

## KEIHIN CARBURETOR 1976 & LATER FL, FX MODELS ADJUSTMENTS AND MODIFICATIONS TO IMPROVE PERFORMANCE

This bulletin is a supplement to bulletin 694 and outlines steps to be taken to improve carburetor performance and reliability.

### Idle Adjustment

Turn low speed mixture screw clockwise until seated. Do not overtighten. Back screw out counterclockwise  $7/8$  turn. Adjust throttle stop screw to obtain recommended idle speed of 700 to 900 R.P.M.

Make final readjustment of low speed mixture screw after engine is warm. Turn screw clockwise, or in, to make mixture leaner and counterclockwise, or out, to make mixture richer. Adjust until engine runs smoothly. As required, readjust throttle stop screw to obtain correct engine idling speed.

### Correction of Faulty Accelerator Pump Operation

With engine warm and running at idle, remove air cleaner cover and see if any fuel is leaking from accelerator pump nozzle due to the accelerator pump rod being too long. Correct by removing rod as detailed in bulletin 694 and shortening to 59.50 mm. (2.34 in.). Caution: Do not over-shorten because this will affect pump action and cause poor acceleration.

### Correction of Lean Mixture Problems

The rubber plug over the slow jet (item 27, Figure 2 in bulletin 694) may be too long, causing a lean mixture. Correct by either modifying or replacing plug. Either cut a plug so it is 5 mm (.20 in.) from shoulder to tip or replace with new plug, part No. 27385-76.

Refer to bulletin 694 for disassembly and assembly procedure to remove and replace plug.

### Correction of Air Leakage at Carburetor Body Plugs

As a precautionary measure to eliminate possible air leakage, apply an adhesive type sealer, such as Harley-Davidson Seal-All, to the two welch plugs in top of carburetor. Apply a minimal amount only to the joints between edges of plugs and casting.

### Addition of Seal to Low Speed Mixture Screw Hole

To seal the low speed mixture screw hole and to hold screw in place, use gasket part No. 27355-76, on screw. Enlarge hole in gasket slightly to permit snug fit on screw and install it on the screw between spring and carburetor body. When resetting screw, turn it in until lightly seated, then back it out  $7/8$  turn.

Elimination of Erratic Idle Due to Fuel Vaporization

Under certain conditions - for example, in slow moving traffic or at high ambient temperature - the engine temperature may rise to the point where it heats the carburetor enough to boil the fuel. When this happens, the engine can idle erratically and stop. To prevent this, place insulating block(s), part No. 27412-57, between engine and carburetor. Use one insulator, on FX's, two on FL's.

Correction of Float Level Setting

Faulty operation can occur if the carburetor bowl float level is set incorrectly. If it is set so the fuel level is too low, there is apt to be poor acceleration and poor high speed performance. If it is set so the fuel level is too high, there is apt to be fuel overflow causing hard starting, poor fuel economy and generally poor road performance. Reset the float level. See Service Manual or bulletin No. 694 for float level adjusting procedure.

HARLEY-DAVIDSON MOTOR CO., INC.