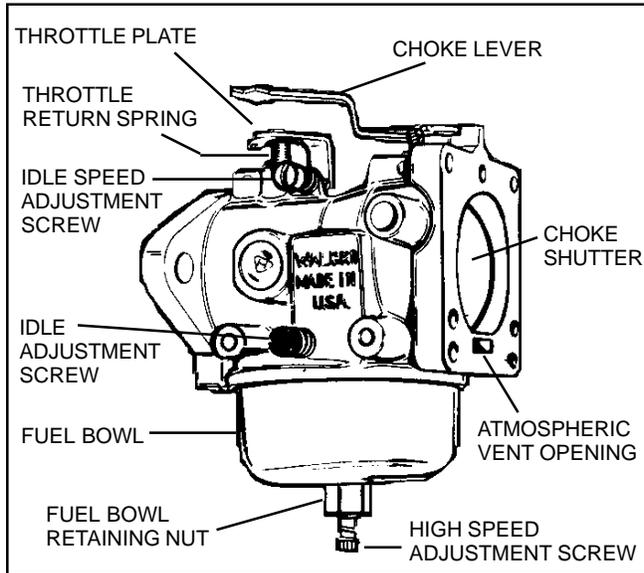


## SECTION 5. OVERHEAD VALVE ENGINE CARBURETORS

Overhead valve engines utilize Walbro carburetors.



**CARBURETOR ADJUSTMENT.** Carburetor factory adjustment should not be changed. However, if required, perform the following: with engine running (Allow engine to warm up for 5 minutes). Open throttle (speed control at "RUN" or "FAST" position). Adjust high speed adjustment screw per chart, clockwise or counterclockwise until engine runs smoothly. With control in idle or slow position, adjust idle speed adjustment screw to obtain correct idle speed. If necessary, readjust idle adjustment screw clockwise or counterclockwise until engine idles smoothly.

CARB.	HIGH SPEED ADJ. SCREW*	IDLE ADJ. SCREW*
OH120 THRU OH180	1 TURN*	1 TURN*
*All Adjustments Off of Seat		

**IDLE ADJUSTMENT SCREW.** Close idle adjustment screw by turning clockwise. Close finger tight only. Forcing will damage screw.

**OPEN IDLE ADJUSTMENT SCREW:** 1 turn counterclockwise.

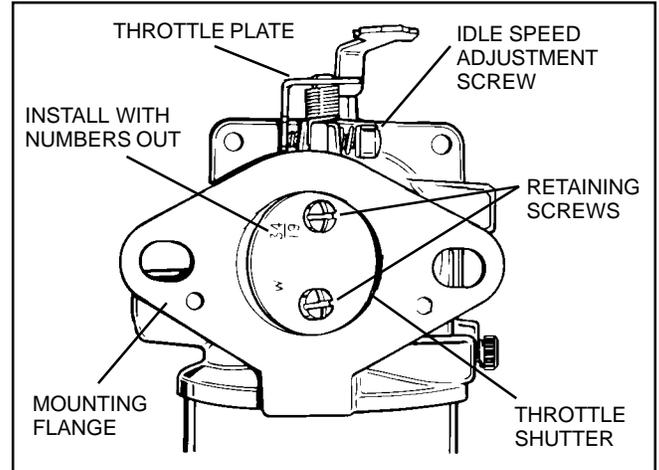
Start engine and with the throttle open (then return to idle position), adjust idle adjust screw one-eighth (1/8) turn at a time clockwise or counterclockwise until engine runs smoothly.

With control at "idle" or "slow" position, adjust idle speed adjustment screw to obtain correct idle speed. If necessary, readjust idle adjustment screw until engine idles smoothly.

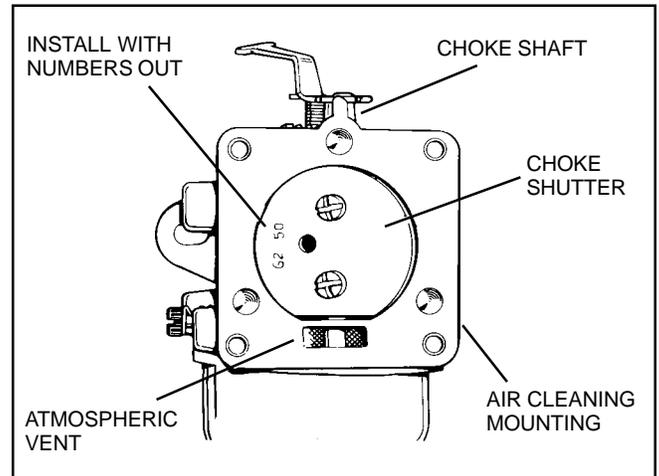
### CARBURETOR SERVICING

#### Throttle Shutter

Install the throttle shutter with the numbers facing out when closed. Move the throttle shaft to the closed position, place the throttle shutter on the shaft and secure with new retaining screws. The throttle should move freely. If binding is present, correct by loosening screws and repositioning throttle shutter.

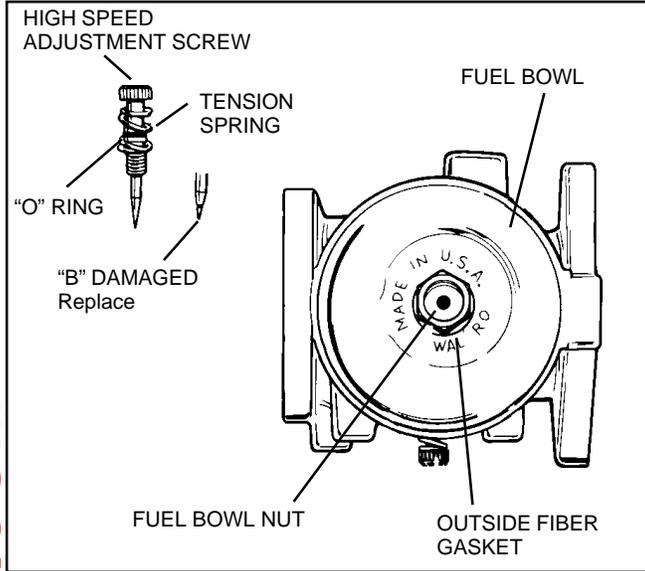


**CHOKE SHUTTER.** Position the choke shaft and shutter in the closed position to tighten the screws. Hard starting may be due to misaligned choke plate. Correct by readjusting the plate to close completely.



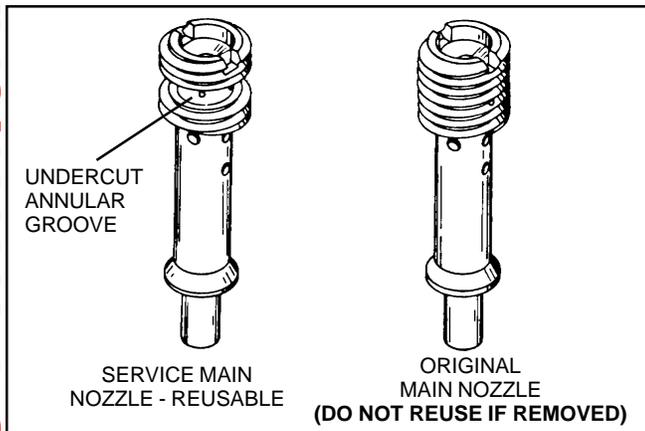
**HIGH SPEED ADJUSTING SCREW.** Prior to removing the fuel bowl nut, remove the high speed adjusting needle. When replacing the fuel bowl nut be sure to position a fiber gasket on each side of the fuel bowl.

Examine the tip of the high speed adjustment screw. If the tip of the screw is damaged, the seat, which is part of the main nozzle, is probably damaged. When replacing the screw, the nozzle should also be replaced with a service replacement nozzle only.

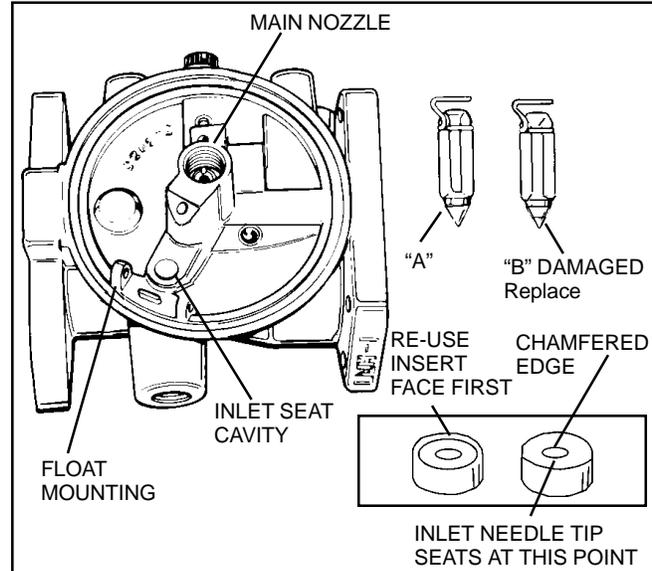


**MAIN NOZZLE.** Normally the main nozzle should not be removed, if it is, clean the carburetor with solvent and compressed air. Remove and replace the main nozzle only if the seat is damaged or is excessively dirty.

If it is necessary to remove the main nozzle, discard it and use a service replacement nozzle with an undercut in the thread area. If the nozzle removed is already under cut, it can be reused. This replacement assures delivery of fuel to the idle system.

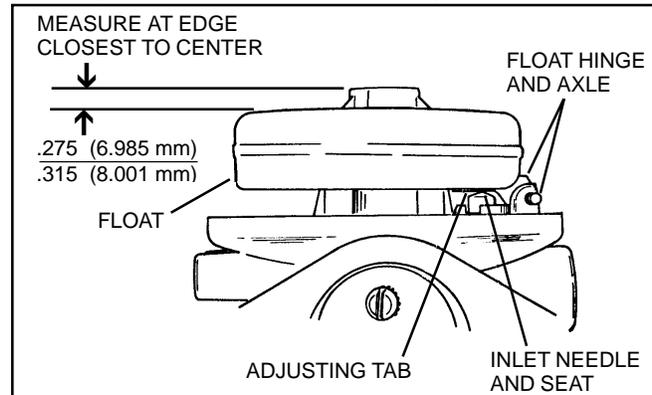


**INLET NEEDLE & SEAT.** The inlet needle and seat are replaceable as an assembly. If the tip appears damaged, replace the needle and seat assembly.



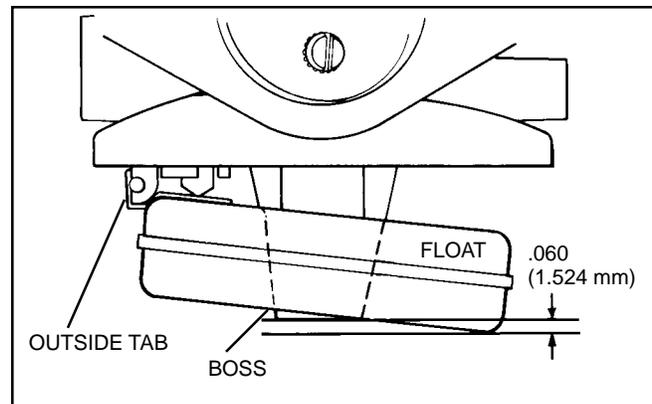
**FLOAT SETTING.** Float Settings are measured opposite the float hinge. Remove float by pulling out float axle. Bend adjusting tab to correct setting. Always remove the float to make adjustments.

Replace the float and axle if wear is evident. The float must measure  $.275'' / .315''$  (6.985 / 8.001 mm) from top of boss to surface of float (closest to center).

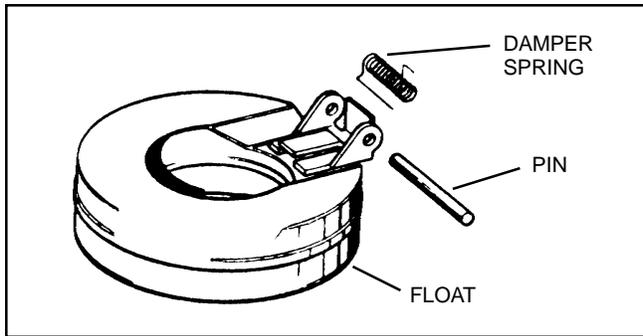


Position carburetor in an upright position.

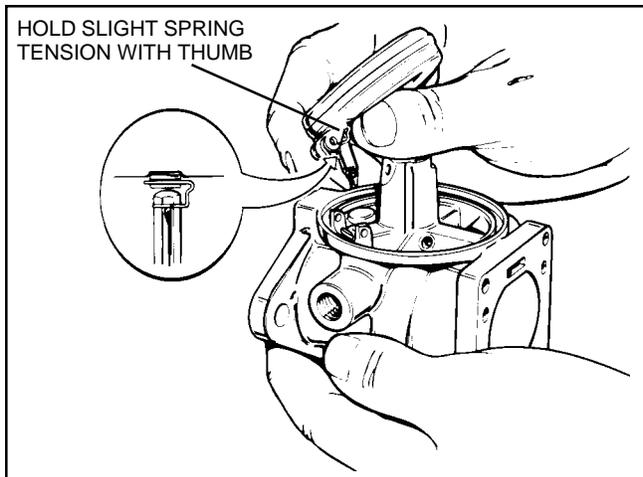
If float is lower than dimensions shown in figure, bend outside tab GENTLY so float does not drop plus or minus  $.060''$  (1.524 mm) from base of boss.



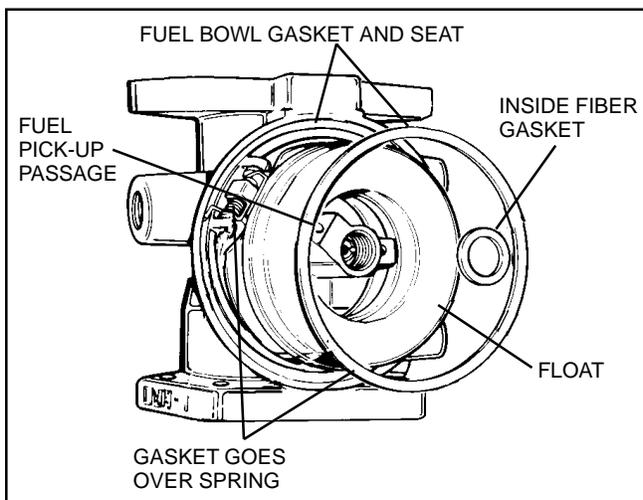
**ASSEMBLING SEAT, SPRING & FLOAT.** Shown below is the float, hinge pin, seat and the float spring.



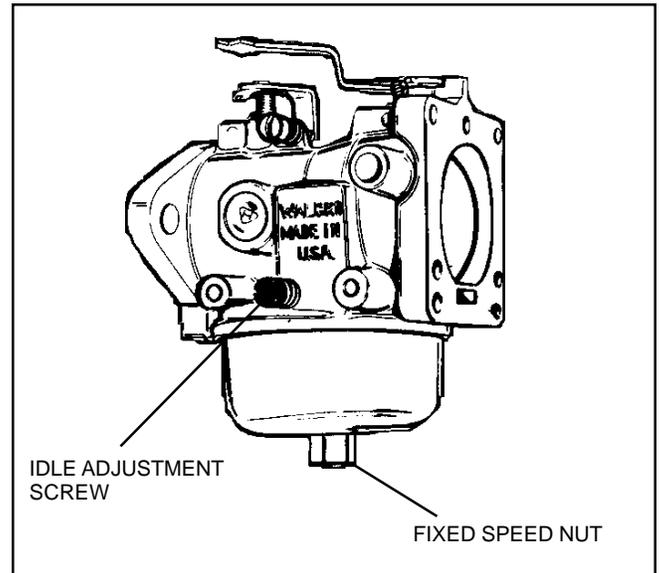
When assembling the float to the carburetor body, position the needle spring on the adjusting tang so that it hangs down. Hold the float damper spring under tension until the carburetor body will support the slight spring tension. The spring ends must point toward the carburetor choke end.



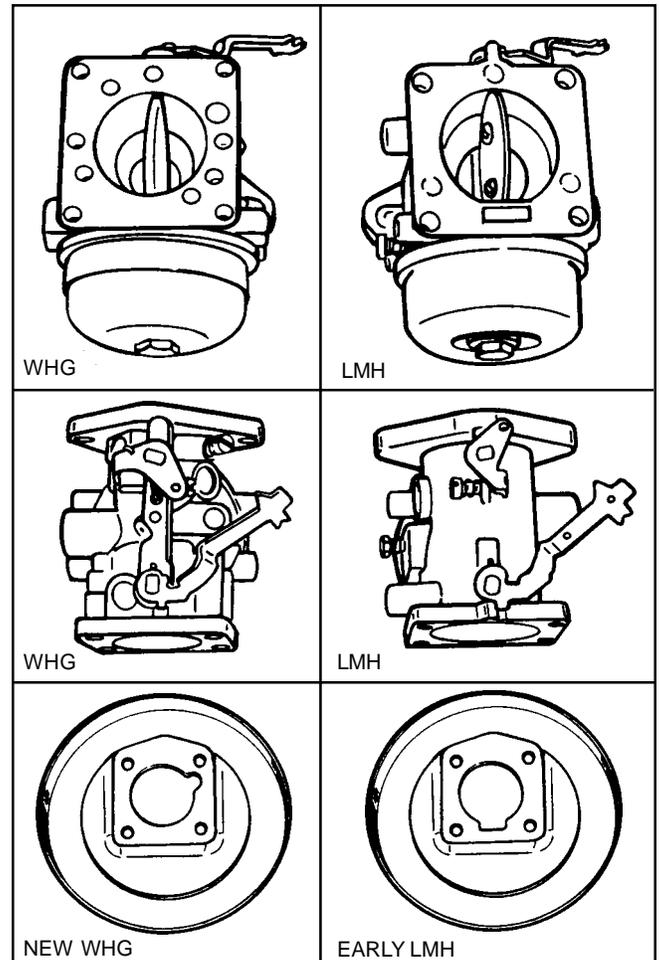
The bowl gasket must be positioned over the float spring as shown.



**FIXED HIGH SPEED CARBURETOR.** On carburetors of a later design the high speed screw has been replaced by a fixed speed nut. Adjustment is made only on the idle adjustment screw since the high speed setting is fixed.



**WALBRO WHG.** The early production OH engine was equipped with a LMH carburetor. The newer engines since 1987 have been manufactured with a WHG carburetor. Service replacements are all WHG, which include an instruction sheet covering service.



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