

VACU-JET CARBURETORS

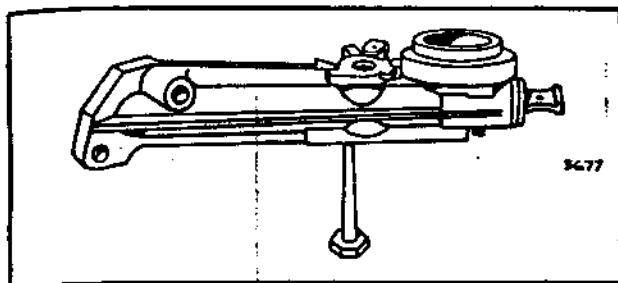


Fig. 45 - Vacu-Jet Carburetor

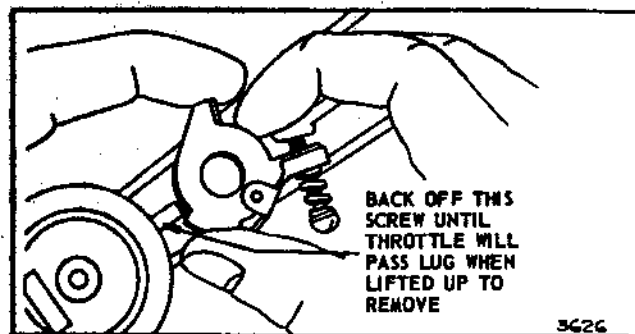


Fig. 47 - Removing Old Style Throttles

Carburetor and Tank Assembly

Remove the carburetor and fuel tank as one unit, being careful not to bend the governor linkage. On models equipped with a stop switch, remove the ground wire. After removal of the carburetor from the fuel tank, inspect the tank for deposits of dirt and/or varnish. Tank should be cleaned in solvent.

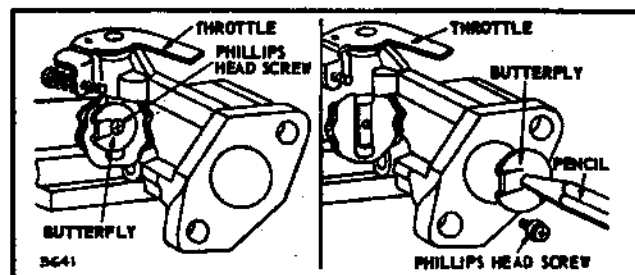
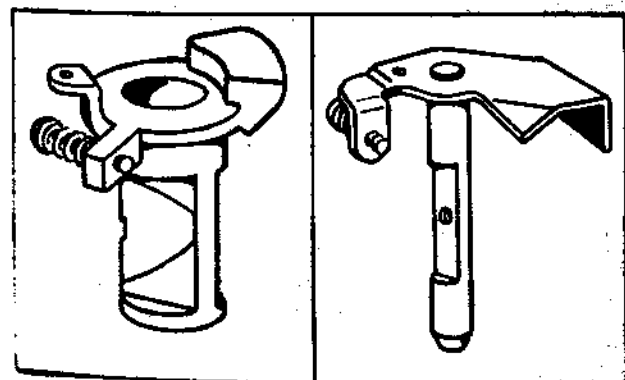


Fig. 48 - Removing New Style Throttles

Throttle

Cast throttles, Fig. 46, Illustration 1, are removed by backing off the idle speed adjusting screw until the throttle clears the retaining lug on the carburetor body. Fig. 47.

Stamped throttles, Fig. 46, Illustration 2, are removed by using a Phillips screw driver to remove the throttle valve screw. After removal of the valve the throttle may be lifted out. Reverse procedure to install. Fig. 48.



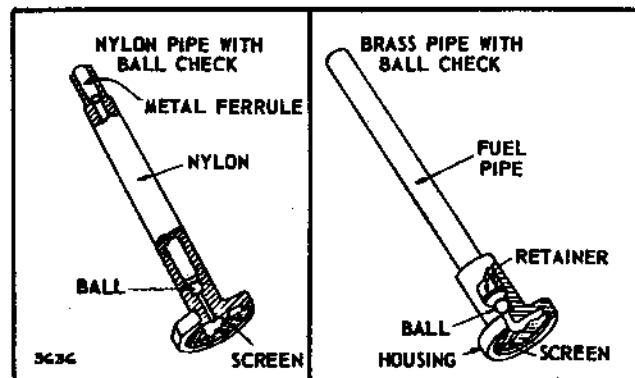
Illus. 1

Illus. 2

Fig. 46 - Throttle Types

Fuel Pipe

The fuel pipe contains a check ball and a fine mesh screen. To function properly, the screen must be clean and the check ball free. Fig. 49. Replace pipe if screen and ball cannot be satisfactorily cleaned in carburetor cleaner. **DO NOT LEAVE CARBURETOR IN CLEANER MORE THAN 1/2 HOUR WITHOUT REMOVING NYLON PARTS.** Nylon fuel pipes, Fig. 49, Illustration 1, are removed and replaced with a 9/16" socket. Fig. 50. Brass fuel pipes are removed by clamping the pipe in a vise and prying out as shown in Fig. 51.



Illus. 1

Illus. 2

Fig. 49 - Fuel Pipes

CARBURETION

Vacu-Jet

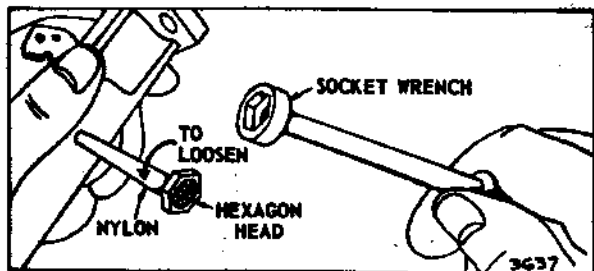


Fig. 50 - Replacing Nylon Fuel Pipe

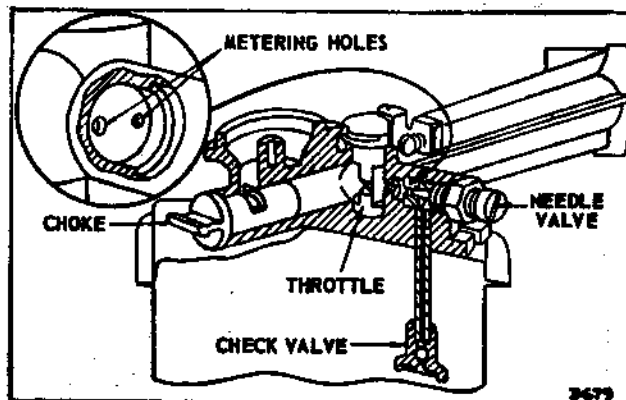


Fig. 53 - Metering Holes

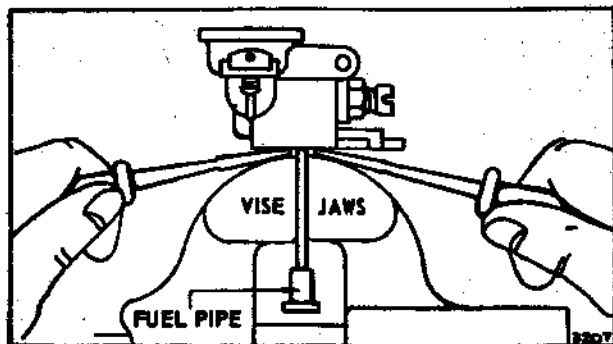


Fig. 51 - Removing Brass Fuel Pipe

To install brass fuel pipes, remove the throttle, if necessary, and place the carburetor and pipe in a vise. Press the pipe into the carburetor until it projects 2-9/32" to 2-5/16" from carburetor face. Fig. 52.

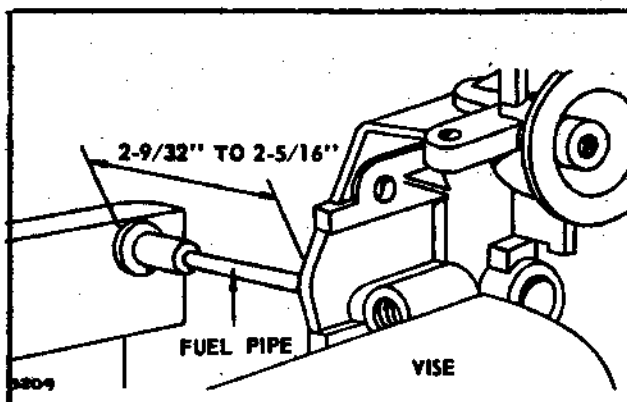


Fig. 52 - Replacing Brass Fuel Pipe

Choke-A-Matic Linkage

Disassemble

To remove choke link, remove speed adjustment lever and stop switch insulator plate. Work link out through hole in choke slide. Fig. 54.

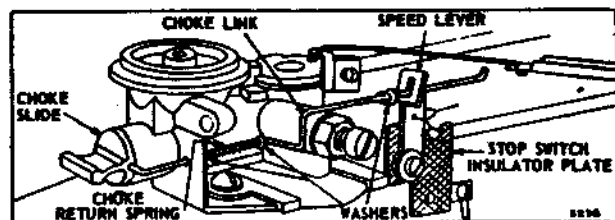


Fig. 54 - Choke-A-Matic Linkage

Repair

Replace worn or damaged parts. To assemble carburetor using choke slide, Fig. 54, place choke return spring and three washers on choke link. Push choke link through hole in carburetor body, turning link to line up with hole in choke slide. Speed adjustment lever screw and stop switch insulator plate should be installed as one assembly after placing choke link through end of speed adjustment lever.

Adjust Choke-A-Matic Linkage

The following covers Choke-A-Matic parts installed on and as a part of the carburetor assembly. See Section 4 for Choke-A-Matic remote controls. To check operation of Choke-A-Matic linkage, move speed adjustment lever to CHOKE position. If choke slide does not FULLY close, bend choke link. Fig. 55. Speed adjustment lever must make good contact against stop switch.

Needle Valve and Seat

Remove needle valve assembly to inspect. If carburetor is gummy or dirty, remove seat to allow better cleaning of metering holes. Fig. 53.

CARBURETION

Vacu-Jet & Two Piece Flo-Jet

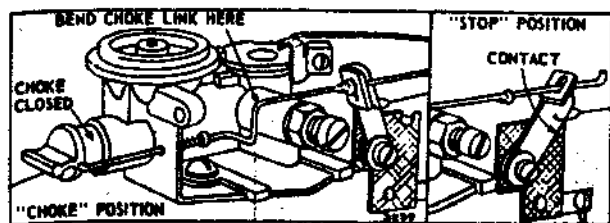


Fig. 55 - Adjust Choke Link

Install Carburetor

Install carburetor and fuel tank as an assembly. Hook throttle link into carburetor throttle and governor lever. (For various hook-ups, see Remote Control, Section 4). Raise carburetor into place, insert a new gasket and fasten with mounting screws.

Install governor spring. Install ground wire and remote control where used. Fig. 56.

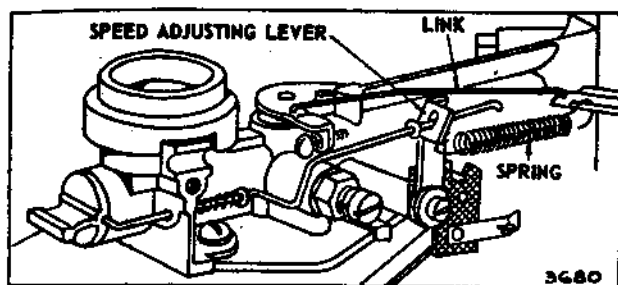


Fig. 56 - Install Carburetor

Choke-A-Matic Remote Controls

See Remote Controls, Section 4, for illustrations by engine model.

Carburetor Adjustment

The initial setting of the needle valve, Fig. 57, is made by turning the needle valve all the way in, then turning out 1½ turns. Final adjustment is made with engine running.

The carburetor should be adjusted with the fuel tank approximately half full, with the engine running at approximately 3000 RPM, turn the needle valve in until the engine starts to lose speed, (lean mixture) then open needle valve very slowly until engine begins to run unevenly. This mixture will seem to be too rich but will be correct for good performance under full load.

Hold throttle in idling position. Engine should idle no slower than 1750 RPM. Turn idle speed adjustment screw until this speed is reached.

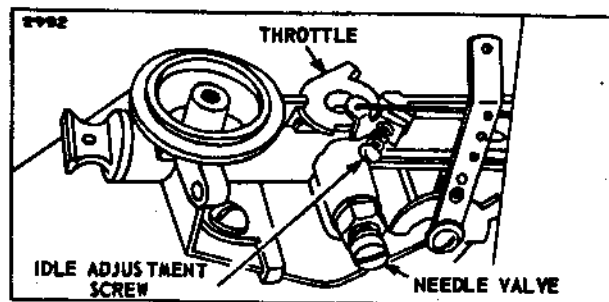


Fig. 57 - Carburetor Adjustment

TWO PIECE FLO-JET CARBURETOR REPAIR

LARGE and SMALL LINE

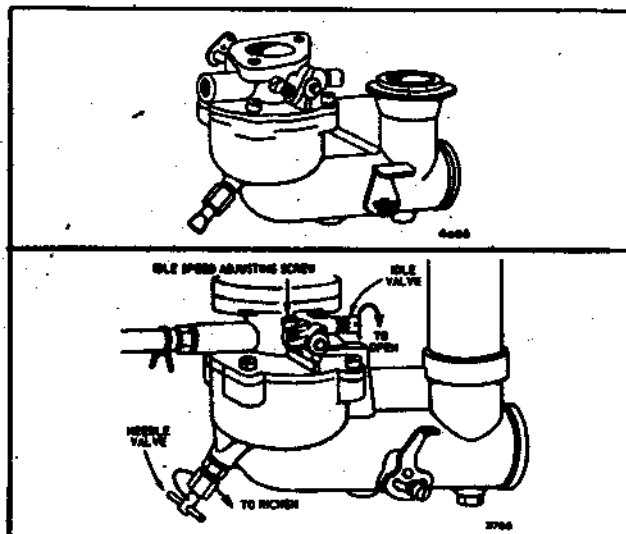


Fig. 58 - Two Piece Flo-Jet Carburetor

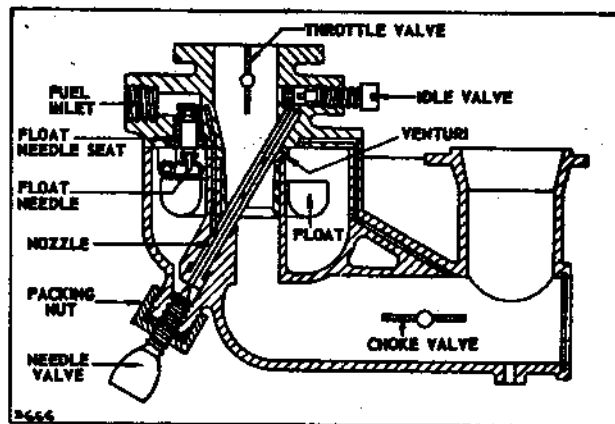


Fig. 59 - Two Piece Carburetor

Check Upper Carburetor Body for Warp

With carburetor assembled and body gasket in place, if a .002" feeler gauge can be inserted between the upper and lower bodies at the air vent boss, just below the idle valve, the upper body is warped and should be replaced. Fig. 59.

CARBURETION

Two Piece Flo-Jet

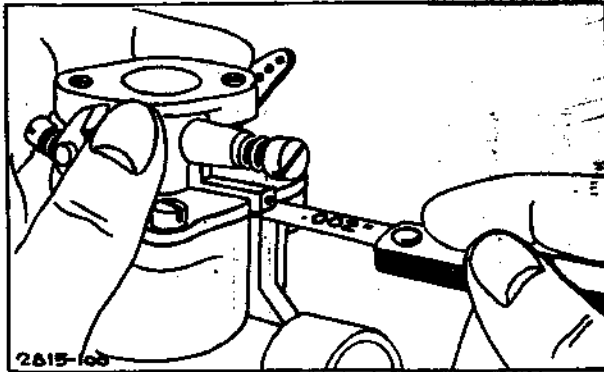


Fig. 60 - Checking Carburetor Body

Check Throttle Shaft and Bushings for Wear

Wear between throttle shaft and bushings should not exceed .010". Check wear by placing a short iron bar on the upper carburetor body as shown in Fig. 61. Measure the distance between the bar and shaft with a feeler gauge while holding the shaft down and then holding shaft up. If the difference is over .010", either the upper body should be rebushed, the throttle shaft be replaced, or both. Wear on the throttle shaft can be checked by comparing the worn and unworn portions of the shaft. To replace bushings, see "Remove Throttle Shaft and Bushings".

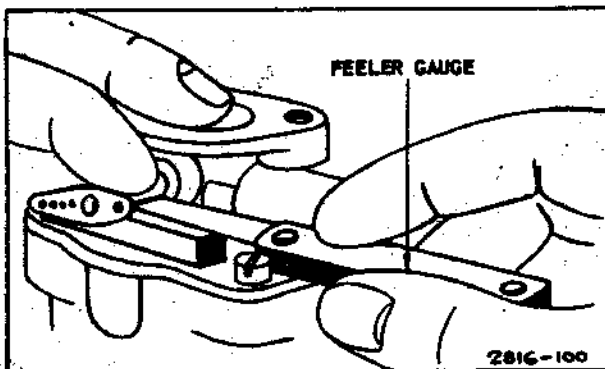


Fig. 61 - Checking Throttle Wear

Disassemble Carburetor

Remove idle valve. Then loosen needle valve packing nut. Remove the packing nut and needle valve together. To remove the nozzle use a narrow blunt screw driver #19061 or #19062, so as not to damage threads in the lower carburetor body. The nozzle projects diagonally into a recess in the upper body and must be removed before the upper body is sep-

arated from the lower body, or it may be damaged. See Fig. 59. Remove the screws holding the upper and lower bodies. A pin holds the float in place. Remove pin to take out the float and float valve needle. Check the float for leakage. If it contains gasoline or is crushed, it must be replaced. Use a wide proper fitting screw driver to remove the float inlet seat, if used. Lift the venturi out of the lower body of small engine carburetors. Some carburetors have a welch plug. This should be removed only if necessary, to remove the choke plate. Some carburetors have a nylon choke shaft. Remove as shown in Fig. 62.

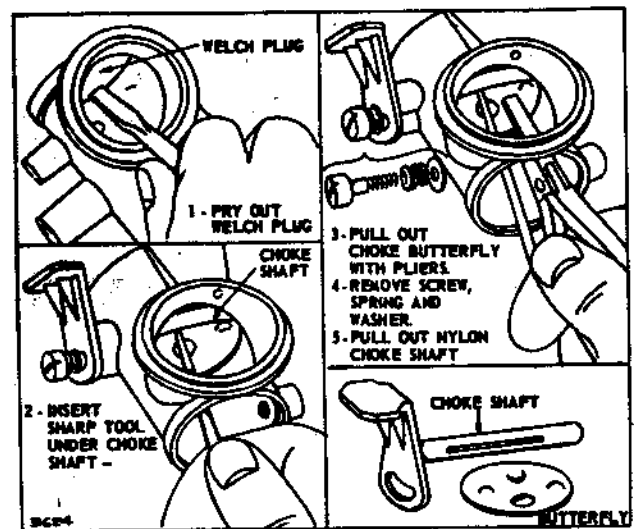


Fig. 62 - Nylon Choke Plate

Remove Throttle Shaft and Bushings

Throttle shaft should be removed only when necessary to replace throttle shaft and/or bushings. To remove throttle shaft, use a thin punch to drive out the pin holding throttle stop to the shaft, remove the throttle valve, then pull out the shaft. Fig. 63.

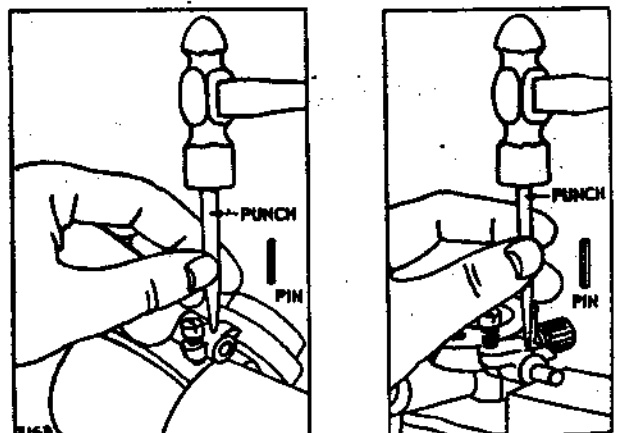


Fig. 63 - Remove Throttle Shaft and Bushings

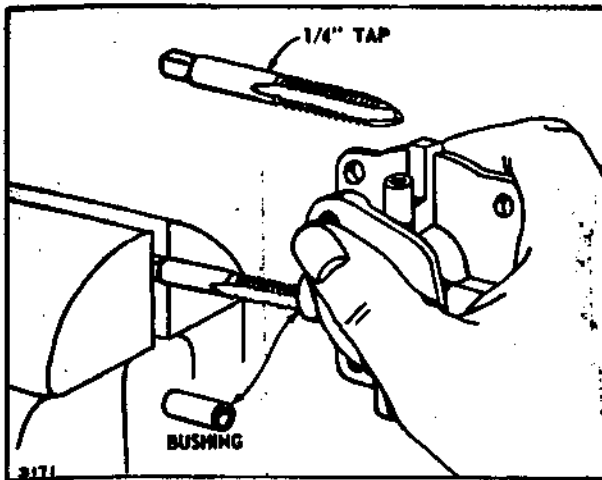


Fig. 64 - Replacing Throttle Shaft Bushings

Replace Throttle Shaft Bushings

Place a 1/4" x 20 tap or an E-Z out in a vise. Turn carburetor body so as to thread tap or E-Z out into bushings enough to pull bushings out of body. Fig. 64. Press new bushings into carburetor body with a vise. Insert throttle shaft to be sure it is free in the bushings. If not, run a size 7/32" drill through both bushings to act as a line reamer. Install throttle shaft, valve and stop.

Repair Carburetor

Use new parts where necessary. Always use new gaskets - old gaskets take a set or harden and may leak. Carburetor repair kits are available. Tighten inlet seat with gasket securely in place, if used. Some float valves have a spring clip to connect the float valve to the float tang. Others are of nylon with a stirrup which fits over the float tang. Older type float valves and engines with fuel pumps have neither spring or stirrup.

A viton tip float valve is used in later models of the large, two piece Flo-Jet carburetor. The seat is pressed in the upper carburetor body and does not need replacement unless damaged.

Replacing Pressed In Float Valve Seat

Use a #93029 self threading screw or remove one self threading screw from a #19069 fly-wheel puller and clamp head of screw in a vise. Turn carburetor body to thread screw into seat. Fig. 65. Continue turning carburetor body drawing seat out. Leave seat fastened to screw. Insert new seat #230996 into carburetor body. (Seat has starting lead).

NOTE: If engine is equipped with a fuel pump, install #231019 seat.

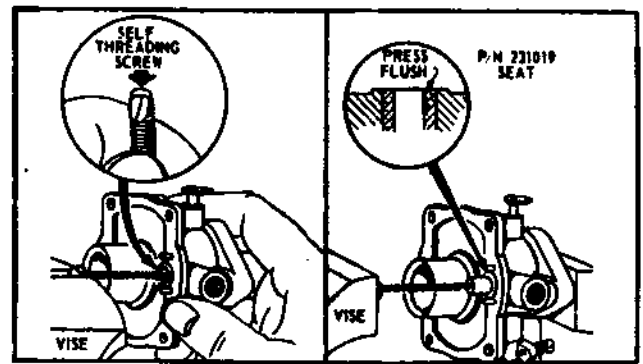


Fig. 65 - Replacing Float Valve Seat

Press new seat flush with body using screw and old seat as a driver. See Fig. 65. Use care to insure seat is not pressed below body surface or improper float to float valve contact will occur. Install float valve as shown in Fig. 66.

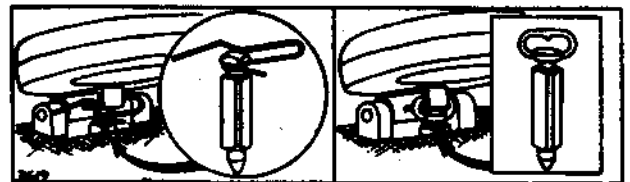


Fig. 66 - Float Valve Variations

Checking Float Level

With body gasket in place on upper body and float valve and float installed, the float should be parallel to the body mounting surface. If not, bend tang on float until they are parallel. DO NOT PRESS ON FLOAT TO ADJUST. Fig. 67.

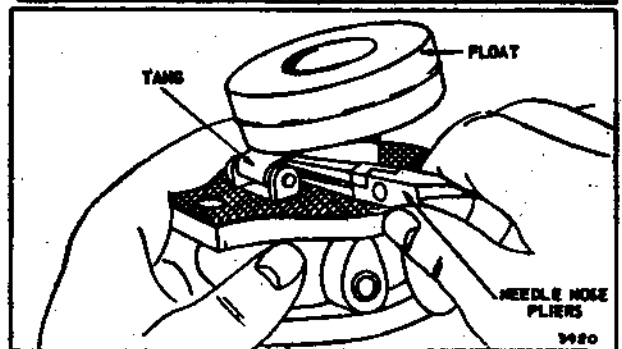
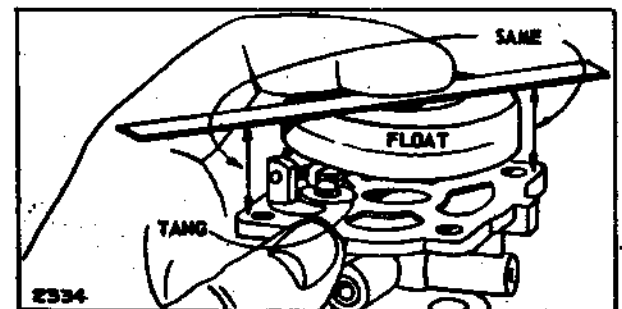


Fig. 67 - Checking Float Level

CARBURETION

Two Piece Flo-Jet

Assemble Carburetor

Assemble venturi and venturi gasket to lower body. Be sure holes in the venturi and venturi gasket are aligned. Some models do not have a removable venturi. Install choke parts and welch plug if previously removed. Use a sealant around the welch plug to prevent entry of dirt.

Fasten upper and lower bodies together with the mounting screws. Screw in nozzle with narrow blunt screw driver #19061 or #19062, being careful that nozzle tip enters the recess in the upper body. Fig. 68. Tighten nozzle securely. Screw in needle valve and idle valve until they just seat. Back off needle valve 1-1/2 turns. Do not tighten packing nut. Back off idle valve 3/4 turn. These settings are approximately correct. Final adjustment will be made when engine is running.

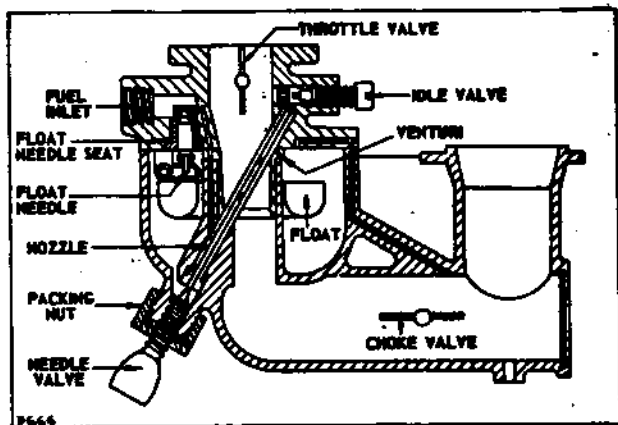


Fig. 68 - Assemble Carburetor

Carburetor Adjustment

Start engine and allow to warm up at 3000 RPM. Turn needle valve in until engine misses (lean mixture) then turn it out past smooth operating point until engine runs unevenly (rich mixture). Turn needle valve to the mid-point between rich and lean so engine runs smoothly. Hold throttle at idle position and set idle speed, adjusting screw until engine idle speed is 1750 RPM - Aluminum Engines. NOTE: 1200 RPM - Cast Iron Engines. Hold throttle at idle position and turn idle valve in (lean) and out (rich) until engine idles smoothly. Fig. 69. If necessary, correct idle speed. Release throttle - engine should accelerate without hesitation or sputtering. If engine does not accelerate properly, the carburetor should be readjusted, usually to a slightly richer mixture of needle valve.

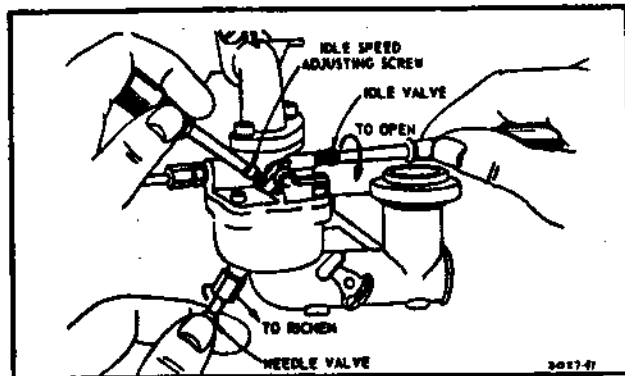


Fig. 69 - Adjust Carburetor

Choke-A-Matic Remote Control

On Choke-A-Matic carburetors, the remote control must be correctly adjusted in order to obtain proper operation of the choke and stop switch.

Choke-A-Matic Adjustment

Typical remote control installations, used with Choke-A-Matic carburetors, are shown in Fig. 70. To adjust, move remote control lever to "Fast" position. Choke actuating lever "A" should just contact choke link, or lever "B", as shown in Fig. 70. If not, loosen screw "C" slightly, and move casing and wire "D" in or out to obtain this condition and re-tighten screw "C".

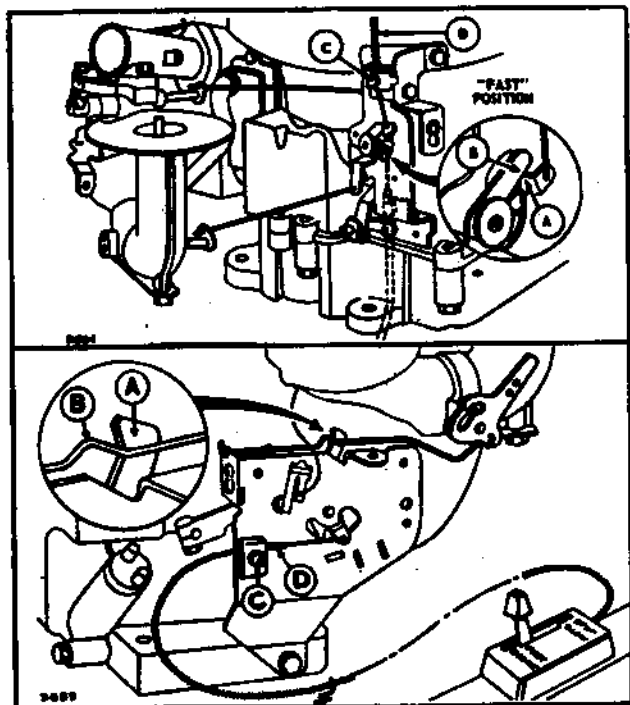


Fig. 70 - Choke-A-Matic Controls (Typical)

Additional control variations are illustrated in Controls. Section 4.

Two Piece Flo-Jet - Automatic Choke

Idling Device and Throttle Control

A manual friction control may be used to limit throttle movement, to any pre-set position. It is commonly used for two purposes. 1. To return the throttle to a "no-load" position on a pump, generator, etc.; 2. For cold weather starting on governed idle engines. The throttle can easily be kept in a "near closed" position, while starting, which is most favorable for cold weather starts. Fig. 71.

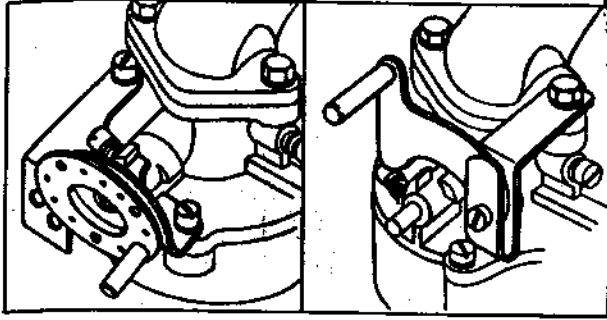


Fig. 71 - Idling Device and Throttle Control

Remote Throttle Control

The remote throttle control opens the carburetor throttle until the full governed speed is obtained, at which point the governor takes over control of the throttle. At any point below the governed speed, the throttle is held in a fixed position and the engine speed will vary with the load. Fig. 72.

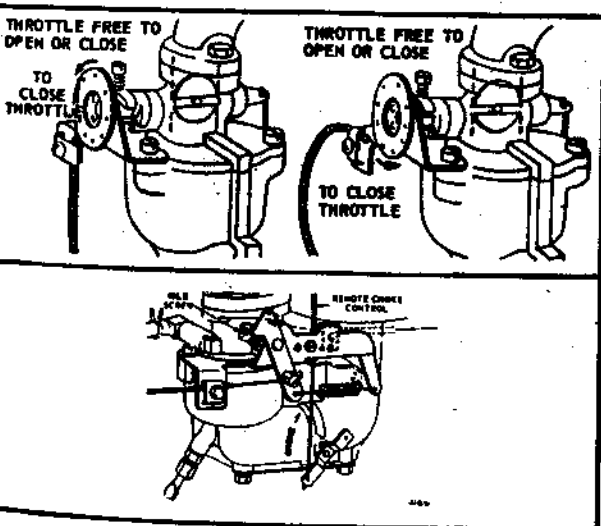


Fig. 72 - Remote Throttle Control

AUTOMATIC CHOKE

Automatic Choke Adjust

Hold choke shaft so thermostat lever is free. At room temperature the screw in the thermostat collar should be in the center of the stops, if not, loosen stop screw and adjust.

Loosen set screw on lever of thermostat assembly. Slide lever to right or left on shaft to insure free movement of choke link in any position. Rotate thermostat shaft clockwise until stop screw strikes tube. Fig. 73. Hold in position and set lever on the thermostat shaft so that choke valve will be held open about 1/8" from closed position. Then tighten set screw in lever.

Rotate thermostat shaft counter-clockwise until stop screw strikes the opposite side of tube. Fig. 73. Then open choke valve manually until it stops against the top of the choke link opening. The choke valve should now be open approximately 1/8" as before.

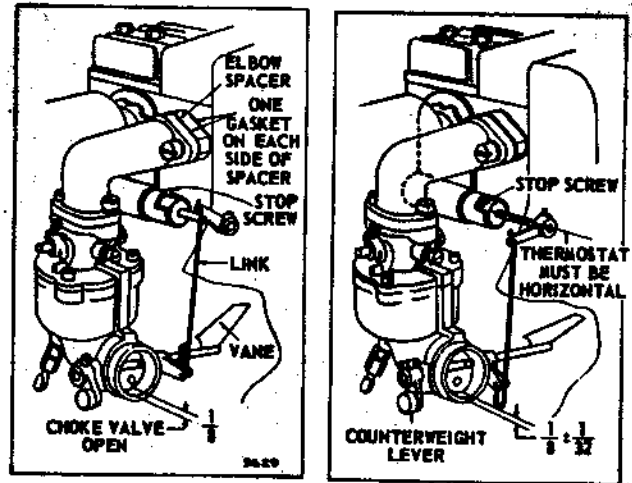


Fig. 73 - Adjust Automatic Choke

Check position of counter-weight lever. With the choke valve in wide open position (horizontal) the counter-weight lever should also be in a horizontal position with free end toward the right.

Operate the choke manually to be sure that all parts are free to move without binding or rubbing in any position.

CARBURETION

Fuel Pump & L.P. Fuel

FUEL PUMPS

To Replace Pump Diaphragm

Remove pump from cylinder and then remove four screws to separate pump head from pump body.

With a narrow punch, drive lever pin out until pump lever is loose. Pin may then be driven in either direction, but need not be removed entirely. Remove old diaphragm, but leave diaphragm spring in pump body.

Place new diaphragm into pump body with the slot in shaft at right angles to the pump lever. Diaphragm spring should fit into the cup under the diaphragm. Without the lever spring, insert the pump lever into body holding the diaphragm down. Fit the hook at the end of lever into the slot in diaphragm shaft. Fig. 74.

Assemble Fuel Pump

Align holes in lever and body, then drive lever pin into place. Place lever spring into body with inner end of spring over the projection in pump body, then use a screw driver to force outer end of spring into body until it slips over the projection on lever. Fig. 74. Illustration 2. Place pump head on body and partially insert the four screws. Press pump lever down as far as possible and then tighten the four screws.

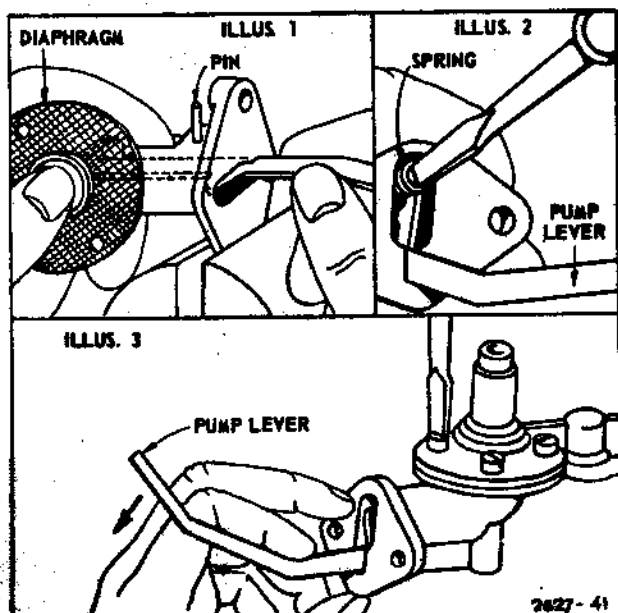


Fig. 74 - Fuel Pump

To Install Fuel Pump

Place a liberal supply of grease or gear lubricant on the portion of fuel pump lever that contacts the crankshaft. Fig. 75. Assemble fuel pump to cylinder using new gasket. Keep mounting face of fuel pump parallel to mounting face of cylinder while inserting lever of fuel pump. The lever must ride in the narrow groove which is located on the crankshaft between the gear and the counter-weight. Revolve crankshaft to be sure that fuel pump is correctly installed. Assemble fuel pipe from outlet of carburetor. Fuel supply pipe should be connected to the inlet of the fuel pump.

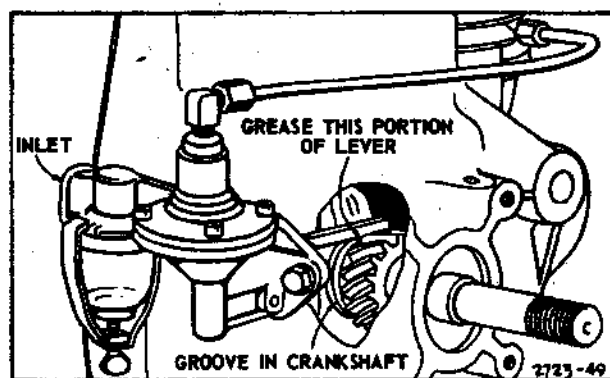


Fig. 75 - Installing Fuel Pump

L.P. GAS FUEL SYSTEM

Refer to MS-3915 for parts list and ordering information. L.P. Conversion Kits may be obtained from Garretson Equipment Co., Mount Pleasant, Iowa.

Checking and Adjusting Fuel System

Loosen fuel line at primary regulator. Open valve on cylinder for an instant, to be sure there is pressure in fuel cylinder. Escaping gas can be heard. Shut off valve at cylinder.

Remove fuel line between primary and secondary regulator (fuel controller). Attach pressure gauge to outlet of primary regulator, leaving gauge connection loose enough to permit a slight leakage of gas. (This will permit adjustment of regulator under conditions of actual gas flow). Remove cap or top of primary regulator.

Open fuel cylinder valve. Turn pressure regulating screw in primary regulator, until a pressure of 1-1/2 pounds is obtained at pressure gauge. Shut off fuel cylinder valve. Reassemble cap. Remove pressure gauge. Loosen secondary regulator bracket from carburetor. Pull secondary regulator away from carburetor so

that short rubber fuel line is disconnected. Assemble fuel line between primary regulator and secondary regulator (fuel controller). Secondary regulator must remain mounted so the diaphragm is in a vertical plane.

Open fuel cylinder valve. Apply soap suds to outlet at the center of secondary regulator to which rubber fuel line has been attached. If a bubble forms, it indicates that the valve is leaking or not locking off. If no bubble appears, press the primer button. A bubble should appear, indicating fuel is flowing into regulator. Put soap suds on the outlet again. Then slowly turn adjusting screw at bottom of secondary regulator counter-clockwise until a bubble forms at the outlet. Then turn adjusting screw in (clockwise) slowly until soap bubbles on outlet no longer form. Hold adjusting screw at this point and tighten locknut. Press primer button to allow fuel to flow. Release and again put soap suds on outlet to make certain the fuel shuts off. Repeat several times. If bubble should form after primer button is released, the adjusting screw should be turned in until flow stops and soap bubble does not break or enlarge. Loosen fuel line between regulators. Reassemble secondary regulator to carburetor with short rubber fuel line in place. Tighten fuel line.

Adjusting Carburetor, L. P. Fuel System

See Fig. 76.

Loosen locknut on load needle screw and turn needle screw in until it seats. Do not force; open 2-1/2 turns. Turn idle needle in until it seats, then open one turn. If engine will not be required to idle, leave idle needle closed. Depress the primer button momentarily, then start engine, run engine to allow it to warm up before final adjustment. With engine running at normal operating speed, turn the load needle screw in (clockwise) until engine starts to miss (lean mixture). Then turn load screw out past the point of best operation until engine begins to run unevenly, (rich mixture). Then turn load screw in just enough so engine will run smoothly. Hold load screw and tighten locknut. Hold throttle at idle position, then release throttle. Engine should accelerate quickly and smoothly.

If engine will be required to run at idle, turn the idle speed adjusting screw on throttle until engine runs at proper idle speed for engine model. See Check Chart. Hold throttle at this point and turn the idle slowly in or out until

engine runs at maximum idle speed. Then re-adjust idle speed screw until proper idle speed is obtained. Allow throttle to open. Engine should accelerate quickly and smoothly. If not, readjust load screw, usually to a richer mixture. To stop engine, turn off fuel supply valve at fuel cylinder.

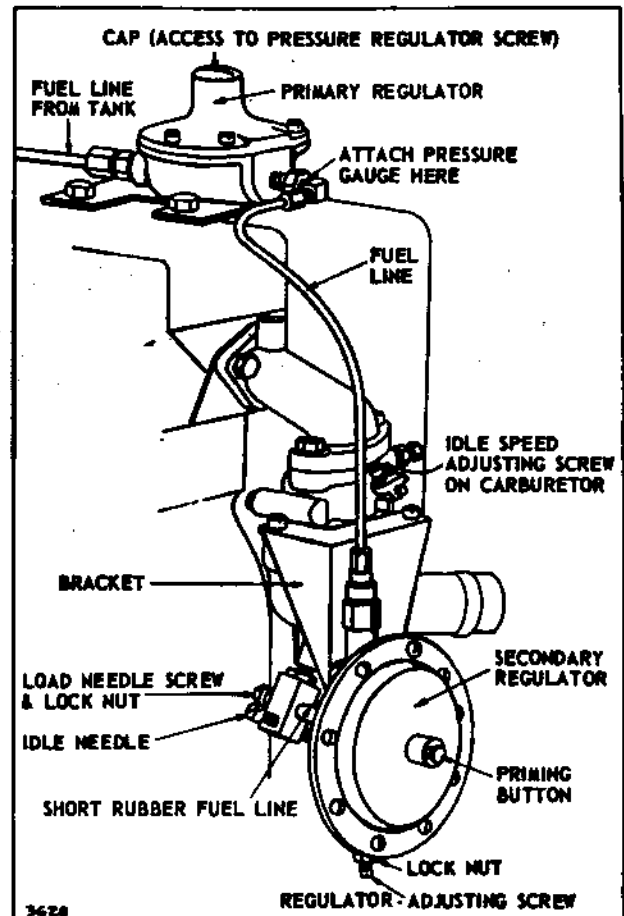


Fig. 76 - Adjusting Carburetor, L. P. Fuel System

Starting Engine

To start engine, do not use choke, but depress primer button momentarily, then start engine immediately. In cold weather, it may be necessary to partially close the choke valve to permit the engine to run smoothly until the engine warms up.

Cleaning L.P. Gas Filter

Unscrew filter head from filter body. Remove element assembly from the head. Fig. 77. Wash the element in commercial solvent cleaner or gasoline. If the accumulated dirt is gummy, we suggest a short soaking period in solvent cleaner. The element should then be rinsed in clean gasoline and blown with compressed air.

CARBURETION

LP. Fuel & Kerosene

ALWAYS USE REVERSE FLOW FROM THE INSIDE OUT. NEVER USE COMPRESSED AIR ON THE OUTSIDE SURFACE OF THE ELEMENT. NEVER DIP ELEMENT IN "BRIGHT DIP" OR OTHER ACID SOLUTION.

To reassemble filter, insert element into filter head with the round washer entering first. The gasket is put on the filter body. The spring is located in the filter body so that when filter body and head are put together, the spring will hold the element against the head. Tighten body and head with 75 foot lbs. of torque. After filter has been reassembled to engine, the point at the gasket and other line connections should be checked with soap suds, with fuel turned on, to be sure there are no leaks.

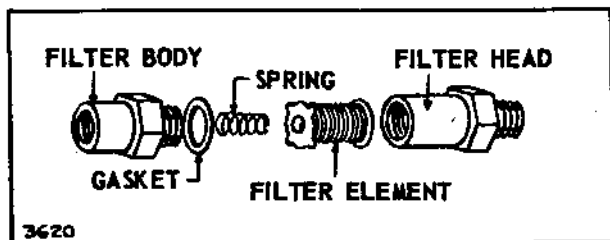


Fig. 77 - Element Assembly

KEROSENE OPERATION

Efficient engine performance will be obtained only when the following changes are accomplished:

1. A low compression cylinder head is required for models 23, 23A, 23C, 23D, 231000, 233000, and 243000. Other models use two cylinder head gaskets.
2. A special spark plug - #291835 - must be used on models 23C, 23D, 233000, and 243000. Spark plug gap .030" all models.
3. A reduced breaker gap .015 is used on models 23C, 23D, 233000 and 243000. The engine must be retimed using the reduced breaker gap. Follow timing procedure in Ignition Section.

Power loss will vary between 15% to 25% and fuel consumption will be approximately 15% less while running on kerosene.

Fig. 78 through Fig. 80 illustrates various types of combination fuel systems used.

Due to the low volatility of kerosene, engines operated on kerosene-gasoline fuel systems can be started on kerosene only when the engine is at operating temperature. Cold engines must be started on gasoline, and switched over to kerosene operation only after warmed up.

After warm-up and while operating on kerosene, adjust carburetor needle valves to a point where engine runs smoothest, and accelerates without hesitation when throttle is quickly opened. When shutting down engine, the carburetor must be emptied of kerosene so the engine can be started on gasoline.

Units equipped as per Fig. 79 and Fig. 80, close fuel filter valve and open bleed screw in needle valve to drain the carburetor. Close bleed screw. Remove wing plug to fill fuel line and carburetor with gasoline. Combination fuel tank units, Fig. 78, open gasoline shut-off valve "A", and close kerosene shut-off valve "B" two or three minutes before shutting off engine. This will stop the flow of kerosene to the carburetor, and will admit gasoline to the carburetor.

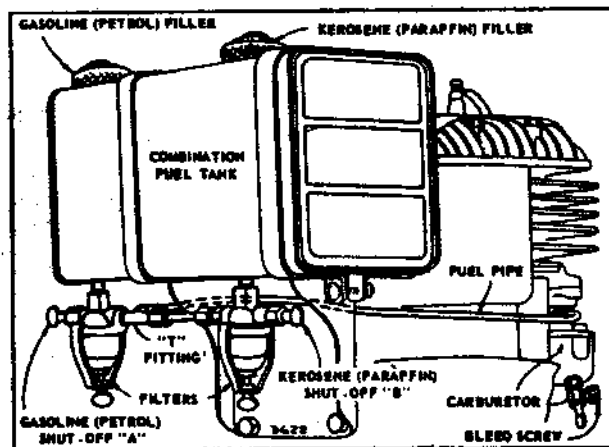


Fig. 78 - Combination Fuel Tank

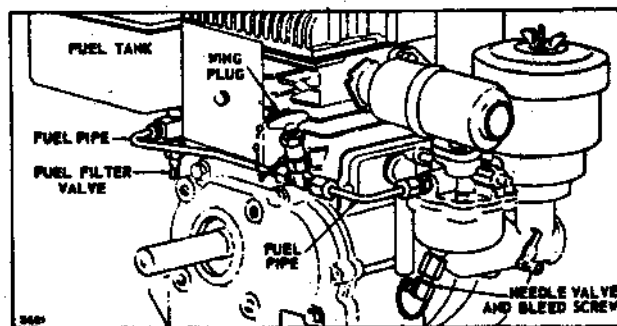


Fig. 79 - Kerosene Fuel System

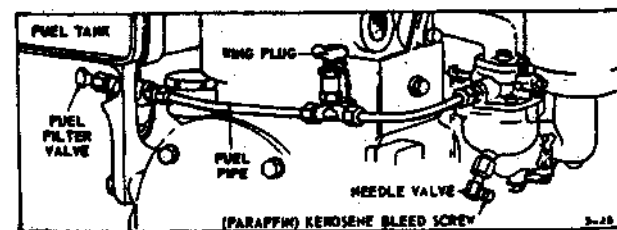


Fig. 80 - Kerosene Fuel System

ONE PIECE FLO-JET CARBURETOR

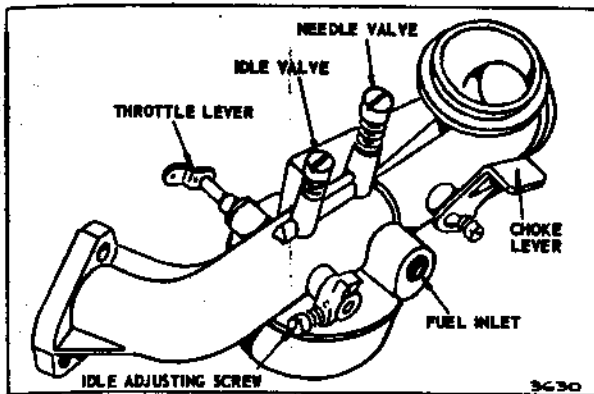


Fig. 81 - Small One Piece Flo-Jet Carburetor

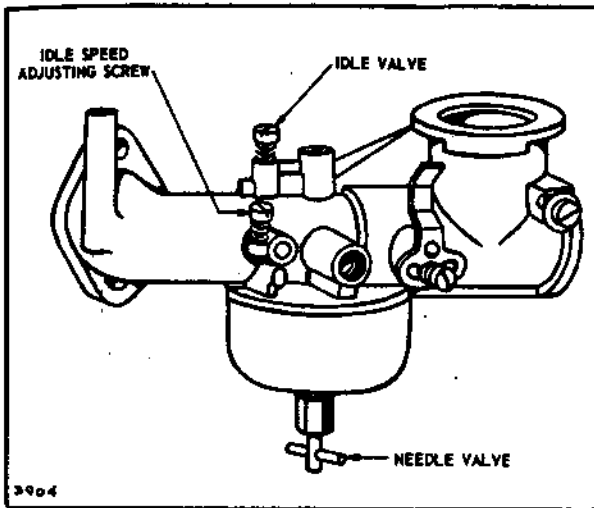


Fig. 82 - Large One Piece Flo-Jet Carburetor

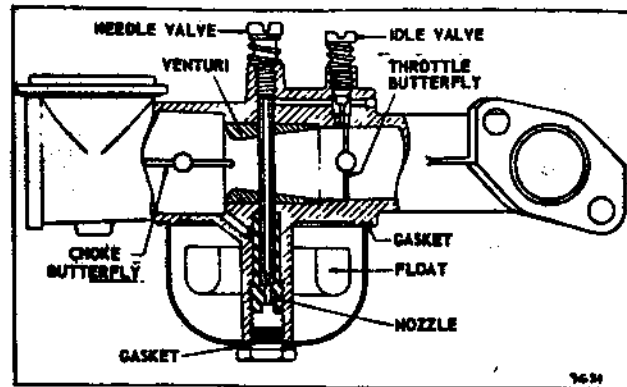


Fig. 83 - Small One Piece Flo-Jet Carburetor

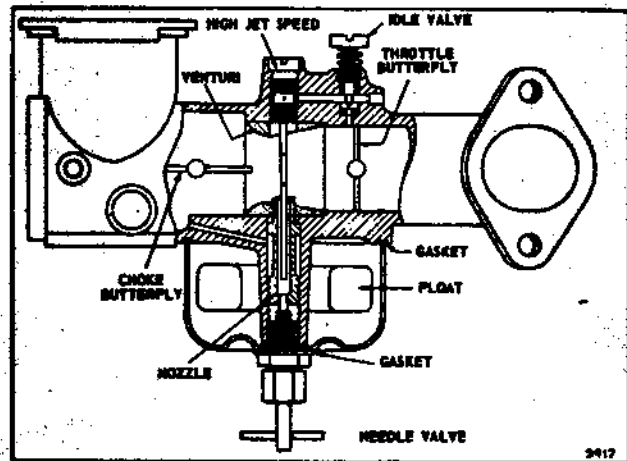


Fig. 84 - Large One Piece Flo-Jet Carburetor

The large one piece Flo-Jet carburetor has the high speed needle valve below the float bowl. All other repair procedures are similar to the small one piece Flo-Jet carburetor.

Disassemble Carburetor

Remove idle and needle valves. Reject if damaged. Remove carburetor bowl screw. A pin holds the float in place. Remove to take off the float and float valve needle. Check the float for leakage. If it contains gasoline or is crushed, it must be replaced. Use screw driver #19062 to remove carburetor nozzle. Use a #19062, heavy screw driver to remove the float valve seat, if used.

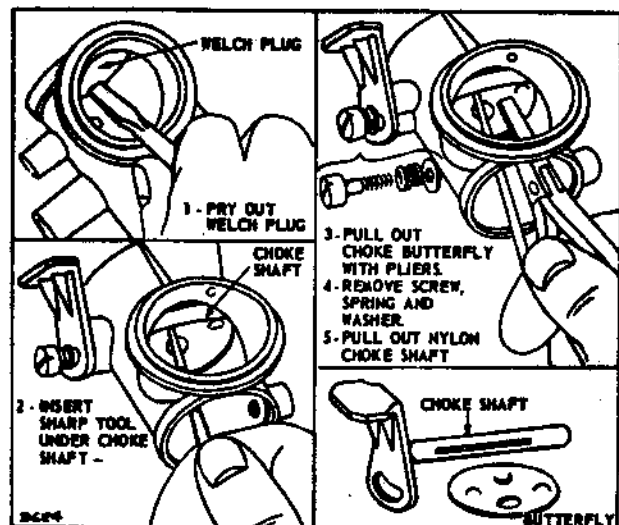


Fig. 85 - Nylon Choke Plate

CARBURETION

One Piece Flo-Jet

If necessary to remove choke valve, Venturi throttle shaft or shaft bushings, proceed in following sequence. Pry out welch plug. Remove choke valve. Where nylon choke shafts are used, remove choke valve as per Fig. 85. Venturi will be free to fall out after choke shaft has been removed. (Choke-A-Matic large carburetors have a choke plate stop pin. Press out to remove venturi). Refer to two piece Flo-Jet carburetor when checking throttle shaft for wear or replacing throttle shaft and/or bushing.

3

Repair Carburetor

Use new parts where necessary. Always use new gaskets. Carburetor repair kits are available. If venturi has been removed, install venturi first, then carburetor nozzle jets. The nozzle jet holds the venturi in place. Fig. 86. Replace choke shaft and valve. Install new welch plug in carburetor body. Use a sealer to prevent dirt entry.

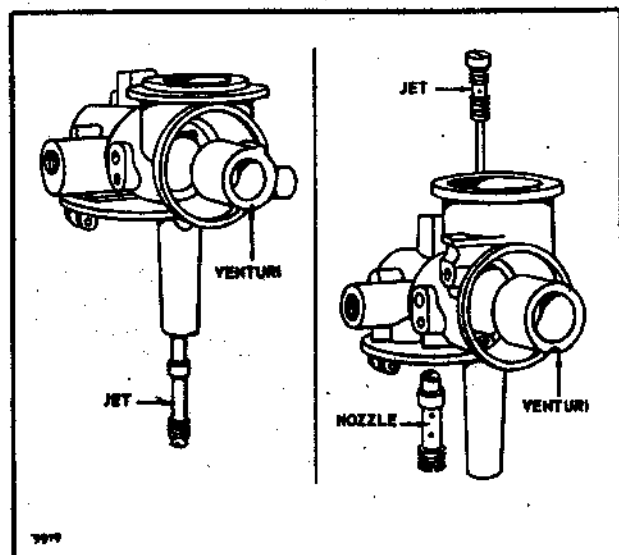


Fig. 86 - Repair Carburetor

A viton tip float valve is used in the large one piece Flo-Jet carburetor. The seat is pressed in the upper carburetor body and does not need replacement unless damaged.

Replacing Pressed in Float Valve Seat

Use a #93029 self threading screw or remove one self threading screw from a #19069 fly-wheel puller and clamp head of screw in a vise. Turn carburetor body to thread screw into seat. Fig. 87. Continue turning carburetor body drawing seat out. Leave seat fastened to screw. Insert new seat #230996 into carburetor body. (Seat has starting lead).

NOTE: If engine is equipped with a fuel pump, install #231019 seat.

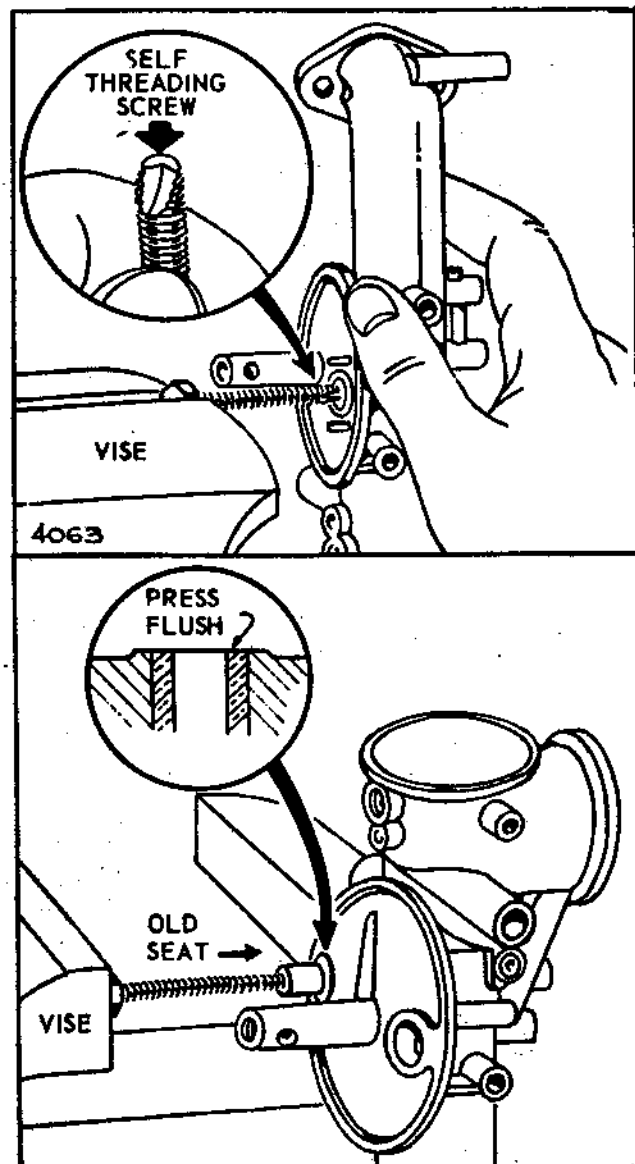


Fig. 87 - Replacing Float Valve Seat

Press new seat flush with body using screw and old seat as a driver. See Fig. 87. Use care to insure seat is not pressed below body surface or improper float to float valve contact will occur. Install float valve as shown in Fig. 88.

CARBURETION

One Piece Flo-Jet

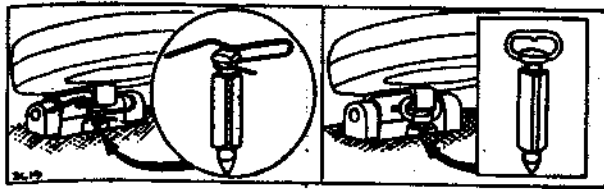


Fig. 88 - Float Valve Variations

These settings will allow the engine to start. Final adjustment should be made when engine is running and has warmed up. See carburetor adjustment. (Two piece Flo-Jet carburetor).

Choke-A-Matic Remote Control

On Choke-A-Matic carburetors, the remote control must be correctly adjusted in order to obtain proper operation of the choke and stop switch.

Choke-A-Matic Adjustment

Typical remote control installations, used with Choke-A-Matic carburetors, are shown in Fig. 90. To adjust, move remote control lever to "Fast" position. Choke actuating lever "A" should just contact choke link, or lever "B" as shown in Fig. 90. If not, loosen screw "C" slightly, and move casing and wire "D" in or out to obtain this condition and re-tighten screw "C".

3

Checking Float Level

With body gasket in place on upper body and float valve and float installed, the float should be parallel to the body mounting surface. Fig. 89. If not, bend tang on float until they are parallel. DO NOT PRESS ON FLOAT. Fig. 89.

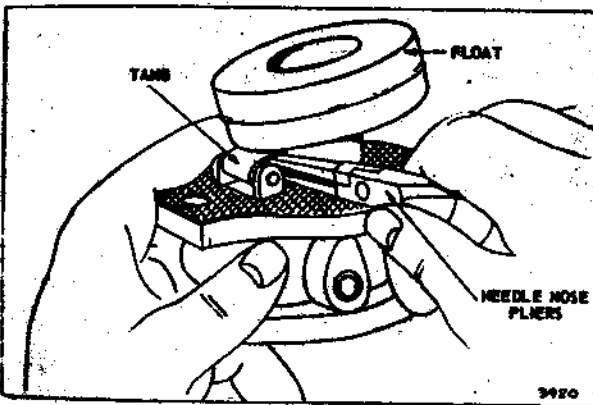
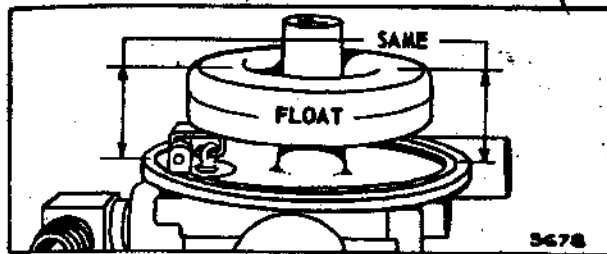


Fig. 89 - Checking Float Level

Install float bowl, idle valve and needle valve. Turn in needle valve and idle valve until they bottom. Open needle valve 2-1/2 turns and idle valve 1-1/2 turns. LARGE CARBURETOR WITH NEEDLE VALVE BELOW FLOAT BOWL, NEEDLE AND IDLE VALVE 1-1/8 TURN OPEN.

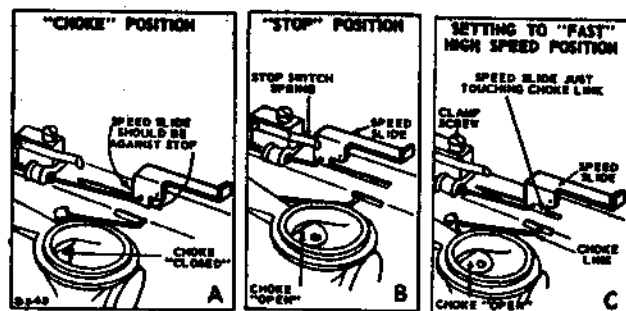
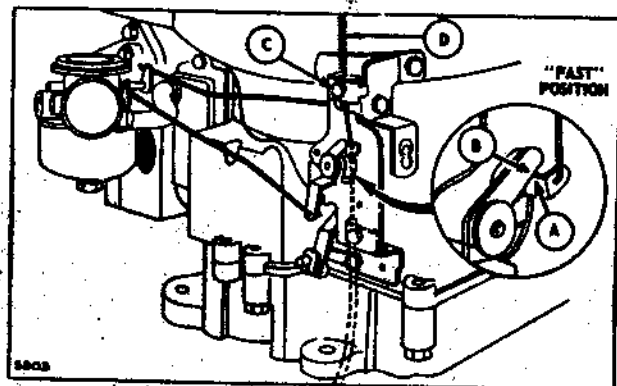


Fig. 90 - Choke-A-Matic Carburetor