

**V-Twin Mfg.**  
**KEIHIN CARBURETOR ADJUSTABLE MAIN JET WITH TOOL**  
**VT No. 35-0369**

**This tool should only be used by a knowledgeable and trained motorcycle technician. V-Twin Mfg. Accepts no responsibility for improper use.**

This tool will assist in the installation of the adjustable main jet kit for Keihin carburetors in 1976 thru 1989 Harley-Davidson's (except CV type). The purpose of the tool is to index (mark with point prick) the carburetor float bowl interior surface for the drilling of the proper sized hole to thread in the adjustable main jet.

**Caution:** Whenever working with any part of the fuel system, remember that gasoline is highly flammable and even after draining fuel from the float bowl (petcock off), vapor will still be present. Gasoline vapor is more dangerous than normally anticipated. Use a well ventilated area, away from possible sparks or exposed flames.

**Installation Instructions:**

1. Carefully remove the float bowl from the main body of the carburetor, being careful to avoid damage to the two O-ring seals on the float bowl or to lose any of the small parts such as float bowl screws and washers.

**Note:** On some Keihin carburetors float bowl screws are not all the same length. Consequently, each screw must be returned to the same locations from which it was removed.

2. Set the float aside, and with the proper size standard flat-bladed screwdriver, carefully remove the main jet from the carburetor main body.
3. In place of the main jet, screw in by hand the brass threaded tool guide provided in the kit. The purpose of this guide is to locate the steel pointed pilot so that it can properly index the carburetor float bowl.
4. Place a small amount of grease on the index tool so that it will remain up in the guide while repositioning the carburetor float bowl. Re tighten float bowl screws.
5. Reach into the venturi (throat) with a screwdriver blade so that one sharp downward tap on the exposed end of the index tool will dimple the inside of the float bowl.
6. Remove float bowl screws and float bowl again using the same care as before. The mark should be visible where a 1/16" or 1/8" pilot hole should be drilled. The final size hole needed is 15/64".
7. After drilling the float bowl, inspect the hole and make certain that it is clean and smooth so that no burrs or debris will damage the O-ring seat on the adjustable main jet.

**Caution:** Whenever drilling or machining around the fuel system, it is important to avoid sparks or hot pieces of flying metal. Do not allow such debris to enter the motorcycle fuel system. Remove the index tool and the guide.

8. Reinstall the float bowl after first installing the adjustable main jet in the float bowl. To do this properly, partially unscrew the small "T" handle so that the needle in the adjustable jet is not exposed to accidental damage.
9. Remove the nut from the adjustable jet, insert the jet through the 15/64" hole drilled earlier, and then re tighten bowl and then gently screw in the 'T' handle to the needle seat and then turn back out four (4) turns. Finer tuning can be achieved through the use of spark plug readings and small adjustments to the "T" handle.

This adjustable jet eliminates the chore of carrying and continually changing different main jets with every change in exhaust system or air cleaner. Proper installation of this adjustable main jet requires the use of our installation tool. This special tool properly indexes the carburetor float bowl for drilling the correct size hole through which the carburetor main jet is threaded. Once the float bowl is properly marked and drilled the adjustable main jet is placed through the hole to provide full adjustability for the main jet circuit. The adjustable main jet is designed to operate in conjunction with a 1.80 main jet included with our kit.

Whenever it becomes necessary to remove the carburetor float bowl, it is important to back off the adjustable jet from its established setting to prevent needle/jet interference when the float bowl is reinstalled. Record or remember the number of turns off the seat.

For initial adjustment, with standard exhaust pipes, muffler(s) and air cleaner, it is recommended that the adjustment needle be backed out four (4) turns from fuel seat.

The adjustable jet set screw is turned in, towards the float bowl to lean the fuel/air mixture. Turn away from the float bowl to richen the fuel/ air mixture.

As with any carburetor modification, it is best to use the spark plug inspection method as a guide for proper jet setting. Check plugs frequently after jet changes or after changes involving exhaust or air cleaner. Avoid too lean or too rich fuel/ air mixture and possible engine damage.