

## Items Supplied >

- 1 – Fi2000R Fuel Injection Module
- 1 – Zip Tie 6"
- 1 – Velcro Strip

## Application(s) >

Suzuki C50/M50 2009

## Instruction Manual >

92-1827

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**ATTENTION: THIS Fi2000 MODULE IS NOT TO BE SOLD OR USED IN THE STATE OF CALIFORNIA FOR ON HIGHWAY USE. CALIFORNIA APPLICATIONS MUST USE PART #: 92-1827-CL-50.**

**Read all instructions carefully and completely before installing your new Fi2000R module.**

**It is recommended that a qualified mechanic or technician install this product.**

**Before installing the Fi2000R it is recommended that the gas tank be low on fuel.**

1. Remove both seats; remove the instrument bezel. Next, remove the fuel tank by removing the bolts and lifting the tank enough to gain access to the 4 pin brown wire connector and dry brake fuel line. Unplug the wire connector by pressing the tab inwards. Disconnect the dry brake fuel line by depressing the two gray tabs. Remove the fuel tank.
2. Temporarily position the Fi2000 module by the battery, and route the wire harness forward into the notch in plastic cover, see Figure 1. Continue routing the harness under the frame at the rear of the fuel tank, and continue it up past the left side of the throttle body assembly.
3. Locate the MAP sensor on the left side of the air intake boot. Slide the steel sensor mount out of the intake boot to allow access to the front fuel injector, underneath the boot, see Figure 2.
4. Disconnect the stock front injector connector by pressing on the tab at the rear of the connector. On the Fi2000 harness locate the longer set of connectors. Now connect the female Fi2000 matching connector to the injector and then connect the stock female connector to the corresponding male Fi2000 connector. Reinstall the map sensor. Route the Fi2000 harness so that it is fixed in the retaining hook near the air intake boot, to keep the harness clear of the throttle linkage, see Figure 2.
5. Locate the rear injector on the throttle body housing disconnect it and mate the corresponding male connector from the rear portion of the Fi2000 harness to it, see Figure 3. Mate the Female Fi2000 connector onto the injector. When finished, make sure the wire harness does not foul any throttle cable linkage. Install the zip tie to secure the harness as shown in Figure 1. Reinstall the fuel tank by reconnecting the brown four-pin connector and dry brake fuel line to the fuel tank.
6. Connect the Fi2000 ground wire (black), to the negative post of the battery and attach the Fi2000R module to the top of the plastic panel with the supplied Velcro, see Figure 1. Before reinstalling the seats verify all connections are made properly.
7. Remove the door from the Fi2000 module to expose the LED's. Verify the wire connections by (1) turning on the ignition while watching the 3 LED's. They will all light up for a few seconds, then go off. This is correct. If you don't see lights, make sure the side stand is up, bike is in neutral, clutch is in and handle bar engine switch is set to run. If you still have no lights, re-check that all connectors are fully engaged and the ground wire is connected correctly. **(Continued to next page!) >>**

**\* Cobra recommends you always wear a helmet while riding. Please never operate your motorcycle while under the influence of alcohol and/or drugs. Enjoy the new look of your motorcycle and please ride safely.**

7. **Continued:** (2) After achieving a steady light from all three LED's, start the motorcycle; the green light should now be the only LED on. If all three LED's are still on after start up, verify you have attached the injector connectors correctly. Reattach the access door when finished and install seat. **Note:** Make sure the ignition is turned off before changing any connection. Once confirmed the module is working properly, reinstall the instrument bezel and other remaining components including the seat.

### ADVANCED TUNING

The Fi2000R has the ability to efficiently tune the EFI system on your motorcycle for slip-on or full exhaust systems. It comes pre-set from the factory for popular brand name slip-on mufflers. Both dyno testing and on-road exhaust gas analysis have been used to develop the best base settings for drivability and power.

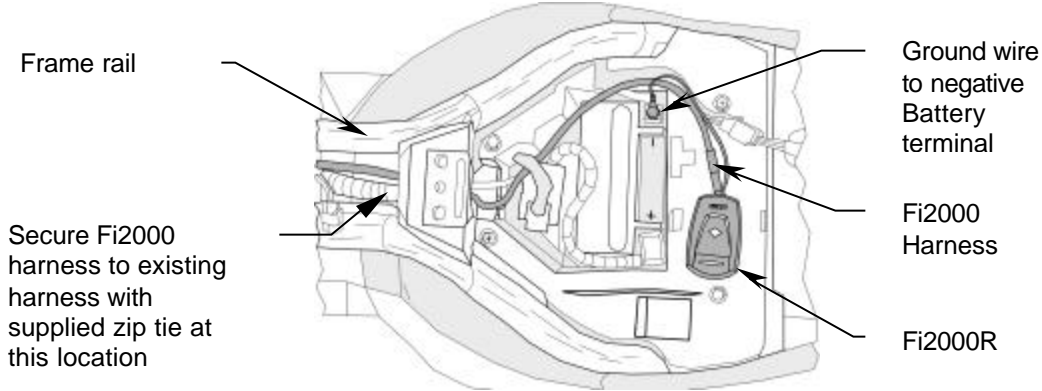
Not all slip-on mufflers flow exactly the same. Some eliminate power valves and others don't. Some are made with street baffles, other with race or competition baffles. Full exhaust systems offer even greater variation in construction, features and performance. The Fi2000R has the ability to tune the EFI system on your motorcycle to any of these exhausts by applying a logical and systematic approach to altering the base settings supplied with your Fi2000R. These suggestions should be followed step by step and help you achieve success.

#### **\*\* Only attempt adjustments on a fully warmed motor \*\***

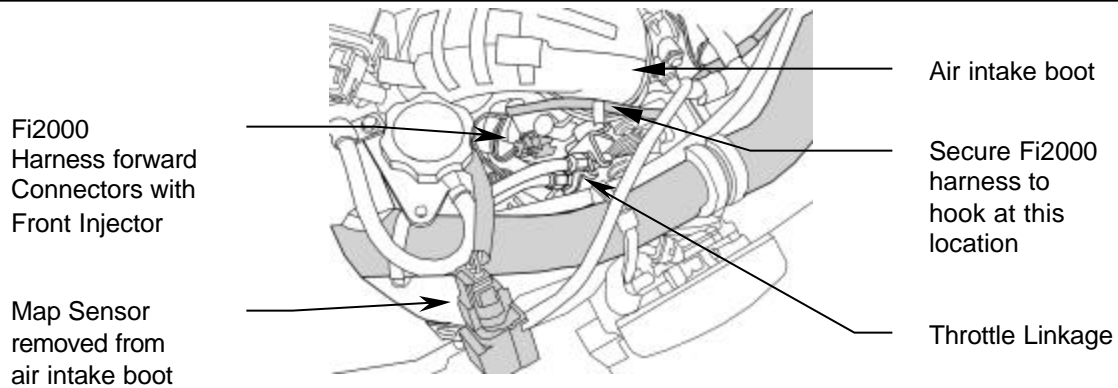
1. Start with the base setting, even if you have a full exhaust system. Adjust and test only ONE adjustment pot at a time until you are happy with the result.
2. Start with the left hand or green light pot. This adjustment works either from idle or above idle (varies with bike) to a R.P.M. of about 5000 (also varies with bike) while the bike is driven at a steady throttle or slowly increasing throttle. This is the cruise range and is where the emissions leanness creates issues like choppy on-off throttle application, surging, and backfiring on trailing throttle.
3. Turn this pot back to zero, and make one position increases until you feel the best performance in this range. Do this test a few times to make sure you have it right.
4. The middle or yellow pot is an engine load- triggered fuel adding adjustment. A rapid increase of the throttle at any R.P.M. will add additional fuel and as long as that predetermined load is present, fuel will continue. As engine loads increase in higher gears the acceleration fuel will stay on longer and be more effective. Starting with the base setting, test ride the motorcycle in 4<sup>th</sup> or 5<sup>th</sup> gear and perform moderately fast roll-on throttle from a repeating standard R.P.M. or speed. Increase the pot one position at a time and stop as soon as you don't feel any improvement.
5. The right hand or red pot is for the fuel setting required when the engine is maximizing its R.P.M. and power delivery. This pot is similar to the main jet in a carburetor. It will take a combination of a minimum R.P.M. and a predetermined amount of engine load to initiate this fuel. The straightaway on a racetrack or an inertia dyno are the best places to set this pot. Full exhaust systems of high quality construction increase flow characteristics and will increase fuel demands over our base settings. Also, air filters specifically designed for higher than stock airflow can create need for higher fuel setting. Try an additional one-position pot setting at a time.
6. Camshaft changes or major air box modifications can alter an engine's volumetric efficiency and create a greater demand on the engine's fuel system than the Fi2000R may have the ability to adjust for.

### TROUBLE SHOOTING

If you have any problems refer to Step 7 in the installation body of these instructions.

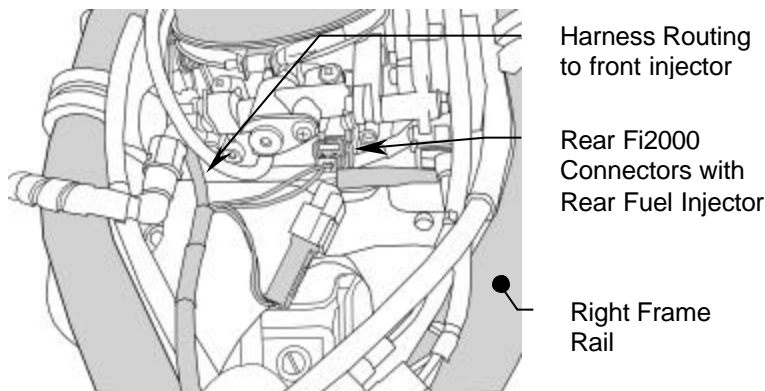


**FIGURE 1**



**FIGURE 2**

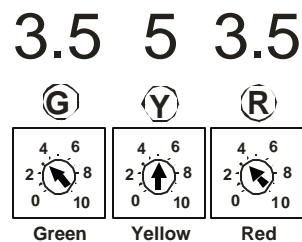
(Fuel tank removed for access to injector connector locations)



**FIGURE 3**

(Fuel tank removed for access to injector connector locations)

**Default Pot Settings:**



**FIGURE 4**