



# SERVICE NEWS

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## FILLING FOLDING TOP HYDRAULIC RESERVOIR

An improved method of filling and bleeding the convertible top hydro-electric system is described below. Use of this procedure will virtually eliminate the possibility of hydraulic fluid contacting and damaging trim material during filling or bleeding of the hydraulic system.

1. Drill a  $\frac{1}{4}$  inch hole through center of a spare reservoir filler plug.
2. Insert a two inch length of metal tubing ( $\frac{1}{4}$ " O.D.,  $\frac{3}{16}$ " I.D.) into center of filler plug; then solder tubing at both ends of plug to form an air tight connection, as shown in inset of Figure 1.
3. Obtain four to five feet of  $\frac{3}{16}$  inch I.D. rubber tubing, or other suitable flexible tubing.
4. With top in raised position, remove front edge of folding top compartment bag from rear seat panel. Remove pump and motor shield.
5. Place absorbent rags below reservoir at filler plug, then slowly remove filler plug from reservoir.

**CAUTION:** When installing a new or overhauled motor and pump assembly; as a bench operation, fill reservoir to specified level with

hydraulic fluid. This operation is necessary as pump must be primed prior to its operation, to avoid drawing an excessive amount of air into the hydraulic system.

6. Install reworked filler plug to reservoir and attach hose to filler plug tubing. Insert oppo-

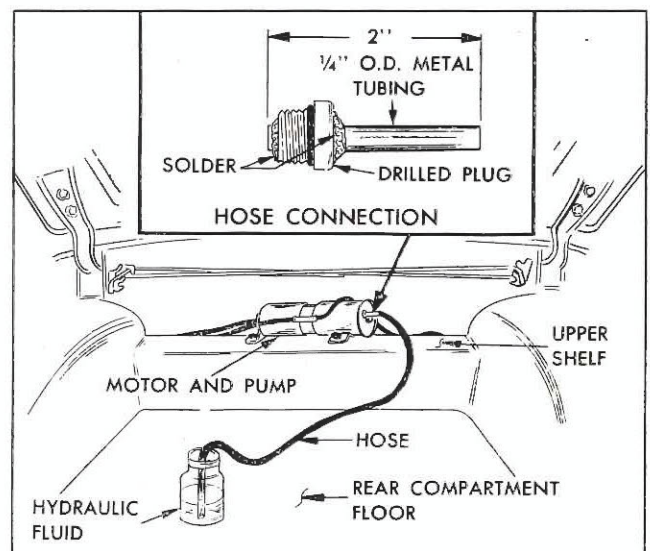


Fig. 1—Filling Hydraulic Reservoir

site end of hose into a container of G. M. Hydraulic Brake Fluid Super No. 11.

NOTE: *Container should be placed in the rear compartment area of body, below level of fluid in reservoir. Make sure sufficient fluid is available in container to avoid drawing air into the hydraulic system.*

7. Operate folding top to down or stacked position. After top is fully lowered, continue to operate motor and pump assembly (approximately 15 to 20 seconds), or until noise level of pump is noticeably reduced. The reduction in the pump noise level indicates that the hydraulic system is filling with fluid.
8. Operate top through up and down cycles several times until travel is smooth in both directions.
9. Remove hose from filler plug tubing and remove filler plug from reservoir.
10. Check level of fluid in reservoir and re-install original filler hose plug.

NOTE: *Fluid level should be within ¼ inch of lower edge of filler plug hole.*

## Improper Jack Stowage Damages Convertible Rear Window

Stowage of the jack column under the side wall of the spare tire will cause the tire and wheel assembly to be tilted up at the front, resulting in possible damage to the convertible vinyl rear window. Under these conditions, the tire brand name or other surface features could be transferred directly to the vinyl window when the folding top is in stacked position.

To avoid damage to the rear window, the jack column must be stowed flat and tight against the metal shield that covers the folding top hydro-electric pump. The jack column will then be retained only by the tread shoulder of the tire. The ratchet and lift hook assembly may be placed at either end of the jack column, positioned so that its inboard edge will just contact in the outboard radius of the tire side wall.

## Direct Air Heater Housing Removal

Direct air heater housing removal procedures for the Corvair and Lakewood, as shown on Page 11-30 of the 1961 Corvair Shop Manual, were developed on the assumption that the rear package shelf (or filler panel) was to be welded in place, in production. This was not the case however, as the

removable feature of the package shelf was retained for 1961 production.

Use of the removable shelf greatly simplifies heater housing removal and heater servicing. The revised procedure for removing the direct air heater housing is detailed below:

1. With vehicle on lift, disconnect the blower wire and control cables from heater housing (see Figure 11-39 of the 1961 Corvair Shop Manual).
2. Remove nuts ("B"—Figure 11-37) from studs on package shelf, one on each side of blower motor.
3. Remove screw ("D"—Figure 11-37) which attaches blower to cross air duct.
4. Lower vehicle, remove four screws attaching the cold air inlet assembly to fire wall (figure 11-38).
5. Push the rubber adapter through the hole in the fire wall.
6. Remove package shelf (filler panel on Lakewood) screws, and lift off shelf.
7. Loosen the hot air inlet hose clamps and slide the hoses (one on each side) off the housing air inlet assembly.
8. Lift the heater housing out through the open package shelf.

## Heater Ignition Points

Production changes in the Corvair "95" gasoline heater, effective October 20, eliminated the possibility of short circuit and premature failure of the heater ignition points, which had been occurring as the result of water entry at the wiring boot on the combustion blower.

Use the procedure detailed below to incorporate in early production heaters, those same corrective changes made in later production.

1. Remove the metal cover from the ignition point base assembly. Drill a 1/8" vent hole at center of cover depressed area.
2. Pierce a 3/16" drain hole in the bottom of the wiring boot at the combustion blower.
3. Using a commercially available plastic seam cement, form a water-tight seal around the combustion blower wiring leads at the point they enter the wiring boot at the blower.

## Clamping Heater Exhaust Pipe

To provide more positive retention of the Corvair "95" gasoline heater exhaust pipe, an additional clamp (#125930) has been installed on all Production vehicles assembled after October 20. On earlier production heaters, this clamp

should be added, as follows: (Refer to Figure 2).

1. The existing exhaust pipe bracket should be bent up slightly to permit attachment of the clamp strap to the cross sill lower flange.

**CAUTION:** Position clamp on pipe so tuning holes in the exhaust pipe are not obstructed.

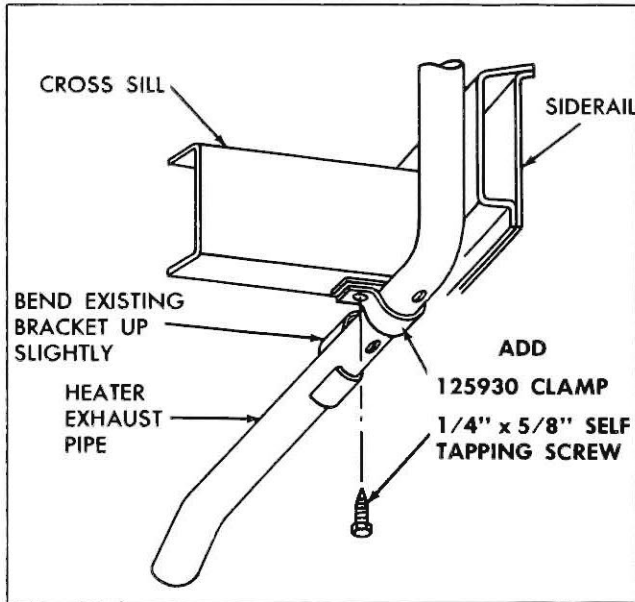


Fig. 2—Adding Heater Exhaust Pipe Clamp

2. Drill a 3/16" clamp attaching hole through the sill flange using clamp as a template. Attach clamp to sill using a 1/4" x 5/8" self tapping screw.

### Ignition Timing Setting Range

To enable service personnel to adjust ignition timing to provide the maximum in fuel economy and engine performance, the following chart lists usable ignition timing setting ranges for several Chevrolet engines. The maximum degree of timing advance that can be beneficially utilized will be dependent on altitude, temperature, and octane rating of fuel used in the particular area in which the vehicle will be operated; while the final determining factor limiting advance will still be the "knock point" of the individual engine.

**NOTE:** Being that present timing recommendations for High Performance engines, in Passenger Car and Corvette, were computed to provide maximum performance with use of premium fuels, those engines are not included in the following chart:

### IGNITION TIMING

Passenger Vehicle Engines	Nominal Setting (Prod.)	Setting Range (Service)	Engine Idle (Auto. Trans. in Drive)
235—6 Cyl.	5° BTDC	0° to 8°	450 Auto. Trans. 475 Synchro.
283 V-8 2-BBL.	4° BTDC▲	4° to 8°▲	450 Auto. Trans. 475 Synchro.
283 V-8 4-BBL.	4° BTDC▲	4° to 10°▲	450 Auto. Trans. 475 Synchro.
348 V-8 4-BBL.	8° BTDC▲	4° to 10°▲	450 Auto. Trans. 475 Synchro.
Turbo-Air* w/Auto. Trans.	13° BTDC▲	13° to 18°▲	500 rpm
w/Synchro.	4° BTDC▲	4° to 10°▲	500 rpm
Super Turbo-Air*	13° BTDC	13° to 18°▲	500 Auto. Trans. 600 Synchro.

▲ Disconnect spark vacuum line and cover opening on manifold.  
\* Covers 1961 Models only—refer to August 1960 Service News for 1960 specifications.

### Corvair Fast Idle Setting

The fast idle screw on early 1961 Corvair and Corvair "95" carburetors was set at .010"-.020" for Powerglide and .030"-.040" for Synchromesh transmissions. These settings, however, result in an excessively high fast idle speed, when the carburetors are operating on half to full choke.

To reduce this high RPM during cold warm up, all Corvair and Corvair "95" production carburetors are now adjusted with the fast idle speed screw gapped .045" from the tang on the throttle lever (Fig. 3).

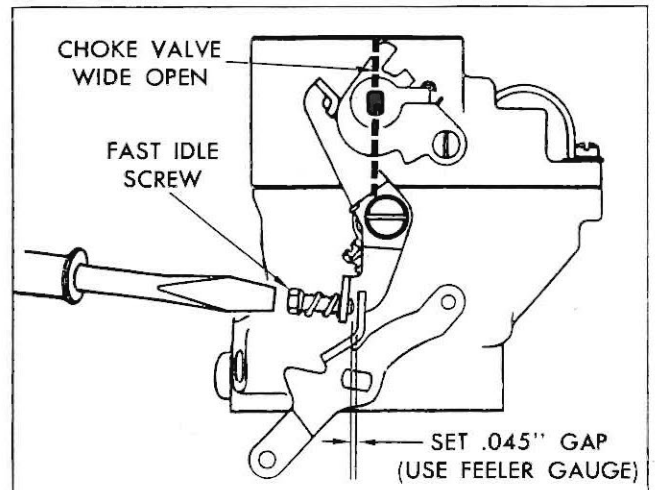


Fig. 3—Corvair Fast Idle Adjustment

Use the following procedure for adjusting fast idle on 1961 carburetors:

1. With engine warmed up, set normal curb idle speed.
2. Hold choke valve wide-open while adjusting fast idle screw to obtain .045" clearance between end of screw and tang on throttle lever. Use feeler gauge for checking clearance.

## Haze On Glass Inner Surface

An oily film, under certain conditions, can form on the inside surface of the body glass on some late model vehicles. The haze on the glass is due to the volatilization and subsequent condensation of solvents or plasticizing agents used in the many synthetic materials and finishes utilized for the vehicle interior.

Corrective measures have been taken in the compounding of synthetic materials used in the vehicle interior; to insure that solvents utilized, have low residue and minimum volatility in the temperature range encountered in the vehicle passenger compartment.

Removal of the haze from the glass surface has proven difficult—it smears with ordinary wiping and leaves a residue when most commercial glass cleaners are used. The best method of removal is to wipe the glass with a vinegar soaked cloth to loosen the film, then wipe the glass clean with a dry cloth or commercial wiping pad.

## Luggage Compartment Finish

To refinish 1961 Chevrolet luggage compartment interiors having the factory applied spatter color-coat, the procedures to be followed and materials available are detailed below:

Equivalent to factory finish will be obtained using DuPont Formula #243-56555 White, and Formula #243-56554 Dark Gray. Apply each color in a separate spray operation, with application of one color immediately followed by application of the other color. The color which is most predominant (white or gray) in the factory finish must be sprayed last to provide proper matching.

The above color-coats are to be sprayed at package viscosity—over DuPont Hi-Speed Lacquer Primer-Surfacer for panel repair work, and over "Preparakote" on unprimed metal replacement panels.

When applying the spatter finish, average distance of the gun from the work should be approximately 12-14". Speed with which horizontal passes are made is very important in effecting size and pattern of the spatter. Air dry spatter finish approximately four hours, or force dry 15-30 minutes at 165°F.

## SPRAY EQUIPMENT

Use a pressure feed system (pressure cup or tank) and a Devilbiss gun with #154 cap and F.F. tip and needle, or a Binks gun with a 67 x 67 PA nozzle.—(or equivalent equipment)

Pressure Recommended

Fluid (at gun)—7#

Air (at regulator)—15-20#

Note: Air spreader and fluid control valves should be set at wide open position.

## Installing Corvair Manifolds

Exhaust manifolds on all 1961 Turbo-Air engines provide an increase in interference fit between the exhaust port sleeve gaskets and the manifold.

To assure full seating of the exhaust manifold on the sleeve gaskets, thereby insuring against exhaust gas leakage, the following revised procedure should be used for manifold installation.

1. Position the exhaust manifold on the sleeve gaskets, tap manifold lightly to insure alignment with the gaskets, then firmly seat manifold using a soft metal or plastic hammer.
2. Install manifold clamps and french locks. Torque attaching nuts to 23-27 ft. lbs., then bend tab on french locks.

## Door Weatherstrip Retention

On 1961 Passenger Cars, if the front door hinge pillar weatherstrip is loose or bridged at the cove area, the following correction may be performed.

Install clip (part #4665930) using a #8 x 3/8" self tapping screw, as shown in Figure 4. Drill a 1/8" diameter hole in the door hinge pillar facing to accommodate the attaching screw. Make certain that the clip prongs are installed over the weatherstrip retaining wire as shown in View "A" of Figure 4.

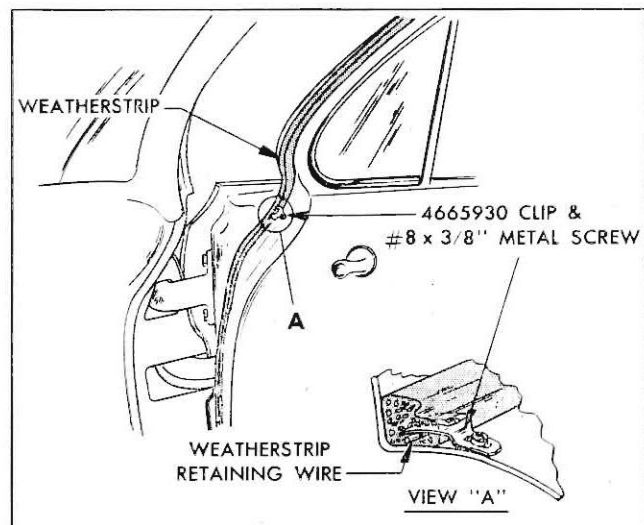


Fig. 4—Clip Retains Weatherstrip in Cove