sight. If not, fuel will enter the mixture to interfere with properly setting the slow speed needle. BE SURE BUTTERFLY VALVE CLOSES FORWARD OF THE HIGH SPEED JET—DOES NOT CLOSE ON TOP OF THE JET.

Actually, the way to properly check this setting is to close the butterfly, then indicate closed position in barrel of carburetor by running a scribe along the bottom outside edge of the butterfly. The barrel is thus scratched to show position of outside edge (lower) of the butterfly with relation to the high speed jet. If correctly adjusted, the distance between the scratch mark and near edge of the jet should be slightly greater than the thickness of the edge of the butterfly, so the butterfly does not close on top of the jet.

Keep above in mind when attempting to overcome a stubborn trolling condition in either of these two motors.

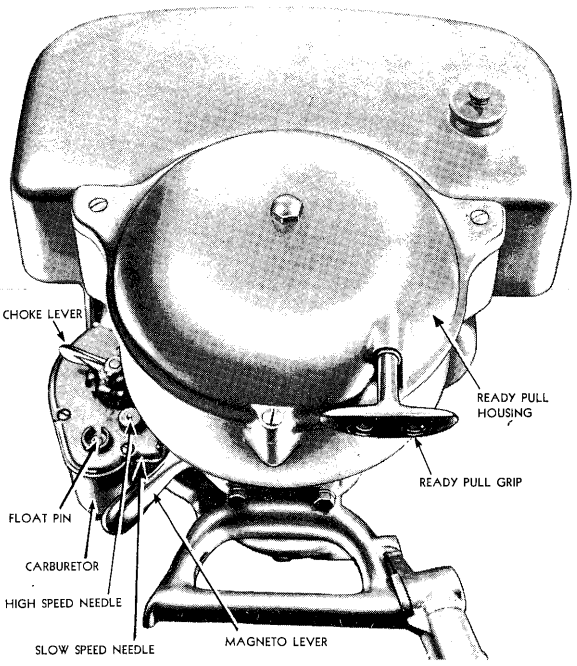
CARBURETION—K, KS, KD

Carburetors are of the full range type, that is, constructed with two jets to insure efficient carburetion throughout the entire speed range of the motor. The slow speed jet provides correct carburetion at slow and intermediate speeds; the high speed jet from intermediate to top speeds.

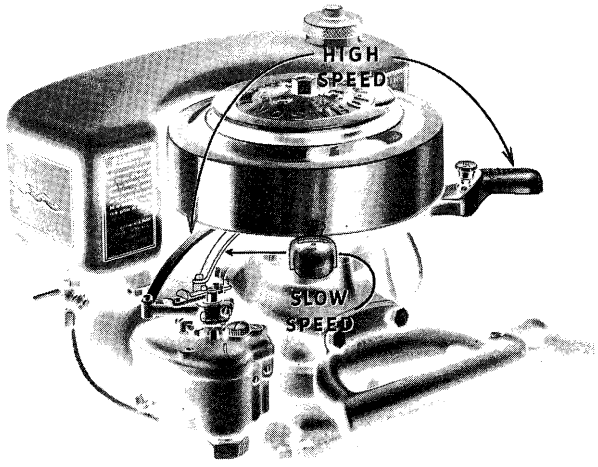
Two adjustments are thus necessary —slow and high speed needles.

TO ADJUST SLOW SPEED (slow speed adjustment should be made with retarded spark and at normal running temperature)—Close slow speed screw or needle (turn right until it rests gently on its seat). Open approximately ½ to ¾ turn (turn left). Start motor as instructed and operate at full throttle until it reaches normal temperature. Move magneto lever midway between center position and full retard. Turn slow speed needle to right or left as required to obtain smooth operation at slow speed.

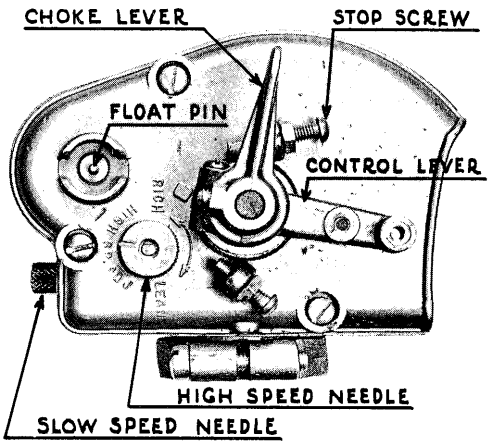
TO ADJUST HIGH SPEED—Start motor as instructed. Operate at full throttle and full spark advance until motor reaches normal operating temperature. Turn high speed needle to right or left as required to obtain maximum speed.



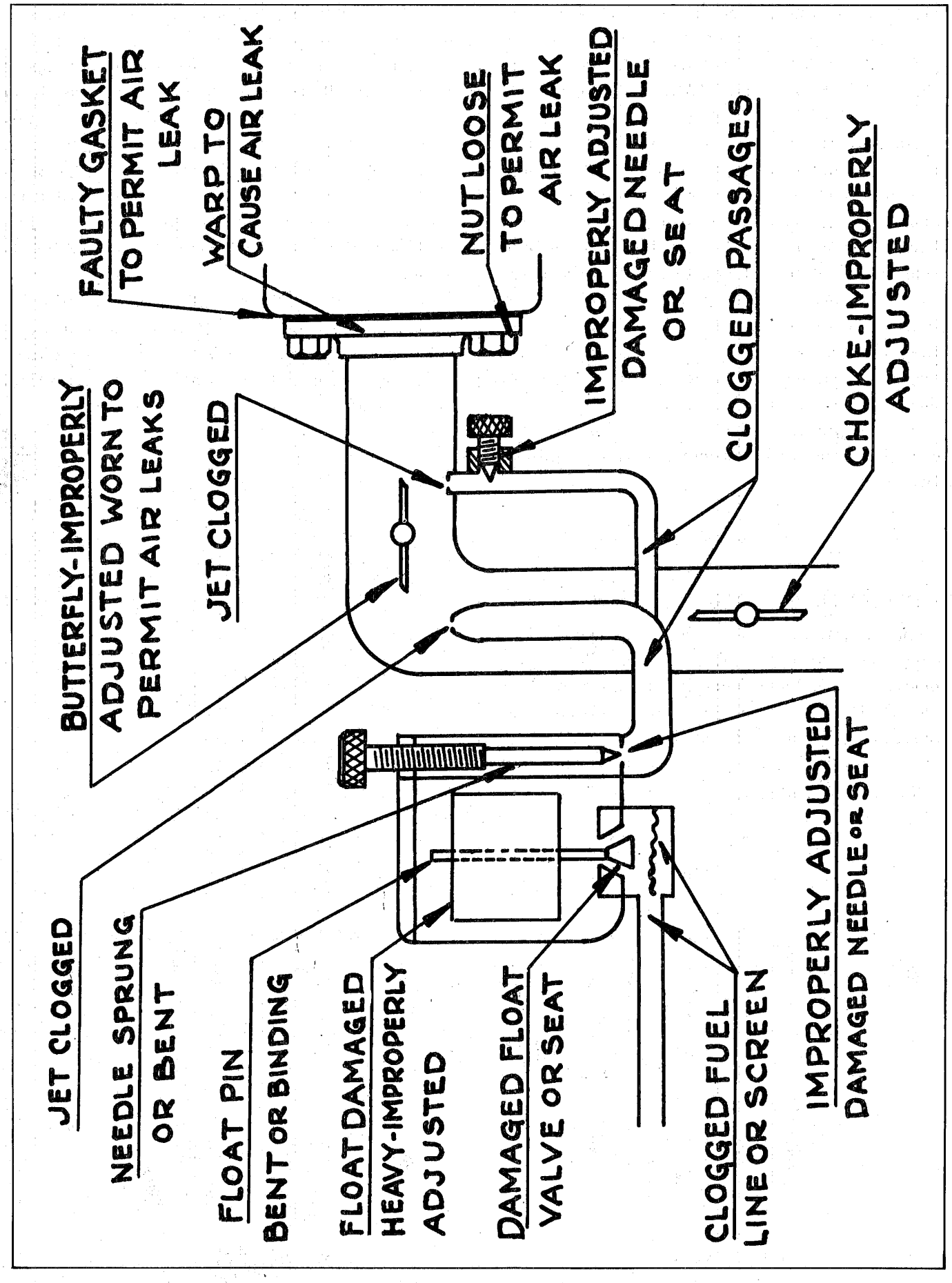
Showing Controls on Model KD(L)



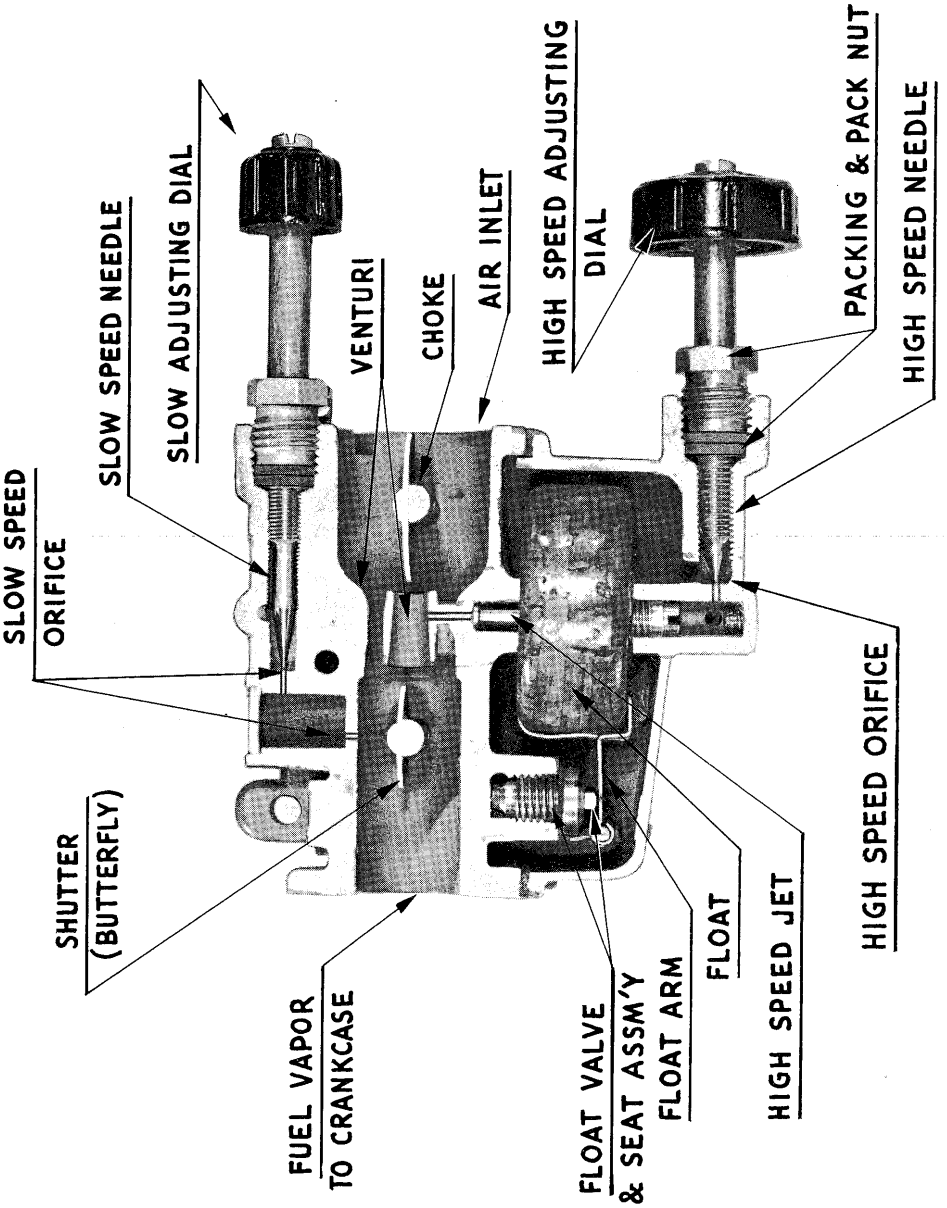
KS-KD Controls



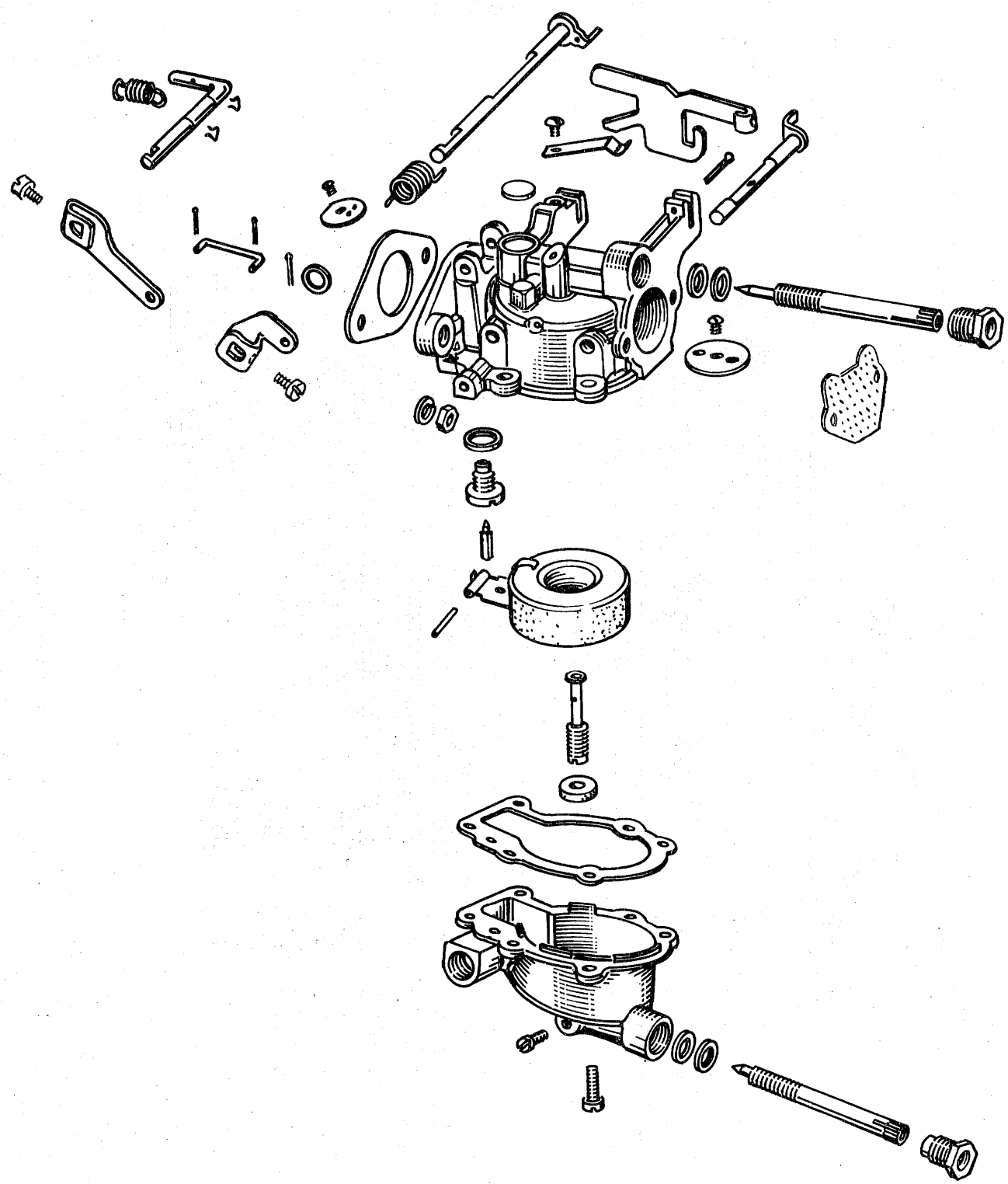
Showing Top View of Model KD Carburetor.


JET CLOGGED
NEEDLE SPRUNG OR BENT
FLOAT PIN BENT OR BINDING
FLOAT DAMAGED
HEAVY-IMPROPERLY ADJUSTED
DAMAGED FLOAT VALVE OR SEAT
CLOGGED FUEL LINE OR SCREEN
IMPROPERLY ADJUSTED DAMAGED NEEDLE OR SEAT
BUTTERFLY-IMPROPERLY ADJUSTED WORN TO PERMIT AIR LEAKS
JET CLOGGED
FAULTY GASKET TO PERMIT AIR LEAK
WARP TO CAUSE AIR LEAK
NUT LOOSE TO PERMIT AIR LEAK
IMPROPERLY ADJUSTED DAMAGED NEEDLE OR SEAT
CLOGGED PASSAGES
CHOKE-IMPROPERLY ADJUSTED

MODEL JW CARBURETOR



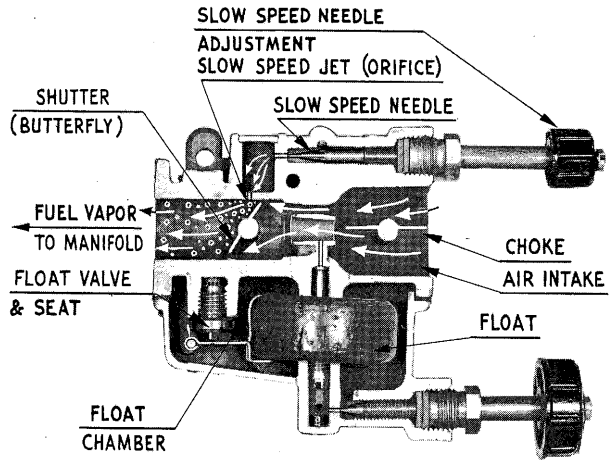
Sectionalized View of Carburetor—Model JW.



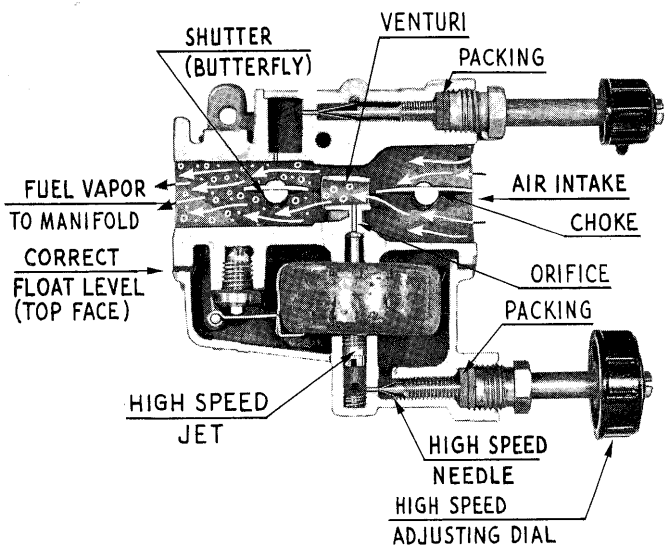
Assembly Layout — Carburetor Model JW.

CARBURETOR — MODEL JW

Carburetor on the Model JW is similar to that employed on other Models (QD, RD, etc.) in that it is of the float feed two-jet type, consisting of a mixing chamber and conventional float chamber. Two adjustments are provided, namely — for high and slow speed performance.

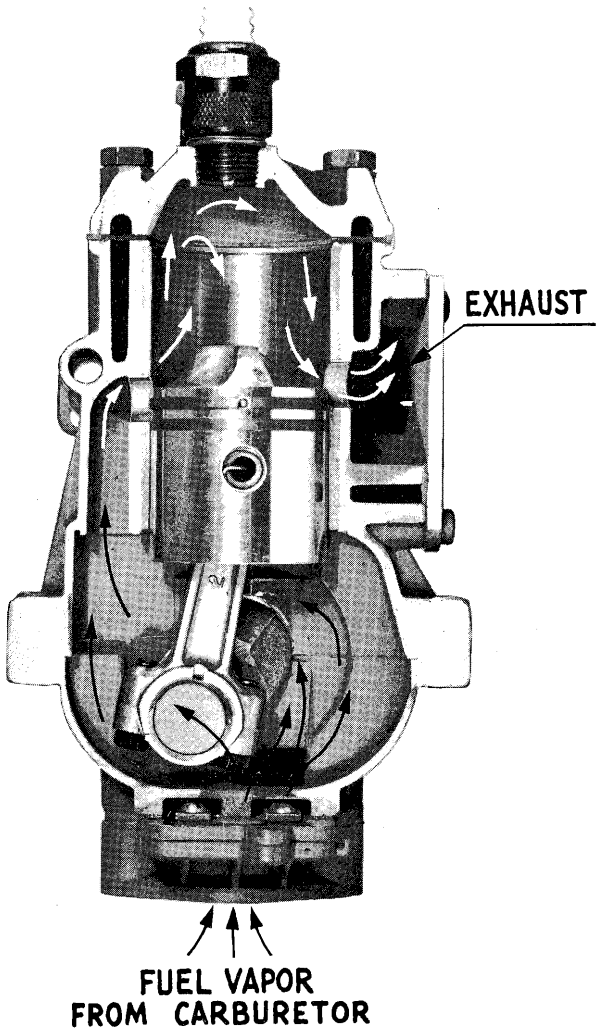


Sectionalized View of Carburetor (Float and Mixing Chambers) Showing Butterfly Shutter Set for Slow Speed Operation (Closed). Note Maximum Fuel Vaporization at Slow Speed Jet — Vaporization at High Speed Jet is Nil.



Sectionalized View of Carburetor (Float and Mixing Chambers)— Butterfly Shutter Full Open for High Speed Performance. Note Maximum Vaporization at High Speed Jet (Orifice) with a Minimum of Vaporization at the Slow Speed Jet; also, Effect of Restriction Caused by the Venturi Tube Built into the Mixing Chamber to Increase Air Velocity in Area of the High Speed Jet (Orifice). Note Position of Float when Adjusted to Correct Level—Top Face Flush with Face of Float Bowl. See Instructions Pertaining to Float Valve and Float on Page 148.

Induction to the crankcase similarly is by means of an automatic intake valve situated between the carburetor and crankcase which functions in accordance with changes in crankcase pressure as the pistons travel up and down to complete the cycle— see pages 79 to 80 inclusive for detail description.



Arrows Indicate Path of Fuel Vapor as the Piston Progresses Through the Cycle. (Intake, Compression, Power and Exhaust).

It will be noticed, however, that the automatic intake valve is not made up of several segments, as in the case of Models QD and RD, but of a single "strip"— one for each crankcase chamber as illustrated on following page.

CARBURETOR CONTROL (SPEED) ADJUSTMENT

Since gas and spark are synchronized to permit realizing consistent performance throughout entire speed range of the motor by correctly proportioning volume of fuel charge with respect to de-