

Items Supplied >

- 1 – Fi2000R Fuel Injection Module
- 2 – Zip Ties, (1): 3/32" x 6"; & (1): 3/16" x 8"
- 1 – Velcro Strip

Application(s) >

Yamaha Roadstar Warrior 02-10

Instruction Manual >

92-1772

Page 1 of 4

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 the seat; remove the foam cover over the electrics. Unbolt the fuel tank at the back, and while holding up the rear of the fuel tank about 2", remove the chrome air cleaner housing on the right side of the engine. **Note:** Orientation of clamp may need to be reversed 180 degrees, so that screw head is pointing downward for reassembly later.
2. Temporarily place the Fi2000R module on top of the ECU and route the wire harness under the seat mount on the right hand side and on top of the large wiring harness, (Fig. 1.) Continue by routing the harness over the top of the right frame rail and along the fuel line and stock harness locations, (Fig. 2). The Fi2000R connectors should lie close to the stock injector sub harness connector (4 pins).
3. Disconnect the stock injector sub harness connectors (black with 4 pins) by pressing the tab in. Plug the mating Fi2000R connectors (white with 4 pins) between them, (Fig 2.)
4. Unstrap the stock ECU from it location and move to the side to allow access to the battery post. Connect the Fi2000R's ground lead to the *Negative* battery post, (Fig. 3.)
5. Before replacing the air cleaner housing, gas tank bolts; seat and ECU to original locations verify Fi2000R LED Functions.
6. Remove the door from the Fi2000R 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, and 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. (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. **Note:** Make sure the ignition is turned off before changing any connection.

* *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. When everything checks out in order, mount the ECU to the stock location and mount the Fi2000R to the top of the ECU with the supplied Velcro, (FIG 3). Zip tie the Fi2000R harness to the right frame rail and existing harness with the supplied zip ties. Reinstall the air cleaner housing. Make sure the Fi2000R harness is not pinched between frame rail and fuel tank grommet. Reinstall fuel tank and 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.

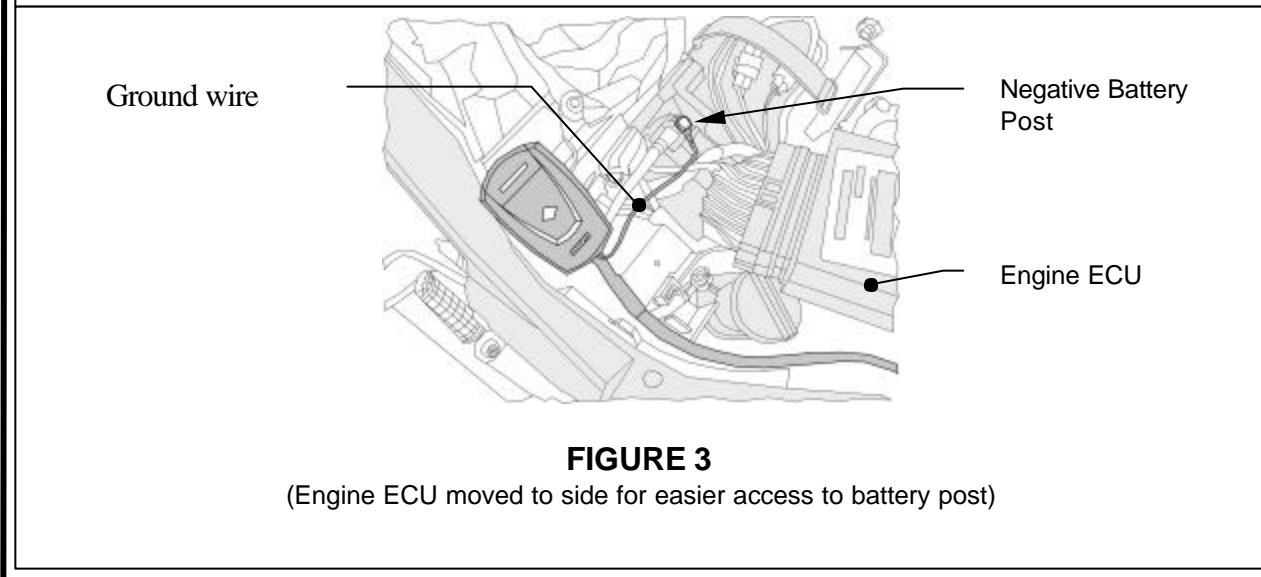
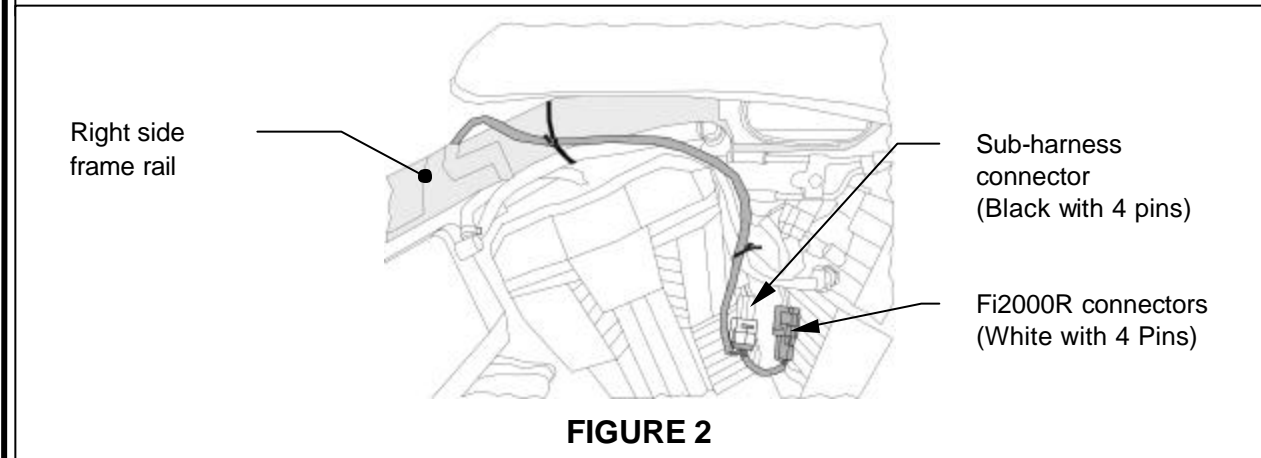
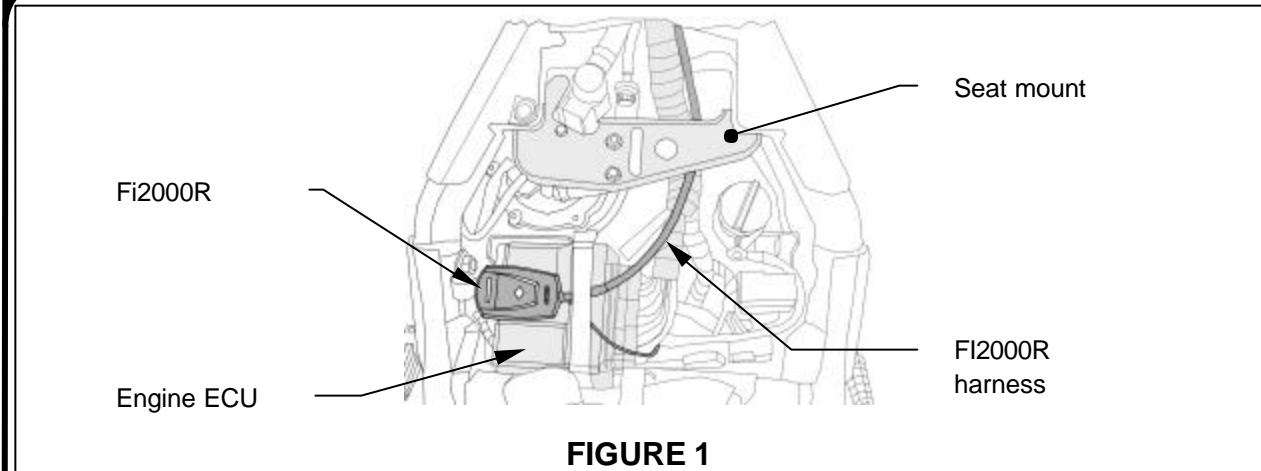
Not all slip-on mufflers flow exactly the same. Some eliminate power valves and others don't. Some are made with street baffles, other with race or competition baffles. Full exhaust systems offer even greater variation in construction, features and performance. The Fi2000R has the ability to tune the 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 4th or 5th 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 note 6 in the installation body of these instructions.



Default Pot Settings:

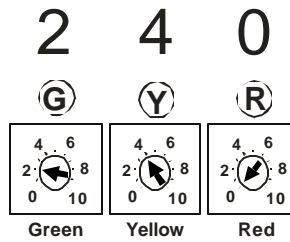


FIGURE 4