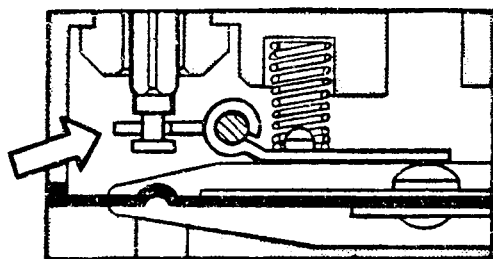
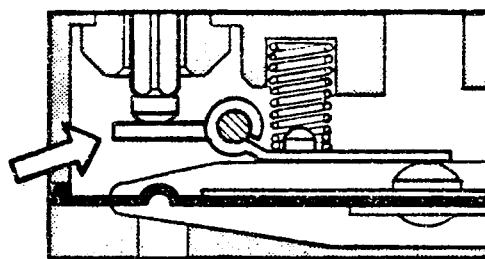


TILLOTSON MODEL HD CARBURETOR

Sportster and Electra Glide models above engine No. 's 66XLCH-10611 and 67FLH-1448 produced after August 10, 1966 have a new carburetor inlet valve lever, needle and seat assembly. The lever now has a forked end which engages a groove in the new inlet needle stem. This locks the lever to the needle providing diaphragm control of needle movement in both directions. Formerly fuel pressure and the weight of the needle alone moved the needle away from the inlet seat. See illustration below.



New Inlet Valve



Old Inlet Valve

Service experience with the new inlet needle valve and lever has shown that it will correct carburetion problems such as high speed leaning out caused by vibration and needle sticking caused by dirt in carburetor.

Carburetors which have new type inlet valve are identified by Model No. HD-1B (Sportster) and HD-2AC or HD-2C (Electra-Glide) located on flange near idle mixture adjustment wheel.

RECOMMENDATION:

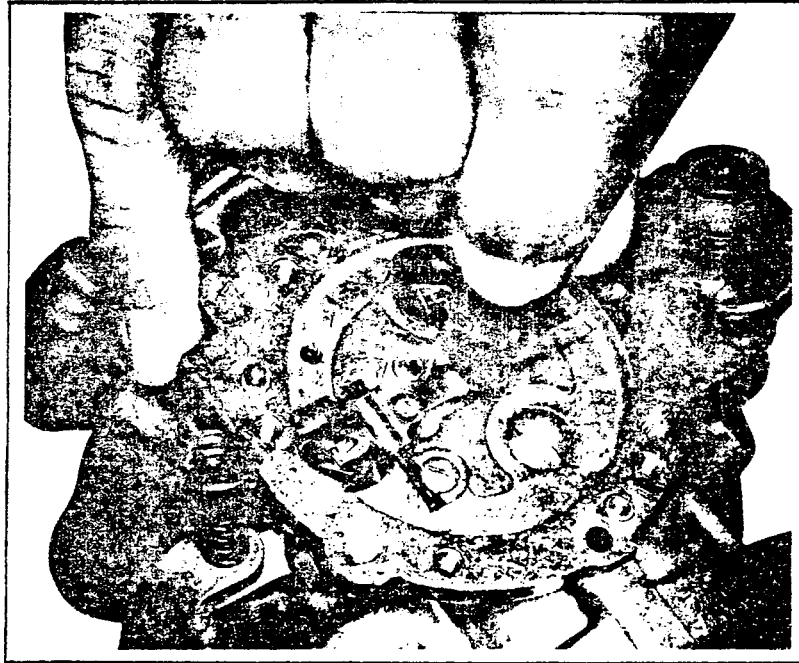
Where definite carburetion problems exist, it is recommended that the new inlet valve parts be applied to early Sportster carburetors identified by Model No. HD-1A and all Electra Glide carburetors identified by Model No. HD-2A, HD-2AB or HD-2B located on flange near idle mixture adjustment wheel. Order inlet lever, needle, seat and gasket kit from the factory under Part No. 27588-66

INSTALLING INSTRUCTIONS:

Only removal of diaphragm cover, diaphragm and diaphragm cover gasket is required to get at the inlet valve parts. Remove inlet lever fulcrum pin retaining screw, and lever with pin being careful not to lose small lever spring. Remove seat and gasket with a 3/8 thinwall socket wrench. Install new seat and gasket. Use old fulcrum pin in new lever, engage forked end of new lever in needle slot and with small spring in position fasten with old retaining screw. See that lever operates needle correctly.

IMPORTANT!

DIAPHRAGM END OF LEVER MUST BE FLUSH WITH FLOOR OF CARBURETOR AS SHOWN IN THE ILLUSTRATION TO PROVIDE CORRECT FUEL MIXTURE TO ENGINE. BEND END OF LEVER AS NECESSARY TO CORRECT POSITION. TO PREVENT DAMAGE TO NEEDLE SEAT PROVIDE SUPPORT UNDER FORKED END OF LEVER WITH A SCREWDRIVER WHEN BENDING UP AT DIAPHRAGM END OF LEVER.



Checking Inlet Control Lever Setting

When reassembling gasket and diaphragm be sure gasket is next to carburetor body. Then assemble diaphragm (with larger metal disc toward body). Last, assemble plastic cover with fuel pump piston in place and tighten 6 cover screws evenly.

ADJUSTING CARBURETOR:

1. Gently close the carburetor idle mixture adjustment until it stops. This is the adjustment with the scalloped wheel on the top of the carburetor. Open the adjustment about 7/8 turn.
2. Gently close the carburetor intermediate adjustment screw and open about 7/8 turn. The intermediate adjustment screw is located on the forward section of the carburetor and is turned by the use of a screwdriver.
3. Start engine and warm to operating temperature.
4. Adjust idle speed
5. Adjust idle mixture for smooth idle.

6. Road test and see if engine operates through its entire speed range smoothly without flat spots or unevenness.
7. Operate motorcycle at 35 MPH in third or fourth gear on level road at constant throttle and if engine is not smooth, open or close intermediate adjustment screw 1/16 turn at a time to correct lean or rich operation and check motorcycle operation each time.

NOTE: Rich mixture - engine will be rough at steady speed.
Lean mixture - engine will not respond when throttle is opened up from steady speed.

8. Readjust idle mixture and idle speed.

NOTE: Normal setting range of both mixture adjustments is 7/8 turn open plus or minus 1/4 turn.

It is felt that this 7/8 turn adjustment on both needles is the optimum. If you find the adjustment to vary extremely, something else might be causing the specific problem you are experiencing. This could be dirt or plugged passages in carburetor, ignition or other engine problems.

IMPORTANT: Any carburetor alterations other than recommended in this bulletin are not recommended and will automatically void the motorcycle warranty.

HARLEY-DAVIDSON MOTOR CO.