

# MasterTune Installation Instructions

www.MasterTuneRacing.com

1. Remove carburetor.
2. Remove bowl plug and main jet.
3. Install Master Tune main jet. Tighten properly.
4. Install Master Tune plug. Tighten properly.
5. Lubricate "O" ring with oil and install needle.
6. Make sure the plug fits the gearbox properly (goes all the way in). Tighten the 2.5 mm Allen bolt and compression washer provided with the clamp.

To verify that the needle rotates properly, with the carburetor in your hands, turn the knob clockwise to the closed position. Looking at the bottom of the carburetor rotate the knob counterclockwise. It should rotate 14 or 15 turns, which represents 3-¼ to 3-½ turns in the needle.

7. Install the carburetor.
8. The flexible shaft should be towards the right side (chain side), although some carburetors are not as close to the cases as others and will allow the flex shaft to be at an angle towards the air filter, thus eliminating a sharp turn to avoid hitting the chain.
9. Secure the flexible shaft in the lower portion with tie wraps to prevent it from rotating, and position the knob near the spark plug in a position that is comfortable to reach while driving. Secure here with two tie wraps.

Before going to the track, close the needle all the way (clockwise) and then open (counterclockwise) approximately 7 turns. This will be the equivalent in jet size to a 200 to 210 jet (rather rich) in a Dellorto or Keihin carburetor. Start your motor. After warming it up, accelerate gently to confirm you are rich. If you are not, turn the knob counterclockwise to open the needle. If it does not start the bowl may be dry. Also try opening the needle more (it may be too lean) or close it more (it may be too rich).

If you follow the instructions properly, the first time in the track you should be rich. Start closing the needle while watching your EGT. It must start going up in temperature and the response of the motor will improve. Close it until you feel the motor going lean, and your EGT temperature drops, go immediately back-up and that is your optimum carburetion. Some people will like to run 100°F (38°C) to 200°F (76°C) richer than peak, some will drive with the EGT at peak all the time. Now with MasterTune you have a choice.

When you go back to the track two or three hours later and the weather is different, you know your EGT peak temperature, so you can adjust to find it.

In your parade lap, when you are not going flat out, lean it a bit to prevent fouling the plug and maintain a clean cylinder head. When you are coming to the last corner, before the green flag, richen it up to the proper setting to start the race. When you are in the lead by a mile, there is no need to beat your equipment, so richen it up to run a more conservative pace. When you are chasing the leader, adjust to get peak EGT readings to obtain your optimum power.

**Note: There is a shim washer with the jet. Do not use unless it is necessary. The way to tell is if you adjust the knob all the way in and you are still rich, that means that the bottom of the jet is too far away from the needle, so the shim will bring it down closer.**

