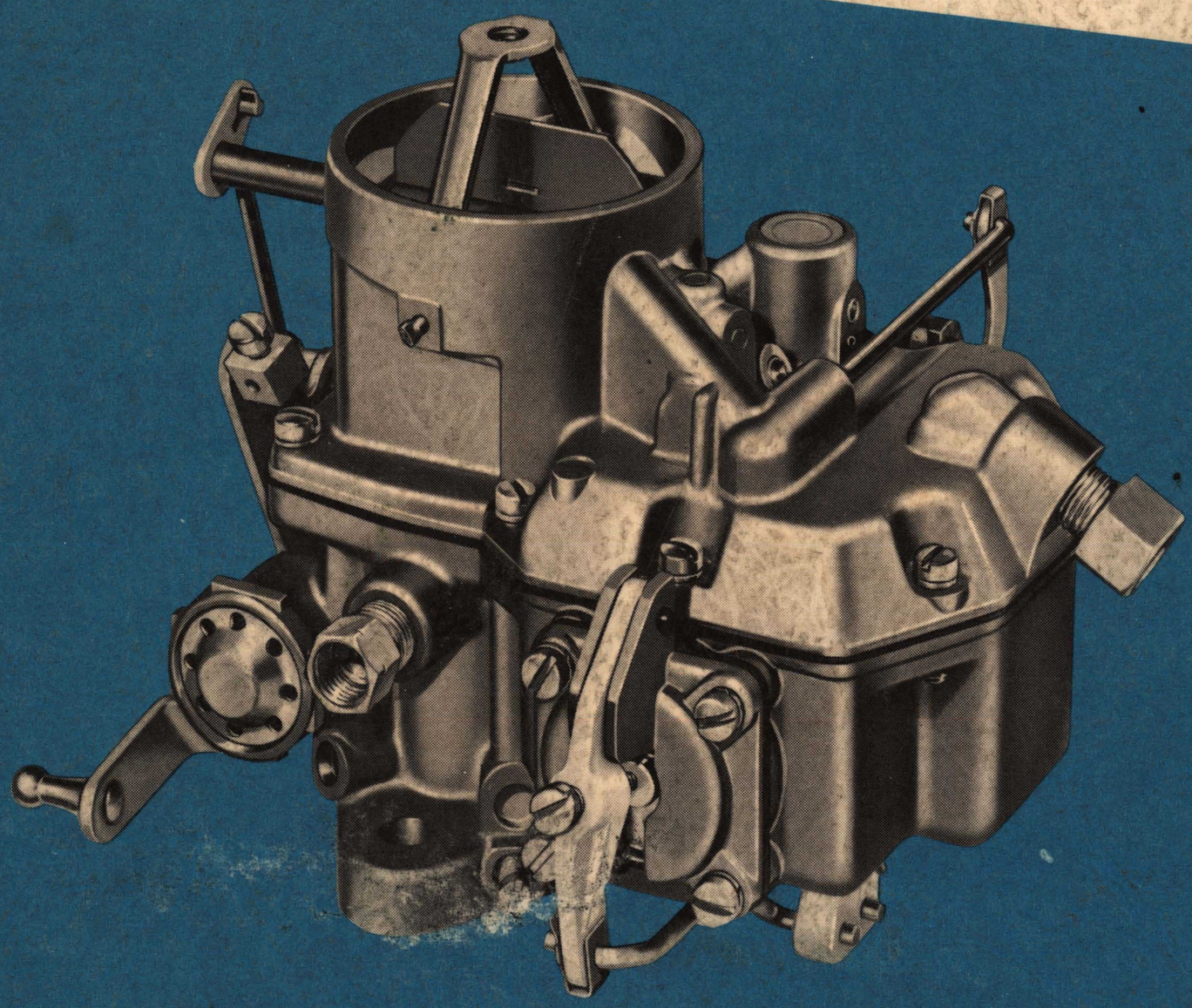
FORD *Service Handbook* 9502



FORD
SINGLE BARREL
CARBURETORS

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The descriptions and specifications in this handbook were in effect at the time the handbook was approved for printing. Ford Division of Ford Motor Company reserves the right to discontinue models at any time, or change specifications or design, without notice and without incurring obligation.

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PART 1 GENERAL INFORMATION

1 COMPONENTS

The Ford Single Barrel Carburetor (Fig. 1) used on all six cylinder engines consists of two main assemblies; the Upper Body Assembly and the Lower Body Assembly.

The Upper Body Assembly contains the major metering components of the carburetor. The Main and Idle Fuel, Power Valve (except in economy carburetors), Float Chamber Vent, and Fuel Inlet Systems, are all part of the Upper Body Assembly.

The lower Body Assembly contains the Fuel Bowl, Accelerating, Pump Assembly, Idle Mixture Adjusting Screw, and Spark Valve (except in economy carburetors). A Hydraulic Dashpot Assembly is also included on units with an automatic transmission.

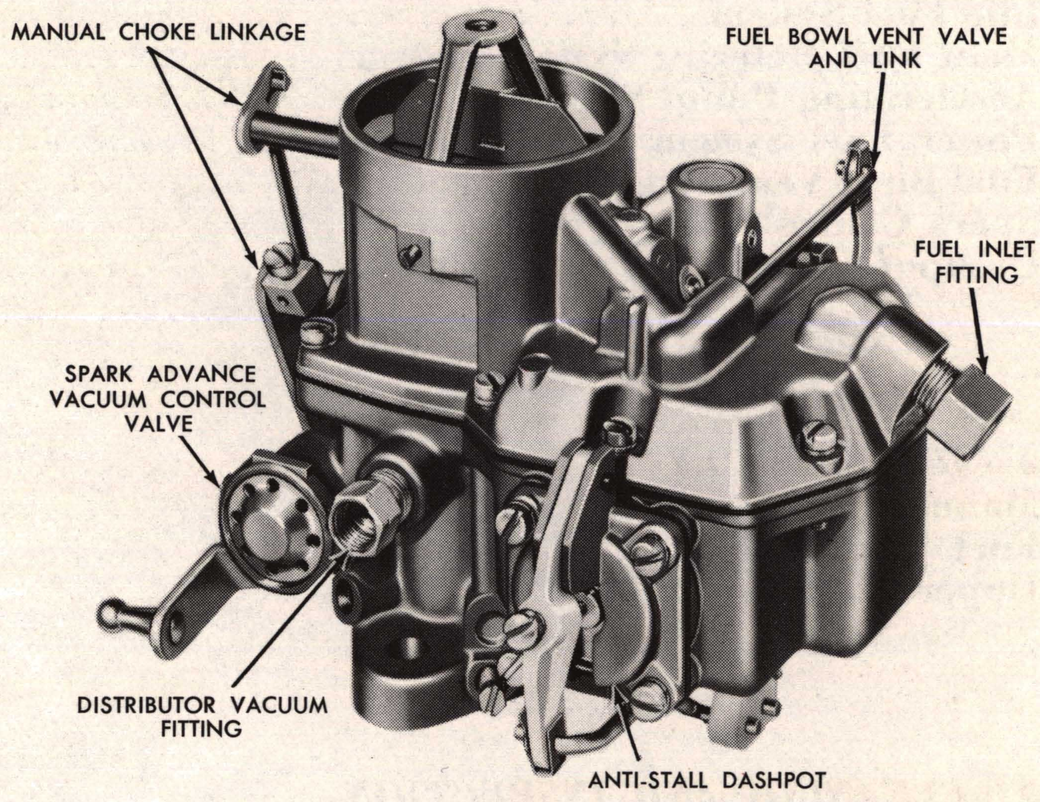


FIG. 1—Ford Single Barrel Carburetor Components

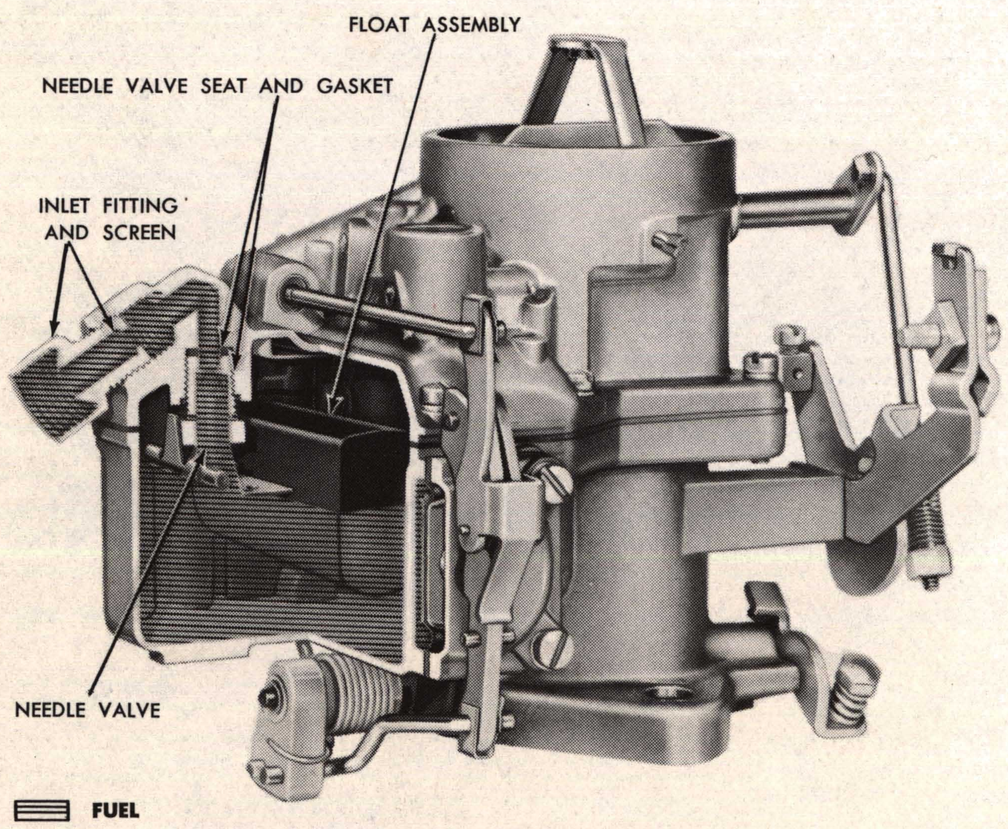


FIG. 2—Fuel Inlet System

2 OPERATION

The function of the carburetor is to mix fuel and air, in the proper porportion, and to supply the mixture in the proper quantity to the engine for all engine operating conditions. The engine speed is regulated by controlling the quantity of fuel and air delivered to the cylinders. Operation is based on the principle of pressure differences, or "vacuum". Air is drawn into the carburetor air horn by vacuum created through movement of the engine piston. As the air passes through the carburetor on its way to enter the cylinders, lower pressure is created at the fuel discharge outlets of the carburetor. The fuel bowl is vented to the atmosphere and/or the air cleaner. The higher air pressure exerted on the fuel in the bowl will force fuel to travel up through the fuel discharge channels and out into the air stream passing through the carburetor. The fuel and air are mixed at this point and distributed into the engine cylinders for burning.

3 FUEL INLET SYSTEM

The fuel inlet system (Fig. 2) of a carburetor maintains a predetermined fuel level within the fuel bowl. If the level of the fuel within the bowl is below the specified setting, a *lean* fuel-air mixture will result. A *rich* fuel-air mixture will occur from a high fuel level. The entire calibration of the carburetor is disturbed if the fuel level is not set as specified.

Fuel enters the fuel bowl through the fuel needle valve and seat assembly. The amount of fuel entering is regulated by the distance the needle valve is moved off the seat and by fuel pump pressure. Correct fuel pump pressure is important if the carburetor wet fuel level is to be maintained within the specified limits.

The fuel level is maintained at a predetermined level by the float and lever assembly, which controls the movement of the needle valve. The needle valve, riding on the tab of the float and lever assembly, reacts to any change in height of the float and the fuel level.

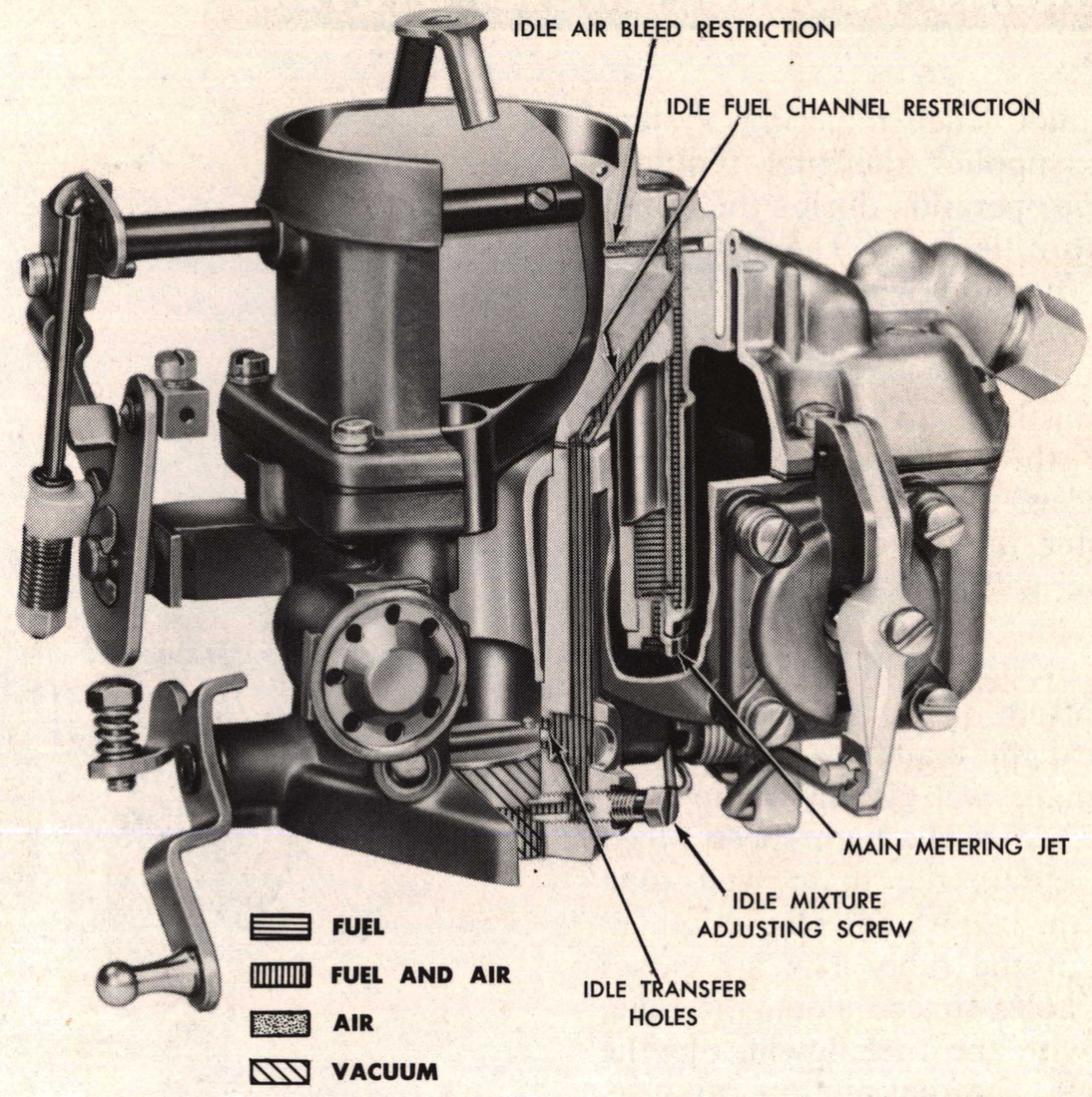


FIG. 3—Idle Fuel System

4 IDLE FUEL SYSTEM

The idle system (Fig.3) functions when the engine is operating at lower rpm. It supplies the fuel-air mixture when the air flow past the carburetor venturi is insufficient to operate the main metering system.

The range of the idle system will extend into the operation of the main metering system. Fuel will flow from the main well up the idle well and through the calibrated idle fuel channel restriction. Filtered air from the carburetor air horn enters the idle air bleed restriction and mixes with the fuel. The air bleed restriction also serves as a vent to prevent syphoning of fuel at high speeds or when the engine is shut off. The fuel-air mixture then passes down through an idle channel restriction and is transferred to the idle channel in the lower body assembly. The fuel air mixture passes down the idle channel, past two idle transfer holes, to the idle mixture adjusting screw. The idle transfer holes act as additional air bleeds at normal idle. The fuel air mixture passes through drilled holes in the adjusting screw and is discharged below the throttle plate. The amount of mixture to be discharged is determined by the position of the idle screw in the lower body passage.

During off-idle operation, when the throttle plate is moved past the idle transfer holes, each hole begins discharging fuel as it is exposed to the lower air pressure (manifold vacuum). Continued opening of the throttle plate increases engine rpm and air flow through the carburetor. The greater air flow past the booster venturi causes a pressure drop in the venturi great enough to bring the main fuel metering system into operation as the idle fuel metering system tapers off.

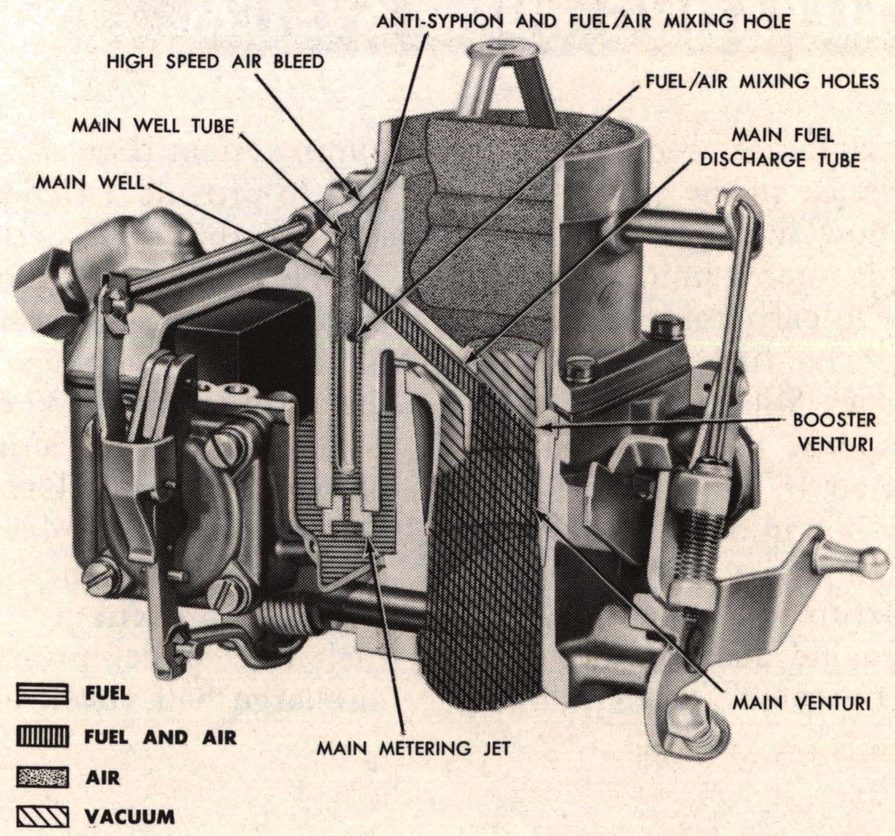


FIG. 4—Main Metering System

5 MAIN FUEL METERING SYSTEM

The main fuel metering system (Fig. 4) supplies the fuel required for engine operation during the cruise or part throttle range. The system begins to function when the air flow through the carburetor venturi creates a sufficient vacuum to start fuel flowing in the main system. The vacuum at the discharge nozzle will increase as the air flow increases. The faster the engine operates, the more fuel will flow through the main fuel system.

Fuel entering the main jet, located at the bottom of the main well, flows up toward the main nozzle. Inserted in the main well is the main well tube. Air from the high speed bleed channel enters the main well tube through a calibrated restriction at the top of the tube. The air passes through holes spaced along the tube, mixing with the fuel flowing up the main well. The fuel and air mixture, being lighter than solid fuel, responds faster to changes in venturi pressures. The mixture continues flowing up the main well to the anti-syphon bleed. More air is introduced at the anti-syphon bleed to the fuel and air mixture, which is then discharged from the main nozzle. The fuel is mixed with the filtered air moving past and through the booster venturi.

The anti-syphon bleed also acts as a vent to prevent syphoning of fuel at low engine speeds.

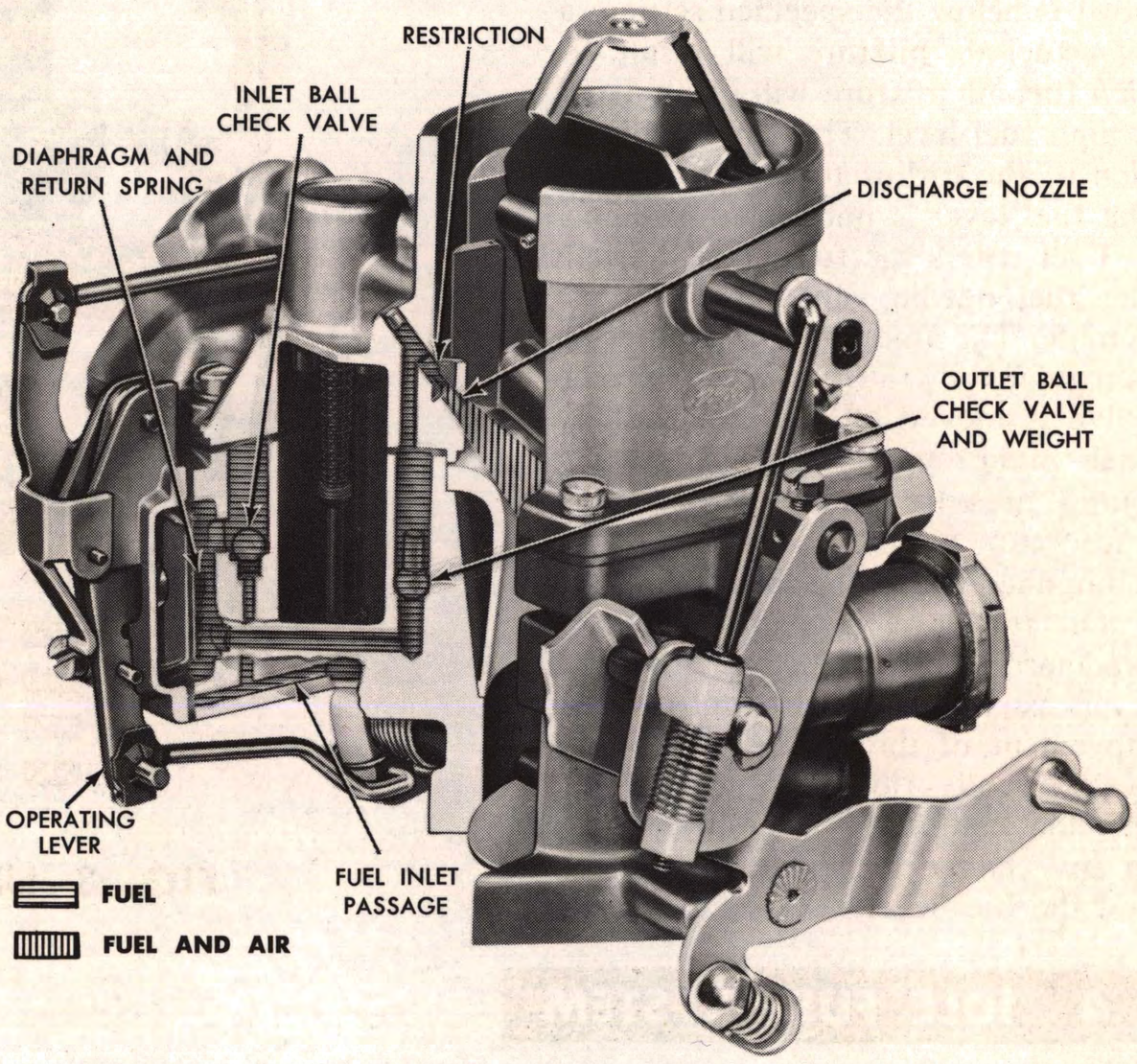


FIG. 5—Accelerating Pump System

6 ACCELERATING PUMP SYSTEM

Smooth acceleration requires a momentary increase in the supply of fuel. The air flow through the carburetor responds almost immediately to any increase in carburetor throttle valve opening. The fuel within the metering passages will lag momentarily in its response to the pressure difference created by this increased air flow. This lag in fuel response will cause a temporary leanness in the fuel-air mixture that results in a hesitation in engine acceleration. A mechanically operated accelerating pump system (Fig. 5) supplies added fuel to provide a richer fuel-air mixture for this brief period of time.

The accelerating pump, located on the side of the lower body assembly, is actuated by linkage connected to the throttle shaft. When the throttle is opened on acceleration, the diaphragm forces fuel from the accelerating pump chamber into the discharge channel. The inlet ball check closes to prevent a reverse flow of fuel. Fuel under pressure forces the discharge ball check and the weight off its seat, allowing fuel to pass up to the discharge nozzle. The fuel is sprayed from the nozzle into the air stream above the main venturi.

When the throttle plate is closed on deceleration, a return spring forces the diaphragm back, drawing fuel through the inlet channel. The inlet ball check opens, allowing fuel to pass into the chamber — while the discharge ball check closes, preventing entry of air.

7 POWER FUEL SYSTEM (except in economy carburetors)

When the engine is required to deliver more power to meet an increased road load demand or wide-open throttle operation, the carburetor must deliver a richer fuel-air mixture than supplied during the operation of the main fuel system. When the engine is running under a high power demand, intake manifold vacuum is low. The vacuum below the carburetor throttle plate approximates intake manifold vacuum. The carburetor power valve will open when the manifold vacuum drops below a pre-determined value. The fuel-air mixture is thus automatically enriched to meet the increased engine power demands.

Manifold vacuum is transmitted from an opening below the throttle plate through a channel to the upper body assembly and to the top of the power valve piston (Fig. 6). At idle and normal engine speeds the manifold vacuum is great enough to hold the power valve piston up.

The power valve rod is connected to the piston. The foot of the rod controls the spring loaded power valve ball check. With the piston held up by manifold vacuum, the ball check closes the power system inlet channel.

A power valve spring is located on the rod. The spring is shim calibrated to overcome the vacuum above the piston when manifold vacuum drops below a predetermined level. Upon demand for more power, the manifold vacuum drops below this level. The spring tension moves the rod down and allows the power valve ball check to open. Air pressure above the fuel bowl forces fuel to flow through the power system channel, adding to fuel in the main fuel system, enriching the fuel-air mixture.

As the demand for power decreases and manifold vacuum increases, the vacuum above the piston overcomes the spring tension. The piston and rod move up, and the ball check closes the power system channel.

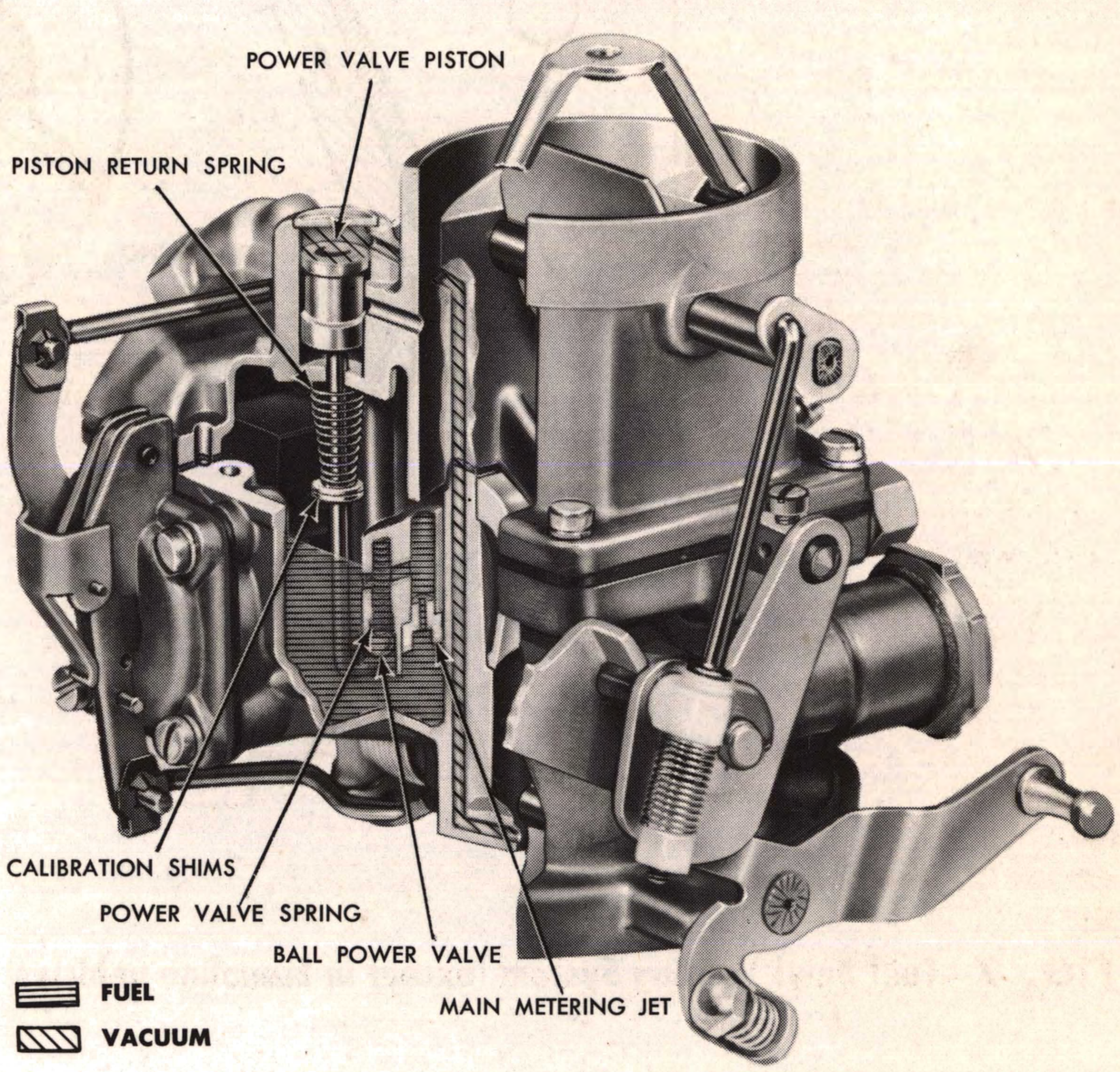


FIG. 6—Power Valve And Fuel Enrichment System

8 FUEL BOWL VENT SYSTEM

The fuel bowl requires venting to provide proper operation for the various systems. Fuel vapors may form in the fuel bowl when a hot engine is stopped, idling, or operating at very low speeds. By venting the fuel bowl to the atmosphere, engine performance is improved. At higher engine speeds, venting to the carburetor air horn prevents calibration changes due to normal air cleaner contamination.

A valve (Fig. 7), connected through linkage to the throttle shaft, and located in a bore over the fuel bowl, is at the inward position during closed or part throttle operation. In this position, the valve allows venting only to the atmosphere.

At normal or wide open throttle operation, the rod moves outward—sealing the external vent and opening the vent to the carburetor throat.

An Econoline vehicle requires a vent system that will draw fuel vapors away from the engine compartment. The carburetor used on Econoline vehicles has an external vent tube and an open passage to the air cleaner. Both vents are always open on this carburetor.

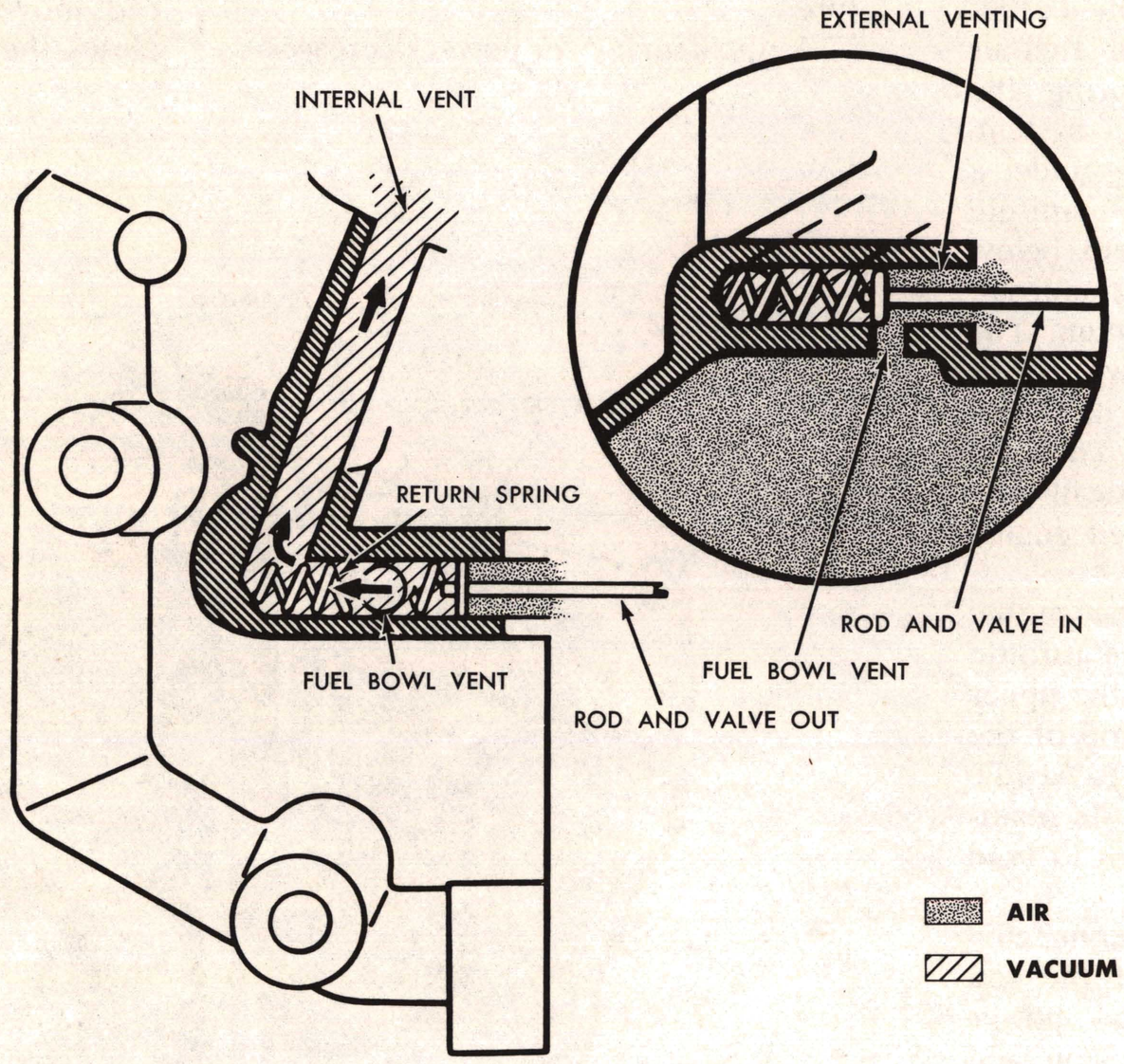


FIG. 7—Fuel Bowl Venting System (except in Econoline vehicles)

9 SPARK CONTROL VALVE SYSTEM

PASSENGER CARS

The degree of spark advance in the distributor is determined by the strength of the vacuum acting on the distributor diaphragm. Vacuum to the distributor diaphragm is a combination of venturi vacuum and manifold vacuum.

Venturi vacuum is available to the distributor through the pickup tube in the carburetor main venturi (Fig. 8). Manifold vacuum enters a hole above the throttle plate and is channeled to the spark valve. In normal operation, manifold vacuum—working against a calibrated spring in the spark valve—holds the spark valve open. With the spark valve open, manifold vacuum aids the venturi vacuum for distributor advance.

When accelerating, manifold vacuum momentarily drops below a predetermined point, and the calibrated spring closes the spark valve, shutting off manifold vacuum to the distributor, to retard the spark timing. Venturi vacuum prevents full spark retard. The spark valve opens as manifold vacuum increases, and the distributor advance is increased for more efficient engine operation.

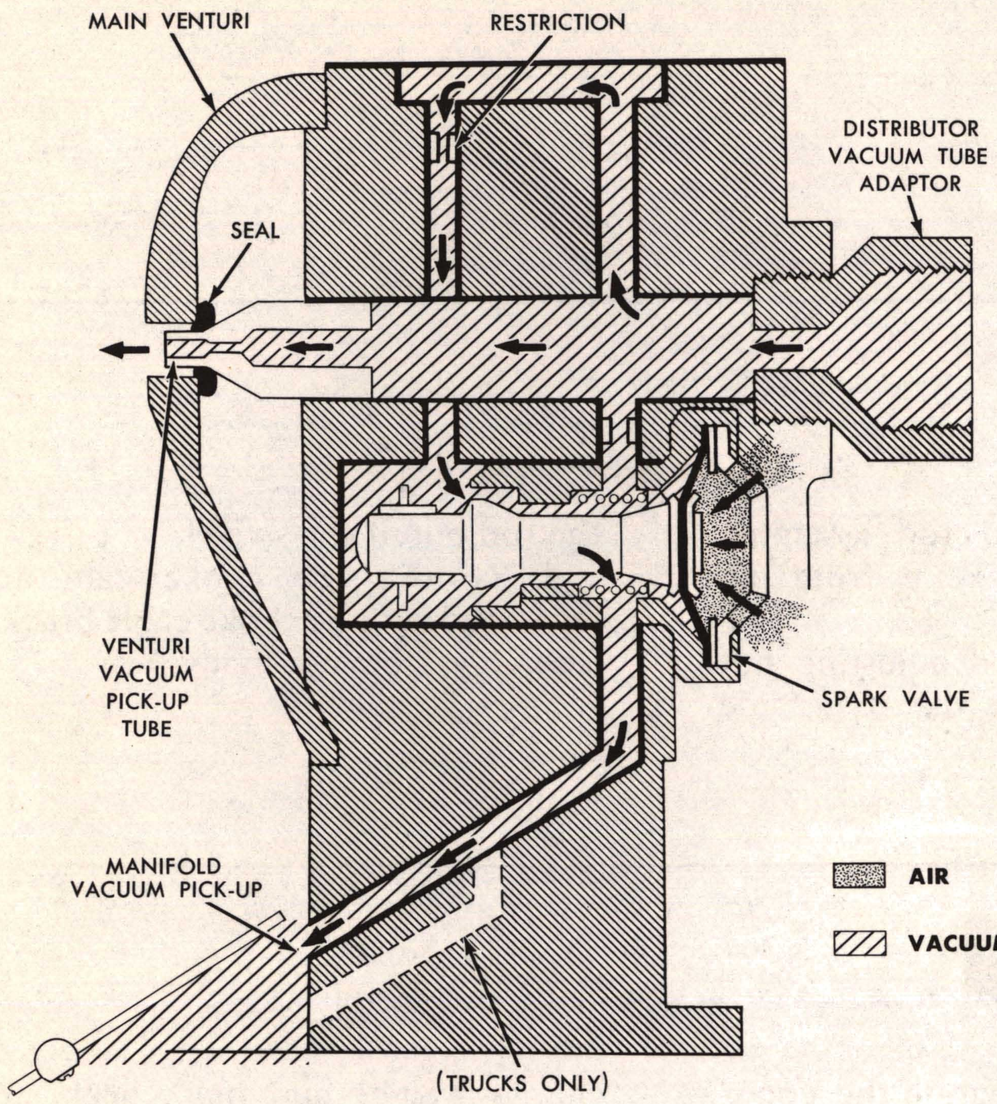
TRUCKS

On Econoline, 262 engines, and 223 parcel delivery trucks an additional passage (Fig. 8) exists that is always open to intake manifold vacuum. The purpose of this passage is to provide additional distributor spark advance during deceleration to prevent after-fire in the exhaust system.

TAXI CABS AND OTHER ECONOMY CARBURETOR EQUIPPED VEHICLES

The distributor spark advance vacuum system on these vehicles consists of parallel connected passages (Fig. 9). Vacuum is available to the distributor from either the carburetor venturi or the intake manifold. The vacuum source to be used is dependent upon throttle position and engine speed.

FIG. 8—Spark Control Valve System (passenger cars and trucks)



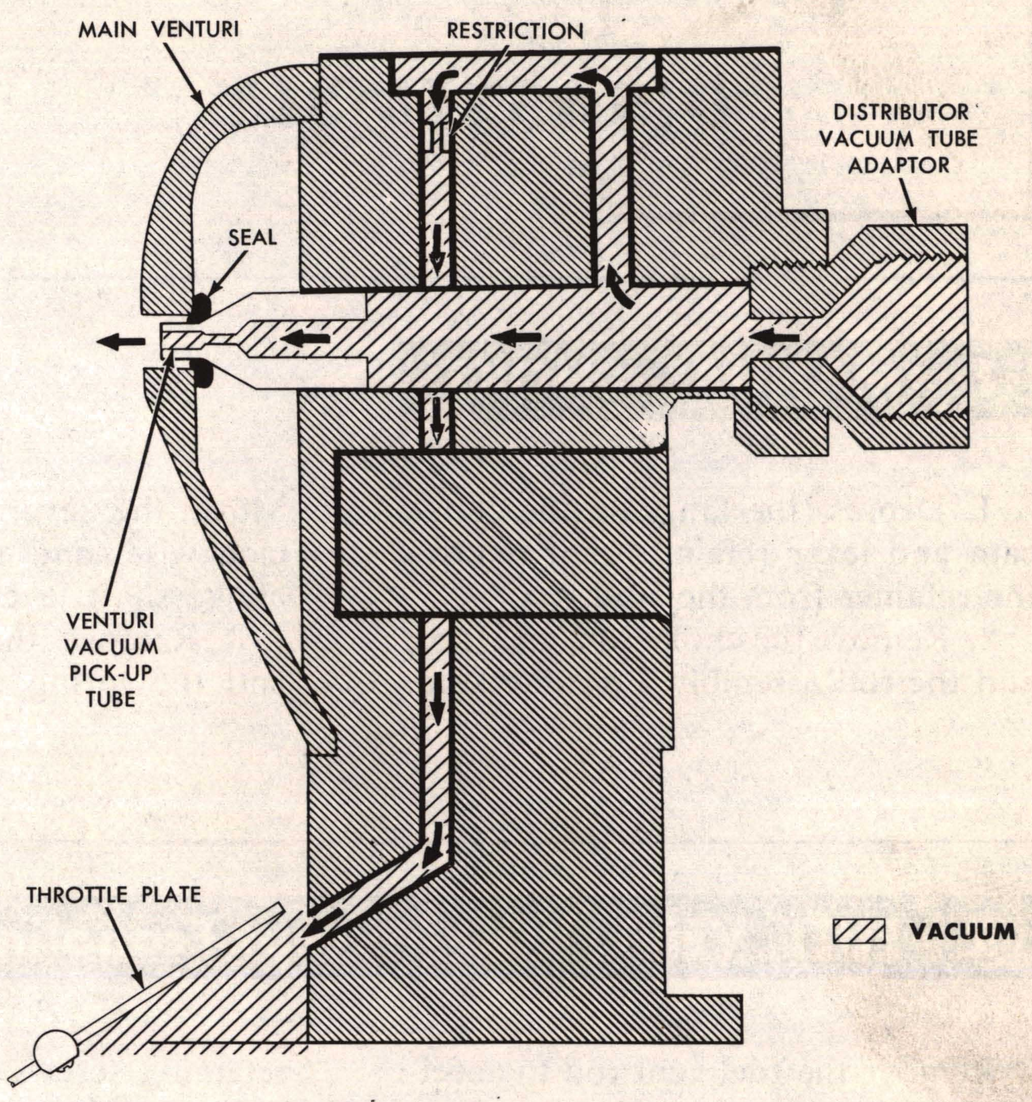


FIG. 9—Spark Control Valve System (taxicabs and other economy carburetor equipped vehicles)

10 DASHPOT SYSTEM (automatic transmissions)

The low idle rpm setting on automatic transmission equipped units requires a means of control to prevent engine stall upon sudden closing of the throttle plate. This is accomplished by hydraulic dampening of the throttle closing rate.

The dashpot (Fig. 10) located on the side of the fuel bowl, is actuated by linkage connected to the throttle shaft. When the throttle is opened, a return spring forces the diaphragm back, drawing fuel through the inlet channel. The inlet ball check opens, allowing fuel to flow into the chamber.

When the throttle plate is closed, the dashpot actuating lever and adjusting screw moves the diaphragm inward. The inward movement of the diaphragm seats the inlet ball check, closes the inlet channel, and forces fuel through a restriction into the fuel bowl. The discharge restriction limits the flow of fuel and slows the closing of the throttle plate.

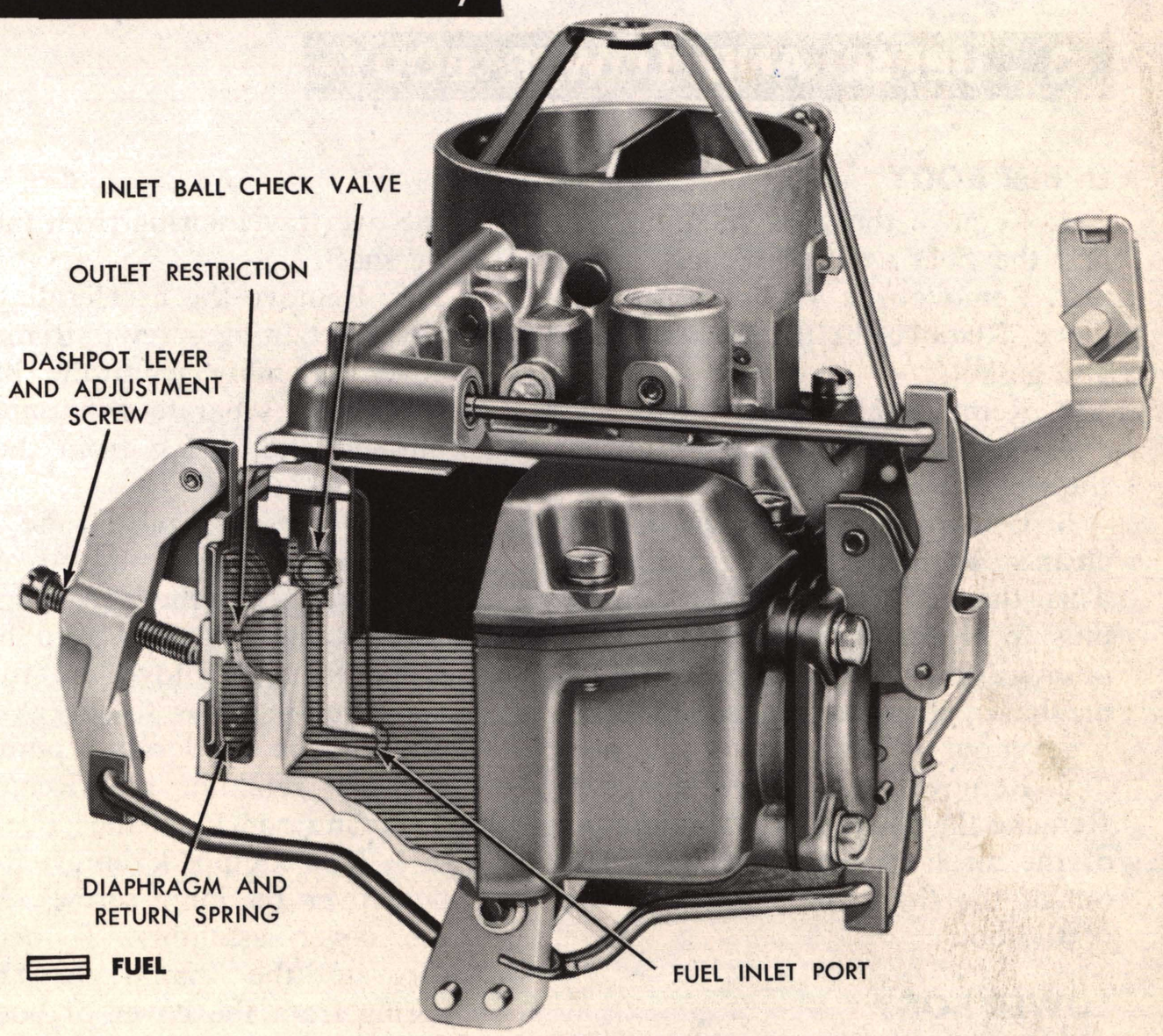


FIG. 10—Anti-Stall Dashpot System

PART 2 DISASSEMBLY

1 MANUAL CHOKE

1. Depress the tangs on the choke cam and lever retainer, and remove the retainer from the stud.

2. Remove the choke cam and lever and the rod assembly from the stud. Move the lever and rod assembly clockwise, and remove it from the choke shaft lever.

3. Remove the rod adjusting nut and the spring from the rod. Slide the rod out of the swivel.

4. Remove the choke cam and lever stud and the choke cable bracket assembly from the body.

2 FUEL VENT ROD (except Econoline)

Remove the fuel vent rod to accelerating pump actuating lever retainer. Remove the vent rod bushing, rod, and return spring.

Remove the upper to lower body retaining screws. Separate the upper body assembly, gasket, and lower body assembly.

Invert the lower body assembly, allowing the accelerating pump discharge weight and ball check, the accelerating pump inlet ball check, and the dashpot ball check to fall into hand.

3 UPPER AND LOWER BODY

UPPER BODY

1. Remove the float retaining pin and the float assembly.

2. Remove the fuel inlet needle valve. Remove the needle valve seat and gasket.

3. Remove the main jet.

4. Remove the fuel inlet fitting and the screen assembly.

5. Using pliers, remove the air cleaner bracket retaining roll pins. Turn them in a direction to coil the pins to a smaller diameter. If they offer resistance to turning, turn them in the opposite direction. Pull the bracket out of the retaining channels.

6. Remove the choke plate screws. Remove the choke plate from the top of the air horn by sliding the plate out of the shaft. Slide the shaft out of the body.

LOWER BODY

1. Remove the accelerating pump lever to throttle shaft retaining clip and washer. Remove the lever and the overtravel spring from the throttle shaft.

2. Remove the accelerating pump cover retaining screws. Remove the cover assembly from the body. If necessary, separate the pump diaphragm and spring from the cover or body.

3. Depress the tab on the accelerating pump lever and rod retaining clip, and slide the rod out of the lever. Remove the clip from the lever. If necessary, remove the fuel vent rod actuating lever to cover retaining pin and the accelerating pump lever to cover retaining pin. Remove the lever and rod from the cover.

4. If so equipped, remove the dashpot cover retaining screws. Remove the cover assembly. If necessary, separate the diaphragm and the spring from the cover or body. Depress the tap on the dashpot lever and rod retaining clip, and slide the rod out of the lever. Remove the clip from the lever. If necessary, remove the lever to cover retaining pin, and remove the lever from the cover.

5. Remove the vacuum outlet adaptor.

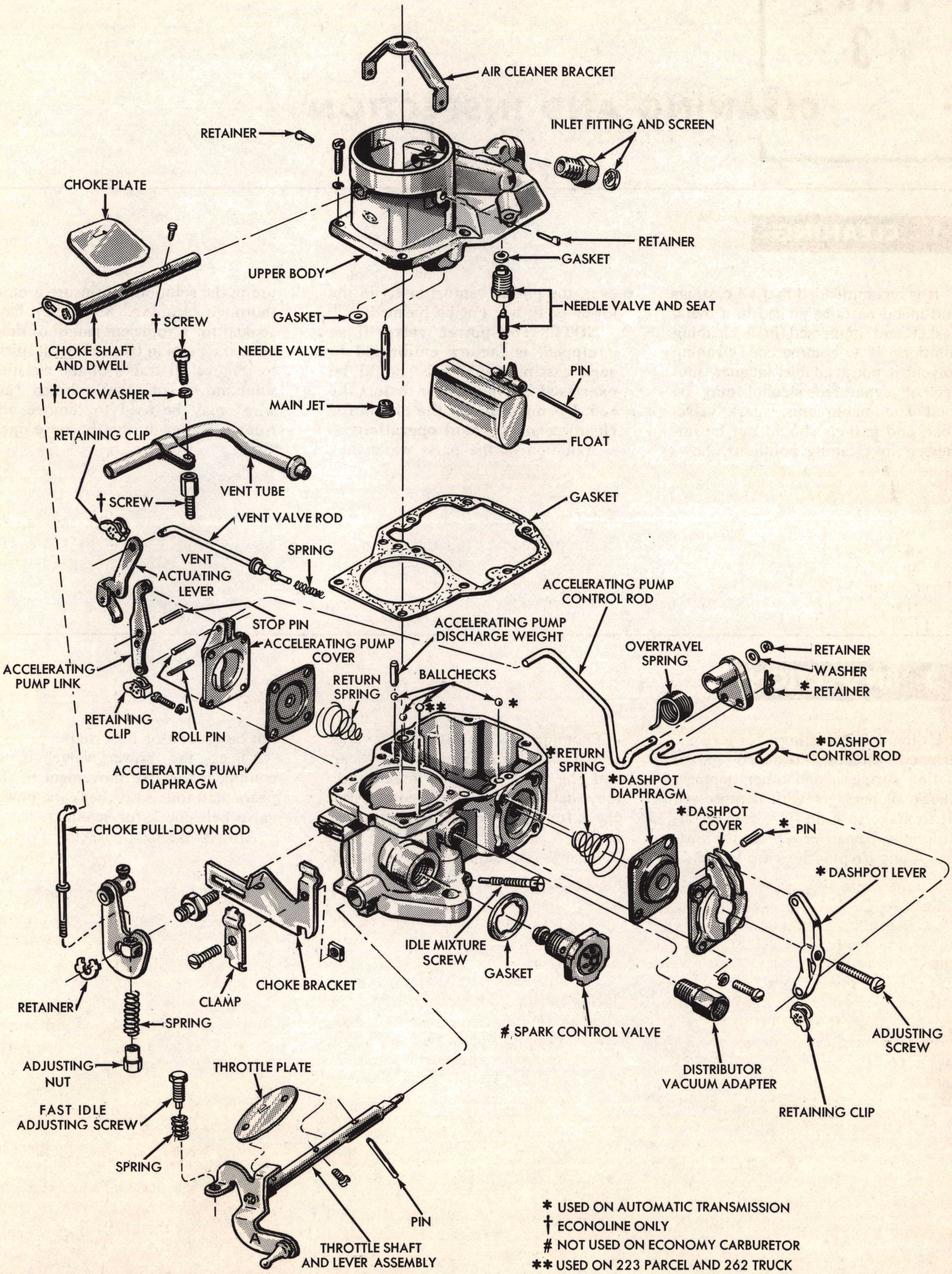
6. Remove the spark valve and gasket, if so equipped.

7. Remove the idle mixture adjusting screw.

8. If it is necessary to remove the throttle plate and shaft, lightly scribe the throttle plate along the throttle shaft so that it may be installed in exactly the same position.

9. Remove the throttle plate retaining screws, and slide the plate out of the shaft. The retaining screws are staked to the throttle shaft. Filing off the staked portion of the screw will facilitate its removal.

10. Remove the overtravel spring tension pin from the throttle shaft, and slide the shaft out of the body.



* USED ON AUTOMATIC TRANSMISSION
† ECONOLINE ONLY
\# NOT USED ON ECONOMY CARBURETOR
** USED ON 223 PARCEL AND 262 TRUCK

FIG. 11—Ford Single Barrel Carburetor—Disassembled

PART 3

CLEANING AND INSPECTION

1 CLEANING

It is recommended that all castings and metal parts be placed in a metal basket and immersed in a cleaning solution. If a commercial cleaning solvent is not available, lacquer thinner, or denatured alcohol may be used The diaphragms, spark valve, float, and gaskets should not be immersed in cleaning solutions; however, the plastic venturi insert in the lower body will not be harmed.

NOTE: The power valve, if so equipped, is factory calibrated to each casting, and care should be exercised not to bend or distort the rod. Do not remove the shims for cleaning or overhaul operations.

Agitation of the parts while they are in the solution will insure a more thorough cleaning. After they have soaked for a sufficient length of time, rinse the parts in clean mineral spirits to remove all traces of the cleaning solution. A stiff bristle brush (not wire) may be used to remove any foreign matter during the rinse operation.

2 INSPECTION

Examine all castings for cracks, stripped threads, damaged gasket mating surfaces, and other damage. Check all passages with compressed air to make sure they are free of obstructions. Repair or replace the castings if any irregularities are found.

Examine the throttle shaft and choke shaft for bearing surface wear and the shaft levers to make sure they have not worked loose. Also check for bent or distorted shafts and levers.

Springs — tension, or coil — should not be broken or distorted.

Check the power valve, if so equipped, for free movement of the piston and rod. Also check the power valve ball check for seating.

Always use new gaskets.

PART 4 ASSEMBLY

1 UPPER BODY

1. Insert the choke shaft assembly into the air horn with the lever side opposite the fuel bowl and the lever pointing away from the spark valve. Insert the choke plate into the slot in the shaft dimple above the shaft. Line up the holes in the shaft and plate, and install the choke plate retaining screws finger tight. Check for the proper plate fit in the air horn and free rotation of the shaft. Tighten and stake the screws.

When staking the screws, support the shaft and plate on a small block of wood or mandrel to prevent bending the shaft.

2. Install the fuel inlet adaptor and screen assembly into the fuel inlet.

3. Install the main jet in the main fuel well.

4. Install the needle valve seat gasket and the seat into the tapped seat hole.

Tighten the needle valve seat firmly. Insert the needle valve into the needle valve seat with the viton tip toward the seat.

5. Position the float assembly with the tab on the arm over the needle valve and the hinge of the arm lining up between the hinge bracket holes in the upper body casting. Insert the float hinge pin through the holes in the upper body and float assembly.

6. Check the float setting. (Refer to Adjustments Section). If necessary, bend the tab on the float arm to bring the float setting within limits to provide the proper fuel level. *DO NOT APPLY PRESSURE ON THE FUEL INLET NEEDLE.* The viton tip of the fuel inlet needle may be damaged through undue pressure exerted on it, which may cause improper fuel levels within the bowl.

7. Insert the air cleaner bracket in the channels of the air horn, and install the bracket retaining pins.

2 LOWER BODY

1. If the throttle plate and shaft were removed, slide the throttle shaft into the lower body. The lever on the throttle shaft is opposite the fuel bowl. Referring to the line scribed on the throttle plate, insert the plate through the slot in the throttle shaft with the dimple below the shaft. Install the throttle plate retaining screws snug, but not tight. Rotate the throttle shaft, lightly slapping the throttle plate in the throttle bore, and check for free rotation of the throttle shaft. Hold the main body up to the light. Little or no light should show between the throttle plate and throttle bore. Hold the throttle plate closed, and tighten and stake the retaining screws.

When staking the screws, support the shaft and plate on a small block of wood or mandrel to prevent bending the shaft.

2. Install the distributor vacuum outlet fitting.

3. If the lever and rod were removed from the accelerating pump cover, position the top hole of the lever between the top bracket holes in the cover, and install the retaining roll pin. Position the vent rod lever over the cover bracket, lining up the hole in the lever with the holes in the bracket, and install the retaining roll pin. Install the roll pin in the proper lever stop hole ("HI"-"LO"), "HI" for warmer weather, or "LO" for colder weather operation. Position the small diameter end of the diaphragm return spring into the boss in the accelerating pump chamber. Position the diaphragm assembly into the accelerating pump cover, lining up the holes. Position the cover and diaphragm over the return spring and onto the body. Install the cover retaining screws finger tight. Push the diaphragm assembly inward, and tighten the screws.

4. Position the accelerating pump actuating rod retaining clip over the hole in the accelerating lever, with the tab side of the clip toward the carburetor barrel. Depress the tab, and insert the shorter end of the rod through the lever and clip. Release the tab when the rod is inserted.

If the carburetor is equipped with a dashpot, proceed with steps 5 and 6.

5. If the lever was removed from the dashpot cover, position the hole in the lever between the holes in the bracket on the cover. Install the lever retaining roll pin. Install the adjusting screw in the lever if necessary. Position the small diameter of the diaphragm return spring into the boss in the dashpot chamber. Position the diaphragm into the dashpot cover,

lining up the holes. Position the cover and the diaphragm over the return spring and onto the body. Install the cover retaining screws finger tight. Push the diaphragm assembly inward, and tighten the screws.

6. Position the dashpot actuating rod retaining clip over the hole in the dashpot lever with the tab side of the clip toward the carburetor barrel. Depress the tab, and insert the shorter end of the rod through the lever and clip. Release the tab when the rod is inserted.

7. Position the overtravel spring on the accelerating pump lever, and hook the tang of the spring on the lever. Position the overtravel lever and spring onto the throttle shaft, inserting the accelerating pump actuating rod and dashpot actuating rod into the two holes in the lever. Install the washer and retaining ring. Install the overtravel tension retaining pin in the throttle shaft. Pull the arm of the overtravel spring over the retaining pin to apply spring tension to the overtravel lever.

8. Position the spark valve gasket, if so equipped, over the spark valve, and install them into the lower body. Tighten the valve securely.

9. Install the idle mixture adjusting screw in the lower body. Turn the screw in until the head bottoms on the lower body. Back off the specified amount of turns. (See Specifications Section).

3 UPPER TO LOWER BODY ASSEMBLY

1. Place the ball check and the accelerating pump weight into the lower body accelerating pump outlet passage, and a ball check into the accelerating pump inlet passage.

2. If equipped with a dashpot, place a ball check into the dashpot inlet passage.

3. Position the main body gaskets onto the lower body. Position the upper body onto the lower body and install the body retaining screws.

4. Insert the fuel vent valve return spring, if so equipped, into the fuel vent passage. Install the vent valve rod retaining ring onto the rod. Insert the piston end of the fuel vent valve rod into the passage, and tap the retaining ring into the vent hole.

5. Position the fuel vent valve retaining clip over the hole in the actuating lever, with the tab side of the clip toward the carburetor air horn, and connect the rod to the actuating lever.

4 MANUAL CHOKE

1. Position the choke cable bracket assembly onto the lower body assembly, and install the stud.

2. Insert the threaded end of the choke shaft to cam lever rod through the cam lever swivel. Install the spring and adjusting nut onto the rod.

3. Position the rod end into the keyhole in the choke shaft lever; insert and turn counterclockwise.

4. Position the cam lever assembly over the stud, and install the retainer.

PART 5 ADJUSTMENTS

1 FLOAT

Remove the carburetor upper body. Turn it upside down. With a scale or gauge, measure the distance from the gasket surface of the upper body to the crown of the float (Fig. 12). Bend the float arm tab as necessary to obtain the correct dimension. (See Specifications Section).

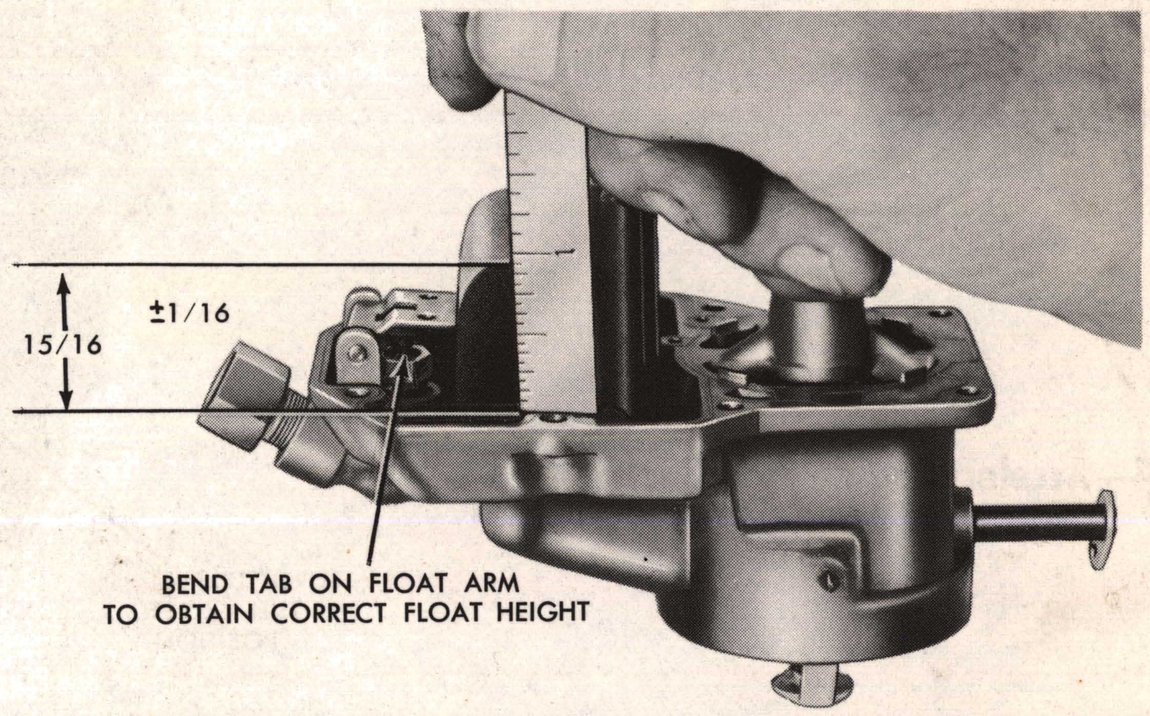


FIG. 12—Float Adjustment

2 VENT VALVE

Set the throttle linkage to the hot idle position. The groove in the vent valve rod (Fig. 13) should now be even with the open end of the vent valve rod retainer. Bend the arm on the vent valve rod actuating lever where it contacts the accelerating pump lever to align the groove with the edge of the bore.

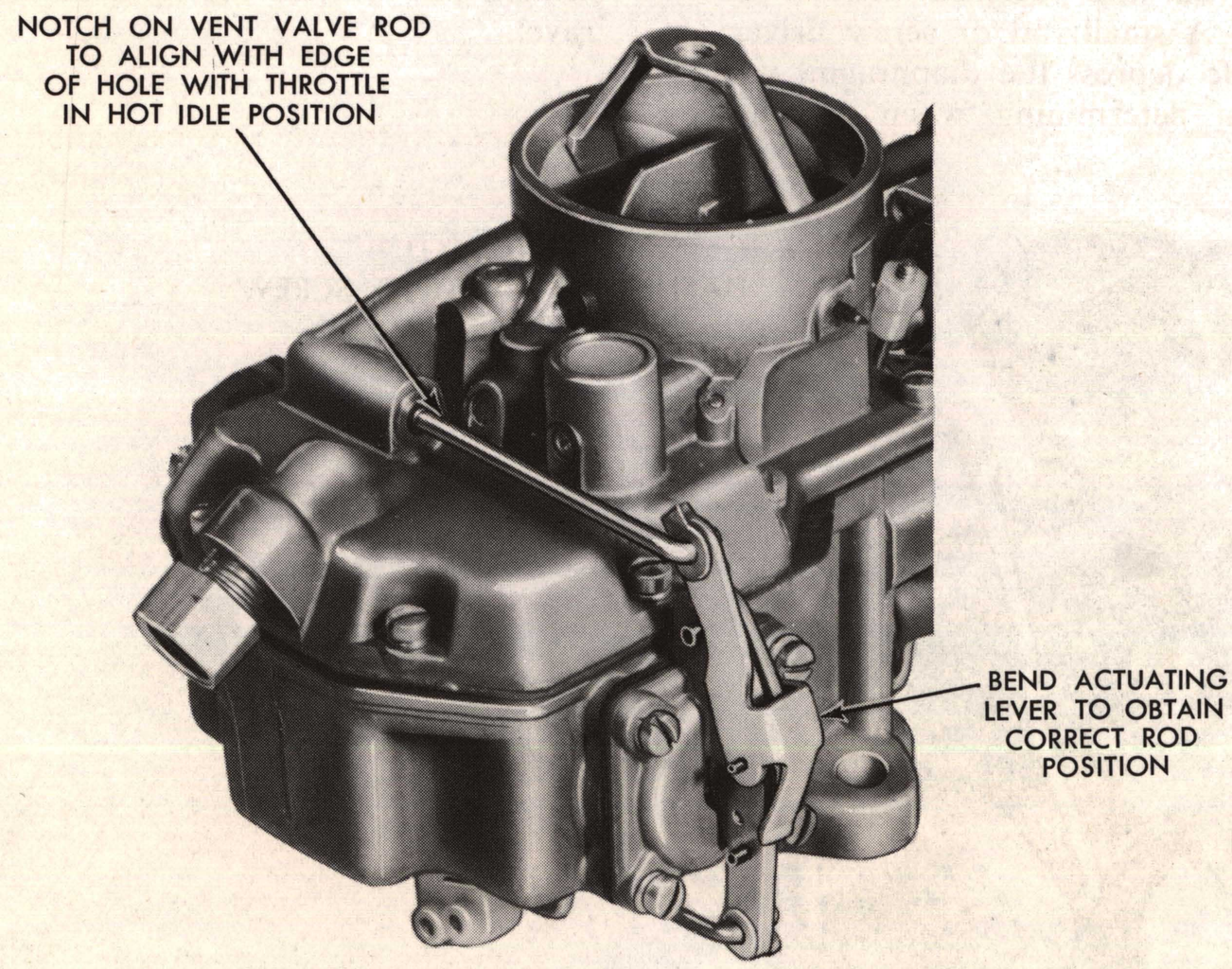


FIG. 13—Float Bowl Vent Valve Adjustment

3 ACCELERATING PUMP

Position the throttle and choke linkage and adjustments so the throttle plate (Fig. 14) will seat in the throttle bore. Bend the accelerating pump actuating rod to obtain the specified clearance between the pump cover and the roll pin in the pump lever. The correct size Allen wrench may be used as a gauge.

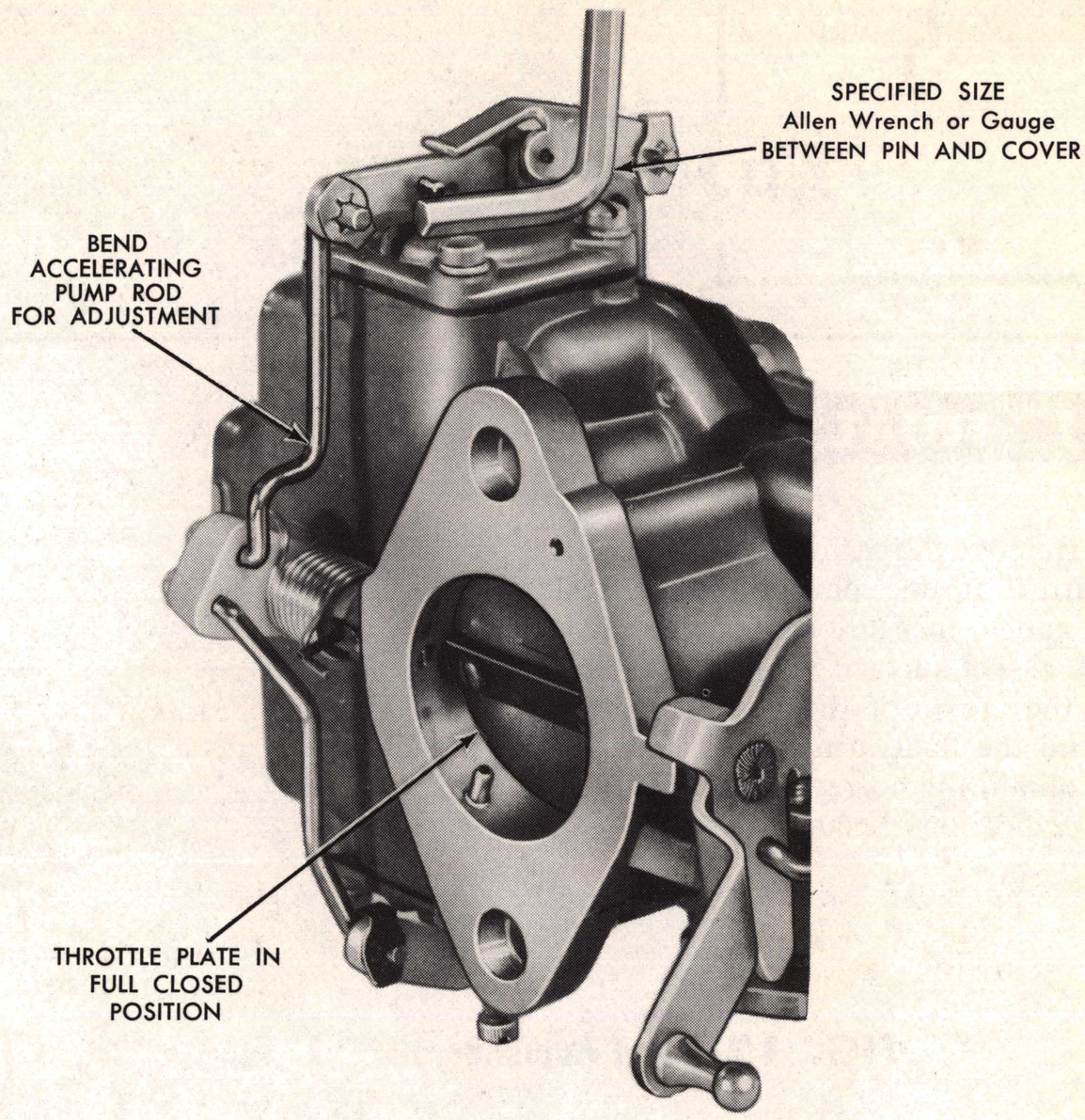


FIG. 14—Accelerating Pump Adjustment

4 DASHPOT

Adjust the throttle position to the hot idle setting (Fig. 15). Turn the dashpot adjusting screw in until it contacts the diaphragm. Turn the screw in the specified number of turns. A small rod or screw driver, used to depress the diaphragm, will aid in determining when the diaphragm has reached the limit of its travel.

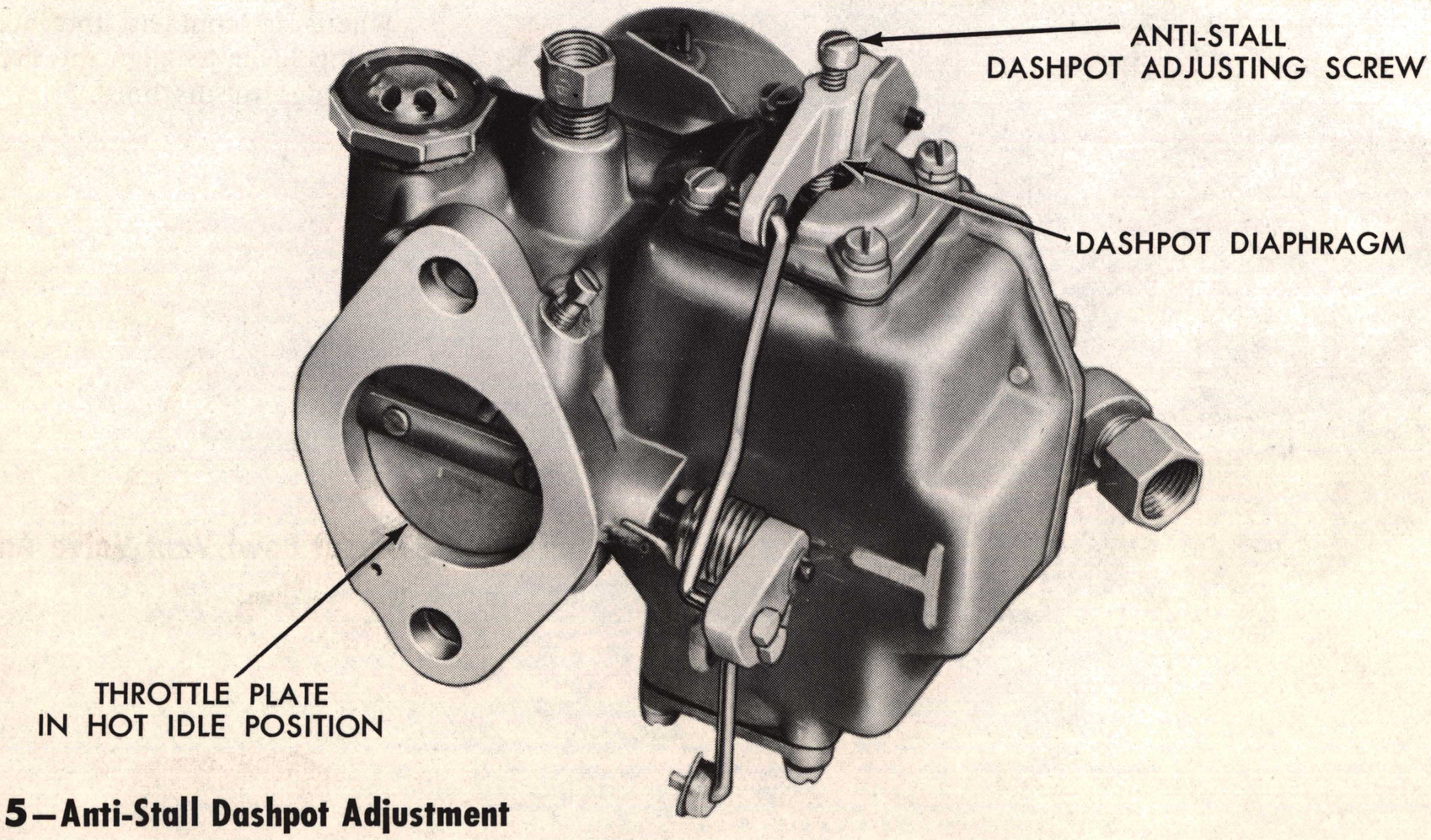


FIG. 15—Anti-Stall Dashpot Adjustment

5 MANUAL CHOKE

Place the choke linkage in the full choke position (Fig. 16). Insert a drill or a gauge of the specified size between the long side of the choke plate and the inside of the air horn. Maintaining the full choke position, adjust the choke pulldown nut to just contact the swivel on the cam lever.

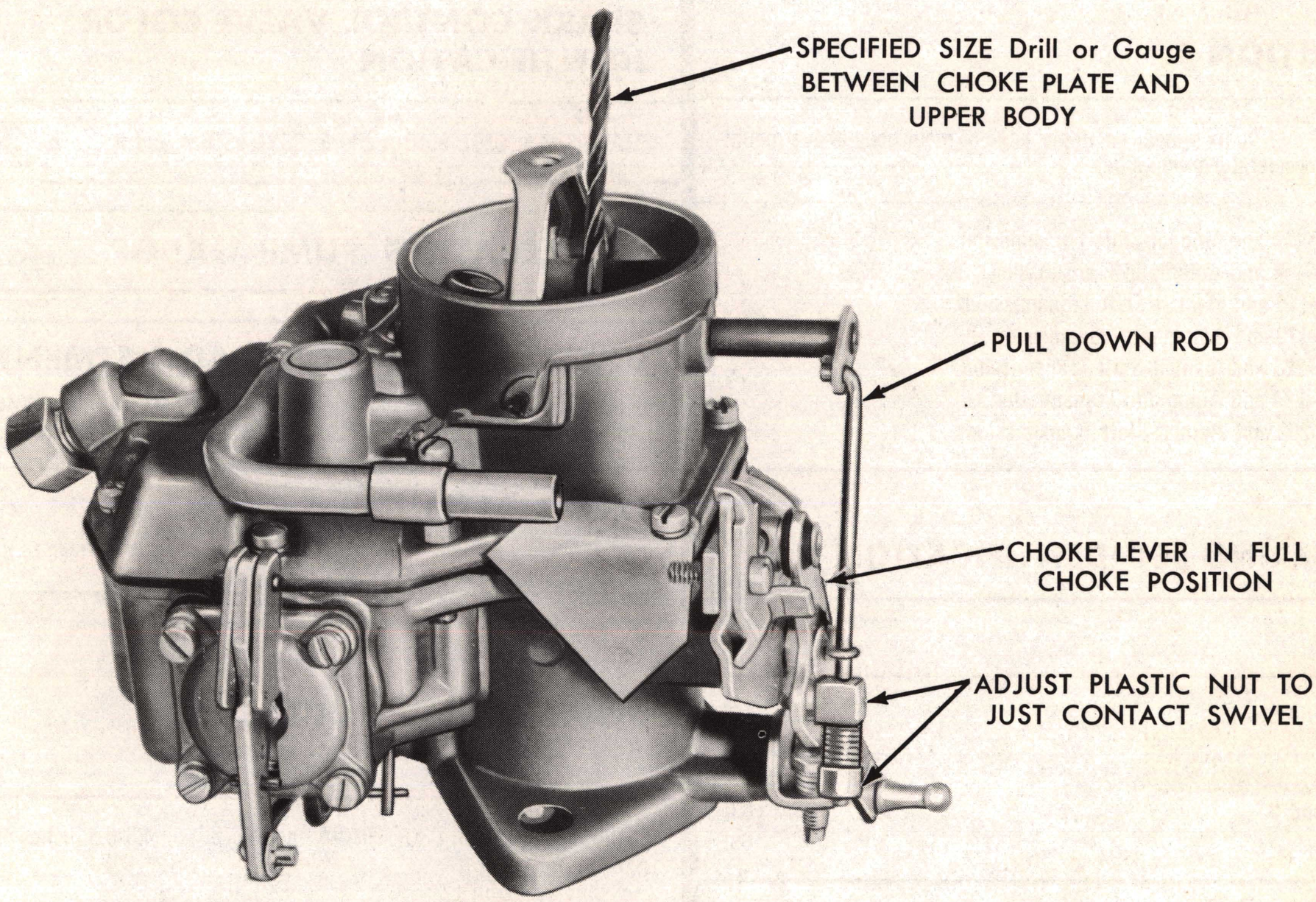


FIG. 16—Manual Choke Pull-Down Tension Adjustment

PART 6 SPECIFICATIONS

IDENTIFICATION

Part No. Prefix and Suffix appear on upper edge of main body above mounting stud hole (accelerator pump side).

C3DF-9510-A—144 and Manual-Shift Transmission.
C3DF-9510-B—144 and Automatic Transmission.
C30F-9510-A—170 and Manual-Shift Transmission.
C30F-9510-B—170 and Automatic Transmission.
C3AF-9510-A—223 and Manual-Shift Transmission.
C3AF-9510-B—223 and Automatic Transmission.
C3TF-9510-E—262 and Manual-Shift Transmission.

MAIN METERING JET IDENTIFICATION NO.

0-5,000 feet

C3DF-9510-A and B	53F
C30F-9510-A	59F
C30F-9510-B	57F
C3AF-9510-A and B	63F
C3TF-9510-E	69F

5,000-10,000 feet

C3DF-9510-A and B	51F
C30F-9510-A	57F
C30F-9510-B	55F
C3AF-9510-A and B	61F
C3TF-9510-E	67F

10,000-15,000 feet

C3DF-9510-A and B	49F
C30F-9510-A	55F
C30F-9510-B	53F
C3AF-9510-A and B	59F
C3TF-9510-E	65F

VENTURI SIZE

C3DF-9510-A and B	1-1/64″
C30F-9510-A and B	1-7/64″
C3AF-9510-A and B	1-13/64″
C3AF-9510-C and D	1-7/64″
C3TF-9510-E	1-13/64″

SPARK CONTROL VALVE COLOR IDENTIFICATION

C3AF-9510-A, C3GF-9510-A and B, C3YF-9510-A and B ..... plain

ACCELERATING PUMP GAUGE ..... 3/16″

INITIAL IDLE MIXTURE ADJUSTMENT

..... 7-8½ turns from full bottom

FLOAT SETTING

..... 1″ from gasket surface to float crown

POWER VALVE OPENS AT

C3DF-9510-A and B, C30F-9510-A and B	4.5-6.5 inches of Mercury
C3AF-9510-A and B	5.5-7.5

DASHPOT ... 3½ turns in from screw just touching diaphragm button.

MANUAL CHOKE DRILL SIZES

144 engine	21/64″
170 engine	29/64″
223 & 262 engine	5/16″

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