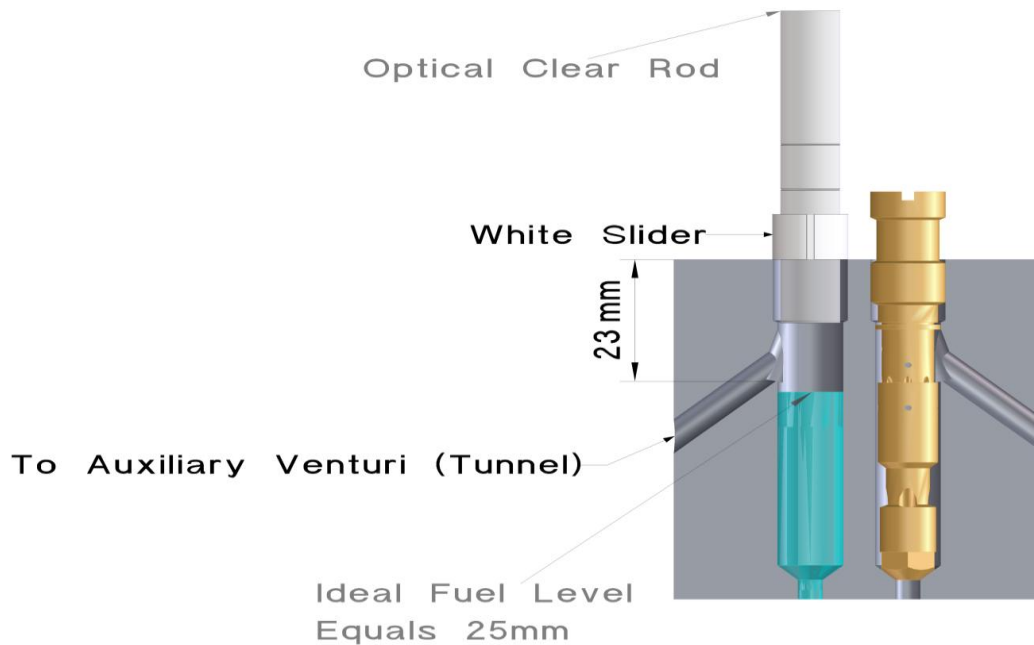


Weber DCOE Carburetor Optical Fuel Level Tools Instructions

The white sleeve on the plastic rod comprising the optical fuel level tool is intended to slide along on the rod as the rod is slowly shoved down into the emulsion tube well. When the bottom surface of the plastic rod contacts the liquid fuel the normally reflective property of that surface is eliminated and you'll see the top end surface turn slightly darker when a sufficient amount of light is shining onto the top surface (like using it in direct sunlight not in a dark garage). The distance from the bottom of the optical rod to the bottom of the sleeve is the real fuel level. See the 3D model for a cross-sectioned view of what this measuring tool does. There is an index line that is 25mm from either end which indicates the ideal fuel level. The model shows the optical tool a retracted position.



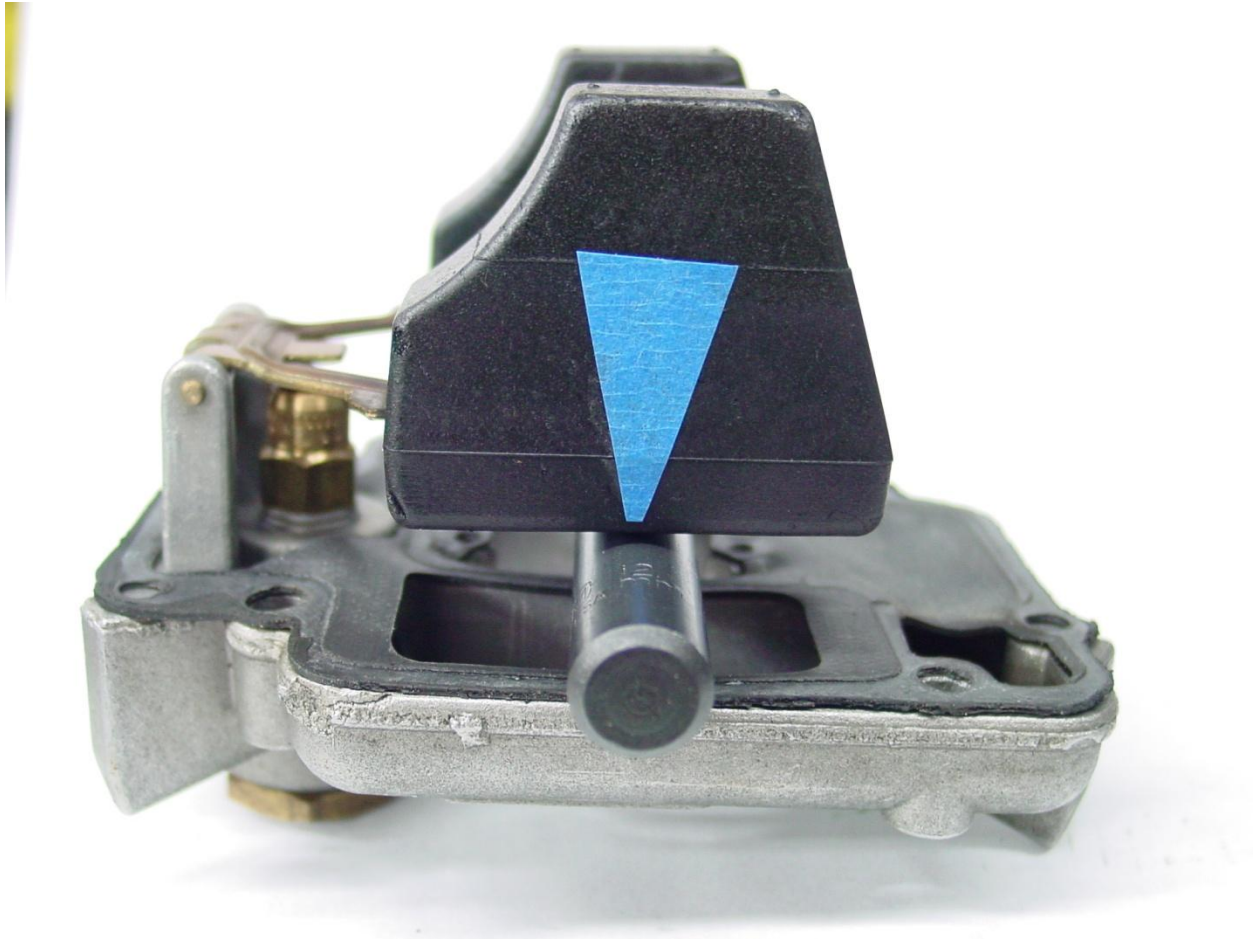
The other white bobbin plastic tool is an adapter to attach a 2-5psi air supply onto the banjo fuel fitting of the top cover so when the float needle valve just cracks open you'll be able to hear that happen. By determining how much the fuel level must be moved relative to the ideal 25mm value the gap between the floats and the cover can be measured using some sort of pin gauge. Changing that gap has a one to one relationship as to how far the fuel level needs to be altered. Generally reducing the gap between the float and cover raises the fuel level and conversely enlarging the gap will lower the level. Below are some pictures that are self explanatory.

The picture below shows how to measure the gap with a known size of drill acting as a pin gauge on the older brass floats.



Make sure the float pivot pin is not worn and it fits into the float without any play. Yet loose enough so when the floats are tilted so the pin is vertical, the pin will fall out from gravity. When bending the tab with needle-nose pliers be careful to not destroy the extremely delicate needle.

The picture below shows how to measure the gap with a known size of drill acting as a pin gauge on the newer plastic floats. Because the top of the float is flat as it tilts that introduces some error. To reduce the error measure with the pin gauge at the mid-point of the float as depicted with the blue arrow.



Thank You!

Safety Precaution Notification!

When initially applying air pressure to the float needle valve a small amount of residual fuel will spray out. Wear safety glasses and point the valve assembly away from yourself, anyone else close by and don't do this near any ignition source. Please be safe!