

Group 11 Fuel System

GENERAL: This group contains information on the automotive fuel system from the fuel tank to engine and auxiliary power unit carburetors. Includes the accelerator pedal and linkage to carburetor.

SPECIFICS: As applicable

- ...Accelerator Pedal
- ...Accelerator Pedal Linkage (engine, transmission)
- ...Engine Carburetor and Hardware (includes vacuum lines)
- ...Fuel Filter
- ...Fuel Lines
- ...Fuel Pumps
- ...Fuel Sending Unit
- ...Fuel Strainers
- ...Fuel Tank



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GROUP 11
FUEL SYSTEM

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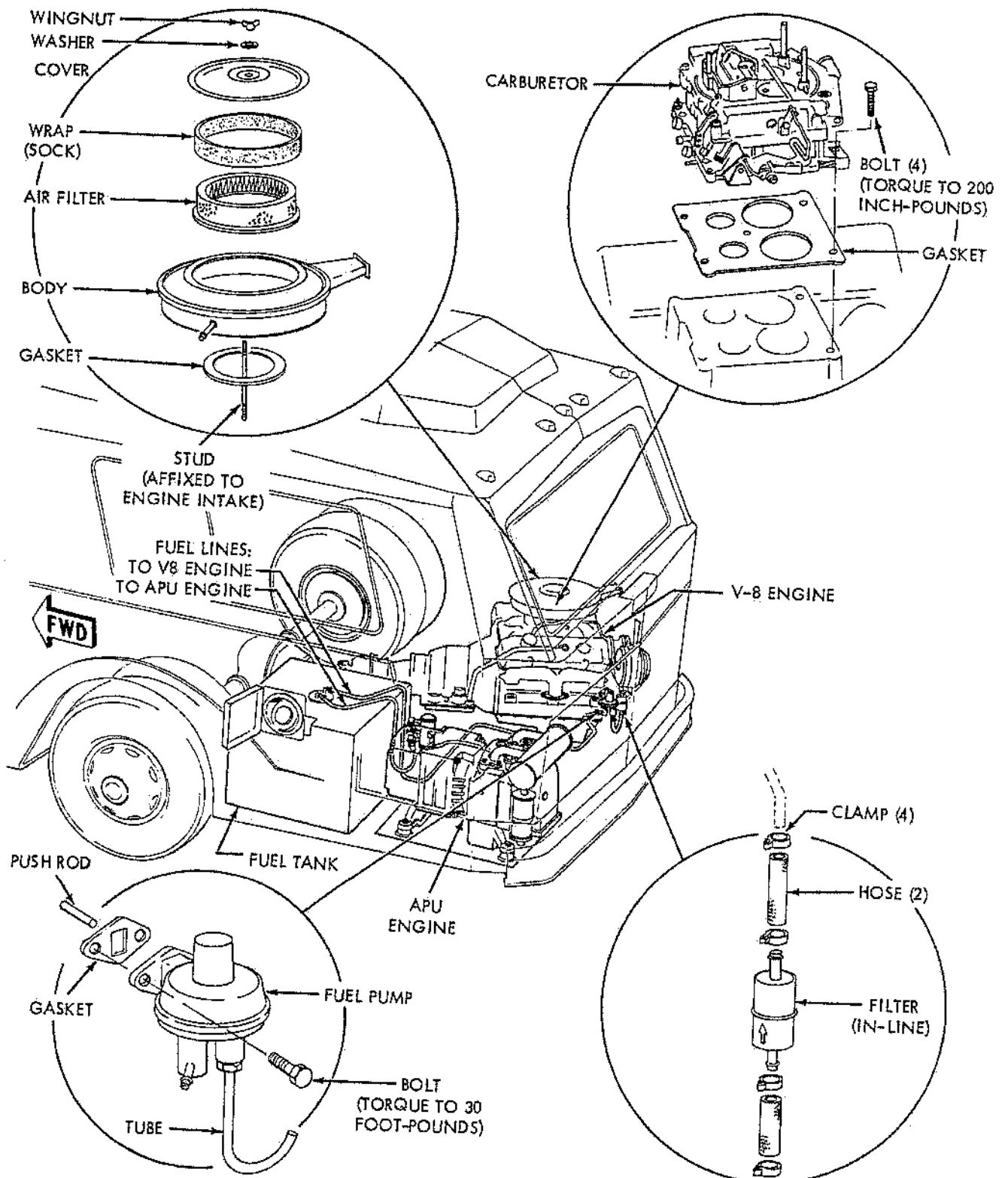


Figure 11-1. Fuel System (Sheet 1 of 2)

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11-1. DESCRIPTION

a. General (fig. 11-1). The coach incorporates two gasoline, carbureted, fuel systems. One system is for the eight-cylinder (V-8) engine and the other is for the two-cylinder auxiliary power unit (APU) engine. Both systems are supplied from one common 60-gallon capacity tank. The fuel tank is located in the left rear side of the coach. A fuel pump, fuel filter, and carburetor are incorporated in each fuel system. Fuel is distributed from the tank to the fuel pump of each system through tubes and hoses. Each fuel system functions to provide the engine cylinders with a combustible mixture of gasoline and air. The gasoline is in liquid form while in the tank, distribution lines and pump, and is atomized as it mixes with air in the carburetor.

NOTE

The V-8 engine carburetor is designed and calibrated to provide the proper fuel/air mixture for the most economical and efficient performance at all speeds, while keeping air pollution to a minimum.

The fuel/air mixture from the carburetor is drawn by vacuum pressure into the engine's intake manifold, and then is injected into the cylinder when the intake valve is open and the piston is on the intake stroke. On the piston's compression stroke, the mixture is compressed, then fired by the spark plugs. When firing occurs, the fuel/air mixture suddenly increases in temperature, resulting in rapid expansion and a high pressure to force the pistons downward on the power stroke.

This Group provides service instructions for the fuel system and its components. For service information on related systems such as exhaust, refer to Group 12; V-8 Engine, refer to Group 15; or APU Engine, refer to Group 40. When applicable, other Groups are referenced. For information on part numbers and procurement of replacement parts, refer to Group 11 in the 2900R Parts Catalog.

b. Fuel Tank (fig. 11-1). The gasoline fuel tank is located on the left-hand side of the coach just forward of the engine compartment grill. The tank incorporates a filler neck and cap, accessible through a key-locked hinged door. The tank filler cap is vented to atmosphere and installed on top of the filler neck, which contains an anti-surge baffle. A rubber boot type splash-apron grommet is installed around the filler neck just below the cap area. The grommet split-lip outer edge is lapped over the coach skin surrounding the access area. A placard, affixed just below the filler neck, is visible when the access door is open. The

placard contains the following fuel servicing warning:

Warning

All pilot lights and appliances shall be turned off during servicing of the fuel tank.

The fuel tank capacity is 60 gallons of gasoline. The engines are designed to run on regular gasoline. Most low lead gasolines can be used under normal operating conditions; however, the use of completely lead free gasolines on a continuous basis is not recommended.

Warning

Make certain LPG valve is closed before refueling.

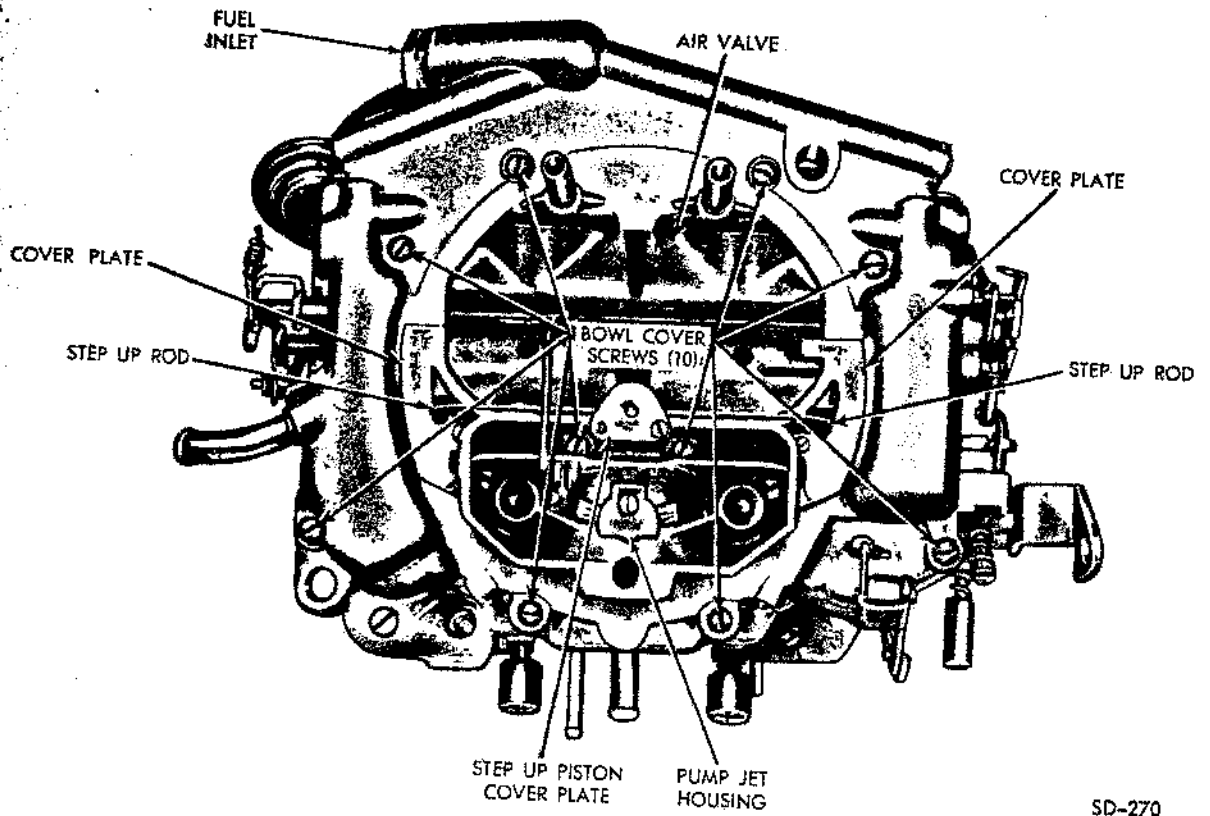
A fuel-level sensing device is incorporated in the tank and electrically connects to a fuel gauge located on the dash panel. The fuel level sensor contains a float installed on one end of a pivot arm which rises or falls as the gasoline level changes. The opposite end of the arm has a wiper which sweeps the windings of a variable resistor as it moves. The resistor is electrically connected to the fuel gauge which reacts to move an integral pointer (needle) across the dial face, according to the level change signals emitted by the sender.

The sender unit electrical terminal (connector) and two suction tube outlets protrude from a 2-inch diameter plate installed in the top center of the tank. The suction tubes (one for the V-8 and one for the APU engine) extend down into the tank and terminate just above the bottom surface.

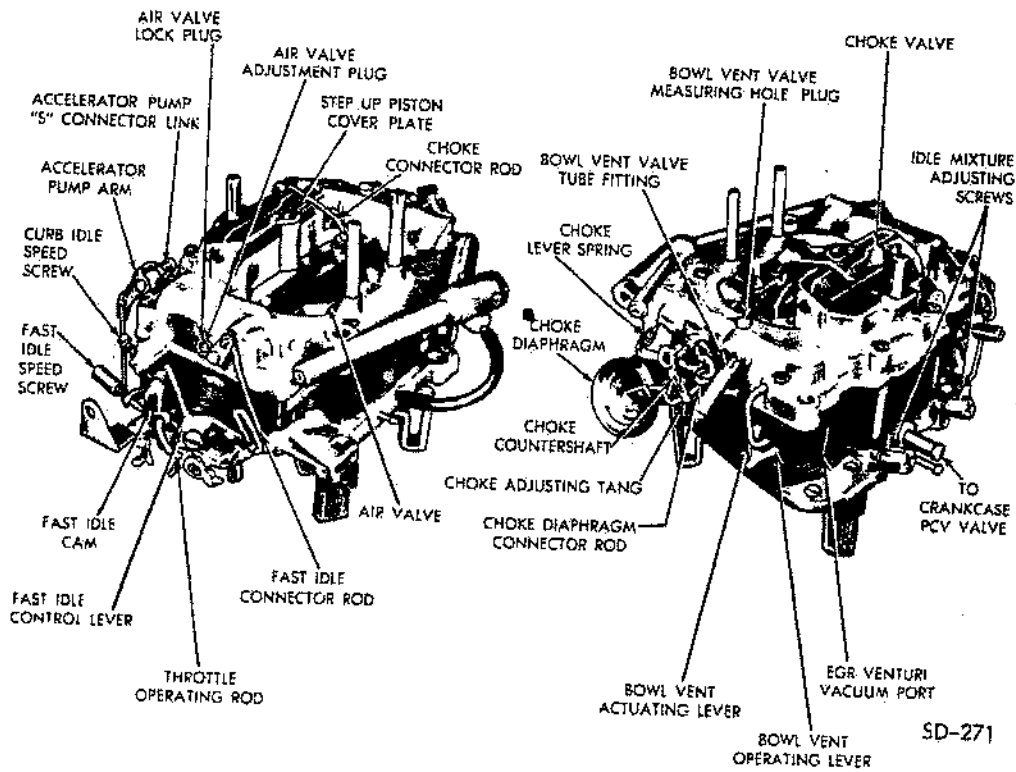
NOTE

The APU system suction tube terminates about 2 inches above the V-8 engine system suction tube end. This assures that the V-8 engine will have fuel available for coach operation in the event the APU is inadvertently run to long with a marginal fuel supply.

The two suction line outlet tubes connect to fuel lines which distribute the fuel to the two systems. An internal-wrenching drain plug is installed in the bottom of the tank on the inboard rear end. Each corner of the tank is attached to the coach frame with elastomer shock mounts and attaching bolts.



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Figure 11-2. Carburetor

to the original full-up position.

h. Transmission-to-Carburetor Linkage. The linkage between the transmission actuation lever and the carburetor throttle valve lever consists of a rod, link, support brackets, two return springs with clips and mounting hardware. The linkage controls the transmission down-shifting when the throttle is advanced for passing other vehicles, and other similar rapid-acceleration situations.

i. Clean-Air Emission System (fig. 11-5). The coach incorporates a positive crankcase ventilation system. The fully-closed crankcase ventilation system operates by air drawn into the crankcase from the air cleaner and through the crankcase inlet air cleaner by means of a hose. Air cir-

culates through the engine, is drawn out of the rocker-arm cover by manifold vacuum into the combustion chambers, and is expelled with the exhaust gases. The system consists of a ventilator valve, installed in the outlet vent of the left-hand rocker-arm cover, and a hose. The hose is connected between the ventilator valve and the lower part of the carburetor body. The valve regulates the flow of crankcase ventilation at various throttle positions and will operate effectively as long as normal maintenance is done. The valve and hose are subject to fouling with sludge and carbon formation because of the nature of the material carried by the ventilation system. A plugged vent system may in turn cause excessive engine crankcase sludge formation and may also cause rough or erratic engine idle or excessive oil leakage. Refer to paragraph 11-5_l for servicing information.

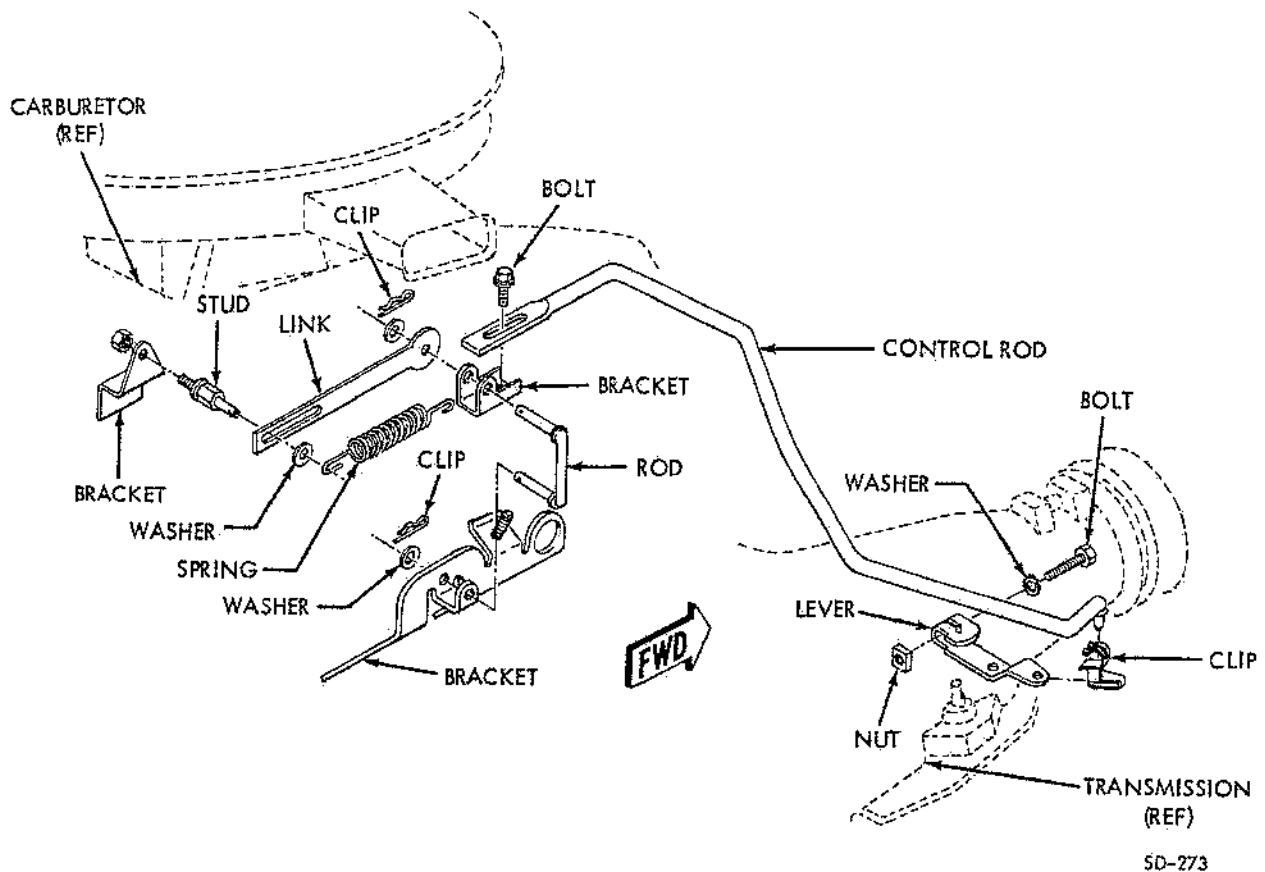


Figure 11-4. Transmission-to-Carburetor Linkage

11-2. TROUBLESHOOTING

Instructions for troubleshooting the fuel system are contained in table 11-1. Prior to troubleshooting

a preliminary visual inspection, to assist in locating the problem, should be made as outlined in paragraph 11-4b.

Table 11-1. Troubleshooting Fuel System

Malfunction (symptoms)	Probable causes	Corrective action (remedies)
Engine hard to start	<p>Automatic choke (V-8 only) not actuated properly by operator</p> <p>Carburetor air cleaner filter excessively dirty</p> <p>Automatic choke valve inoperative because linkage is sticking</p> <p>Fuel pump not delivering sufficient fuel, due to clogged vent in fuel tank cap</p> <p>Automatic choke (V-8 only) vacuum hose leaking; (loose or disconnected)</p> <p>Water in fuel</p>	<p>Instruct operator to depress accelerator pedal slightly before cranking with starter</p> <p>Clean, refer to paragraph 11-4c (2); or replace, refer to paragraphs 11-3b and 11-3c</p> <p>Clean linkage; refer to paragraph 11-5d</p> <p>Remove and inspect cap; clean as required, then reinstall. Ensure that rubber splash-apron grommet does not contact cap base, so as to obstruct air venting</p> <p>Connect or tighten as necessary</p> <p>Siphon fuel from about 1/32 inch above bottom of tank into glass jar to partially fill jar; inspect fluid in jar for layer of water below fuel. If water is present, repeat procedure until tank fluid is free of water</p>
Engine operation is sluggish	<p>Carburetor air cleaner filter excessively dirty</p> <p>Fuel pump output pressure low</p> <p>Fuel filter clogged</p> <p>Rocker-arm cover (crankcase) vent valve (V-8 engine only) vacuum hose not attached to carburetor</p>	<p>Clean, refer to paragraph 11-4c (2); or replace, refer to paragraphs 11-3b and 11-3c</p> <p>Replace pump; refer to paragraphs 11-3f and 11-3g</p> <p>Replace; refer to paragraphs 11-3d and 11-3e</p> <p>Connect hose to carburetor</p>
Rough or too-slow engine idling	<p>Idle jets incorrectly adjusted</p>	<p>Adjust; refer to paragraph 11-5e for V-8 engine. For APU engine, refer to Group 40</p>

(c) Install air cleaner cover using washer and wingnut.

(2) APU Engine.

(a) Install air filter element on end of air inlet duct.

(b) Secure cover over filter element with wingnut.

d. Fuel Filter Removal.

(1) V-8 Engine.

(a) Loosen clamps attaching hoses to tube on each end of filter.

(b) Pull filter out of the two hoses.

(2) APU Engine.

(a) The screen-type filter is integral with fuel pump; remove fuel pump; refer to paragraph 11-3f.

(b) Place pump on a clean work surface, then unscrew base and remove filter screen.

NOTE

If fuel filter screen is serviceable, it may be cleaned according to paragraph 11-4c(4).

e. Fuel Filter Installation.

(1) V-8 Engine.

(a) With loose clamps moved toward center of each connecting hose, insert fuel filter end tubes into hose ends.

(b) Position clamps on each hose end over filter tube end and secure in position.

(2) APU Engine.

(a) Install serviceable clean screen filter in fuel pump, then install on pump.

(b) Install fuel pump; refer to paragraph 11-3g.

f. Fuel Pump Removal.

Warning

To ensure safe operation during the following procedures, turn off electrical power, appliances, pilot lights, and LPG service-and-relief valve. Make certain that gasoline is not exposed to any ignition source such as a lighted cigarette or spark-producing machinery. Use a suitable container to catch fuel when fuel system components are drained.

(1) V-8 Engine.

(a) Remove hose clamp from fuel pump inlet fitting, then pull hose off and allow fuel to drain into a suitable container.

(b) Remove tube from pump outlet, allowing fuel to drain into container.

(c) Remove two bolts and lockwashers, then pull pump lever out of pump.

NOTE

Pump spring may be compressed by cam pressure against the pump lever; this will place side pressure against bolts during removal.

(d) Remove pump gasket.

(2) APU Engine.

(a) Remove electrical wire from pump by disconnecting connector under start-switch box.

(b) Loosen clamp on pump inlet adapter, then remove hose and drain gasoline into suitable container.

(c) Disconnect tube from pump outlet fitting, allowing fuel to drain into container.

(d) Remove fuel line fittings from pump inlet and outlet.

g. Fuel Pump Installation.

i. Fuel Line Installation.

Warning

To ensure safe operation during the following procedures, turn off electrical power, appliances, pilot lights, and LPG service-and-relief valve. Make certain that gasoline is not exposed to any ignition source such as a lighted cigarette or spark-producing machinery.

NOTE

After component installation and satisfactory system checkout, reactivate appliances and LPG system; refer to Group 34 for water heater, Group 36 for range and furnace, and Group 38 for LPG system.

(1) V-8 Engine.

(a) Secure fuel tube to four captive mount studs on coach frame with four clamps, lock-washers, and nuts. Torque nuts 46 to 52 INCH-pounds.

(b) Connect hose to fuel pump tube with hose clamp.

Caution

Make sure that hoses are not twisted or bent sharply when installed.

(c) Connect other end of hose to fuel tank inboard suction outlet tube.

(d) Turn on coach electrical power.

(e) Operate engine and check for fuel leaks. Correct any leaks as necessary.

(f) Shut-down engine.

(2) APU Engine.

(a) Connect hose to fuel pump inlet fitting with clamp.

Caution

Make sure that hose is not twisted or bent sharply when installed.

(b) Connect other end of hose to fuel tank outboard suction outlet tube.

(c) Turn on coach electrical power.

(d) Operate APU engine and check for leaks. Correct any leaks as necessary.

(e) Shut-down engine.

j. Fuel Tank Removal.

Warning

To ensure safe operation during the following procedures, turn off electrical power, appliances, pilot lights, and LPG service-and-relief valve. Make certain that gasoline is not exposed to any ignition source such as a lighted cigarette or spark-producing machinery. Use a suitable container to catch fuel when fuel system components are drained.

(1) Securely block front wheels against movement and set coach parking brake.

(2) At two rear jacking points on coach, use hydraulic jack and jack stands to lift and block coach rear end at least 8 inches, plus jack height. (Fuel tank is about 23 inches high overall; coach clearance is about 16 inches.)

(3) Drain and purge fuel tank according to paragraph 11-4c (5) steps (a) through (e).

(4) Remove splash-apron grommet from filler neck.

(5) Reach through access door, then disconnect hose clamps from fuel tank suction outlet tubes.

(6) Disconnect electrical plug from top of tank. Reinstall fuel tank cap.

(7) Securely install internal-hex plug in the drain in bottom of tank.

(8) Support fuel tank with block(s) and a heavy duty hydraulic floor jack.

(9) At each end of two supports of tank, remove bolt, nut, shockmount, and washers.

(10) Lower from coach while holding fuel tank balanced on jack.

(11) Carefully lower fuel tank to clear bottom of coach.

(12) Remove tank from coach.

Caution

Refrain from too rapid removal of vacuum hose as damage to the diaphragm through the strong suction forces generated could result.

(e) Disconnect fuel tube from carburetor.

(f) Disconnect transmission linkage at carburetor throttle rod.

(g) Disconnect accelerator linkage at carburetor throttle rod.

(h) Remove clip at top of choke rod; remove rod from lever hole.

(i) Remove four mounting bolts from carburetor base; remove carburetor.

(2) APU Engine. For carburetor removal, refer to Group 40.

o. Carburetor Installation.

(1) V-8 Engine.

(a) Flush carburetor with gasoline and adjust, as required; refer to paragraph 11-5e.

(b) Mount carburetor on engine with four bolts. Torque bolts to 200 INCH-pounds.

(c) Connect vacuum hose from right valve cover to large tube in carburetor.

(d) Connect distributor hose to small tube in carburetor.

(e) Attach choke rod to lever with clip.

(f) Connect fuel line to carburetor.

(g) Connect accelerator linkage to carburetor throttle rod.

(h) Connect transmission linkage to carburetor throttle rod.

(i) Operate engine to check carburetor operation and for fuel or vacuum leakage; stop engine.

(j) Install air cleaner and gasket.

(k) Secure air cleaner with washer and wingnut.

(l) Connect ventilation hose to air cleaner.

(m) Check that linkages function properly; adjust as necessary.

(n) Operate engine and check for correct functioning at various speeds.

(2) APU Engine. For carburetor installation, refer to Group 40.

p. Carburetor Automatic Choke Removal.

(1) V-8 Engine.

(a) Remove two bolts from choke assembly cover on engine at left of carburetor.

(b) Remove clip from carburetor choke lever at upper end of choke rod.

(c) Remove choke assembly (thermostatic spring and housing).

(2) APU Engine. For choke removal, refer to Group 40.

q. Carburetor Automatic Choke Installation.

(1) V-8 Engine.

(a) Position choke assembly in engine recess at left of carburetor.

(b) Secure choke assembly with two bolts.

(c) Attach choke rod to choke lever on carburetor with clip.

(2) APU Engine. For choke installation, refer to Group 40.

r. Accelerator Pedal Removal (fig. 11-3).

(1) Accomplish steps (1) through (3) of paragraph 11-3t.

(2) Remove two screws at aft base of accelerator pedal, then remove pedal from floor and ball end of push rod.

(3) Remove forward bolt from base of push rod housing, loosen rear bolt in base, then slide housing forward and remove.

(4) Remove cotterpin, pin, washer, and bushing at each end of bellcrank. (The push rod and forward spring-adjustment bracket are also released.)

(10) Install engine bracket with nut and washer.

(11) Mount cable end on engine bracket with cable clamp/shim, and two bolts, lockwashers, and nuts.

(12) Install cable support clamps under coach (front and rear).

(13) Adjust throttle linkage; refer to paragraph 11-5g.

(14) Attach dimmer switch to bracket on floor cover plate with two screws.

(15) Install floor cover plate with screws, then seal the plate edges with a thick bead of

silicone putty.

(16) Install carpeting over cover plate.

11-4. INSPECTION/CLEANING

a. General. This section contains information necessary for inspection and cleaning of the fuel system.

b. Inspection. The following steps give procedures for inspection of the fuel system components. Function-check procedures for the fuel pump and vacuum diaphragm are contained in paragraph 11-5. Inspect the fuel supply system according to table 11-2.

Table 11-2. Fuel System Component Inspection

Component (and area)	Visually inspect for	Corrective action
Tank	Deterioration of elastomer mounts	Replace unserviceable mounts
	Splash-apron grommet on filler neck for deterioration or misalignment	Reseat with split-lips around coach skin so cap venting is not shut off. Replace if unserviceable
	Damage to tank exterior	Repair, or replace if unserviceable; refer to paragraphs 11-3j- and 11-3k
Fuel lines	Loose connections	Tighten
	Chafing on structure	Reroute to clear structure
	Bending that constricts lines	Correct sharp bends
	Cuts or punctures	Replace; refer to paragraphs 11-3h and 11-3i
Fuel pump	Gasoline leakage through diaphragm (will appear at vent hole)	Replace pump; refer to paragraphs 11-3f and 11-3g
Carburetor air cleaner	Clogged or damaged filter element	Clean, refer to paragraph 11-4c; or replace, refer to paragraphs 11-3b and 11-3c
Carburetor	Evidence of leakage	Clean, then repair as necessary. Torque cover screws 50 INCH-pounds and mounting bolts 30 foot-pounds

(d) Tap filter flush against a flat surface to remove outer layer of particles.

(e) Apply low-pressurized air jet to inside of filter element, with air nozzle at least 2 inches from element.

Caution

Do not apply air jet to outside of filter; this can imbed foreign matter in the element. Do not hold jet closer than 2 inches from element. Avoid distorting element and do not attempt to clean it with liquids.

(f) Disconnect ventilation hose from air cleaner.

(g) Remove air cleaner body, then clean it and its cover with cleaning solvent. Wipe off solvent to dry parts.

(h) Install air cleaner body and gasket (if removed) on carburetor; connect ventilation hose to cover.

(i) Insert filter element in wrap (sock) and then in air cleaner body.

(j) Install cover on air cleaner with washer and wingnut.

(3) V-8 Engine Carburetor. If engine operation indicates that the carburetor may be clogged with heavy gum and carbon deposits, use an acceptable commercial combustion chamber conditioner for cleaning.

(4) APU Engine Carburetor.

(a) Wipe or blow any accumulated sediment from carburetor.

(b) Clean fuel pump screen thoroughly in a suitable solvent.

(c) Use a fine wire to clean small hole in the short speed-booster vacuum tube (mounted in hole in top of engine intake manifold). Do not enlarge the hole.

(d) Clean carburetor air cleaner by tapping it flush against a flat surface to remove outer layer of particles, then using a low-pressurized air jet to clean inside of filter element, with air nozzle at least 2 inches from element.

Caution

Do not apply air jet to outside of filter; this will imbed foreign matter in the element. Do not hold jet closer than 2 inches from element. Avoid distorting element and do not attempt to clean it with liquids.

NOTE

The element will normally require replacement every 500 operating hours, and more often under severe operating conditions.

(5) Flushing/Purging Fuel Tank (fig. 11-3). If the fuel tank has been contaminated by foreign matter or fluids, flush and purge it as follows:

(a) Check fuel gauge on coach dash panel to determine amount of fuel remaining in tank.

(b) Provide enough containers to receive all of gas in tank.

Warning

To ensure safe operation during the following procedures, turn off electrical power, appliances, pilot lights, and LPG service-and-relief valve. Make certain that gasoline is not exposed to any ignition source such as a lighted cigarette or spark-producing machinery. Use a suitable container to catch fuel when fuel system components are drained.

(c) At left rear underside of coach, remove internal-hex plug (from bottom of gas tank) over a suitable gas-drain container.

(d) Open gas filler neck access door and remove gas tank cap.

(e) Purge tank by steam-cleaning through filler neck, with drain plug removed.

(f) Allow gas tank to air-dry, or dry with low-pressure air.

(g) Install internal-hex drain plug securely in bottom of tank.

(h) Fill fuel tank; refer to paragraph 11-5h.

Table 11-3. Fluids/Lubricants (Continued)

Item	Specification	Quantity/Use
Pressurized air	Low pressure	Cleaning fuel lines and carburetor air filter
Steam-Source	(Commercial steam-cleaner)	Purging fuel tank

c. Torque Requirements. Torque requirements for the fuel system are contained in table 11-4.

For torque values of APU engine fuel components, refer to Group 40.

Table 11-4. Torque Requirements

Item	Torque
Carburetor cover screws (10)	50-INCH-pounds
Carburetor mounting nuts (4)	200 INCH-pounds
Fuel pump bolts (2)	30 foot-pounds
Fuel tube clamp nuts (4)	46 to 52 INCH-pounds
Fuel tank mounting bolts (4)	41 to 44 foot-pounds

d. V-8 Engine Carburetor Servicing. At least every 6 months use a conditioner to clean and lubricate moving parts of the carburetor exterior linkage as follows:

(6) Repeat procedures starting at step (4) for other friction points of linkage.

NOTE

An acceptable conditioner is Chrysler Corporation P/N 2933500.

(1) Remove wingnut and washer from air cleaner cover.

(2) Disconnect ventilation hose from air cleaner body.

(3) Remove cover and body as a unit.

(4) Saturate choke-valve shaft with conditioner.

(5) Move shaft full travel in each direction several times to work in conditioner, then repeat steps (4) and (5).

NOTE

Conditioner will dissolve oil and gasoline residues and flush them away with accumulated dirt etc. Conditioner also retards accumulation of more deposits.

NOTE

It is necessary for the fast idle cam and pivot pin to operate freely. To insure free operation have solvent applied to the fast idle cam and pivot pin to remove dirt, oil or other deposits that could cause sticking or erratic motion.

(7) Install air cleaner and gasket (if removed), then secure in position with washer and wingnut.

(8) Connect ventilation hose to tube on air cleaner body.

e. V-8 Engine Carburetor Adjustments. Adjust carburetor, as required, in accordance with the following paragraphs:

(1) Secondary Throttle Linkage (fig. 11-7).

(a) Remove carburetor; refer to paragraph 11-3n.

(b) Block choke valve full open.

(c) With screwdriver turn counter-clockwise as shown.

(d) Turn adjustment plug, until air valve just contacts the stop, then screw plug in 1-1/4 turn more.

(e) Hold plug in position (with screwdriver), then tighten lock screw against plug. Manually check that valve moves freely.

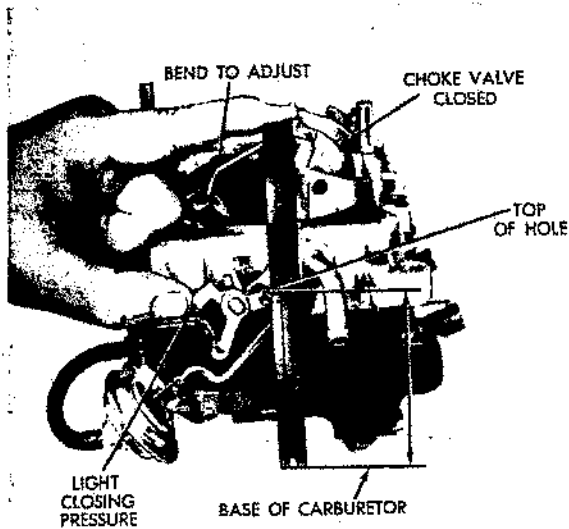
(4) Accelerator Pump Stroke (fig. 11-7). Adjust the stroke of the accelerator pump as follows:

(a) Check that rod end is connected to center hole of accelerator lever pump arm as shown.

(b) Measure top of pump shaft to top of bowl cover. If it is not 31/64 inch, bend rod end at bottom to adjust.

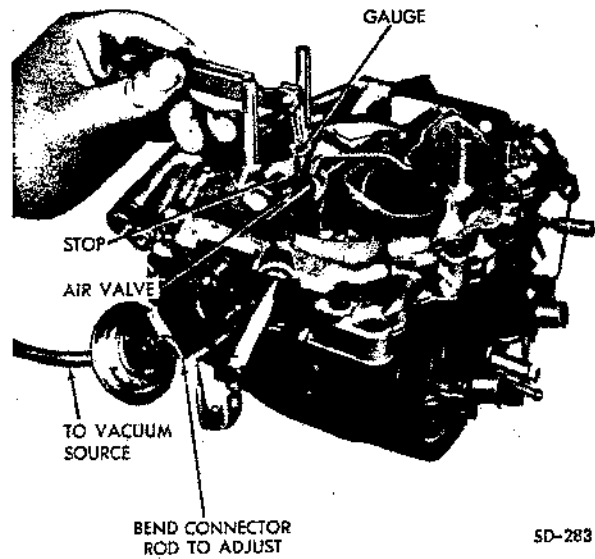
(5) Choke Control Lever (fig. 11-7). The choke control lever must be properly adjusted to provide correct choke thermostat loads and choke linkage operation. Adjust as follows:

(a) Place carburetor on flat object with



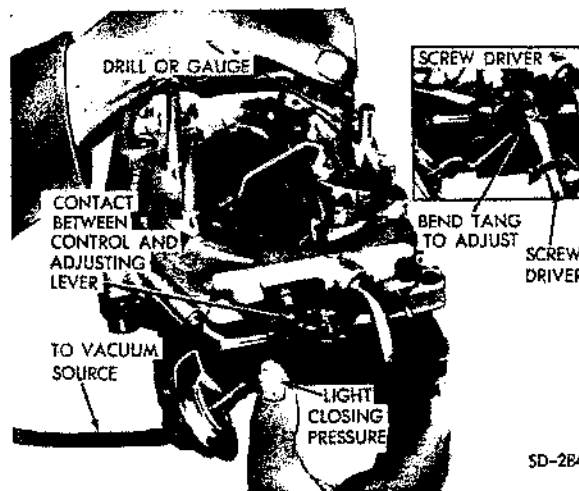
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Choke Control Lever



SD-283

Choke Diaphragm Rod



SD-284

Vacuum Kick

Figure 11-7. Carburetor Adjustment (Sheet 2 of 3)

Caution

Always adjust the choke diaphragm rod before adjusting the vacuum-kick, as described in subsequent paragraph.

(a) Slowly remove (work from side-to-side) existing vacuum hose from choke diaphragm tube.

Caution

Refrain from a too-rapid removal of vacuum hose, as damage to the diaphragm through the strong suction forces generated could result.

(b) Check that choke diaphragm is securely mounted, then apply a vacuum of at least 10 Hg (inches-of-mercury) to fully retract diaphragm.

(c) Close air valve, then check between air valve and valve stop with feeler gauge for a 0.040 inch clearance. If necessary, bend diaphragm connector rod to obtain required clearance.

NOTE

Retain vacuum setup for next adjustment.

(7) Vacuum Kick (fig. 11-8). With vacuum setup as in previous adjustment, proceed as follows:

Caution

Accomplish choke diaphragm adjustment prior to accomplishing the vacuum kick adjustment.

(a) Open the throttle valves and move choke valve to closed position with control lever. Release throttle before releasing choke, to trap fast-idle cam in closed choke position.

(b) Apply a vacuum of at least 10 Hg (inches-of-mercury) to choke diaphragm.

(c) Insert 1/4-inch diameter drill or gauge as shown, between long side (lower edge) of choke valve and the air horn wall. Apply sufficient closing pressure on choke control lever to provide a minimum choke valve opening without distortion of choke linkage. This carburetor extends a spring connecting the control lever to

an adjustment lever; this spring must be fully extended for proper measurement of vacuum kick adjustment. Adjustment will be necessary if slight drag is not obtained as drill is being removed.

(d) Slowly remove drill or gauge. If there is not a slight drag, bend the tang as shown, to contact with end of diaphragm rod. Adjust tang only while applying a counter-force to the adjustment lever. Counter-force can be provided by a screwdriver placed in U-shaped opening between lever and shaft.

Caution

Do not adjust diaphragm rod and do not load the link connecting the two choke shafts because choke control lever qualification will change.

(e) Turn off vacuum-test machine, then check that choke valve moves freely between open and closed position. Correct any misalignment or binding; if choke adjustment is affected, repeat adjustment procedure.

(f) Remove vacuum test machine.

(8) Fast-Idle Cam and Linkage (fig. 11-7).

(a) Set fast-idle screw on the second step of the cam and against the shoulder of the first step as shown.

(b) Adjust fast-idle connector rod by bending, as required, for a 0.110-inch opening between wall of air horn and edge of choke valve (long side of valve near lever).

(9) Choke Unloader (fig. 11-7). The choke unloader is a mechanical device to partially open the choke at wide open throttle. It is used to eliminate choke enrichment during cranking of an engine. Engines which have been flooded or stalled by excessive choke enrichment can be cleared by use of the unloader. Adjust as follows:

(a) Hold throttle valves in wide open position. Insert drill, 0.149-inch drill or gauge, between long side (lower edge) of choke valve and inner wall of air horn as shown.

(b) Lightly press choke control lever while withdrawing drill or gauge. If there is no slight drag, bend tag on fast idle control lever until drag is obtained.

(10) Secondary Throttle Lockout (fig. 11-7).

(1) Open gas filler neck access door and remove tank cap.

(2) Fill fuel tank with gasoline; refer to paragraph 11-5b.

(3) Wipe any spilled fuel from coach body.

(4) Install gas cap and close access door.

(5) Reactivate appliances and LPG system; refer to Group 34 for water heater, Group 36 for range and furnace, and Group 38 for LPG system.

i. V-8 Engine Fuel Pump Check. This check must be performed only with a fully-charged automotive battery. A stop watch and a manometer are required.

Warning

To ensure safe operation during the following procedures, turn off electrical power, appliances, pilot lights, and LPG service-and-relief valve. Make certain that gasoline is not exposed to any ignition source such as a lighted cigarette or spark-producing machinery. Use a suitable container to catch fuel when fuel system components are drained.

(1) On fuse panel under coach dash panel, open cover, then remove 5-ampere ignition fuse (center fuse in center fuse group).

(2) Disconnect fuel tube at fuel pump inlet and drain gasoline into a suitable container.

(3) Disconnect hose from fuel filter outlet; drain gasoline into container.

(4) Connect manometer to fuel pump inlet.

(5) Use starter to turn engine while observing stop watch and reading on manometer. Within three seconds, manometer should indicate a vacuum of at least 14 Hg (inches-of-mercury).

(6) If correct reading was not reached, check fuel filter for clogging. If filter is replaced, repeat step (4) above. If requirement is still not met, pump is defective.

(7) If fuel pump is replaced, or reworked, repeat procedure beginning at step (4) above.

(8) Reconnect fuel tube to pump inlet and hose to filter outlet.

(9) Reinstall ignition fuse on fuse panel under coach dash panel.

(10) Operate engine until fuel line is bled of air (engine runs steadily).

(11) Set throttle so engine runs at about 1500 rpm (check tachometer on coach dash panel). If tachometer indication does not remain steady, the fuel pump bypass valve is defective and the pump must be replaced.

(12) If pump is replaced, repeat procedures beginning at step (1) above.

(13) After satisfactory pump checkout, reactivate appliances and LPG system; refer to Group 34 for water heater, Group 36 for range and furnace, and Group 38 for LPG system.

j. V-8 Engine Carburetor Vacuum Diaphragm Check.

(1) Remove vacuum hose from diaphragm fitting.

(2) Press down on diaphragm stem then place finger over outlet fitting to seal opening.

(3) Release stem. If stem moves more than 1/16 inch in ten seconds, leakage is excessive and diaphragm assembly must be replaced.

(4) Reconnect vacuum hose to diaphragm assembly.

k. Transmission-to-Carburetor Linkage Adjustment (fig. 11-4).

(1) Loosen bolt at top of control rod.

(2) Pull carburetor throttle attachment stud fully forward transmission, then tighten bolt at top of control rod (to provide 1/4-inch play to end of transmission lever motion).

(3) Pull control rod forward to end of travel, then move back (aft) about 1/4 inch.

TECHNICAL SERVICE BULLETIN

U.S. Automotive
Service & Parts Sales
Division

Recreational Vehicle Services Inc.
RR2 Box M140 Monterey Highway
Morgan Hill, CA 95037



Of Interest General Manager Sales Manager Service Manager Parts Manager Service Technicians

400 and 440 engines equipped with electronic lean burn for 1977 make use of electronic rather than centrifugal governor advance.

An infrequent cross fire condition may be observed with this new system that results in misfire, backfire, and/or bucking of the engine.

If you encounter complaints of this nature, install a new type reluctor, P/N 4091277 available through your local parts depot. This new reluctor changes the rotor insert alignment 5° to minimize cross firing. The reluctor can be identified by having only one shaft indexing slot. Further identification can be seen by the absence of the arrow on the top of the reluctor.

After the reluctor has been changed, it is very important that the engine be retimed to the specification as called for on the Vehicle Emission Control Information Label.

POLICY: Reimbursable within the provisions of the warranty.

TIME ALLOWANCE: (C)
Operation No. 08-15-65-01 0.3 Hr.

FAILURE CODE: Improperly Installed 51

J. W. Farley
Manager - Technical Service
U.S. Automotive Service & Parts Sales

Models

All 1977 400 and 440 CID Engines Equipped With Electronic Lean Burn Built Through September, 1976

Subject

Engine Misfire and/or Backfire

Index

ELECTRICAL

Date:

October 4, 1976

No. 08-01-77

P-4751-C



THIS BULLETIN IS SUPPLIED AS TECHNICAL INFORMATION ONLY AND IS NOT AN AUTHORIZATION FOR REPAIRS. REPRINT OF THIS MATERIAL NOT AUTHORIZED UNLESS APPROVED



CHRYSLER

Plymouth



Dodge

Dodge Trucks



INSTALLATION INSTRUCTIONS

FOR 9000 SERIES THERMO-QUAD CARBURETORS-9801 MODEL

READ ALL INSTRUCTIONS BEFORE STARTING WORK

You have just purchased one of the finest street performance carburetors available.

Your new Thermo-Quad carburetor is one of a new generation of performance carburetors, the "9000 Series", which are designed to bolt on original equipment and popular aftermarket spread-bore manifolds (an adapter plate may be used for square-holed manifolds).

Enclosed with your new carburetor is an installation kit which includes most of the necessary parts for installation.

YOUR INSTALLATION KIT INCLUDES

- 1 - Air Cleaner Stud
- 1 - 3/16" Plastic Tee
- 1 - Flange Gasket
- 2 - Large Rubber Caps
- 3 - Small Rubber Caps
- 1 - 36" Choke Wire (Red)
- 1 - Air Cleaner Gasket

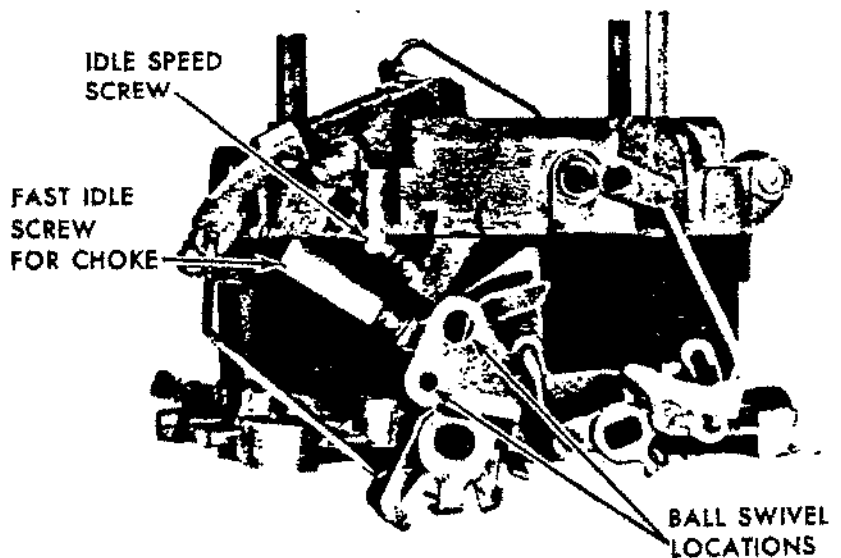
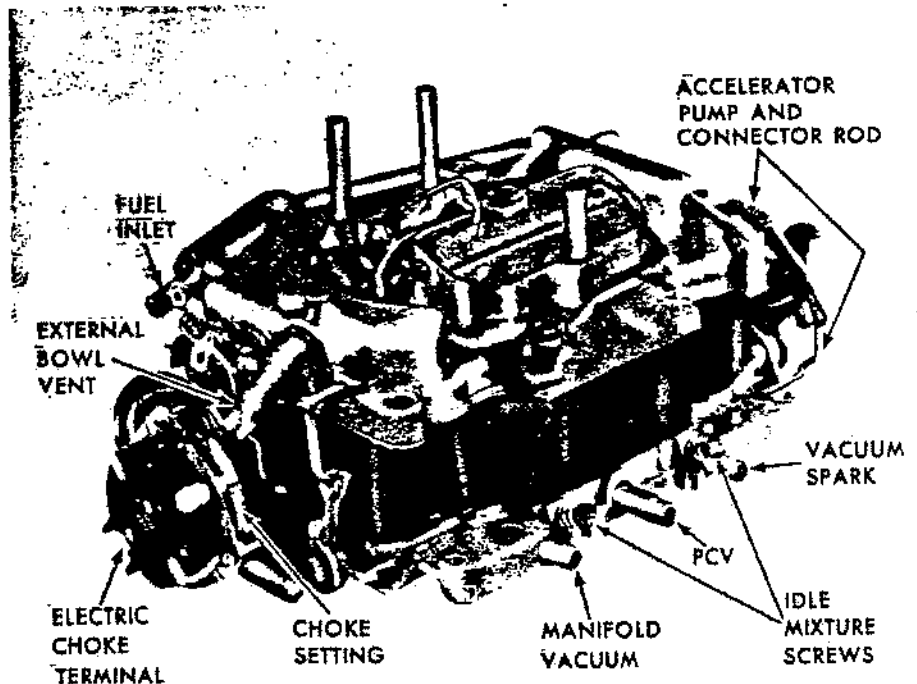
You Will Need:

Carb. to Manifold Adapter with Square-Holed Manifolds

2 BBL TO 4 BBL CONVERSION

When converting from a two barrel to a four barrel application you may find it helpful to purchase some inexpensive parts from your local dealer. Purchasing these parts may help you retain a clean installation and save you some down time.

The 2-bbl throttle bracket and kickdown linkage will not give proper alignment. In some cases the two barrel cable will not extend far enough to provide smooth cable operation. We suggest you check your dealer for your specific application. All of these items are inexpensive and are worth looking into. (2 bbl. to 4 bbl.)



Service Bulletin

DATE MAY 15, 1974

NUMBER 2911-40001

<p>ATTENTION: SERVICE MANAGER</p>	<p>GROUP 11</p>
	<p>SUBJECT HEAVY DUTY AIR CLEANER KIT</p> <p>MODEL (S) AFFECTED 2900R SERIAL 00001 TO 00530</p> <p>(Factory Use Only) Information added to:</p>
	<p>OWNER MANUAL (S)</p> <p>SERVICE MANUAL (S)</p> <p>PARTS MANUAL (S)</p> <p>WARRANTY MANUAL (S)</p> <p>OTHER</p> <p>SD-526</p> <p>H.D. Air Cleaner Service Bulletin 2911-40001</p>

Service Bulletin

DATE May 15, 1974

NUMBER 2911 40001

<p>ATTENTION: SERVICE MANAGERS AND OWNERS</p>	<p>GROUP 11</p>
<p>3. Install bands (5106085) on air cleaner bracket (5106381) with four bolts (M18075), nut (M17010), and washer (M17007).</p> <p>4. Locate bracket (5106381) on vertical fire wall between service door and ignition relay panel. Position bracket so that bottom of bracket is resting on LPG tank crossmember.</p> <p>5. Secure bracket (5106381) to fire wall using one pan head screw (M14038) at top of bracket. At bottom of bracket secure to frame crossmember with one bolt (M18075), nut (M17010), and washer (M17007) at inboard edge; use existing LPG tank bolt to hold outer edge of bracket to frame.</p> <p>6. Position air intake adapter (5106342) on carburetor with air horn toward right side of coach. Install adapter seal (5106411) on bottom of adapter. Secure with new 7" long carburetor stud (5106442) and existing washer and wing nut.</p> <p>CAUTION: Make certain seal between carburetor and adapter is properly seated before tightening wing nut.</p> <p>7. Install air cleaner assembly (5106087) in bands with air inlet facing rear of coach.</p> <p>8. Insert sleeve (M22185) into one end of hose (M20106); slide opposite end of hose over adapter on carburetor.</p> <p>9. Secure hose with clamps (M24490) at carburetor and sleeve.</p> <p>10. Place rubber elbow (5106386) on top of air cleaner and insert sleeve (M22185) into elbow.</p> <p>11. Secure elbow to air cleaner and sleeve with clamps (M24490).</p> <p>12. Relocate rear hydrovac air cleaner on either fire wall or coach frame.</p>	<p>SUBJECT HEAVY DUTY AIR CLEANER KIT 5106380</p> <hr/> <p>MODEL(S) AFFECTED 2900R SERIAL 00001 TO 00530</p>
	<p>(Factory Use Only) Information added to:</p> <hr/> <p>OWNER MANUAL (S)</p> <hr/> <p>SERVICE MANUAL (S)</p> <hr/> <p>PARTS MANUAL (S)</p> <hr/> <p>WARRANTY MANUAL (S)</p>
<p><u>SERVICING</u></p> <p>This air cleaner is equipped with a vacuator valve that ejects dust and water continuously. This eliminates regular cup servicing, and cuts service time to a minimum. Should the air cleaner element need cleaning (annually) it will be necessary to remove unit from coach and drop dust cup. Empty dust cup as required. Dust should not be allowed to build up closer</p>	<p>OTHER</p>



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Service Bulletin

DATE May 15, 1974

NUMBER 2911 40001

ATTENTION: SERVICE MANAGERS AND OWNERS

GROUP

11

SUBJECT

HEAVY DUTY AIR
CLEANER KIT
5106380

than one inch from the baffle. Remove element and wipe inside of cleaner with a clean damp cloth. Replace element with a new or properly cleaned filter element. Replace wing nut and tighten securely. Reinstall the dust cup making sure it seals all around the cleaner body. Check all connections between the air cleaner and the engine to be certain they are tight and leak-free.

John L. Strever

JOHN L. STREVER
Service Manager

MODEL (S)
AFFECTED

2900R
SERIAL 00001
TO 00530

(Factory Use Only)
Information
added to:

OWNER MANUAL(S)

SERVICE MANUAL (S)

PARTS MANUAL (S)

WARRANTY MANUAL (S)

OTHER



URGENT

ROUTINE

MANDATORY

INFORMATIONAL

Service Bulletin

DATE September 30, 1974

NUMBER 2911-40002

ATTENTION: SERVICE MANAGERS AND OWNERS			GROUP 11
INTRODUCTION These instructions apply specifically to installation of a Cruise Control Kit for the 2900R Motor Home. Consult your FMC Motor Coach Division Dealer for availability and cost of installing this kit on your motor home.			SUBJECT CRUISE CONTROL KIT #5101979-R020
KIT CONTENTS			MODEL (S) AFFECTED
<u>MCD NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>	2900R MOTOR HOMES SERIAL 00001 TO 00531
5101979-01	Regulator Assembly	1	<i>(Factory Use Only)</i> Information added to: OWNER MANUAL (S) SERVICE MANUAL (S) PARTS MANUAL (S) WARRANTY MANUAL (S) OTHER
5101979-02	Screw and Washer (1/4-20 x 1/2)	2	
5101979-03	Servo-Vacuum	1	
5101979-04	Bracket-Servo Mounting	1	
5101979-05	Nut and Washer (1/4-20)	1	
5101979-06	Screw (3/8-16 x 1)	2	
5101979-07	Washer, lock (3/8)	2	
5101979-08	Rod, Servo	1	
5101979-09	Retainer, Servo Rod	1	
5106949	Lever Assembly-Cruise Control/ Turn Signal	1	
5101138	Connector, Lever Wires	1	
5101979-R021	Harness, Regulator to Coach Wiring	1	
5101979-12	Cable, Regulator to Transmission	1	
5101979-13	Hose, Servo Vacuum (7/32 x 60")	1	
5101979-14	Tee, Servo Vacuum Hose	1	
5101979-15	Strap, Drive Cable	3	
5100311-01	Eye, Throttle Cable Terminal	1	
5100861	Bushing, Throttle Cable	1	
M16010	Wire, Stop Light Switch Ground (18 gauge, white)	20"	
M15031	Terminal, Ground Wire Slip On	1	
M15019	Terminal, Ground Wire Ring	1	
INSTALLATION STEPS			
<p>1. Disconnect negative battery cable from automotive battery at right rear of coach.</p> <p>2. Remove steering wheel from column (See Service Manual, Group 7).</p> <p>3. Install the Cruise Control-Turn Signal lever (5106949) in steering column.</p>			



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<p>ATTENTION: SERVICE MANAGERS AND OWNERS</p>	<p>GROUP 11</p>
<p>4. Route lever wires inside black tubing on steering column.</p> <p>5. Install connector (5101138) to lever wires (yellow, brown, red, green) to connect to existing connector under dash panel.</p> <p style="text-align: center;">NOTE</p> <p style="text-align: center;">Existing connector has four wires (white, white/black, black, and white/blue).</p> <p style="text-align: center;">See Figure 1 for connections.</p>	<p>SUBJECT CRUISE CONTROL KIT #5101979-R020</p>
<p>6. Install steering wheel (See Service Manual, Group 7).</p> <p>7. At 15 pin connector under instrument panel, insert the existing white/blue wire to connect to the existing white/green wire in the connector. (See Figure 1.)</p>	<p>MODEL (S) AFFECTED 2900R MOTOR HOMES SERIAL 00001 TO 00531</p>
<p>8. Connect existing blue wire (taped in harness under dash) to one of two open terminals on the stop light switch.</p> <p>9. Add white ground wire (M16010), with terminal (M15031), and terminal (M15019) to make a ground from stop light switch to any convenient grounding point on coach frame.</p>	<p>(Factory Use Only) Information added to: OWNER MANUAL (S)</p>
<p>10. Disconnect existing speedometer cable and sending units from transmission and at coach frame.</p>	<p>SERVICE MANUAL (S)</p>
<p>11. Install drive cable (5101979-12) to transmission and to regulator. (See Figure 2).</p>	<p>PARTS MANUAL (S)</p>
<p>12. Install existing speedometer sending unit and Thermasan speed sensing switch on regulator. Discard existing cable used to drive speed sensing switch. (See Figure 2).</p>	<p>WARRANTY MANUAL (S)</p>
<p>13. Locate regulator (5101979-01) with speedometer sending unit and Thermasan speed sensing switch attached, on frame. (See Figure 2).</p>	<p>OTHER</p>
<p>14. Locate, mark, and drill two 9/32" diameter mounting holes to hold regulator to frame.</p>	

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DATE September 30, 1974

NUMBER 2911-40002

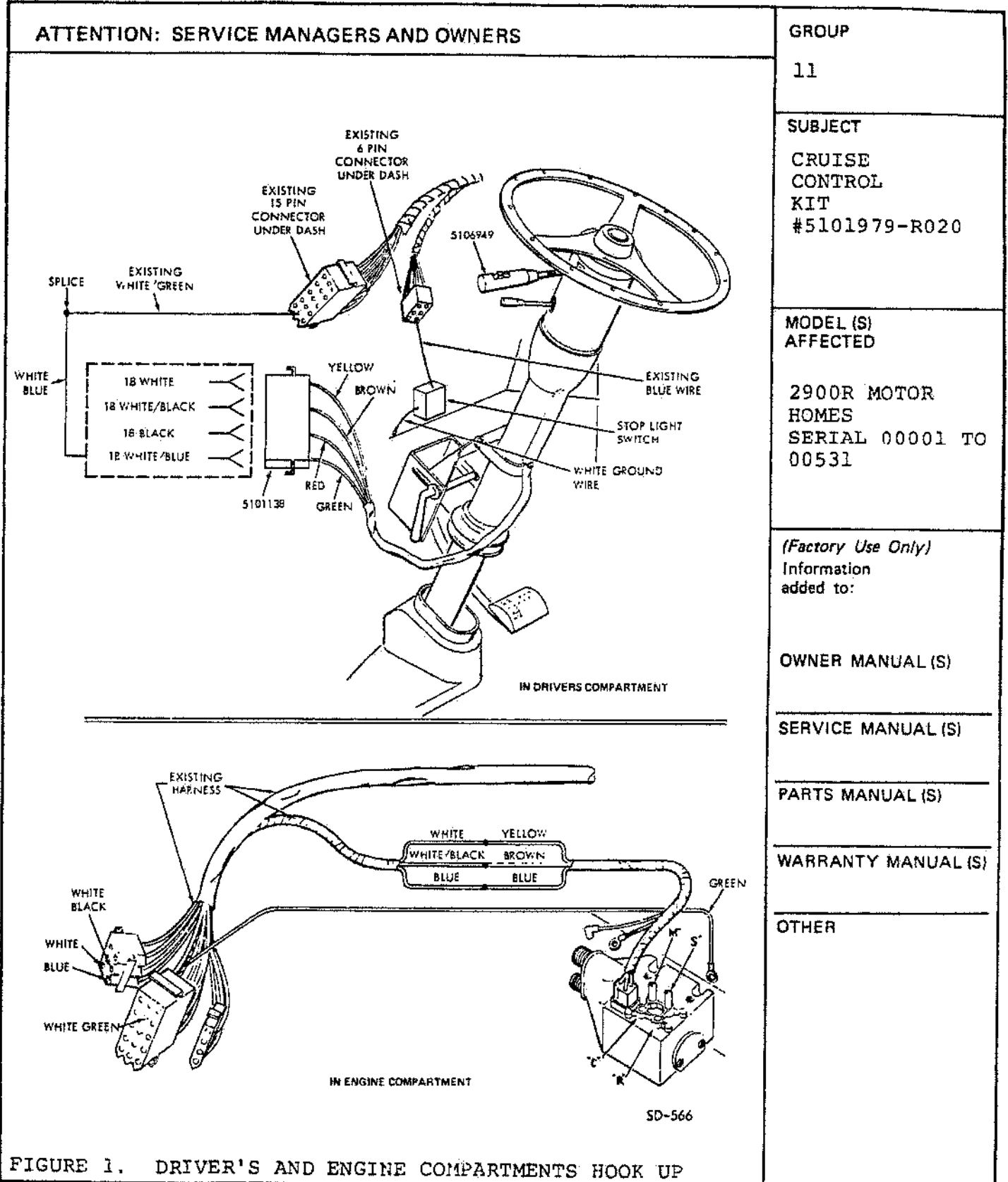


FIGURE 1. DRIVER'S AND ENGINE COMPARTMENTS HOOK UP



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ATTENTION: SERVICE MANAGERS AND OWNERS	GROUP
CAUTION	11
<p>Make certain you locate regulator so drive cable between transmission and regulator is not bent or kinked.</p>	SUBJECT
<p>15. Secure regulator to coach frame with two screws and washers (5101979-02). (See Figure 2).</p>	<p>CRUISE CONTROL KIT #5101979-R020</p>
<p>16. Remove air cleaner from carburetor. If coach is equipped with heavy duty air cleaner, remove air cleaner adapter from carburetor.</p>	MODEL (S) AFFECTED
<p>17. Attach servo bracket (5101979-04) to the forward right head of the engine. Use existing holes in engine. Attach bracket with two screws (5101979-06) and washers (5101979-07).</p>	<p>2900R MOTOR HOMES SERIAL 00001 TO 00531</p>
NOTE	
<p>Do not use existing engine screws to secure bracket to engine.</p>	(Factory Use Only) Information added to:
<p>18. Attach servo (5101979-03) to mounting bracket with nut and washer (5101979-05).</p>	OWNER MANUAL (S)
<p>19. Attach servo rod (5101979-08) to throttle with retainer (5101979-09) and use existing throttle rod clip. Insert the straight end of servo rod through nylon bushing on servo.</p>	SERVICE MANUAL (S)
<p>20. Remove existing eye fitting from end of throttle rod and replace with new ground parts 5100311-01, and bushing 5100861.</p>	PARTS MANUAL (S)
<p>21. With carburetor set on hot idle, install and adjust rod and retainer so that there is 1/16" clearance between retainer and face of nylon bushing on servo.</p>	WARRANTY MANUAL (S)
NOTE	OTHER
<p>Carburetor must be in hot idle position and off the fast idle cam.</p>	
<p>22. Attach vacuum hose (5101979-13) to servo hose connector, route to regulator unit, cut to length, and attach to "S" connector on regulator (Figure 1).</p>	

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<p>ATTENTION: SERVICE MANAGERS AND OWNERS</p>	<p>GROUP 11</p>
	<p>SUBJECT CRUISE CONTROL KIT #5101979-R020</p>
	<p>MODEL (S) AFFECTED 2900R MOTOR HOMES SERIAL 00001 TO 00531</p>
	<p><i>(Factory Use Only)</i> Information added to:</p>
	<p>OWNER MANUAL (S)</p>
	<p>SERVICE MANUAL (S)</p>
<p>PARTS MANUAL (S)</p>	
<p>WARRANTY MANUAL (S)</p>	
<p>OTHER</p>	

FIGURE 2. ENGINE COMPARTMENT

SD-567



URGENT

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INFORMATIONAL

Service Bulletin

DATE September 30, 1974

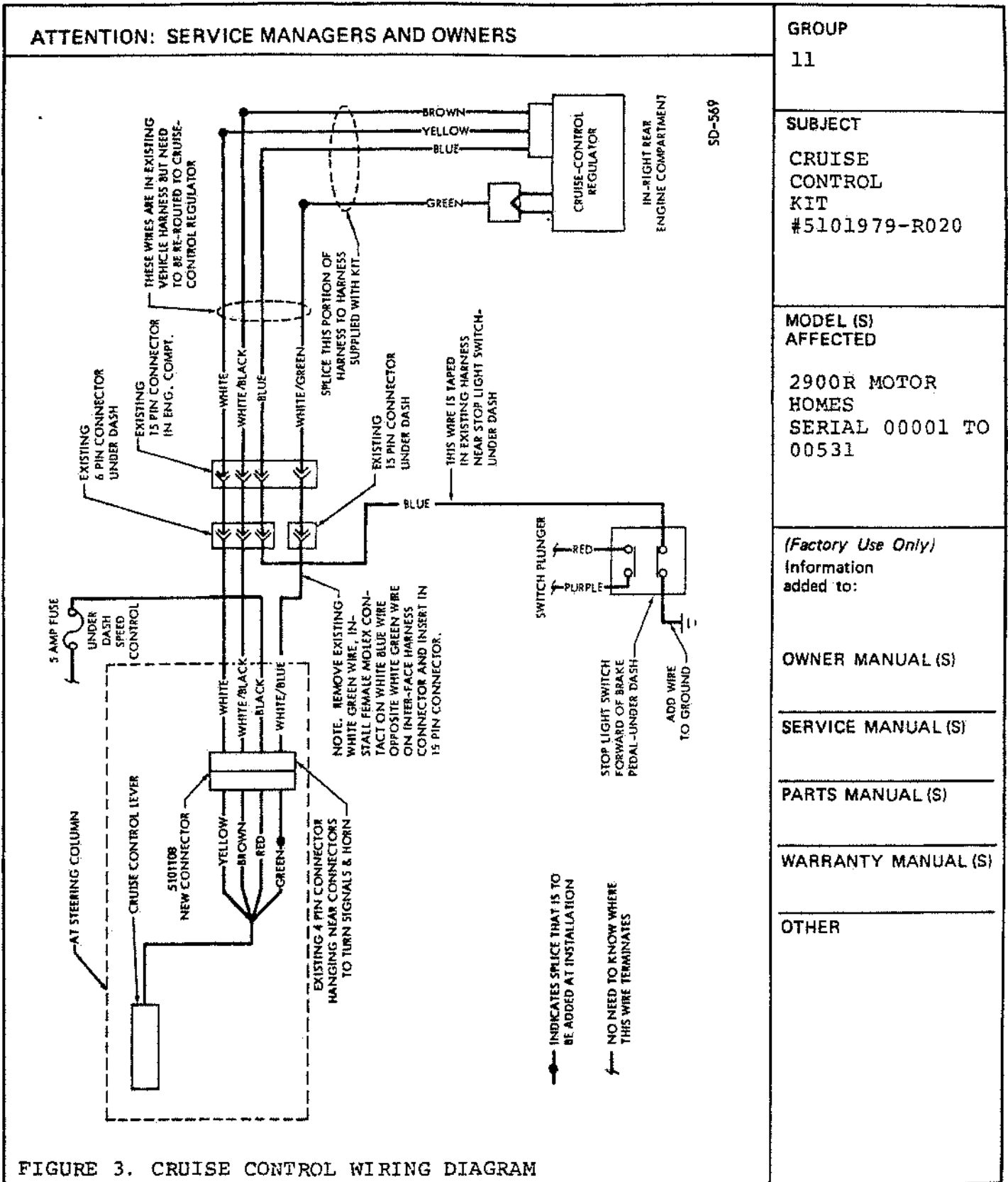
NUMBER 2911-40002

<p>ATTENTION: SERVICE MANAGERS AND OWNERS</p>	<p>GROUP</p>
<p>23. Disconnect power brake line at intake manifold and remove hose adapter.</p> <p>24. Install adapter tee (5101979-14) in intake manifold and reinstall hose adapter.</p> <p>25. Install vacuum hose (5101979-13) on adapter tee and route to regulator. Cut to length and attach to "M" connector on regulator (Figure 1).</p> <p>26. Install air cleaner or air cleaner adapter on carburetor.</p>	<p>11</p> <p>SUBJECT</p> <p>CRUISE CONTROL KIT #5101979-R020</p>
<p style="text-align: center;">CAUTION</p> <p>Make certain air cleaner or adapter clears the servo and servo rod and that there is no possibility of the linkage assembly becoming caught or entangled on any adjacent parts which could hold the throttle open. Work accelerator pedal several times to check.</p>	<p>MODEL (S) AFFECTED</p> <p>2900R MOTOR HOMES SERIAL 00001 TO 00531</p>
<p>27. Install harness 5101979-R021 on regulator. Attach three wire connector (yellow, blue, brown) to the three terminal connections on regulator. Attach connector (with green wire) to the threaded screw on regulator (See Figure 1).</p> <p>28. Strip covering from cut end of regulator harness. Disconnect the interface harness (under coach from front to rear) where it connects to engine harnesses (3 connectors) in rear compartment.</p> <p>29. Wrapped within interface harness and taped together in a set of three (blue, black/white, and white) is a small harness to which the regulator harness is spliced.</p>	<p>(Factory Use Only) Information added to:</p> <p>OWNER MANUAL (S)</p> <p>SERVICE MANUAL (S)</p> <p>PARTS MANUAL (S)</p> <p>WARRANTY MANUAL (S)</p>
<p style="text-align: center;">NOTE</p> <p>It may be necessary to search under the coach to find this small harness. Some have been taped in the channel that carries the interface harness.</p> <p>30. Splice "yellow" wire to existing "white" wire, "brown" wire to existing "white/black" wire, and "blue" wire to existing "blue" wire. Splice the "green" regulator harness wire into the "white/green" wire which is located in the 15 pin connector on the interface harness (See Figure 1.)</p>	<p>OTHER</p>

Service Bulletin

DATE September 30, 1974

NUMBER 2911-40002





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INFORMATIONAL

Service Bulletin

DATE September 30, 1974

NUMBER 2911-40002

ATTENTION: SERVICE MANAGERS AND OWNERS				GROUP 11																													
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5" style="text-align: center;">SWITCH OPERATION DATA</th> </tr> <tr> <th rowspan="2"></th> <th colspan="3" style="text-align: center;">SLIDE SWITCH</th> <th style="text-align: center;">SET SPEED BUTTON DEPRESSED AND SLIDE SWITCH ON</th> </tr> <tr> <th style="text-align: center;">OFF</th> <th style="text-align: center;">ON</th> <th style="text-align: center;">RES.</th> <th></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">RED/BROWN</td> <td style="text-align: center;">OPEN</td> <td style="text-align: center;">CLOSED</td> <td style="text-align: center;">CLOSED</td> <td style="text-align: center;">CLOSED</td> </tr> <tr> <td style="text-align: center;">RED/GREEN</td> <td style="text-align: center;">OPEN</td> <td style="text-align: center;">CLOSED</td> <td style="text-align: center;">CLOSED</td> <td style="text-align: center;">OPEN</td> </tr> <tr> <td style="text-align: center;">RED/YELLOW</td> <td style="text-align: center;">OPEN</td> <td style="text-align: center;">OPEN</td> <td style="text-align: center;">CLOSED</td> <td style="text-align: center;">CLOSED</td> </tr> </tbody> </table>				SWITCH OPERATION DATA						SLIDE SWITCH			SET SPEED BUTTON DEPRESSED AND SLIDE SWITCH ON	OFF	ON	RES.		RED/BROWN	OPEN	CLOSED	CLOSED	CLOSED	RED/GREEN	OPEN	CLOSED	CLOSED	OPEN	RED/YELLOW	OPEN	OPEN	CLOSED	CLOSED	SUBJECT CRUISE CONTROL KIT #5101979-R020
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				MODEL (S) AFFECTED 2900R MOTOR HOMES SERIAL 00001 TO 00531																													
<p>SET SPEED BUTTON</p> <p>—— NORMAL</p> <p>- - - DEPRESSED</p>				<p>SLIDE SWITCH</p> <p>//// OFF</p> <p>—— ON</p> <p>- - - RES.</p>																													
<p>FIGURE 4.. CRUISE CONTROL SWITCH</p>				<p>(Factory Use Only) Information added to:</p> <p>OWNER MANUAL (S)</p> <hr/> <p>SERVICE MANUAL (S)</p> <hr/> <p>PARTS MANUAL (S)</p> <hr/> <p>WARRANTY MANUAL (S)</p> <hr/> <p>OTHER</p>																													

SD-568



FMC Corporation
 Motor Coach Division
 333 Brokaw Road Box 664 Santa Clara California 95052

URGENT

ROUTINE

MANDATORY

INFORMATIONAL

Service Bulletin

DATE September 30, 1974

NUMBER 2911-40002

<p>ATTENTION: SERVICE MANAGERS AND OWNERS</p>	<p>GROUP</p>
<p>31. Check all wiring connections per Figure 3.</p> <p>32. Reconnect automotive battery and check operation of cruise control buttons on lever. See Figure 4 for proper operation and positions.</p> <p>33. Road test system before delivering coach to customer.</p>	<p>11</p>
<p style="text-align: center;"><i>Max Snavely</i> Max Snavely Service Manager</p>	<p>SUBJECT</p> <p>CRUISE CONTROL KIT #5101979-R020</p>
	<p>MODEL (S) AFFECTED</p> <p>2900R MOTOR HOMES SERIAL 00001 TO 00531</p>
	<p>(Factory Use Only) Information added to:</p> <p>OWNER MANUAL (S)</p>
	<p>SERVICE MANUAL (S)</p>
	<p>PARTS MANUAL (S)</p>
	<p>WARRANTY MANUAL (S)</p>
	<p>OTHER</p>



FMC Corporation
 Motor Coach Division
 333 Brokaw Road Box 664 Santa Clara California 95052

URGENT

ROUTINE

MANDATORY

INFORMATIONAL

Service Bulletin

DATE May 20, 1976

NUMBER 2911-40003

ATTENTION: SERVICE MANAGERS AND OWNERS		GROUP 11
<u>DESCRIPTION</u>		Fuel System
<p>An inspection of coaches at the factory service center reveals that some coaches do not have the gasket between the air horn adapter and the carburetor, on others the gasket was "knicked" which may allow dirt to intrude into the engine. This could easily occur during normal servicing of the coach, particularly if the air horn adapter and carburetor were removed.</p>		SUBJECT
<u>MATERIAL</u>		Carburetor Air Horn Adapter Gasket
Carburetor to air horn adapter gasket #5106411.		All coaches with Donaldsen Air Cleaner
<u>ACCOMPLISHMENT INSTRUCTIONS</u>		MODEL (S) AFFECTED
<p>During the next routine service on your coach, inspect the gasket between carburetor air horn adapter and the carburetor to make certain it is properly seated in it's groove. If gasket appears worn, knicked, or damaged in any manner it is recommended that a new gasket be installed. Add a few drops of adhesive (3M yellow weather cement) at approximately 120 degrees around the circumference of gasket to make certain it is bonded to the air horn adapter.</p>		Coach 00548 and up.

**F.M.C., AS OF 12/31/75, NO LONGER
 HONORS PARTS OF EARLY MANUFACTURE
 AS OBTAINED IN THIS BULLETIN**

Service Bulletin

DATE 9 November 1973

NUMBER 2911 20001

<p>ATTENTION: SERVICE MANAGERS AND OWNERS</p>	<p>GROUP</p>
<p>1. DESCRIPTION</p> <p>An inspection of air cleaner gasket, FMC/RVD 5100011-R089 (CCMI 2843071), air filter FMC/RVD 5100011-R019 (Chrysler CCMI 2863349) and wrap P/N 5100011-R091 (CCMI 2863322) is being requested to prevent any possible damage to the engine. We have found that when assembling the air cleaner to the carburetor, it is possible the owner or service personnel could tighten the air cleaner wing nut without achieving a satisfactory seat between the air cleaner and carburetor/gasket. This, in turn, could allow moisture or dirt to enter the carburetor, resulting in possible damage to the engine.</p> <p>If for any reason the air cleaner assembly is to be removed, take all precautions to achieve a complete and satisfactory seat between the air cleaner and carburetor/gasket when reassembling.</p>	<p>11</p> <p>SUBJECT</p> <p>AIR CLEANER GASKET AND FILTER INSPECTION</p> <p>MODEL (S) AFFECTED</p> <p>2900R</p>
<p>Coaches affected:</p> <p>All coaches</p>	<p>(Factory Use Only) Information added to:</p>
<p>2. MATERIAL</p> <p>FMC/RVD 5100011-R089 (Chrysler CCMI 2843071) gasket, FMC/RVD 5100011-R019 (Chrysler CCMI 2863349) element, and wrap-air cleaner RVD 5100011-R091 (CCMI 2863322).</p>	<p>OWNER MANUAL (S)</p> <p>SERVICE MANUAL (S)</p>
<p>3. ACCOMPLISHMENT INSTRUCTIONS</p> <p>The procedure for inspecting the air cleaner gasket is as follows:</p> <p>A. Gain access to air cleaner through engine service door (right side of coach).</p> <p>B. Remove wing nut and washer from top of air cleaner and lift air cleaner assembly clear of carburetor.</p> <p>C. Remove air cleaner gasket from top of carburetor and inspect for any distortion.</p> <p>D. Install new air cleaner gasket if old gasket is damaged. Make sure seating surfaces are clean and dry.</p>	<p>PARTS MANUAL (S)</p> <p>WARRANTY MANUAL (S)</p> <p>OTHER</p>

**F.M.C., AS OF 12/31/73, IS LONGER
TUNERS PARTS OR DEALERS INFORMATION
AS OUTLINED IN THIS BULLETIN**



URGENT

ROUTINE

MANDATORY

INFORMATIONAL

Service Bulletin

DATE January 15, 1976

NUMBER 2911 3001

<p>ATTENTION: SERVICE MANAGERS</p>	<p>GROUP T11</p>
<p><u>DESCRIPTION</u></p> <p>This bulletin is issued to cover instructions for changing the accelerator pedal throttle bellcrank to use a steel bellcrank in place of the existing Zinc die cast bellcrank.</p>	<p>SUBJECT ACCELERATOR PEDAL BELLCRANK</p>
<p><u>COMPLIANCE</u></p> <p>Vehicles affected by this bulletin will be completed by March 1, 1976. The accomplishment of this bulletin prior to the above mentioned date will not jeopardize your existing warranty. You are urged to comply by the above date to avoid possible adverse consequences.</p>	<p>MODEL (S) AFFECTED</p> <p>ALL TRANSIT COACHES 00530 AND UP</p>
<p><u>MANPOWER</u></p> <p>Estimated accomplishment time for one mechanic is 1 hour.</p>	
<p><u>WARRANTY REIMBURSEMENT</u></p> <p>FMC Motor Coach Division will allow labor reimbursement as outlined above upon receipt of a properly filled out Warranty Claim (RVD 69) for this bellcrank change.</p>	
<p><u>PARTS FURNISHED</u></p> <p>New bellcranks #5109005 ⁵¹⁰⁹⁰⁰⁵ <u>Steel</u> have been furnished on a no charge basis to all transit operators for replacement purposes.</p> <p><u>ACCOMPLISHMENT INSTRUCTIONS</u></p> <ol style="list-style-type: none"> 1. Before attempting to change bellcrank, turn the door air tank shut-off valve to the OFF position. This valve is located either adjacent to air tank (underneath coach) or just below drivers seat on mounting pedestal. Open door emergency valve (near door) to exhaust all air from the system and move door master switch (on panel) to the OFF position. 2. Remove cotter pin, washer, adjustment bracket, clevis bushing, and pin from lower arm of bellcrank; remove clevis and jam nut from cable end. 	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"> F.M.C., AS OF 12/27/75, NO LONGER HONORS PARTS OR LABOR REIMBURSEMENT AS OUTLINED IN THIS BULLETIN </p>

Service Bulletin

DATE January 15, 1976

NUMBER 2911 30001

<p>ATTENTION: SERVICE MANAGERS</p>	<p>GROUP</p>
	<p>T11</p>
	<p>SUBJECT</p>
	<p>ACCELERATOR PEDAL BELLCRANK</p>
	<p>MODEL (S) AFFECTED</p> <p>ALL TRANSIT COACHES 00530 AND UP</p>

Accelerator Pedal and Linkage

SD-887



URGENT

ROUTINE


MANDATORY

INFORMATIONAL

Service Bulletin

DATE January 15, 1976

NUMBER 2911 30001

<p>ATTENTION: SERVICE MANAGER S</p>	<p>GROUP T11</p>
<p><u>ACCOMPLISHMENT INSTRUCTIONS (CONT)</u></p> <ol style="list-style-type: none"> 3. Remove clevis pin, cotter pin and washer holding bellcrank to frame. 4. Tilt bellcrank down to clear heater hoses and remove from coach. <i>5109005</i> 5. Position new 2911-0020 <u>Steel</u> bellcrank in place and connect to frame with clevis pin and cotter pin. 6. Connect cable to bellcrank with clevis pin, cotter pin, washer, and adjustment bracket. 7. Depress accelerator pedal a few times to make certain bellcrank rotates freely and moves cable fore and aft with no binding. 8. Set accelerator pedal adjust stop high enough so that pedal does not travel too far for the full throttle position. Excessive pedal travel could damage carburetor throttle valve (gasoline engine) or cause governor malfunction (diesel engine). 	<p>SUBJECT ACCELERATOR PEDAL BELLCRANK</p>
<p style="text-align: center;">NOTE See Groups T3 and T11 of Transit Series Service Manual for details pertaining to door air system and accelerator cable.</p> <div style="text-align: center; margin-top: 20px;">  W. BIONDI SERVICE MANAGER </div>	<p>MODEL (S) AFFECTED ALL TRANSIT COACHES 00530 AND UP</p>



URGENT

ROUTINE

MANDATORY

INFORMATIONAL

Service Bulletin

DATE 9 November 1973

NUMBER 2911 20001

ATTENTION: SERVICE MANAGERS AND OWNERS	GROUP
1. <u>DESCRIPTION</u>	11
<p>An inspection of air cleaner gasket, FMC/RVD 5100011-R089 (CCMI 2843071), air filter FMC/RVD 5100011-R019 (Chrysler CCMI 2863349) and wrap P/N 5100011-R091 (CCMI 2863322) is being requested to prevent any possible damage to the engine. We have found that when assembling the air cleaner to the carburetor, it is possible the owner or service personnel could tighten the air cleaner wing nut without achieving a satisfactory seat between the air cleaner and carburetor/gasket. This, in turn, could allow moisture or dirt to enter the carburetor, resulting in possible damage to the engine.</p> <p>If for any reason the air cleaner assembly is to be removed, take all precautions to achieve a complete and satisfactory seat between the air cleaner and carburetor/gasket when reassembling.</p> <p>Coaches affected:</p> <p>All coaches</p>	SUBJECT
<p>2. <u>MATERIAL</u></p> <p>FMC/RVD 5100011-R089 (Chrysler CCMI 2843071) gasket, FMC/RVD 5100011-R019 (Chrysler CCMI 2863349) element, and wrap-air cleaner RVD 5100011-R091 (CCMI 2863322).</p>	MODEL (S) AFFECTED
<p>3. <u>ACCOMPLISHMENT INSTRUCTIONS</u></p> <p>The procedure for inspecting the air cleaner gasket is as follows:</p> <p>A. Gain access to air cleaner through engine service door (right side of coach).</p> <p>B. Remove wing nut and washer from top of air cleaner and lift air cleaner assembly clear of carburetor.</p> <p>C. Remove air cleaner gasket from top of carburetor and inspect for any distortion.</p> <p>D. Install new air cleaner gasket if old gasket is damaged. Make sure seating surfaces are clean and dry.</p>	2900R
	<p>(Factory Use Only) Information added to:</p> <p>OWNER MANUAL (S)</p> <p>SERVICE MANUAL (S)</p> <p>PARTS MANUAL (S)</p> <p>WARRANTY MANUAL (S)</p> <p>OTHER</p>

F.M.C., AS OF 12/8/75, NO LONGER HONORS PARTS OR LABOR REIMBURSEMENT AS OUTLINED IN THIS BULLETIN



URGENT

ROUTINE

MANDATORY

INFORMATIONAL

Service Bulletin

DATE 9 November 1973

NUMBER 2911 20001

<p>ATTENTION: SERVICE MANAGERS AND OWNERS</p>	<p>GROUP</p>
	<p>11</p>
<p>E. Before reassembling air cleaner to carburetor, remove and inspect air filter element FMC/RVD 5100011-R019 (Chrysler CCM1 2863349) and wrap 5100011-R091 (CCMI 2863322) from air cleaner body assembly. Clean (refer to Group 11 of Service Manual) or replace as necessary.</p>	<p>SUBJECT</p> <p>AIR CLEANER GASKET AND FILTER INSPECTION</p>
<p>F. Replace air filter element and wrap in air cleaner body and reassemble air cleaner to top of carburetor. Be sure satisfactory seat is achieved between the air cleaner and carburetor/gasket when securing with wing nut and washer.</p>	<p>MODEL (S) AFFECTED</p>
<p>G. Secure air cleaner by hand-tightening wing nut.</p>	<p>2900R</p>
<p>4. <u>SERVICE MANAGERS</u></p>	
<p>Make certain the air cleaner gasket and filter are serviceable per this bulletin on all coaches now in your possession before they are delivered.</p>	<p>(Factory Use Only) Information added to:</p>
<p>5. <u>OWNERS</u></p>	
<p>Inspect air cleaner gasket and filter per above instructions or make an appointment with your dealer to have this work done.</p>	<p>OWNER MANUAL (S)</p>
<p style="text-align: center;">NOTE</p>	<p>SERVICE MANUAL (S)</p>
<p>It is very important that the engine air cleaner be checked regularly as stated in your 2900R Owner's Manual. Make certain that these checks are made with increased frequency when operating under unusual (dusty) conditions.</p>	<p>PARTS MANUAL (S)</p> <p>WARRANTY MANUAL (S)</p>
<p style="text-align: center;"><i>John L. Strever</i> John L. Strever Service Manager</p>	<p>OTHER</p>



URGENT

ROUTINE

MANDATORY

INFORMATIONAL

Service Bulletin

DATE May 15, 1974

NUMBER 2911 40001

ATTENTION: SERVICE MANAGERS AND OWNERS

GROUP

11

DESCRIPTION

Now available for your 2900R Motor Coach is a Donaldson heavy duty air cleaner kit that can be installed on your coach to replace the existing air cleaner. This heavy duty air cleaner has been designed to provide a longer operating life for the air cleaner element and improve engine performance.

SUBJECT

HEAVY DUTY AIR
CLEANER KIT
5106380

COMPLIANCE

This kit can be purchased from FMC/RVD for installation on coaches if desired by owners. Owners desiring this kit should order through their dealer and make arrangements to have it installed at their expense.

MODEL(S)
AFFECTED

2900R
SERIAL 00001
TO 00530

KIT COMPONENTS

ITEM	PART DESCRIPTION	PART NO.	QUANTITY
1	Air Cleaner 10" Dry	5106087	1
2	Band, Air Cleaner 10"	5106088	2
3	Bracket, Mounting	5106381	1
4	Adapter, Carburetor	5106342	1
5	Seal, Carburetor Adapter	5105411	1
6	Hose, Adapter to Cleaner	M20106	1 (4" x 18")
7	Elbow, Air Cleaner (rubber)	5106386	1
8	Sleeve, Elbow to Hose	M22185	1
9	Stud, Air Intake Adapter	5106442	1 (1/4-20 x 7" LG)
10	Clamp, Hose	M24490	2 (4-1/16" to 5")
11	Bolt, Bracket to Band	M18075	5 (3/8-16 x 1-7/8)
12	Washer, Bracket to Band Bolt	M17007	5 (3/8 lock)
13	Nut, Bracket to Band Bolt	M17010	5 (3/8-16)
14	Screw, Bracket Pen Head	M14038	1 (#10 x 1)

(Factory Use Only, Information added to)

OWNER MANUAL(S)

SERVICE MANUAL(S)

PARTS MANUAL(S)

WARRANTY MANUAL(S)

OTHER

INSTRUCTIONS

1. Remove existing air cleaner and mounting stud from carburetor.
2. Remove old hydrovac air cleaner from fire wall.

F.M.C., AS OF 12/31/75, IS PROVIDING HONORS PARTS ON ITEMS IN THIS BULLETIN AS OUTLINED IN THIS BULLETIN