FUEL SYSTEM

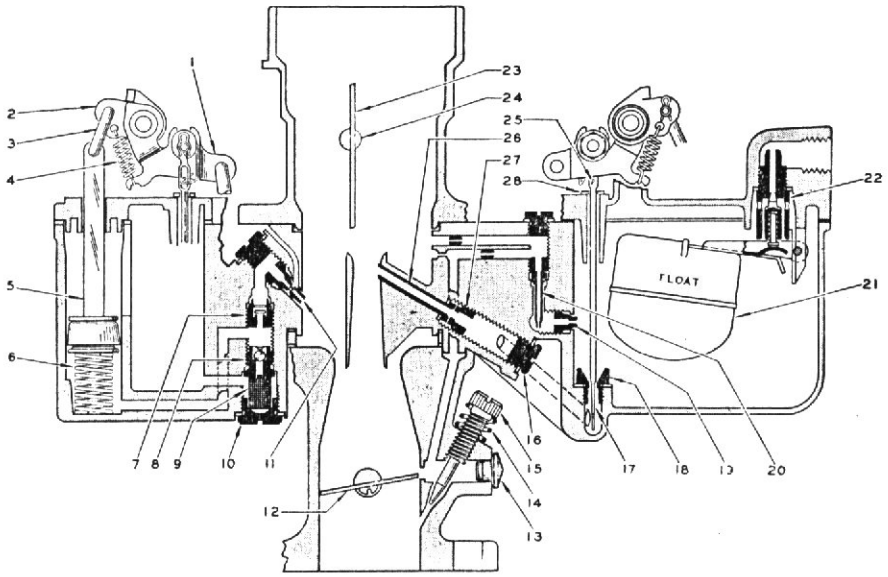

FIG. 1—CARBURETOR

No.	Willys Part No.	Ford Part No.	Name
1	116537	GPW-9529	Pump Operating Lever Assembly
2	116181	GPW-9528	Pump Arm and Collar Assembly
3	116199	GPW-9527	Pump Connecting Link
4	116187	GPW-9570	Pump Arm Spring
5	116195	GPW-9631	Pump Plunger and Rod Assembly
6	116188	GPW-9636	Pump Plunger Spring
7	116204	GPW-9594	Discharge Disc Check Assembly
8	116205	GPW-9576	Intake Ball Check Assembly
9	116175	GPW-9575	Pump Check Strainer
10	116163	GPW-9696	Pump Check Strainer Nut
11	116180	GPW-9940	Pump Jet
12	116154	GPW-9585	Throttle Valve
13	116162	GPW-9579	Idle Port Rivet Plug
14	116183	GPW-9578	Idle Adjustment Screw Spring
15	116176	GPW-9541	Idle Adjustment Screw
16	116164	GPW-9928	Pump Jet also Nozzle Passage Plug and Gasket Assembly
17	116540	GPW-9906	Metering Rod
18	116541	GPW-9914	Metering Rod Jet and Gasket Assembly
19	116179	GPW-9544	Idle Well Jet
20	116539	GPW-9533	Low Speed Jet Assembly
21	116172	GPW-9550	Float and Lever Assembly
22	116174	GPW-9567	Needle, Pin, Spring and Seat Assembly
23	116157	GPW-9549	Choke Valve Assembly
24	116545	GPW-9546	Choke Shaft and Lever Assembly
25	116538	GPW-9907	Metering Rod Spring
26	116166	GPW-9922	Nozzle
27	116161	GPW-9562	Nozzle Retainer Plug
28	116206	GPW-9905	Metering Rod Disc

The Fuel System, Fig. 2, consists of the Fuel Tank, Fuel Lines, Fuel Filter, Fuel Pump, Carburetor and Air Cleaner.

The most important attention necessary to the fuel system is to keep it clean and free of water.

It should be periodically inspected for leaks.

The fuel tank capacity is given on Page 3. The tank sets in a sump in the floor pan and two drain holes are incorporated in this sump to allow for flushing. When the vehicle leaves the factory a cap is placed over the front drain hole to keep out stones and dirt and another is placed in the glove compartment. Should maneuvers in water be necessary, install the second cap over the rear drain hole from the left side of the vehicle. After passing through the water remove cap and return it to the glove compartment.

CAUTION—Whenever the vehicle is to be stored for an extended period, the fuel system should be completely drained. The engine started and allowed to run until carburetor is emptied. This will avoid oxidation of the gasoline, resulting in the formation of gum in the units of the Fuel System.

Information pertaining to the operation and servicing of the units contained in fuel system are covered in the succeeding paragraphs.

Carburetor

The Carter Carburetor, Model WO-539S, Fig. 1, is the plain tube type with a throttle operated accelerator pump and economizing device.

Since carburetion is dependent in several ways upon both compression and ignition, it should always be checked last in an engine tune-up.

The carburetor delivers the proper fuel and air ratios for all speeds of the engine. By proper cleaning and replacing all worn parts, the carburetor will function correctly.

The carburetor can be divided into five circuits which are:

1. Float Circuit
2. Low Speed Circuit
3. High Speed Circuit
4. Pump Circuit
5. Choke Circuit

By treating each circuit separately, the study and repair of the carburetor is made much easier.

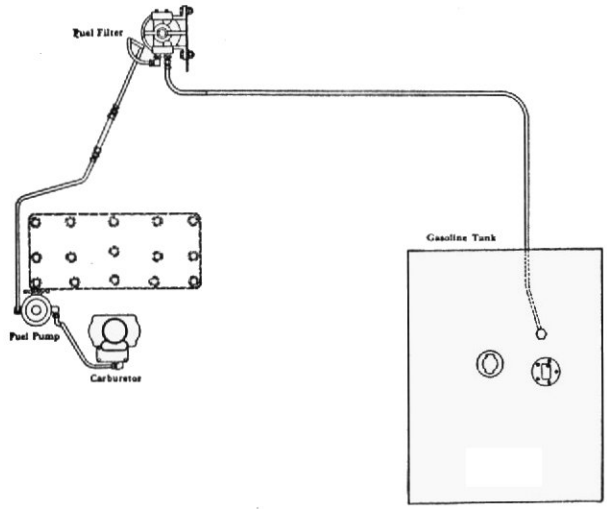

FIG. 2—FUEL SYSTEM

Float Circuit or Fuel Level

The float circuit Fig. 3, is important because it controls the height of the fuel level in the bowl and in the nozzle. If the fuel level is too high, it will cause trouble in the low and the high speed circuits.

The float bowl No. 3, acts as a reservoir to hold a supply of fuel. The level of the fuel in the bowl is controlled by a combination of parts which are: float and lever assembly No. 2, float bowl cover No. 4, needle valve and seat assembly No. 1.

Low Speed Circuit

The idle or low speed circuit, Fig. 4, controls the supply of fuel to the engine during idle and light load speeds up to approximately 20 miles per hour, and it feeds a small amount of fuel during the entire operation of the high speed circuit (gradually decreasing as speed is increased, above 20 m.p.h.).

During idling and low speed operation of the engine, fuel flows from the float bowl through the idle jet No. 8, to the point where it combines with a stream of air coming in through the by-pass, No. 9. The combining of the air with the fuel atomizes or breaks up the fuel into a vapor.

This mixture of air and fuel continues on through the economizer No. 10 until it begins to pass the point where it is further combined with a stream of air coming in through the lower bleed No. 11. This mixture of fuel and air then flows downward to the idle port chamber and thence into the engine at the port No. 12 and through the idle adjusting screw seat just below. This mixture is richer than the engine requires but when mixed with the air coming past the throttle valve it forms a combustible mixture of the right proportion for idle speeds.

The idle port is slotted so that as the throttle valve is opened it will not only allow more air to come in past it, but will also uncover more of the idle port allowing a greater quantity of fuel and air mixture to enter the intake manifold.

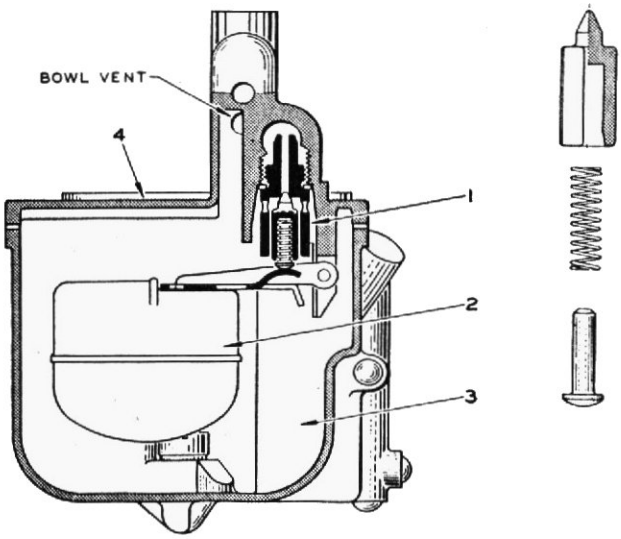

FIG. 3—FLOAT CIRCUIT

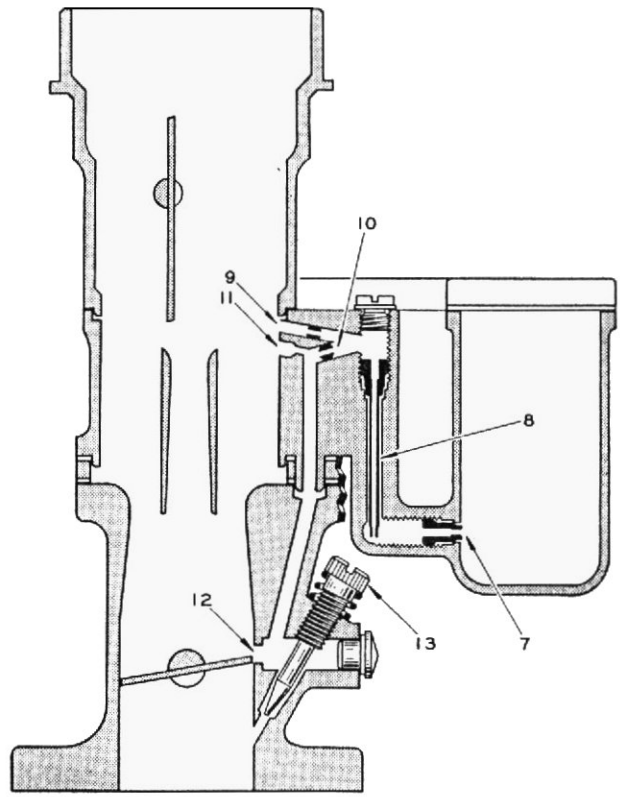

FIG. 4—LOW SPEED CIRCUIT

When the idle speed position of the throttle is fixed at an idle speed of 8 miles per hour, it leaves enough of the slotted port as reserve to cover the range in speed between idle and the time when the high speed system begins to cut in.

The idle adjusting screw No. 13 varies the quantity of the idle mixture.

High Speed Circuit

The high speed circuit, Fig. 5 cuts in as the throttle is opened wide enough for a speed of a little more than 20 miles per hour. The velocity of the air flowing down through the carburetor throat creates a pressure slightly less than atmospheric pressure at the tip of the main nozzle, No. 20.

Since the fuel in the float bowl is acted upon by atmospheric pressure, the difference in pressure between the two points causes fuel to flow from the bowl through the metering jet and out the main nozzle into the throat of the carburetor.

At higher speeds the area of the opening between the jet No. 17 and the metering rod No. 16 governs the amount of fuel going into the engine. At top speeds, the smallest section of the rod is in the jet.

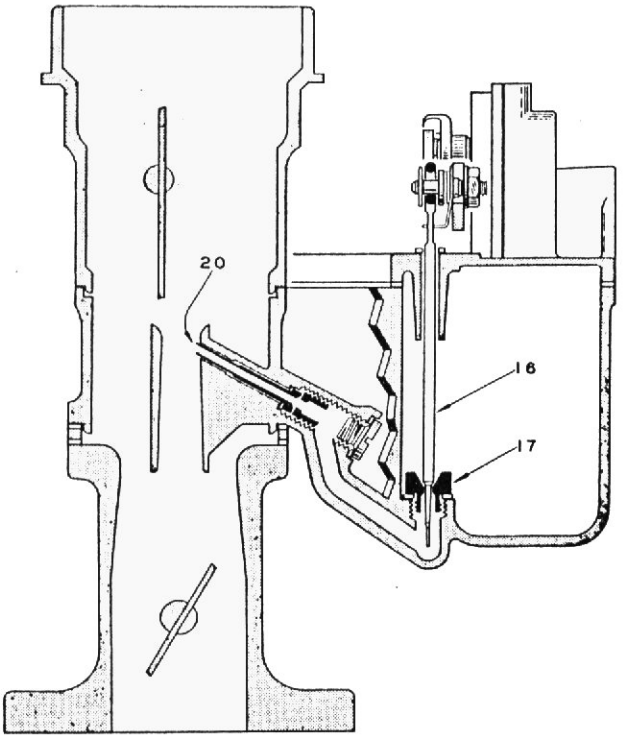

FIG. 5—HIGH SPEED CIRCUIT

Accelerating Pump Circuit

As the accelerator pedal is depressed, the pump plunger and lever are forced downward. This causes the fuel to leave the cylinder; closes the intake check valve No. 29, Fig. 6, opens the discharge check valve No. 30, and forces fuel into the throat of the carburetor at No. 33.

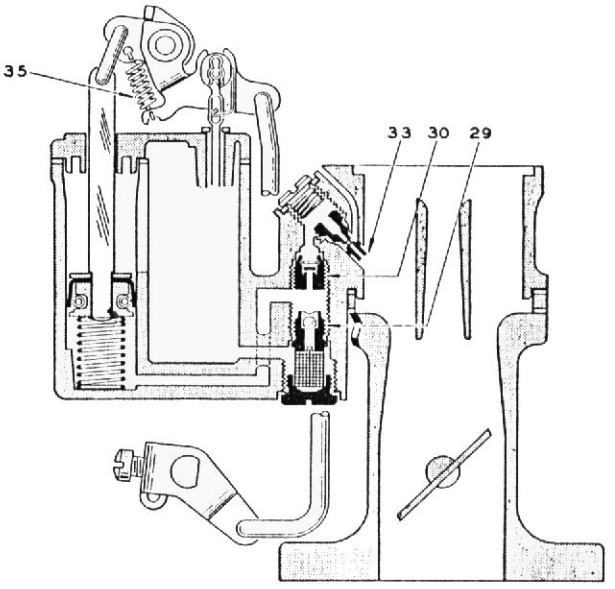

FIG. 6—PUMP CIRCUIT

The action is prolonged by the pump arm spring, No. 35, Fig. 6, since the hole in the top of the pump jet No. 33 restricts the flow of fuel so long as it is being forced out by the pump cylinder. The prolonging of the pump discharge gives the fuel in the high speed circuit sufficient time to flow fast enough to satisfy the demands of the engine.

As the accelerator pedal is allowed to return to its original position, the pump plunger is lifted upward. This creates a reduced pressure in the pump cylinder which opens the intake check valve No. 29 and closes the discharge check valve No. 30, thereby drawing in a new charge of fuel from the bowl.

Choke Circuit

This circuit, Fig. 7 is used only in starting and the warming up of the engine, by reducing the amount of air allowed to enter the carburetor and, thereby producing a richer mixture. It consists of the choke shaft and lever assembly No. 39, choke operating lever and spring No. 40, choke valve No. 37, and screws No. 38.

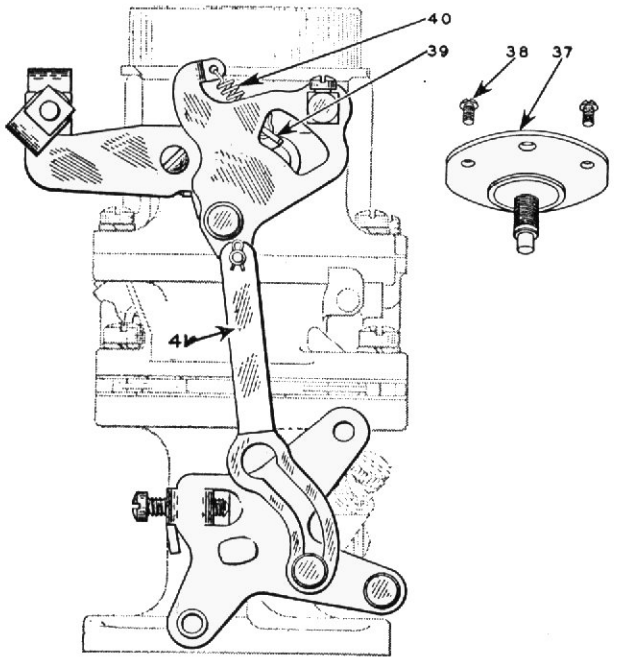

FIG. 7—CHOKE CIRCUIT

SERVICING AND ADJUSTMENT

Float Circuit

The Float Circuit is illustrated in Fig. 3.

If float is loaded with fuel or damaged, or if the holes for the pin are worn, the carburetor will flood. Poor action of float needle results if the lip of the float bracket is worn. In this event, it should be smoothed with emery cloth.

The needle and seat may leak because of wear, damage or sticking and will cause the carburetor to flood. Needles and seats are available only in matched sets. Never replace the needle without replacing the seat.

In determining the float level, Fig. 8, first turn the bowl cover gasket around and with the bowl cover in the position as shown, the float by its own weight, should rest at (⅜") as indicated by the gauge.

To make a change in the float level, it is best to press down with a screw driver on the brass lip of the float, holding up on the float while assembled to the cover of the carburetor. Bending the lip in this way allows it to retain its curvature which is necessary for the correct operation of the float valve.

Be sure the spring and pin in valve are in position and that the spring has not been stretched.

Low Speed Circuit

In the low speed circuit Fig. No. 4 it will be found that the fuel for the low speed circuit does not come through the main metering jet, but through the well jet No. 7, and the low speed jet No. 8, the openings of which are carefully calibrated, so if they are damaged or worn they should be replaced. The jets should always be tightly seated.

The by-pass and air bleed holes, No. 9 and 11, may be restricted. Carbon deposit which forms in the throat of the carburetor may restrict the air bleed holes to the extent that insufficient air will be supplied to mix the fuel before it reaches the idle port, No. 12.

This condition will generally be indicated if it is necessary to screw the idle mixture adjusting screw, No. 13, in closer than the minimum limit of ½ turn. If the condition is bad, a rolling idle may continue even after the idle mixture adjusting screw is screwed entirely in against the seat. These air bleed holes may be cleaned with a soft copper wire.

The idle port must be clean and unrestricted. If it is damaged, the engine will not perform properly at low speeds and a new casting will be necessary.

A letter "C" enclosed within a circle is stamped on the face of the throttle valve. When installed in the carburetor, this side should be toward the idle port, and facing the intake manifold as viewed from the bottom.

To properly center the valve in the throat of the carburetor, the screws should be started in the shaft, and then with the valve tightly closed, (throttle lever adjusting screw backed out), it should be lightly tapped. This will centralize the valve in the bore. Pressure should then be maintained with the fingers until the screws are tightened.

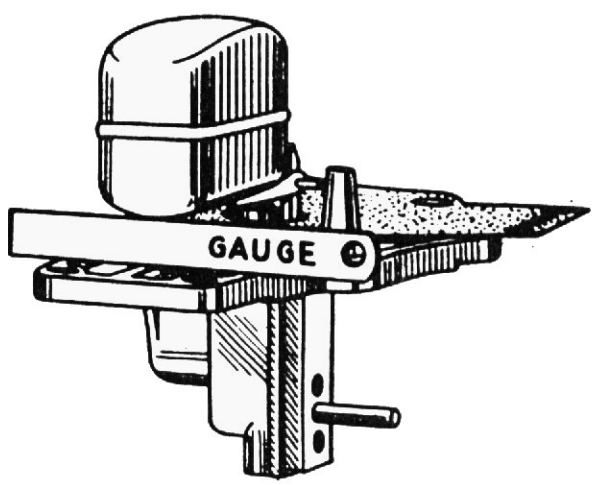

FIG. 8—FLOAT LEVEL SETTING

If the carburetor bore is restricted with carbon deposit it will be necessary to open the throttle wider than the specified opening to obtain the proper idle speed. Opening the throttle more than the specified amount in order to obtain the proper idle will then uncover more of the slotted idle port than was intended. This will result in leaving an insufficient amount of the idle port as a reserve to cover the period between idle and 20 miles per hour, where the high speed system begins to cut in. A flat spot on acceleration will result. Clean by scraping or with emery cloth.

High Speed Circuit

It is rarely necessary to remove the main nozzle No. 20, Fig. 5. It can usually be cleaned by removing plug and blowing out with compressed air. If it is damaged and requires replacing make sure, upon installation, only one gasket is between nozzle and its seat in the casting.

If the carburetor has been in service for a long time or has been tampered with, it may be found the metering rod is improperly adjusted or worn. A worn metering rod will have the effect of a rich mixture above 20 miles per hour. If the metering rod is worn, the metering rod jet will also be worn and both should be replaced.

To adjust metering rod, back out throttle lever adjusting screw "C" Fig. 9, and close throttle tight. Using gauge T-109-26, loosen nut "B" Fig. 9, and move pin until it seats in notch of gauge. Tighten nut securely. Remove gauge and install metering rod, disc, and connect spring through hole in metering rod.

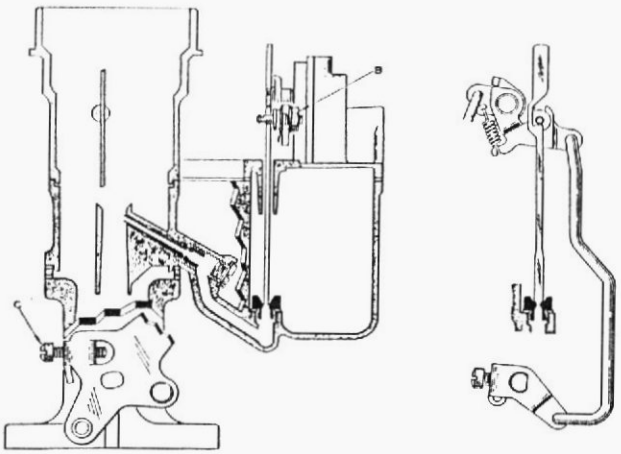

FIG. 9—METERING ROD GAUGING

Accelerating Pump Circuit

If the pump plunger is worn, sticks, or the spring under the leather has lost its tension, replace the plunger assembly No. 5, Fig. 1.

If the Accelerator Pump Intake Valve (ball check) No. 29, Fig. 6 leaks, part of the pump discharge will be forced back through the valve into the float bowl, thereby causing an insufficient amount of fuel to be discharged from the Jet No. 33. If the valve cannot be cleaned with compressed air, it must be replaced.

If the Accelerator Pump Discharge Valve (Disc check) No. 30 leaks, air will be drawn into the pump cylinder on the upstroke of the plunger. This gives an insufficient charge of fuel into the throat of the carburetor upon acceleration causing a flat spot. If the valve cannot be cleaned with compressed air so that it works properly, it must be replaced.

If the Accelerating Pump Arm Spring No. 35 is weak or damaged, it will cause poor acceleration.

If the hole in the Accelerating Pump Jet No. 33 is too large, the accelerating charge will be allowed to pass too fast and will make the mixture too rich. An enlarged jet must be replaced. A jet loose on its seat gives the same effect. A clogged jet will result in a stumble on acceleration.

To adjust the pump stroke, the pump gauge T-109-117S should be used. First back out the throttle adjusting screw "C", Fig. 9, so that it does not touch the casting. In gauging the pump stroke, place the gauge on top of the bowl cover, open the throttle wide then measure to the top of the pump rod. Close throttle tight and measure again. The difference should be 17/64". To adjust the stroke, bend the throttle connector rod at "A" Fig. 10. ALWAYS SET THE PUMP BEFORE SETTING THE METERING ROD. If set afterwards the metering rod will be thrown out of adjustment.

Throttle Connector Rod and Throttle Shaft Arm Assembly may be worn, and allow the throttle valve to be opened by the accelerator pedal before the pump jet begins to discharge gasoline, resulting in a flat spot. Replace all worn parts, because the operation of the metering rod is also affected.

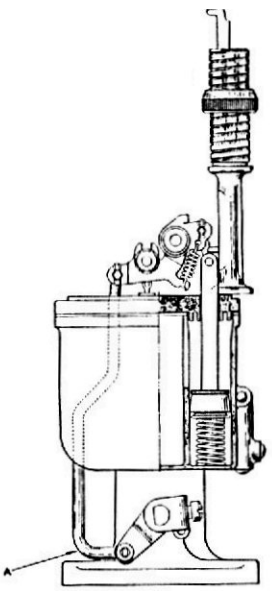

FIG. 10—PUMP TRAVEL GAUGING

Choke Circuit

The choke connector link No. 41, Fig. 7 connects the choke lever and the throttle lever and causes the throttle to be opened slightly when the choke valve is closed, thus insuring quick starting and freedom from stalling during the warm up period.

Accelerator and Linkage

The accelerator linkage, Fig. 11 is properly adjusted when vehicle leaves the factory, however, in time component parts will become worn and require adjusting to maintain a smooth even control of engine speed.

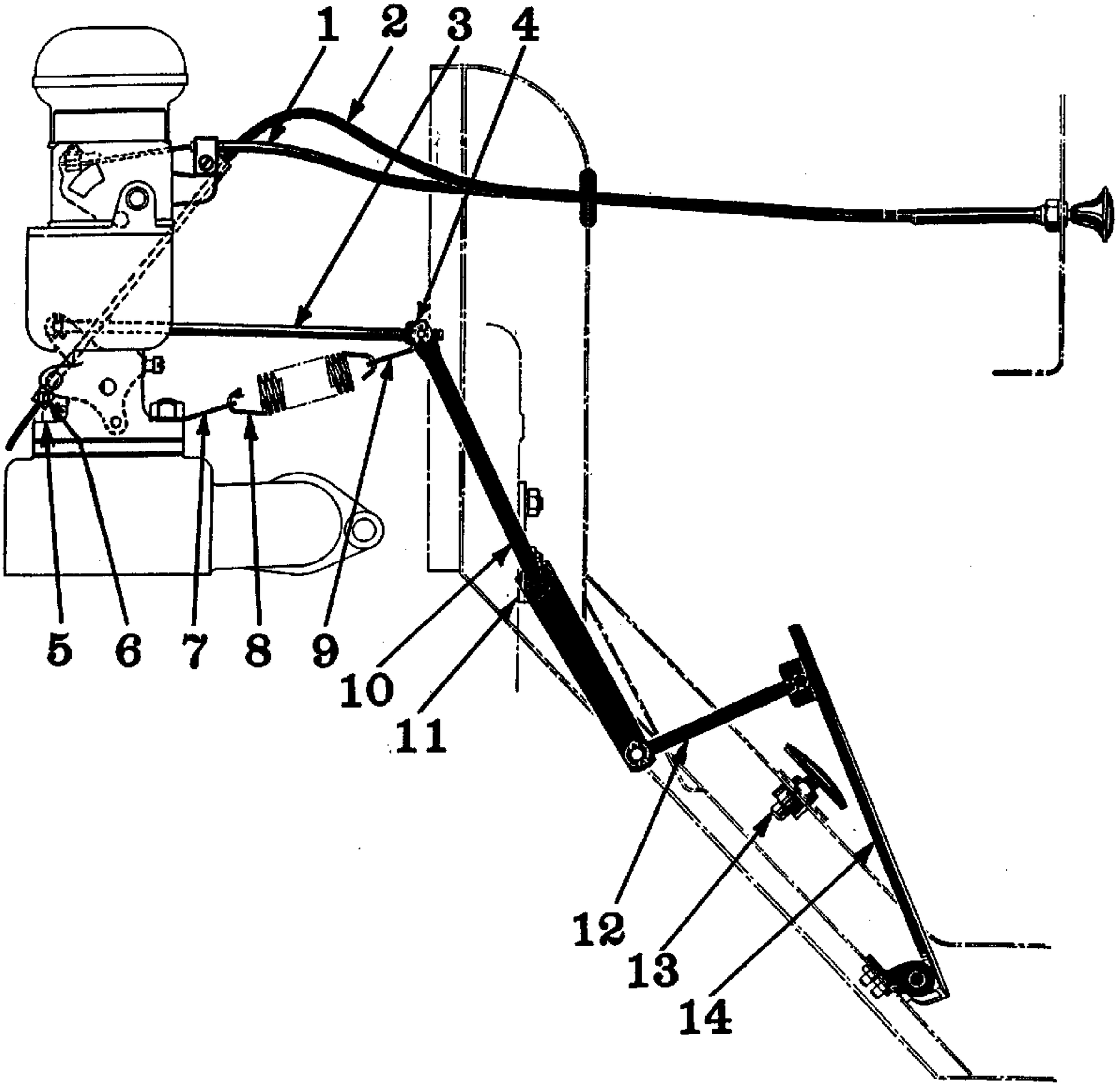

FIG. 11—ACCELERATOR, THROTTLE and CHOKE CONTROL

No.	Willys Part No.	Ford Part No.	Name
1	A-1301	GPW-9700	Choke Control Assembly
2	A-5106	GPW-9775	Throttle Control Assembly
3	A-1175	GPW-9742	Throttle Rod
4	633013	GPW-9752	Throttle Rod Adjusting Block
5	50922	33800-S2	Carburetor to Inlet Manifold Stud Nut
6	372438	GPW-11474	Throttle Wire Stop
7	A-1173	GPW-9751	Accelerator Retracting Spring Clip
8	633011	GPW-9799	Accelerator Spring
9	639610	GPW-9745	Accelerator Retracting Spring Clip
10	A-1243	GPW-9730	Accelerator Cross Shaft and Lever
11	639607	GPW-9728	Accelerator Cross Shaft Bracket
12	A-1174	GPW-9727	Accelerator Connector Link
13	A-1225	GPW-9716	Accelerator Foot Rest Assembly
14	A-1083	GPW-9735	Accelerator Treadle Assembly

Adjust the length of throttle rod No. 3 so when carburetor throttle valve is wide open, the accelerator treadle No. 14 will not strike the toe board. Tighten lock nut on adjusting block No. 4.

Fuel Pump

The Fuel Pump, Fig. 12 delivers a pressure of 1½ to 2½ lbs. maximum pressure at 1800 r.p.m. 16" above pump outlet.

The rotation of camshaft eccentric actuates rocker arm "A" about ¼", pivoted at "B" which pulls link "C" and diaphragm assembly "D" downward against spring pressure "E" which creates a vacuum in pump chamber "F".

On the suction stroke of the pump, fuel from the tank enters inlet "G" into sediment bowl "H" and passes through strainer "I" and inlet valve "J" into pump chamber "F". On the return stroke spring pressure "E" pushes diaphragm "D" upward, purpose of keeping the rocker arm in constant contact with eccentric.

forcing fuel from chamber "F" through outlet valve "K" and out through "L" to the carburetor.

When the carburetor bowl is full, the float in the carburetor will shut off the needle valve, thus creating a pressure in pump chamber "F". This pressure will hold diaphragm assembly "D" downward against spring pressure "E" where it will remain inoperative until the carburetor requires further fuel and the needle valve opens. Spring "M" is merely for the

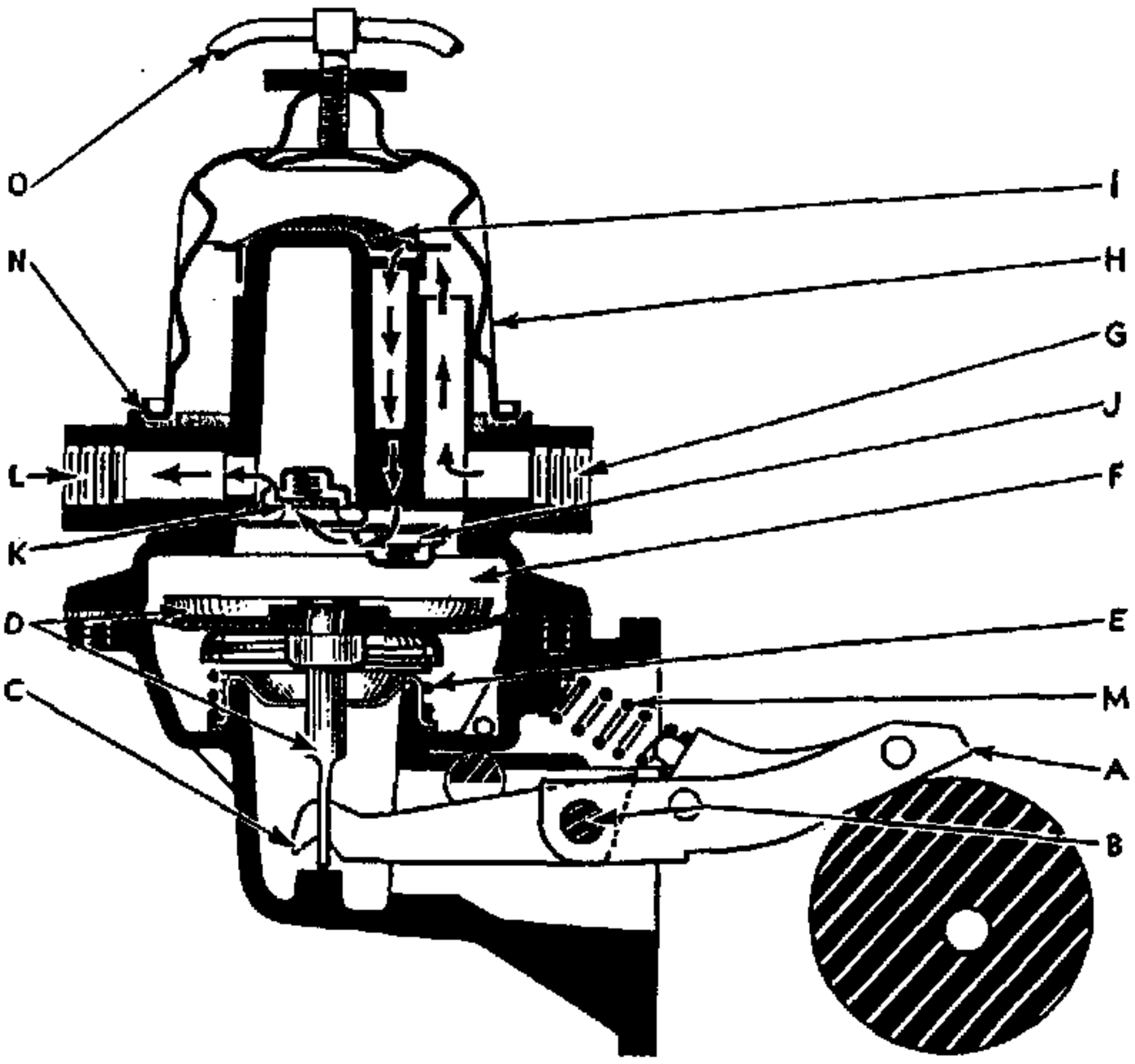

FIG. 12—FUEL PUMP

No.	Willys Part No.	Ford Part No.	Name
A	115641	GPW-9399	Fuel Pump Rocker Arm Assembly
B	A-1046	GPW-9378	Fuel Pump Rocker Arm Pin
C	115880	GPW-9381	Fuel Pump Rocker Arm Link
D	115644	GPW-9398	Fuel Pump Diaphragm and Pull Rod Assembly
E	115868	GPW-9396	Fuel Pump Diaphragm Spring
F			Pump Chamber
G			Fuel Inlet
H	A-1494	GPW-9355	Fuel Pump Bowl
I	115654	GPW-9365	Fuel Pump Filtering Screen Assembly
J	115651	GPW-9352	Fuel Pump Inlet Valve Assembly
K	115651	GPW-9352	Fuel Pump Outlet Valve Assembly
L			Fuel Outlet
M	115643	GPW-9380	Fuel Pump Rocker Arm Spring
N	115656	GPW-9364	Fuel Pump Bowl Gasket
O	115657	GPW-9387	Strainer Ball Assembly

A lever and spring located on rear side of the fuel pump body is used for priming of the carburetor.

Moving the lever up and down operates the fuel pump diaphragm manually and pumps the fuel from the tank, filling the filter and carburetor bowl.

This provides a means of filling the fuel lines and units without using the starting motor, which would create unnecessary drain on battery.

The lever should be placed in the downward position to make pump function normally.

Diaphragm "D" is composed of several layers of specially treated cloth, which is impervious to fuel.

The fuel pump has a large reservoir and surge chamber. The filter bowl is clamped to the cover assembly, making it a simple matter to clean any sediment from the fuel pump. The inlet and outlet valve assemblies are interchangeable, and each assembly is a self-contained unit made up of a valve cage, a fibre valve, and a valve spring. Both valve assemblies are held in place by a valve retainer, permitting easy and speedy removal of the assemblies.

To disassemble fuel pump release thumb nut holding clamp of filter bowl, "H" and remove bowl. Remove strainer "I" from center tower, remove cork gasket, remove the six screws holding the cover flange to the pump body. Scratch a line across the two castings so that on assembly these two parts can be correctly assembled. Lift off top cover which brings into view the diaphragm assembly "D". Remove spring "M" that holds the rocker arm "A" against the camshaft eccentric.

To unhook the diaphragm pull rod "D" from the rocker arm link "C" press down and away from the rocker arm side. Remove oil seal and washer.

Remove the two screws holding inlet and outlet valve retainer.

Wash all parts thoroughly in cleaning solution and make the assembly as follows:

Install oil seal, (rubber cup) on body, then steel washer and spring that fits on the diaphragm assembly, holding the rocker arm "A" down, press the diaphragm assembly "D" down, tilt the diaphragm away from rocker arm and hook into place. Install inlet valve assembly "J" with new gasket. The inlet valve is installed in the body with the spring facing down. Install the outlet valve assembly "K" with the outlet valve spring up. Install valve retaining plate and two screws. Assemble upper and lower castings so that scratch marks line up. Install the six retaining screws and tighten them evenly. Install cam lever spring "M". Install new bowl gasket, filter screen "I" and bowl "H", tightening into place with thumb nut.

Fuel Filter

The fuel filter, Fig. 13 is of the multiple disc type bolted to the right side of the cowl and located in the fuel line between the fuel tank and the fuel pump. This is an added precaution against water or dirt reaching the carburetor. Drain the filter every few days to remove accumulated dirt and water. Be sure to tighten drain plug securely after draining.

To clean filter, remove the cover cap screw, No. 2, and remove the bowl, No. 10. Remove the filter unit, No. 8, and wash in any suitable cleaning solution. Blow out lightly with an air hose and clean out filter bowl. When replacing the unit be sure spring, No. 9, is placed over center post at the bottom of the bowl. Be sure that the gasket, No. 7, at top of filter unit and the bowl gasket, No. 6, are in good condition and in place. If the bowl gasket leaks, air will enter the fuel supply. Check for any fuel leaks with the engine stopped. Clean the filter unit every 500 operating hours or more often under severe conditions.

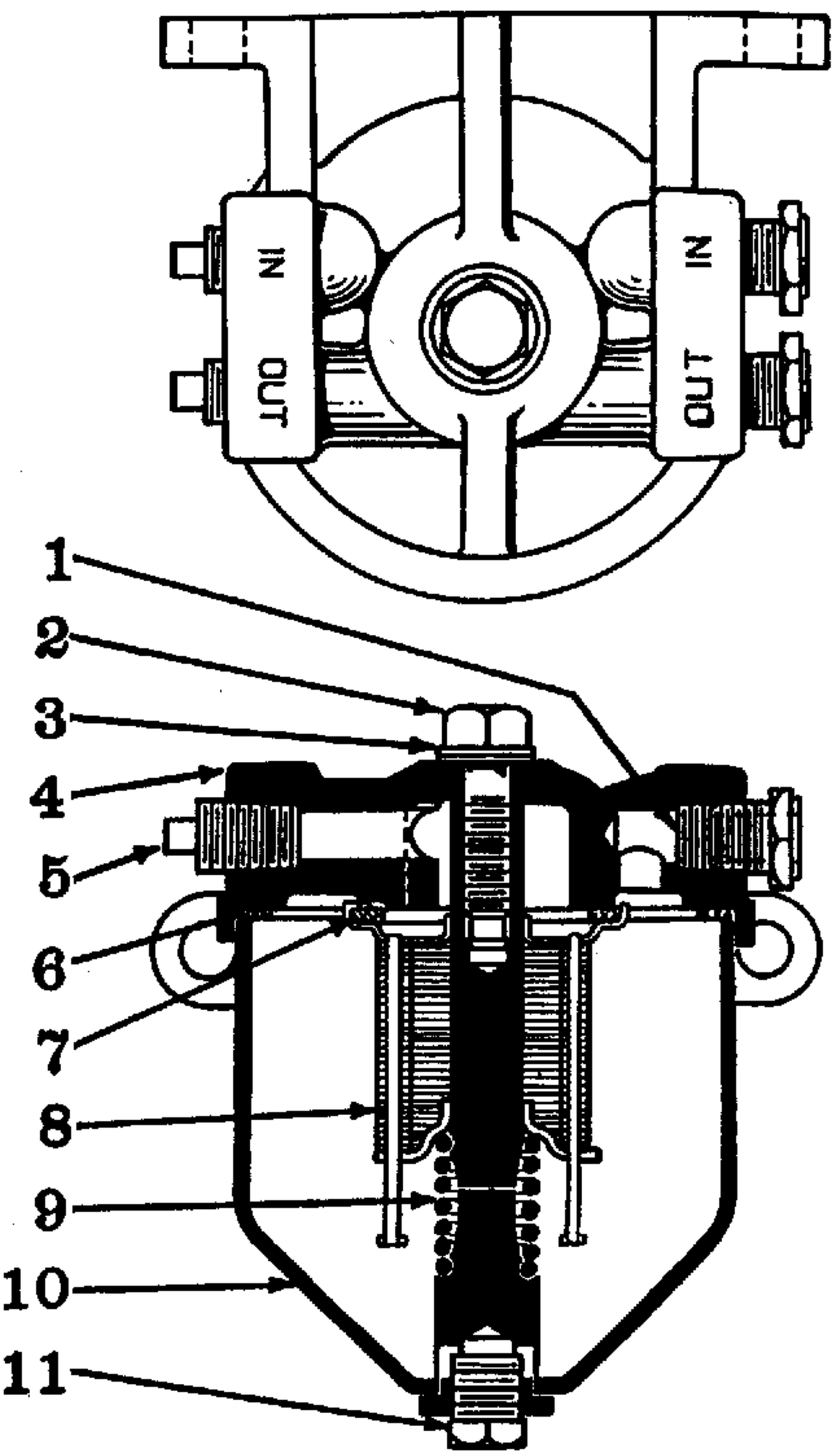

FIG. 13—FUEL FILTER

No.	Willys Part No.	Ford Part No.	Name
1	A-1265	GPW-9154	Reducing Pipe Bushing—¼ x ⅛ Pipe
2	A-1256	GPW-9183	Strainer Cover Cap Screw
3	A-1257	GPW-9184	Strainer Cover Cap Screw Gasket
4	A-1258	GPW-9149	Strainer Cover
5	5138	353055-S	Pipe Plug—¼"
6	A-1259	GPW-9160	Strainer Bowl Gasket
7	A-1260	GPW-9186	Strainer Unit Gasket
8	A-1261	GPW-9140	Strainer Unit Assembly
9	A-1262	GPW-9182	Strainer Unit Spring
10	A-1263	GPW-9162	Strainer Bowl and Center Stud
11	A-1264	GPW-9185	Strainer Drain Plug

Air Cleaner

The air which is taken into the carburetor, to mix with the fuel, is thoroughly cleaned when passed through the oil bath air cleaner Fig. 14. The cleaner is mounted on the right hand side of the dash and can be readily removed.

To clean the filter, loosen the hose clamp and two wing nuts at the center of the dash; remove the two wing nuts on the right side and remove air cleaner assembly from vehicle. Next, unfasten both clamps holding the oil cup. Unscrew element wing nut and pull out filter unit.

Wash the filter in cleaning solution by slushing it back and forth, then with an air hose dry off the unit. Do not reoil. Fill the oil cup to the indicated level. (See Capacity Chart, Page 3 and Lubrication Chart, Page 12). To assemble, reverse the dismantling procedure.

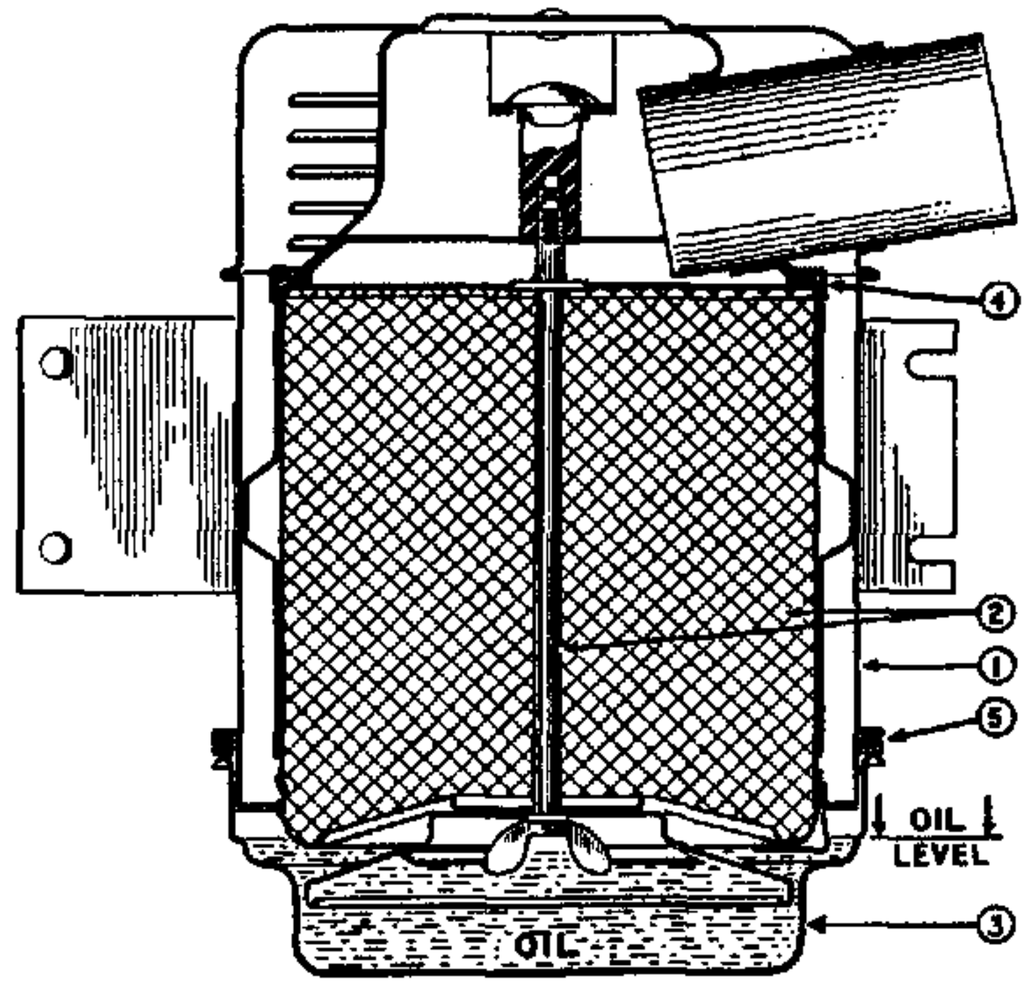

FIG. 14—AIR CLEANER (HEAVY DUTY—OIL TYPE)

No.	Willys Part No.	Ford Part No.	Name
1	A-5629	GPW-9609	Air Cleaner Body
2	A-5630	GPW-9617	Cleaner Element & Wing Bolt
3	A-5631	GPW-9658	Cleaner Cup (Oil)
4	A-5632	GPW-9621	Body Gasket (Upper)
5	A-5633	GPW-9623	Oil Cup Gasket (Lower)

Fuel Tank Cap

The fuel tank cap is of the pressure type which keeps up to 1½ to 2 lbs. vapor pressure on the fuel. This reduces leakage and fire hazard, also eliminates depreciation of fuel qualities by evaporation.

FUEL SYSTEM TROUBLES AND REMEDIES

SYMPTOM	PROBABLE REMEDY
Excessive Fuel Consumption:	
Tires Improperly Inflated	Inflate to 30 lbs.
Brakes Drag	Adjust
Engine Operates too Cold	Check Thermostat
Heat Control Valve Inoperative	Check Thermostatic Spring
Leak in Fuel Line	Check All Connections
Carburetor Float Level High	See Carburetor Section
Accelerator Pump Not Properly Adjusted	Adjust
Leaky Fuel Pump Diaphragm	Replace
Loose Engine Mountings (High carburetor fuel level)	Tighten
Ignition Timing Slow or Spark Advance Stuck	See Distributor Section
Low Compression	Check Valve Tappet Clearance
Air Cleaner Dirty	Remove and Clean
Engine Hesitates on Acceleration:	
Accelerator Pump does not Function Properly	Replace Piston and Rod or Adjust
Carburetor Float Level	Adjust
Spark Plugs	Replace or Clean and Adjust
Low Compression	Check Valves
Distributor Points—Dirty or Pitted	Replace
Weak Condenser or Coil	Replace
Carburetor Jets Restricted	Remove and Clean
Excessive Engine Heat	See Engine Section
Engine Stalls—Won't Idle:	
Improper Condition of Carburetor	See Carburetor Section
Low Speed Jet Restricted	Remove and Clean
Dirty Fuel Sediment Bowl Screen	Remove and Clean
Air Cleaner Dirty	Remove and Clean
Leaky Manifold or Gasket	Replace
Fuel Pump Diaphragm Porous	Replace
Loose Carburetor	Tighten Flange Nuts
Water in Fuel	Drain System
Improper Ignition	See Distributor Section
Spark Plugs	Clean and Adjust
Valves Sticking	Grind Valves

FUEL SYSTEM SPECIFICATIONS

Carburetor:

Make.....Carter
Model.....W.O.-539 S
Flange.....1"
Primary Venturi.....1 1/32" I.D.
Main Venturi.....1" I.D.
Float Setting.....3/8"
Fuel Intake..... Square Vertical Spring Loaded Needle No. 53 Drill Size in Needle seat.

Fuel Line Connection.....1/8" pipe thread—3/16" inverted flared tube elbow.

Low Speed Jet Tube
Jet Size.....No. 71 Drill
Idle Well Jet.....No. 61 Drill

Idle Screw Seat.....No. 46 Drill

Main Nozzle Discharge Jet.....096" Diameter

Metering Rod.....No. 75-547
Jet Size.....070" Diameter
Setting (Use gauge No. T-109-26).....2.718"

Accelerating Pump
Discharge Jet.....No. 73 Drill
Intake Ball Check.....No. 40 Drill
Discharge Disc Check.....No. 40 Drill
Relief Passage to Outside.....No. 42 Drill
Adjustment (Use gauge T-109-117 S).....17/64"

Air Cleaner:

Make.....Oakes
Model.....613300
Type.....Oil Bath
Oil Capacity.....See Capacity Chart, Page 3

Fuel Pump:

Make.....AC
Model.....AF
Type.....Camshaft
Pressure..1½ to 2½ lbs. at 16" above outlet @ 1800 R.P.M.

Fuel Tank:

Make.....Own
Capacity.....See Capacity Chart, Page 3
Location.....Under Driver's Seat
Filler Cap.....AC No. 850018

Fuel Filter:

Make.....AC
Model.....T-2
Type.....Disc
Mounting.....Mounted on Dash