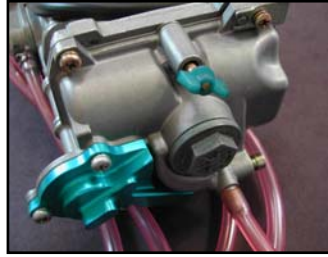


Part # 00-019



## *Congratulations on your purchase of the Merge FMS (Fuel Mixture Screw)*

These instructions are intended to provide the competent mechanic with the information necessary to correctly install and adjust this Merge product.

### **Installation**

**Important - If you are not a competent mechanic do not attempt to install this product yourself; have your local dealer install it for you.**

**Precautions:**

- Always wear Safety Glasses when working on a motorcycle.
- Always let the motorcycle cool down completely before you work on the fuel system.
- Gasoline is flammable! Read all safety instructions in your manual.
- Always clean the area around the carburetor before disassembly.

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### **Read all instructions before installing the FMS**

1. Most original fuel mixture screws can be removed with a short screwdriver; if there is inadequate clearance you need to remove the carburetor per your owner's manual.

2. Once you have access to the standard mixture screw, turn the screw clockwise until it's lightly seated. Make a note of the amount of turns you moved it in.

3. Remove the screw counterclockwise.

**NOTE: The spring normally comes out with the screw but it's very common for the washer and/or o-ring to stay inside. You must verify that the o-ring and washer are located either inside the carburetor or mounted on the fuel screw – do not duplicate the parts!**

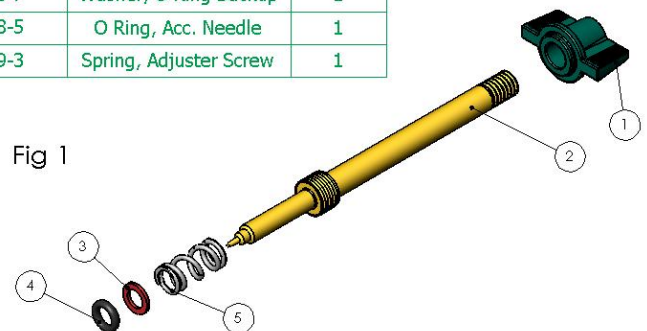
4. Assemble the FMS in the following order: screw - spring – washer – o-ring. See fig 1.

*Tip: You can install the FMS using the original spring, washer and o-ring, or the parts supplied in the kit.*

5. Once you have the parts mounted on the FMS, install it in the carburetor turning it clockwise until it lightly touches the stop.

6. Unscrew the FMS counterclockwise the same amount of turns that you recorded earlier.

ITEM NO.	PART #	DESCRIPTION	QTY.
1	00-019-2	Knob, A/F Screw	1
2	00-019-1	Screw, Fuel FCR	1
3	00-008-7	Washer, O Ring Backup	1
4	00-008-5	O Ring, Acc. Needle	1
5	00-019-3	Spring, Adjuster Screw	1



### **Adjustment and Setup**

- Before you attempt to make adjustments make sure your engine is serviced. It's extremely important that the piston, rings, valve clearances and the air filter etc are good condition.
- The FMS works in conjunction with the pilot jet. If you have the correct pilot jet installed, the engine will run its best in the 1 to 2 turn range. If the engine runs better with the FMS set at less than 1 turn or more than 2 ¼ you should also change the pilot jet.

### **To adjust the FMS and pilot jet:**

7. Set the FMS to 1½ turns out, start the motorcycle and get the engine up to operating temperature.
8. Adjust the idle as low as possible without stalling. Idle speed is a matter of preference, but if it's too low, the motorcycle will be harder to start, especially when the engine is hot. Most factories recommend 1700 to 1900 rpm
9. Slowly turn the screw in until the engine starts to slow down and then unscrew the FMS 1/2 of a turn. The screw should be in the 1 to 2 turn range. If the FMS is less than 1 turn, the pilot is too big - install the next smaller size. If the FMS is more than 2 ¼ turns the pilot jet is too small - install the next larger size. *Note;*
  - *Turning the screw out makes the engine run richer*
  - *Turning the screw in makes the engine run leaner*
10. Replace the pilot jet if necessary and repeat the adjustment from step 8.

### **Additional items required**

- **Small Flat Blade Screwdriver**
- **Med Philips Screwdriver**
- **Owner's manual for your motorcycle**

### **Online Videos**

Log on to [www.mergeracing.com](http://www.mergeracing.com) to view introduction, installation and adjustment videos.

### **Other Safety Notices –**

- **Offroad motorcycles should never be ridden when they are not functioning correctly.**
- **Make a note of your FMS adjuster screw setting and periodically check that it's correct. Under normal circumstances it will not move. If it does, replace the O-ring, washer and spring to increase the tension and resistance to the original specification.**
- **Never run with a fuel screw more than 2½ turns out.**

### **Other recommended Merge Racing Technologies products**

# 00-008 "ALJ" Adjustable leak Jet Kit

# 00-018 "APS" Accelerator Pump Spring

**For all the latest updates and information. Visit us on the web at [www.mergeracing.com](http://www.mergeracing.com)**

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