Setting the Float Height on a Motorcycle Carburetor

The float height controls the fuel level in the carburetor's float bowl. If set too low, the engine may run lean or struggle under hard acceleration. If too high, fuel can overflow into the carburetor throat, causing rich conditions or fuel leakage into the air filter.

Manufacturers will specify the correct float height, which can usually be found in a service manual, Clymer repair guide, or online.

Measuring Float Height:

1. Positioning the Carburetor:

- For Harley CV carburetors, position the carb upside down at a 20-degree angle to ensure the float is resting on its spring at full extension.
- For most metric motorcycles, the carburetor is simply flipped completely upside down for measurement.

2. Taking the Measurement:

- Measure the float height from the float bowl gasket surface on the base of the carburetor body, to what will be the highest point of the float.
- Refer to your specific motorcycle's manual for the exact height specification.

Once set correctly, the float height typically does not need frequent adjustment.



Some floats are located inside the float bowl. To measure and adjust these floats:

- Hold the float bowl Gently raise the float until the needle is in the closed position and the spring inside the needle is fully compressed. You can do this by pushing on the float tang with your thumb, until the float needle bottoms out.
- Measure the distance from the gasket surface (where the float bowl seals) to the top of the float, opposite the needle and seat. The correct float height is around typically 1/8" to 3/16" (3.2 to 4.8 mm) below the gasket surface, but check your manual for the exact specification.
- Adjust the Float Height
- If the float height is incorrect, carefully bend the float tang accordingly until the float can be measured in the correct position.
- You only need to make small adjustments in the tang, to equal a large movement of the float height
- Reassemble & Test

Once properly set, the float height should rarely need further adjustment.