

# Float Level Adjustments

36, 38, & 40mm SC2 Model SmartCarbs

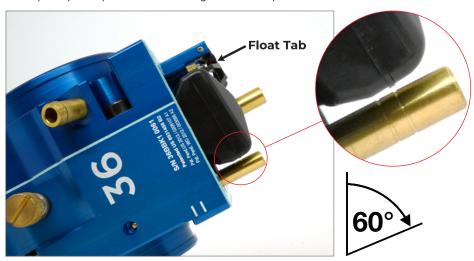
Proper float level and control are critical for the optimal function and performance of the SmartCarb® SC2. SmartCarb Fuel Systems pre-sets the float level in every SmartCarb® prior to shipping, however adjustments may be made to alter or improve running characteristics.

**NOTE:** Float level adjustments should be made only after achieving best performance using the external adjusters and confirming proper fuel tank venting and fuel flow into the SC2 (no restrictions).

Adjusting the float level in the SC2 requires access to the float system (carburetor uninstalled and float bowl removed). Refer to the User Manual (included with your purchase or available online at <a href="mailto:smartcarb.com/technical-support">smartcarb.com/technical-support</a>) for reinstallation instructions after making float level adjustments.

### Making Adjustments

1. Assess the float setting by tilting the SmartCarb® (about 60 degrees) so that the float barely contacts or rests on the float needle valve plunger (without depressing it). Viewing from the choke side of the SC2, watch where the POM float parting line points along the brass choke pick-up tube (standard float setting shown below).



2. Raise or lower the float level setting by making small adjustments to the float tab. To raise the float level, carefully bend the tab up. To lower the float level, carefully bend the tab down.

**NOTE:** A little bit goes a long way. Make small adjustments when bending the float tab (.5mm increments or less at a time).

#### Adjustments & Effects

In general, raising the float level will richen up the air/fuel (A/F) mix ratios while lowering the float level will lean them out.

Running characteristics that may benefit from raising the float level include:

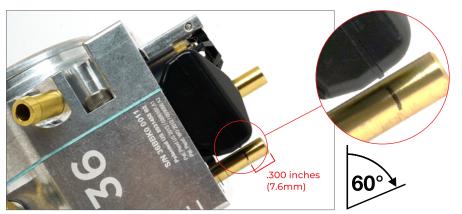
- The engine cutting out after a sustained wide open (WOT) pull
- Lowering an otherwise high idle RPM that can't be corrected using the external adjustments or identified as being caused by an air leak or insufficient throttle cable slack

Running characteristics that may benefit from lowering the float level include:

- Engine stalling at low throttle positions/RPMs, particularly when going downhill, that can't be fixed by going leaner (counterclockwise) on the clicker adjuster (top of the carb)
- Hard starting after a momentary tip-over
- · Poor fuel economy despite otherwise excellent performance

## Legacy Adjustments

Early model SC2s may not have the machined mark on the choke pick-up tube. If so, use a pair of calipers (or a precise ruler), measure a distance of .300 inches (7.6mm) down from the top of the choke pick-up tube, and mark it with a scratch mark or a sharpie.



#### **Contact**

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