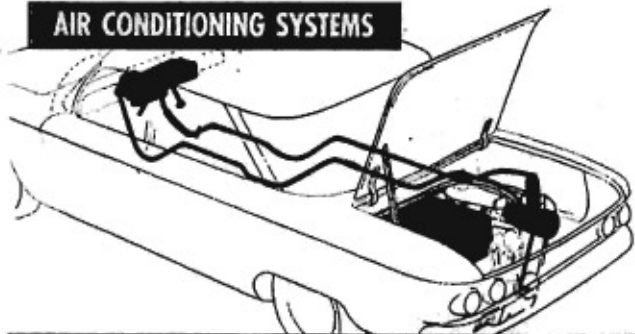
LEFT SIDE



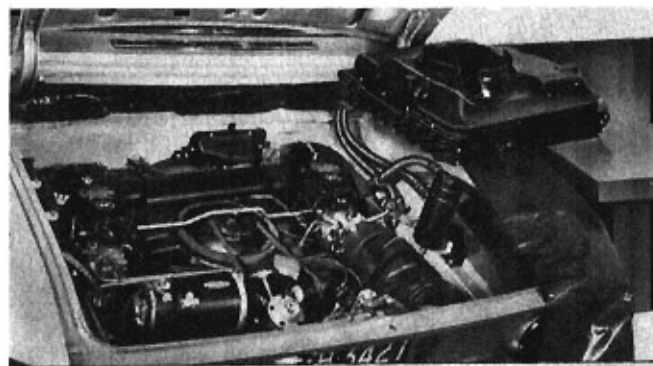
RIGHT SIDE

The condenser must be swung out of the way for some tune-up procedures or replacement of the engine blower belt. When necessary, remove only the 6 screws which attach the condenser to the mounting brackets. Then —

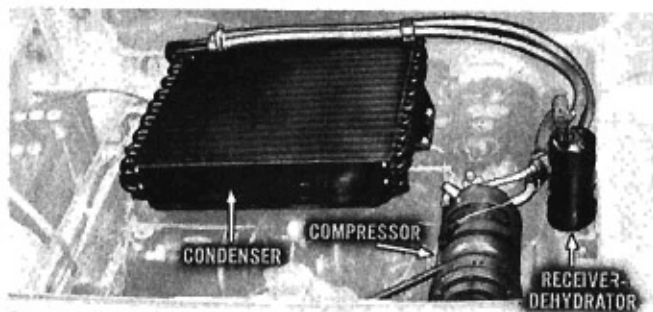
AIR CONDITIONING SYSTEMS



Corvair: The installation and operation of this unit are similar to the Cool Pack with necessary variations caused by the air-cooled rear engine design. These differences are as follows:

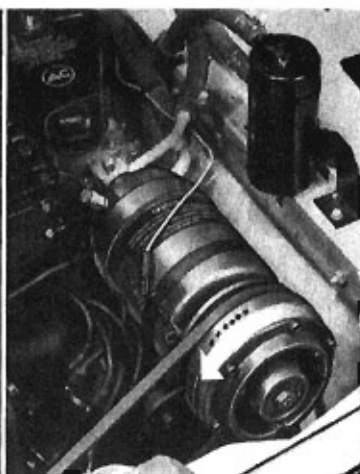


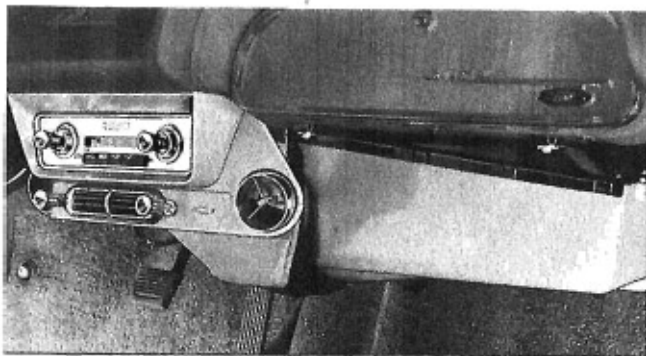
— carefully lift the assembly upward and rotate it to the right of the vehicle. NOTE: It is not necessary to discharge the system or disconnect any hose connections.



The condenser is placed over the engine cooling air intake. All air for the engine blower passes through the condenser coils and fins. The receiver-dehydrator is adjacent to the compressor on the right side of the engine compartment.

The compressor (painted green for identification purposes) is similar to the compressor used on Chevrolet passenger cars with the exception that it rotates counterclockwise. It is not interchangeable with other compressors because of oil pump operation.

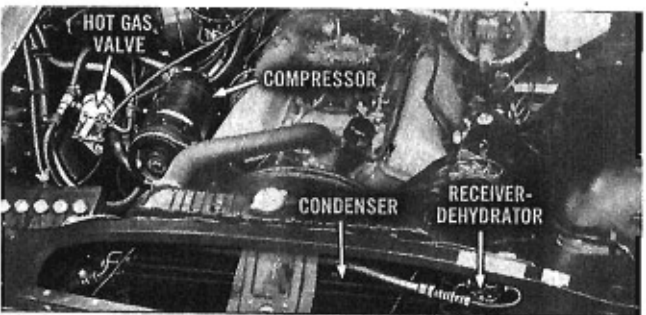




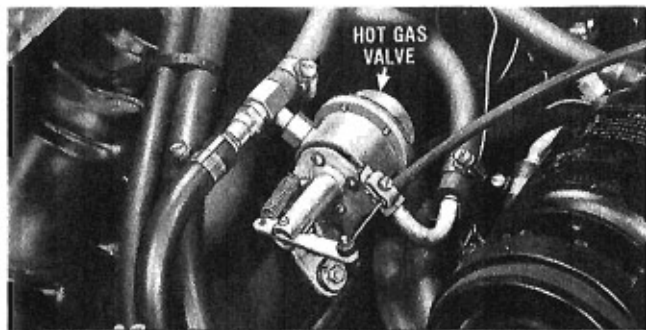
The assembly, which houses the evaporator, expansion valve and blower motor, is centrally located inside the passenger compartment and provides recirculated cooling air.



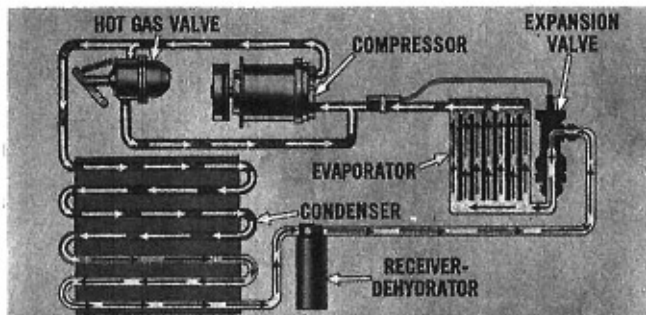
The controls and nozzle outlets are located directly under the radio. The thermostatic switch is mounted on the left side of the housing (as it is on the 1959 Cool Pack). Now let's briefly review the Chevrolet passenger car systems.



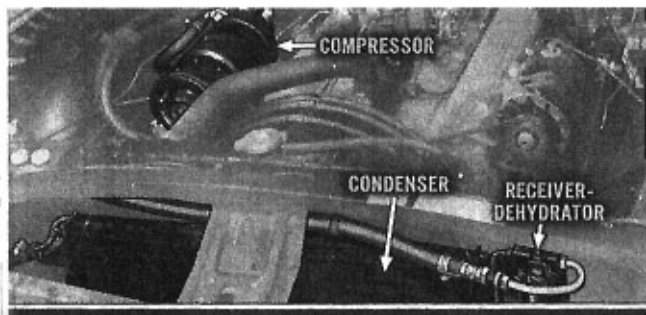
All Weather: In this system, the compressor, condenser, receiver-dehydrator and hot gas valve have remained basically the same from 1959 through 1961. Air, for cooling, is obtained through the use of full outside air, recirculated air or a combination of both.



There are many other features of the All Weather system and probably the most important one from a service standpoint is the hot gas valve method of controlling the desired cooling temperature.



The hot gas valve bypasses part of the high-pressure refrigerant vapor from the compressor to the evaporator to regulate the nozzle outlet temperature. The compressor operates continuously, without cycling, when the air conditioning controls are turned on for cooling.



Cool Pack: This system has remained much the same from 1959 through 1961, without any major changes in the compressor, receiver-dehydrator or condenser. Air for cooling is recirculated from the passenger compartment through the evaporator. The compressor clutch —



— is electrically controlled by a thermostatic switch. Thus, it is normal for the Cool Pack and Corvair compressor to cycle off and on when the system is in operation. Varying the thermostatic switch setting regulates the desired cooling. NOTE: Both 1960 and 1961 Cool Pack switches are located behind the control panel face plate.

SYSTEM INSPECTION AND MINOR SERVICE

A periodic visual inspection and necessary corrections of the items listed below will help to uncover borderline operating conditions before they contribute to a loss of cooling efficiency.

- Compressor Belt
- Blower Motor and Electrical Connections
- Compressor Clutch
- Hoses and Connections
- Refrigerant Charge
- Compressor Oil Level
- Condenser

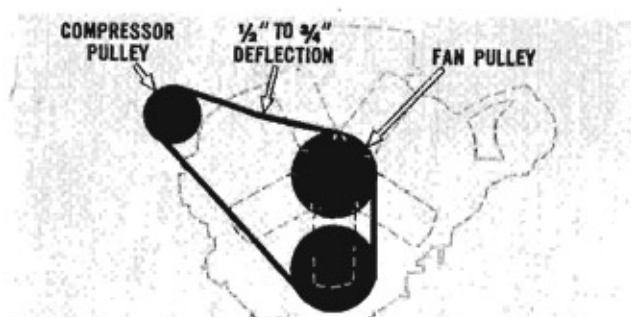
Service procedures will be shown on the 1961 All Weather unit. Important differences in the systems will be explained.

Before we begin the service procedures, let's briefly review the usual safety precautions which are considered good shop practice. Although Freon is safe, an awareness of what it can do is important to health and safety.

Experience tells us that:

- Freon in its liquid state is approximately 21.7°F below zero. Therefore, if Freon contacts the eyes, immediately splash the eyeballs with cold water to gradually get the temperature above the freezing point. Consult a doctor or eye specialist at once.
- In the event of an accidental rapid discharge of Freon immediately walk away from the area to avoid inhaling large quantities of vapor.

Because these mishaps may occur unexpectedly, always wear goggles, and cover as much of exposed skin as possible.



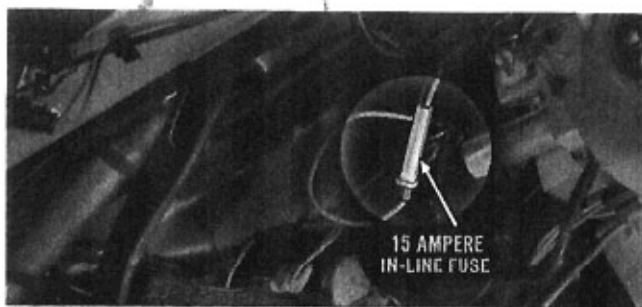
Compressor Belt: Check condition and proper tension. If the belt is cracked, frayed or oil-soaked, replace it. Generally, normal hand pressure on the belt, midway between the compressor and fan pulleys, should give 1/2" to 3/4" deflection.



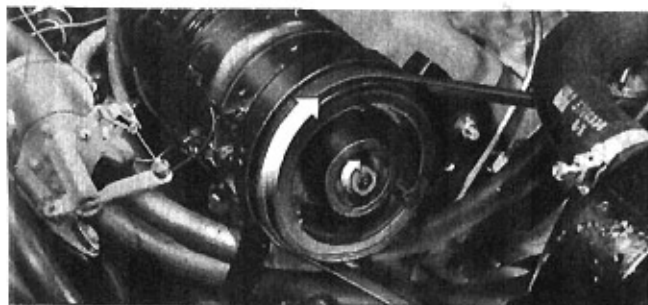
Blower Motor and Electrical Connections: With the ignition switch on, turn fan control switch to low, medium, and high positions. If blower does not operate, install a new 20-ampere fuse located in the junction block. If the replacement fuse burns out, inspect all wiring and connections in the air conditioning electrical circuit.



The 1961 All Weather and Cool Pack blower motors have an additional 20-ampere in-line fuse located in the feed wire from the starter solenoid to the relay. This fuse protects the blower motor only in high speed. Inspect and replace this fuse if necessary.



The Corvaire blower motor is protected in low and medium speed by a 15 ampere "Heater" fuse located in the junction block. This fuse also protects the electrical circuit of the compressor clutch. The blower high speed circuit uses a separate 15 ampere in-line fuse located near the left of the radio.



Compressor Clutch: Start the engine. Engage and disengage the clutch by the nozzle outlet control on the All Weather system or the fan switch on the Cool Pack and Corvaire units. When the clutch is properly engaged, the pulley nut should rotate at the speed of the pulley.

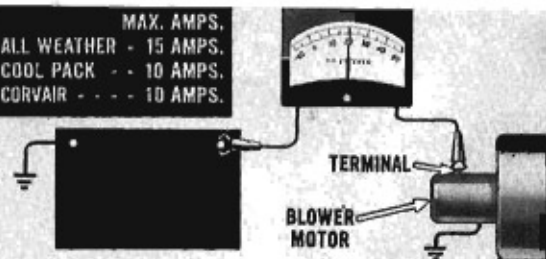
GENERAL NOTE

With the blower motor switch in the high speed position, it is normal for the 1959 through 1961 All Weather blower motors to change from high to medium speed whenever the headlights are turned on.



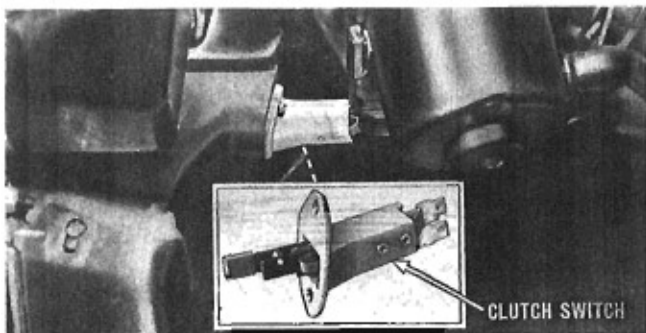
If the clutch does not engage, turn ignition switch off. Clean and tighten the compressor coil ground wire connection. If the clutch still fails to engage, connect an ammeter in series from the battery to the clutch coil feed wire (with the engine not running). The reading should be approximately 3 amperes.

MAX. AMPS.
ALL WEATHER - 15 AMPS.
COOL PACK - - 10 AMPS.
CORVAIRE - - - 10 AMPS.

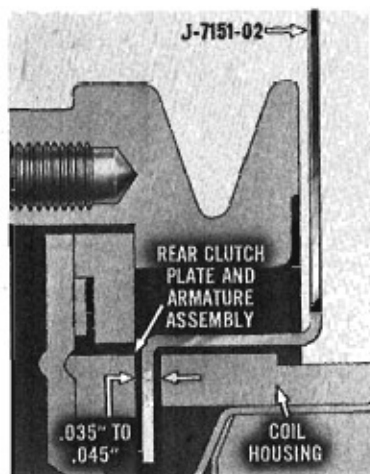


If trouble is suspected within the blower motor, first make certain all electrical connections, including the blower motor ground wire are clean and tight. Then, with the engine off, connect an ammeter in series from the battery to the blower motor terminal. A reading that exceeds the maximum amperes shown in the chart indicates the motor should be repaired or replaced as required.

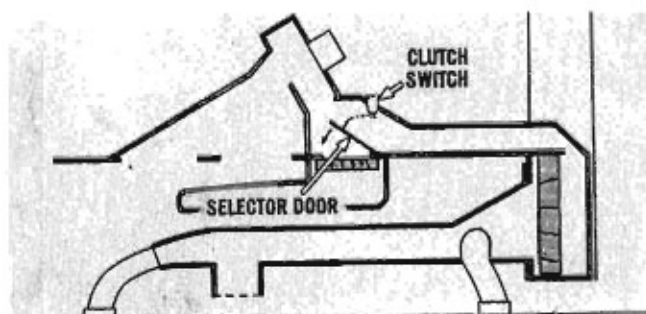
If the ammeter reads zero, the clutch coil has an open winding. An excessive or unsteady ampere reading indicates a shorted coil. The coil should be replaced.



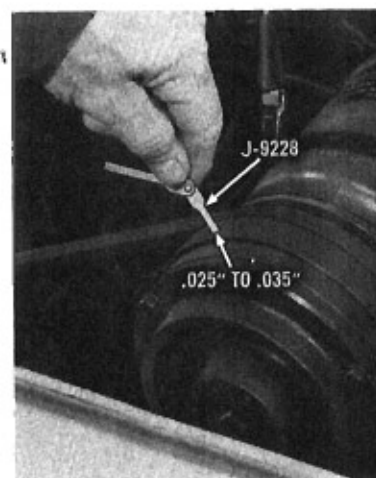
If the clutch engages with the ammeter in series, and amperage draw is correct, the trouble may be caused by a faulty compressor clutch switch (All Weather units), or a faulty thermostatic switch on Cool Pack or Corvair units.



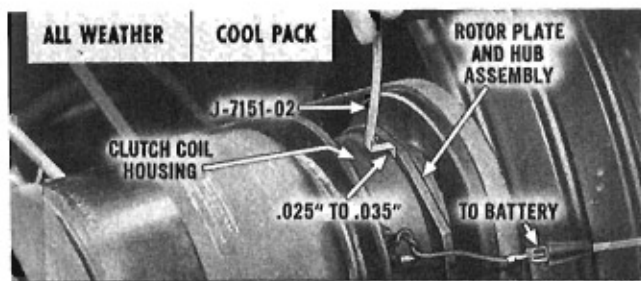
On the 1959 and 1960 passenger car models with jumper wire connected, the air gap between the coil housing and rear clutch plate and armature assembly should measure .035" to .045" using Gauge J-7151-02.



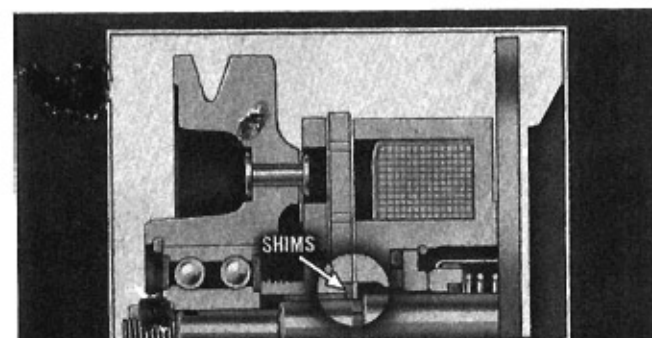
On the All Weather units, the conditioning selector door is manually controlled by the nozzle outlet knob. As the door opens, the contact points of the spring-loaded clutch switch snap together and complete the electrical circuit to the compressor clutch. Test the switch and if necessary, replace.



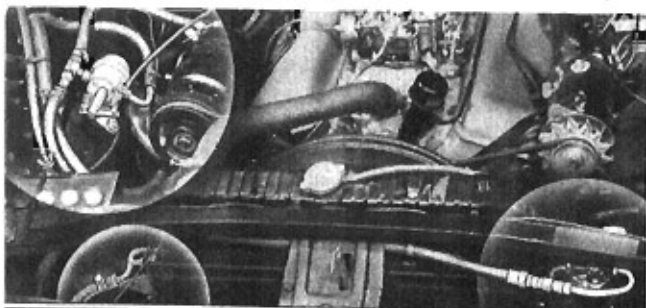
On the 1961 Corvair with jumper wire connected, the air gap between the coil housing and rotor plate is checked by inserting Gauge J-9228 through the 3/16" hole drilled through the pulley assembly. Correct clearance is .025" to .035".



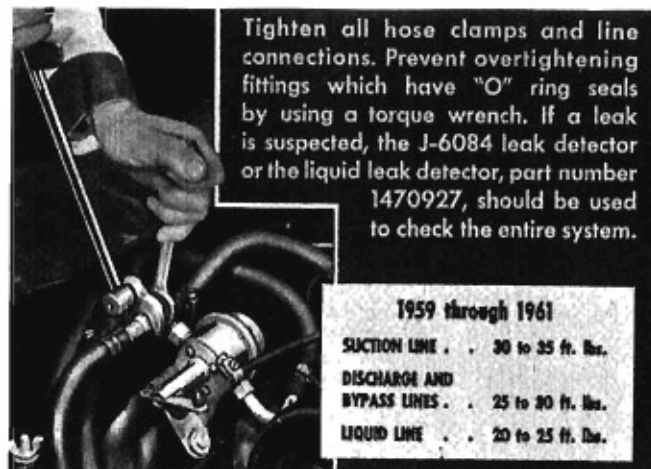
When the clutch operates properly, check clutch air gap (with engine not running) by energizing the clutch coil with a jumper wire. On 1961 passenger cars, measure clearance between the clutch coil housing and the rotor plate and hub assembly. This clearance should be .025" to .035". Use special Gauge J-7151-02.



Increasing or decreasing the air gap clearance is made by the use of special shims which are available in various thicknesses. Remove or replace shims as required.



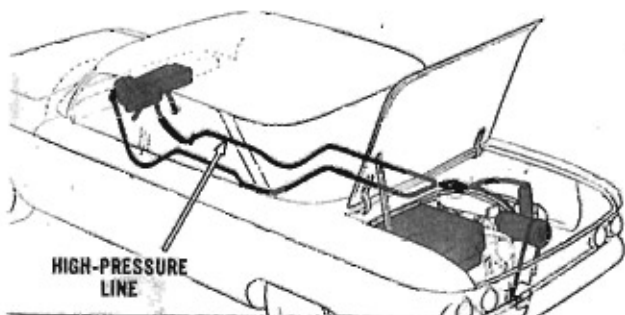
Hoses and Connections: Inspect the hoses for sharp bends, collapsed sections or age cracks in the outer covering. Any leakage, indicated by an oil film and dust collection around a fitting or line connections, must be inspected with a leak detector and necessary corrections made.



Tighten all hose clamps and line connections. Prevent overtightening fittings which have "O" ring seals by using a torque wrench. If a leak is suspected, the J-6084 leak detector or the liquid leak detector, part number 1470927, should be used to check the entire system.

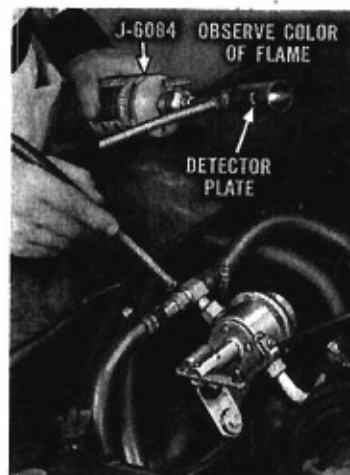
1959 through 1961

SUCTION LINE . . . 30 to 35 ft. lbs.
DISCHARGE AND
BYPASS LINES . . . 25 to 30 ft. lbs.
LIQUID LINE . . . 20 to 25 ft. lbs.

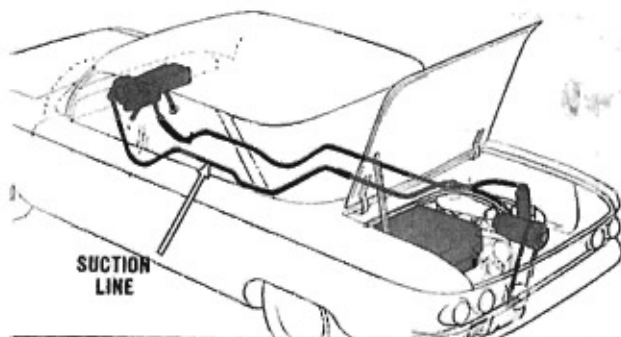


HIGH-PRESSURE
LINE

On the Corvair, the high-pressure line from the receiver-dryer to the expansion valve at the evaporator consists of metal tubing with hose connections at each end. The tubing is located underneath the car body along the right side rail.



The escape of Freon will normally cause the J-6084 detector flame to change from a blue to a purple color. In some instances, a slight leak may cause a yellow or green color. Before condemning the system, make sure the burner is operating properly and the detector plate is free from carbon.



SUCTION
LINE

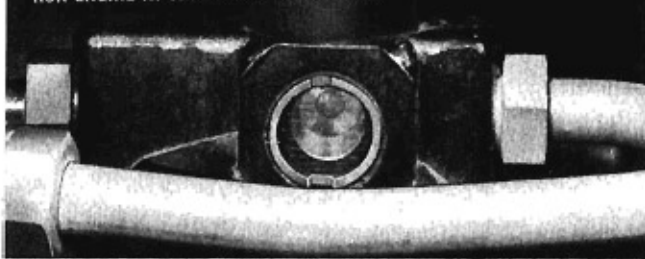
The suction line consists of two pieces of metal tubing and hose connections. It returns from the evaporator to the compressor under the seats and floor mats. A short length of hose, beneath the rear seat cushion, connects the tubing.

GENERAL NOTE

Where possible, a Freon leak in the high-pressure side of the system may be more easily detected when the air conditioning system is operating.

When checking the low-pressure or suction side of the system, a leak may be more easily detected with the engine off for a few minutes and after the entire system has had an opportunity to equalize pressures. This specifically applies to the compressor front seal.

RUN ENGINE AT 1500 RPM DURING CHECK



Refrigerant Charge: Run engine at 1500 rpm for at least 10 minutes with the COLD control in maximum cooling position and blower at high speed. Look through the sight glass at the top of the receiver-dehydrator. If the refrigerant flow appears clear, the Freon charge is not low in supply.

RUN ENGINE AT 1500 RPM DURING CHECK



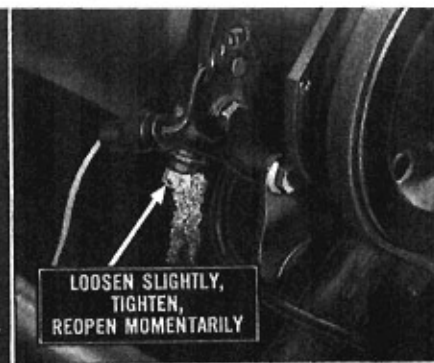
If a continuous stream of bubbles appears, or if the refrigerant is frothy, it indicates the system has an insufficient charge of Freon. A more accurate diagnosis is sometimes necessary if bubbles appear occasionally in small amounts.
On the —

— Cool Pack and Corvair systems, the momentary appearance of bubbles may be due to the normal cycling of the compressor. Use a jumper wire to keep the compressor clutch energized and operating continuously. The jumper wire should not be connected for extended periods of time. If bubbles still continue to appear, it confirms the indication of a low refrigerant charge.

NOTE: Bubbles in the sight glass may be considered normal on the All Weather systems when the hot gas valve opens (indicated by a slight hissing noise) and bypasses Freon.

Compressor Oil Level: Idle engine for 5 to 7 minutes with controls set for maximum output. Turn ignition switch off. Loosen screw in test fitting and allow a mixture of

Freon and oil to escape. Tighten screw momentarily. Again loosen screw slightly. A mixture of Freon and oil in a frothy condition indicates oil is at a safe level.



A steady hiss of vapor with no oil escaping indicates the oil supply is too low.

NOTE: Do not leave fitting open any longer than the time it takes to momentarily check oil level. See Oil Adding Procedures.



Whenever the compressor oil level is low, it is nearly always accompanied by a Freon loss. When this condition is experienced, further diagnosis and repair of the system are necessary.



Condenser: Inspect the condenser and remove foreign material with compressed air or a scrub brush, soap and water. Never steam-clean the condenser or any other component of the system, because refrigerant temperatures will be raised to a dangerously high level.

When only minor adjustments are needed and the Freon charge and oil levels check out correctly, take a temperature reading at the right-hand nozzle outlet to determine the system's general cooling efficiency. Close doors and windows. Set controls for maximum cooling. The All Weather controls should be set for recirculated air. Run engine at 1500 rpm for at least 10 minutes.

See performance data chart for reference to recommended outlet nozzle temperatures.

RECHARGING PROCEDURES

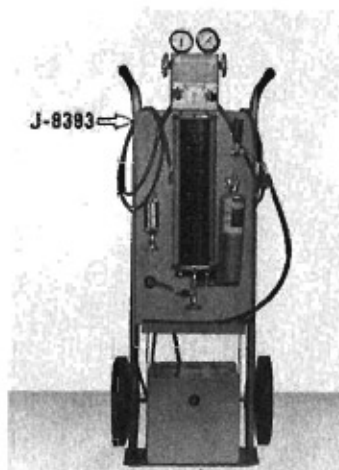
Whenever refrigerant is needed in the system, only a full charge is recommended. In this presentation, the charging-station method will be shown for:

- Purging
- Evacuating
- Charging

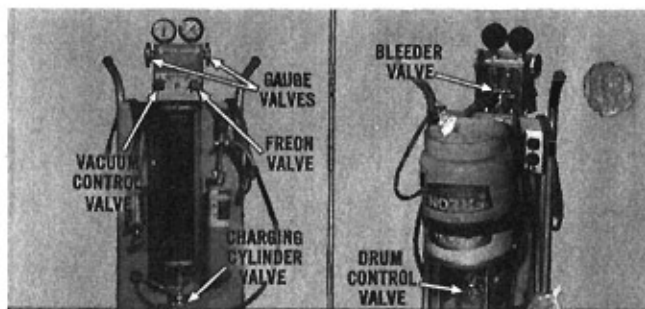
The Shop Manual will be your guide when other methods and equipment are used.

CAUTION

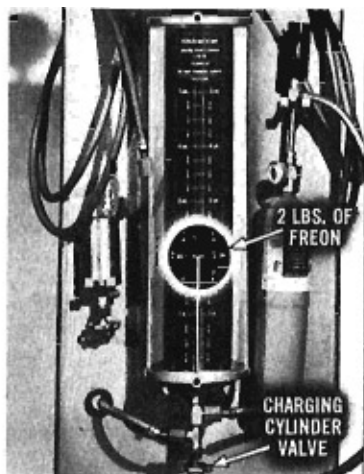
A partial charge is not recommended because the exact amount of Freon existing in the system cannot be accurately determined. Guessing the amount of Freon needed or adding Freon until there are no bubbles appearing in the sight glass may add more Freon to the system than it requires. When the Freon charge is low, determine the point of leakage and repair. Then Purge, Evacuate and Charge the system as described in the following procedures.



The Charging Station J-8393 has many advantages. It is a complete unit containing the test gauges, vacuum pump and the Freon supply. Dealers will in time save on the Freon dispensed because it can be measured so accurately. It eliminates the necessity of heating the Freon container to charge the system.



To allow Freon to enter the charging cylinder, proceed as follows. Close both pressure gauge valves and the Freon and vacuum control valves. Then, fully open the Freon drum control valve and the charging cylinder valve. Slowly open bleeder valve to allow Freon to flow from the drum to the cylinder.

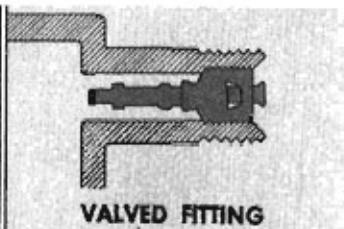


As the Freon rises in the charging cylinder sight glass, stop bubbling of Freon by closing bleeder valve. Check Freon liquid level. Repeat procedure until the sight glass indicates 2 pounds of refrigerant. Close the charging cylinder valve and be certain all other station valves are closed.

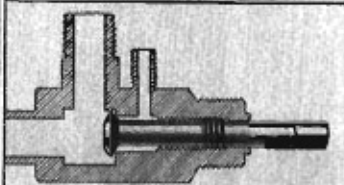


The valved fitting can be identified on all systems by the absence of a large acorn cap (previously shown). When the small acorn cap covering the gauge fitting is removed, the valved fitting remains closed until the proper adapter is connected.

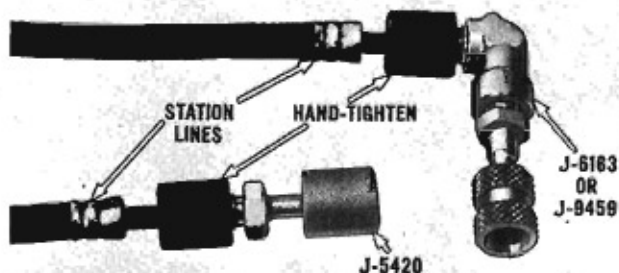
Before connecting the charging station lines to the system, let's examine the two types of connections which are used in various combinations at the compressor. It is extremely important to be able to identify the valved fitting from the hand shutoff type when connecting or disconnecting station lines.



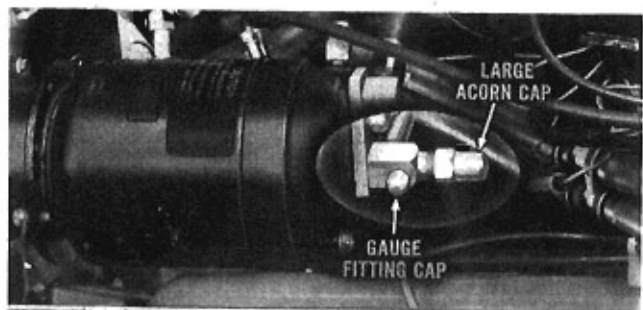
VALVED FITTING



HAND SHUTOFF VALVE

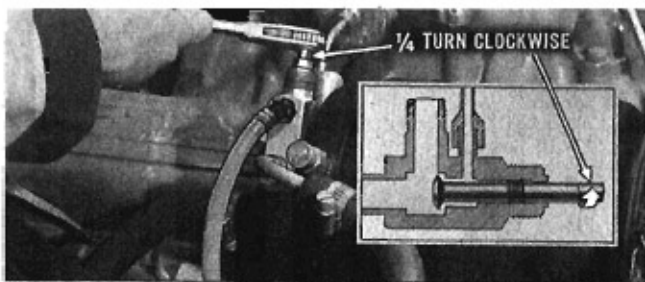


Adapters J-6163, J-9459 or J-5420 automatically open the valved fitting when hand-tightened to the threaded fitting. **CAUTION:** The adapter must be always hand-tightened to a station line before tightening the adapter to the compressor fitting. Now, let's purge the system.

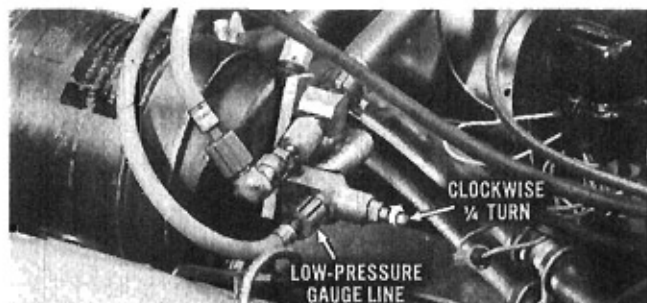


The hand shutoff valve type can be identified on all systems by the large acorn cap covering the valve control stem. Check to see that this type of shutoff valve is turned fully counterclockwise before removing the gauge fitting small acorn cap to attach a station line.

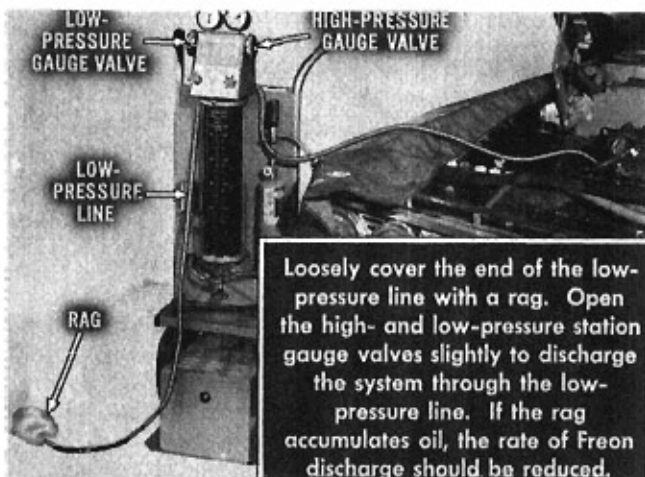
Purging: Whenever Freon is required or it becomes necessary to replace a component or open a line connection, it will be necessary to discharge all of the refrigerant remaining in the system. Make sure all station gauge valves are closed.



Connect the high-pressure gauge line to the high-pressure fitting (always the uppermost fitting) at the compressor connector. If the fitting has a hand shutoff valve, turn the valve stem clockwise $\frac{1}{4}$ turn, using Tool J-6105, after the gauge line has been connected.

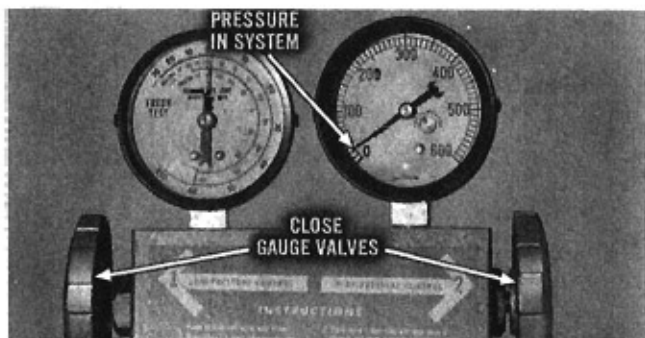
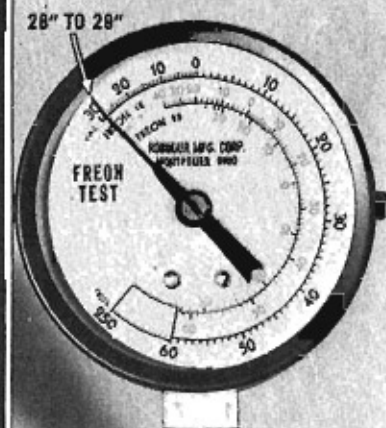


—connect the low-pressure gauge line to the compressor low-pressure fitting. If a hand shutoff valve is used, turn the valve stem clockwise $\frac{1}{4}$ turn after connecting the line. Start the vacuum pump and open the vacuum pump control valve. Open both the —



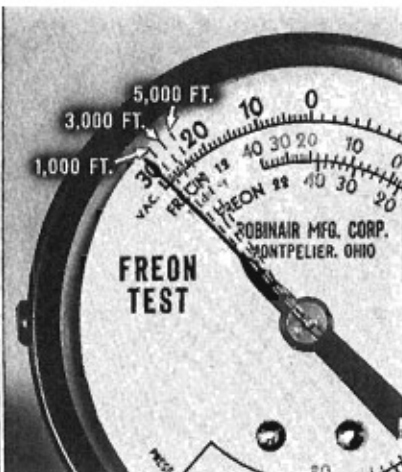
Loosely cover the end of the low-pressure line with a rag. Open the high- and low-pressure station gauge valves slightly to discharge the system through the low-pressure line. If the rag accumulates oil, the rate of Freon discharge should be reduced.

—high- and low-pressure gauge valves fully to allow the system to be evacuated on both the high and low sides. Run pump until 28" to 29" of vacuum is obtained or the maximum according to altitude above sea level. Then—

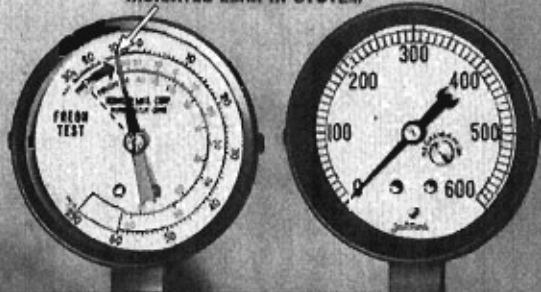


Evacuating: When the Freon appears completely discharged, close both gauge valves. Observe high-pressure gauge for a few minutes to see if any Freon pressure remains in the system. If it does, repeat the purging procedure. Then —

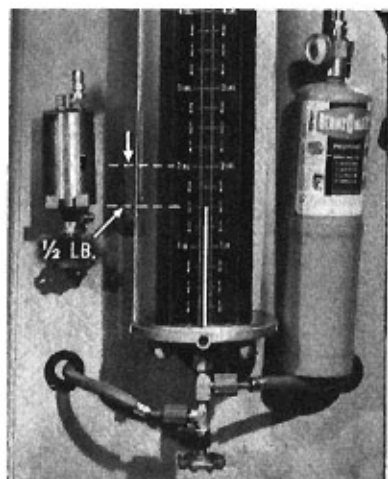
—continue to run the pump for 15 minutes more to insure a complete evacuation. **NOTE:** Gauge readings will be 1" of vacuum less for each 1,000 feet above sea level.



INDICATES LEAK IN SYSTEM



Close both gauge valves and the vacuum control valve. Stop the vacuum pump and observe the low-pressure gauge. A gauge reading which does not hold the correct vacuum reading for 3 to 5 minutes indicates a leaking condition somewhere in the system.



To locate the source of leakage, proceed as follows: Slowly open the Freon control valve and the high-pressure gauge valve. When the charging cylinder sight glass indicates 1/2 pound of Freon has entered the system, close both valves. Then —

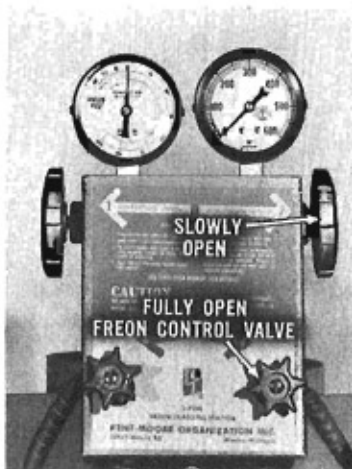
— using a leak detector as described earlier, determine the point of leakage and make necessary corrections. Purge the system and complete the evacuation procedure for 15 minutes as originally performed. Recheck to see if the vacuum will now hold.

When the system is in a leak-free condition, as indicated by the vacuum holding for 3 to 5 minutes, it is a recommended practice to add 1/2 pound of Freon to the system. Then purge this slight charge and re-evacuate for 5 minutes. This will insure that the lines, hoses and other components are thoroughly clean and free of any moisture or contamination. The system is now ready to accept the final charge of Freon.

Charging: Permit the correct charge of Freon to enter the station-charging cylinder. Then add 1/2 pound more. This extra amount should not be allowed to enter the system. Its purpose is to help meter the exact Freon charge shown between the sight glass graduated markings. Now, close all station valves.

FREON CAPACITY CHART

YEAR	ALL WEATHER	COOL PACK	CORVAIR
1961	3 1/2 lbs.	3 lbs.	5 lbs.
1960	4 1/2 lbs.	3 1/2 lbs.	
1959	4 1/2 lbs.	4 lbs.	



Fully open the Freon control valve and slowly open the high-pressure gauge valve to allow refrigerant to enter the system. Normally, the complete charge will not enter the system. Therefore, it will be necessary to perform the additional charging steps which follow:

Close all valves at the charging station. Set all air conditioner controls for maximum cooling. Start engine and run between 600 and 800 rpm.

The balance of Freon must now be admitted to the system through the low-pressure side of the system.

Open Freon control valve, then open and close the low-pressure gauge valve as necessary to keep low side pressure below 50 psi. When the correct charge has entered the system, close all station valves. Turn ignition off.

PERFORMANCE TEST

- Place thermometers at the right-hand nozzle outlet and in the area near the condenser air inlet.
- With the parking brake fully applied and the transmission in NEUTRAL or PARK, start and run engine at 1500 rpm.
- Position temperature control for maximum cooling.
- Turn blower motor control to high speed.
- On the ALL Weather system: position AIR control for full inside air recirculation, pull NOZZLE OUTLET knob to full out position.
- Close all windows and doors.

When making a performance test on—



—the Corvair, position a large fan at the left rear fender to direct an air stream across the top of the condenser. On the All Weather and Cool Pack systems, place a large fan (approximately 18") in front of the car to direct air flow toward the condenser.

PERFORMANCE DATA 1959 and 1960 All Weather Systems

Air Temp. at Grille	70° to 100°
Head Pressure (psi)	130 to 225
Suction Pressure (psi)	27
Temp. at R H Outlet	40° to 50°

1961 All Weather System

Air Temp. at Grille	70°	80°	90°	100°	110°	120°
Head Pressure (psi)	135-150	145-170	160-190	200-225	240-260	270-290
Suction Pressure (psi)	24	24	24	25	26	26
Temp. at R H Outlet	35°-40°	35°-40°	36°-41°	38°-43°	39°-44°	40°-45°

The engine must run for at least 10 minutes to settle out the system before accurate gauge readings can be taken. Gauge readings should fall within the limits shown.

PERFORMANCE DATA 1959 Cool Pack System

Air Temp. at Grille	70° to 100°
Head Pressure (psi)*	130° to 250°
Suction Pressure (psi)*	18
Temp. at R H Outlet*	40° to 50°

1960 Cool Pack System

Air Temp. at Grille	75°	80°	90°	100°	110°	120°
Head Pressure (psi)*	130-140	135-145	155-165	185-195	215-225	260-270
Suction Pressure (psi)*	14	14	16	17	19	21
Temp. at R H Outlet*	36°-41°	37°-42°	37°-42°	38°-43°	39°-44°	40°-45°

*When compressor clutch disengages.

PERFORMANCE DATA 1961 Cool Pack System — Early Production (Units Have Chrome Air Outlet Nozzles)

Air Temp. at Grille	70°	80°	90°	100°	110°	120°
Head Pressure (psi)*	115-130	134-145	160-170	190-210	225-240	265-275
Suction Pressure (psi)*	12	15	16	17	18	18
Temp. at R H Outlet*	36-41	37-42	37-42	38-43	39-44	40-45

1961 Cool Pack System — Late Production (Units Have Painted Air Outlet Nozzles)

Air Temp. at Grille	70°	80°	90°	100°	110°	120°
Head Pressure (psi)*	130-140	135-145	160-170	195-205	230-240	265-275
Suction Pressure (psi)*	13	14	15	15	17	17
Temp. at R H Outlet*	35-40	37-42	37-42	38-42	39-44	39-44

*When compressor clutch disengages.

PERFORMANCE DATA
1961 Corvair System

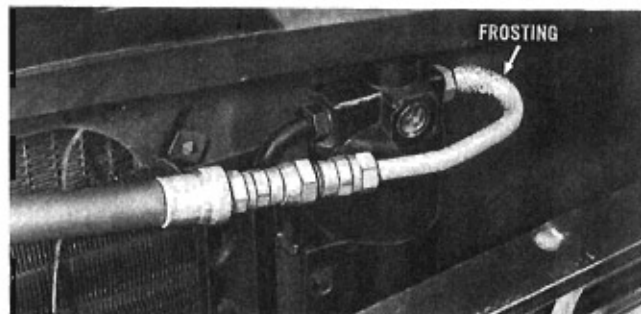
Air Temp. at Condenser	70°	80°	90°	100°	110°	120°
Head Pressure (psi)*	130-140	152-162	182-192	220-230	252-262	300-310
Suction Pressure (psi)*	14	17.5	18	21	21.5	23
Temp. at R H Outlet*	36-41	37-42	38-43	40-45	40-45	41-46

*When compressor clutch disengages.

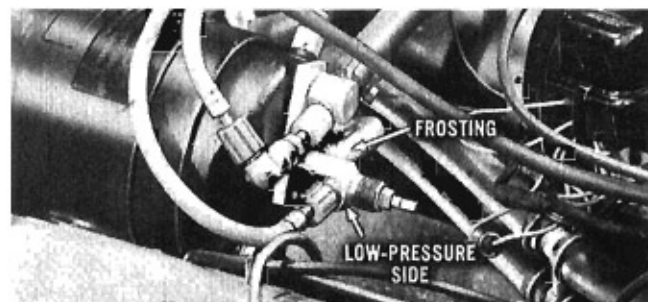
Suction and head pressure are directly influenced by the amount of Freon in the system. Therefore, gauge readings will help to indicate if the system has the proper charge.

EVALUATING GAUGE READINGS AND MINOR ADJUSTMENTS

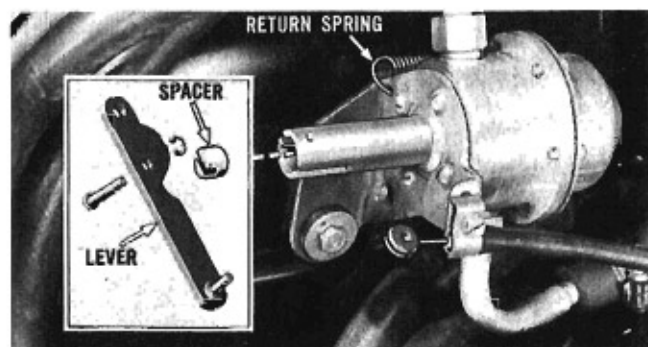
In areas of high humidity it is possible to have thermometer and gauge readings approach but not reach the figures listed in the performance chart and still have a satisfactorily operating unit. However, it is important to remember that suction pressure has a direct relationship on nozzle outlet temperature. If suction pressure is too low, ice will gradually form on the evaporator fins, restricting air flow into the passenger area and resulting in insufficient or no cooling.



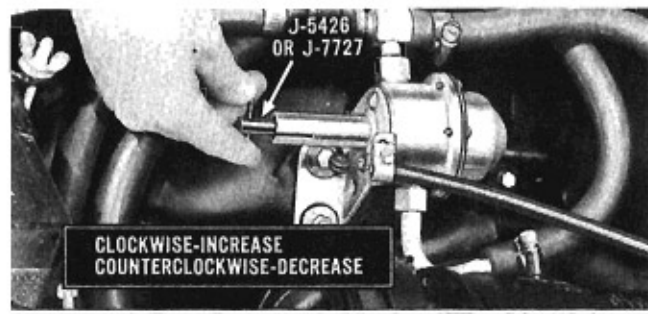
An abnormal high-pressure gauge reading may be the result of a blockage in the high-pressure side of the system. If this blockage is sufficient, the low-pressure gauge will show an abnormally low reading to the point of a vacuum and frosting will occur near the point of trouble.



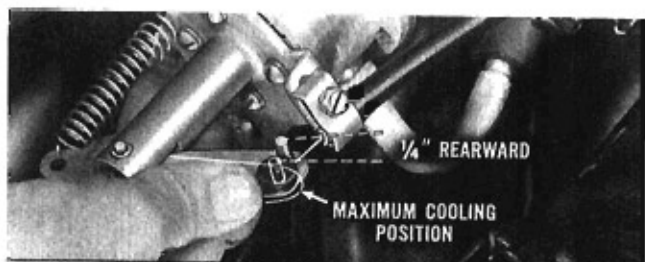
When suction pressure is correct, some frosting is normal in the low-pressure side of the system adjacent to the compressor. Suction pressure which is too high or too low may be caused by an improperly adjusted hot gas valve or thermostatic switch.



To adjust the hot gas valve, move the cold control lever to maximum cooling. Remove the return spring and bowden wire loop from the lever arm. Remove the lever and spacer from the valve assembly.



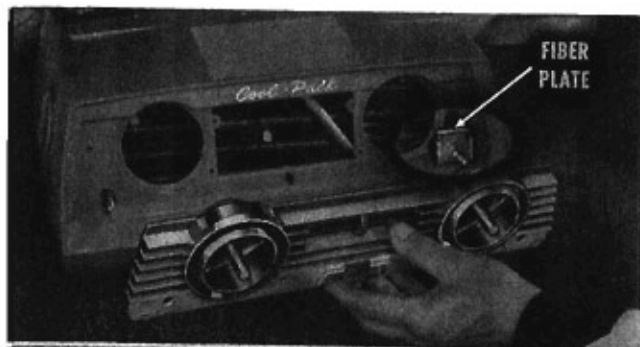
Use special Key J-5426 or J-7727 and turn the adjusting stem clockwise 1/2 turn at a time to increase suction pressure. Turn adjusting screw counterclockwise to reduce pressure. Wait between adjustments to observe gauge readings and the discharge air temperature at the nozzle.



When suction pressure is correct, install spacer, lever, lever pivot pin and the retainer. Loosen cable sheath clamp. Move lever $\frac{1}{4}$ " rearward from its maximum cooling position and hold in this position. Move sheath until the wire loop aligns with the position of the lever pin, then tighten clamp. Install return spring. Place wire loop over the pin and install the retainer.



For easier adjustment of the Corvair thermostatic switch, remove the 2 attaching screws and carefully turn the switch around without disturbing the location of the thermocouple.

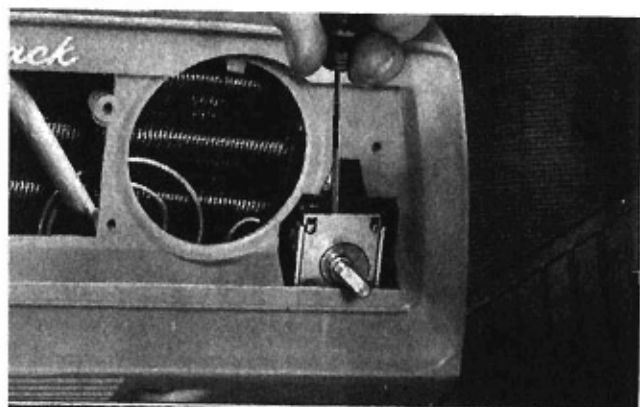


To gain access to the 1960-61 Cool Pack thermostatic switch, remove the control knobs and the screws attaching the face plate to the housing. Remove the fiber plate covering the adjustment screw.

Increase suction pressure by turning the adjustment screw clockwise $\frac{1}{2}$ turn at a time. Decrease suction pressure by turning screw counterclockwise. Light pressure on the screw will prevent spring tension from affecting final adjustment.

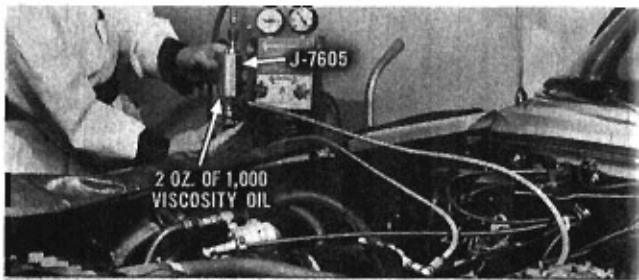


After each $\frac{1}{2}$ turn of the adjusting screw, permit the system to cycle several times. Observe the low-pressure gauge and thermometer readings to help establish the exact point at which the system functions. If a closer adjustment is needed, the screw should be turned less than $\frac{1}{2}$ turn.



Use a small, thin screwdriver to reach and turn the adjustment screw when correcting suction pressure.

If suction pressure does not change or the compressor runs continuously without cycling, on thermostatic switch controlled systems, the evaporator will freeze up. This condition may be caused by the switch points fusing together. If this occurs, the switch must be replaced.



Partial Oil Charge: When necessary, a special tool, J-7605, can be used to add oil to the system. Fill with 2 ounces of 1,000 viscosity oil and attach the unit in series with the low-pressure gauge line. Purge the gauge lines and add oil to the system by following steps 1 to 9 on pages 15-25 and 15-26 of the 1961 Chevrolet Shop Manual.



For more detailed service, such as removal of units, overhaul and the less frequently encountered difficulties, refer to the Chevrolet Shop Manuals and Service News. For background information, use the T-O-P releases shown.

NOTES