

## Items Supplied >

- 1 – Fi2000 FUEL INJECTION MODULE
- 1 – 6" ZIP TIE NARROW #18 TEST
- 1 – VELCRO STRIP

## Application(s) >

HONDA SHADOW RS 750 2010-2013

## Instruction Manual >

92-1614

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**Read all instructions carefully and completely before installing your new Fi2000 module. It is recommended that a qualified mechanic or technician install this product. Before installing the Fi2000 it is recommended that the gas tank be low on fuel.**

1. Remove the M6 bolts securing the main seat and remove seat. Remove the left side cover to allow access for the Fi2000 harness routing.
2. Remove the bolt securing the rear of the tank and prop the tank up at the rear for extra access to fuel injectors.
3. Place the Fi2000 in the under seat area and route the harness forward under the front seat mount, see Figure 1. Route up the center frame tube toward injectors along the left side.
4. Disconnect air recirculation hose to gain access to stock fuel injectors, see Figure 2.
5. Note which stock injector connectors belong to front and rear injectors. Disconnect the stock injector connector from the front cylinder and connect the longer female Fi2000 connector to that injector – connect corresponding male Fi2000 connector to stock female connector (removed from front cylinder). See Figure 3. Note: (Angled needle nose pliers will aid in removing stock connectors.)
6. Disconnect the stock injector connector from the rear cylinder and connect the shorter female Fi2000 connector to that injector – connect corresponding male Fi2000 connector to stock female connector (removed from rear cylinder injector), see Figure 3. Make sure all connectors are fully engaged and seated.
7. Reconnect air recirculation hose. Pull slack out of harness and pull excess slack to rear of harness.
8. Remove the Phillips screw attaching cover over battery. Lift cover rearward to access battery terminals. Attach the black ground cable to the **NEGATIVE** post of the battery. See Figure 1. Close battery box cover and install Phillips screw. Install supplied zip tie to harness in location shown.
9. Velcro the Fi2000 box on top of the frame rail behind the battery box cover and verify your connections. Remove the door from the Fi2000 box to expose the LED lights and pot settings. Verify the wire connections by (1) turning on the ignition while watching the 3 LEDs, confirm that all 3 LEDs light up and remain on. If you don't see lights, make sure the sidestand is up, bike is in neutral, clutch is in and handlebar 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.**

10. Once all connections have been verified, lower the fuel tank into proper position and install bolt. Reinstall seat and make sure all bolts are properly tightened.
11. Reinstall left side cover.

### ADVANCED TUNING

The Fi2000 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 full exhaust systems. Both dyno testing and on-road exhaust gas analysis have been used to develop the best base settings for drivability and power.

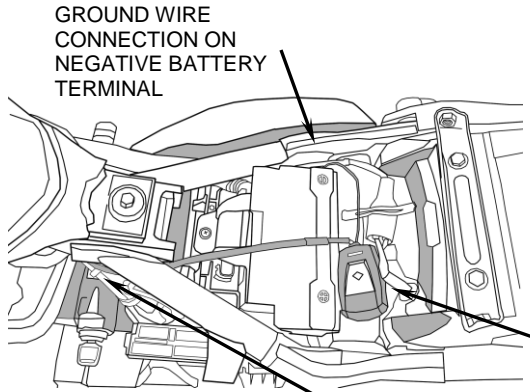
Not all slip-on mufflers flow exactly the same. Some eliminate power valves and others don't. Some are made with street baffles, others with race or competition baffles. Full exhaust systems offer even greater variation in construction, features and performance. The Fi2000 has the ability to tune the 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 Fi2000. 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 in Figure 4 if a full exhaust system is installed. If a full exhaust system is installed in combination with a Cobra PowrFlo™ Air Intake System the same setting will be adequate, please visit: [www.cobrausa.com](http://www.cobrausa.com) for system details. Refer to Step 2 if the stock exhaust is installed or a slip-on muffler is being used to determine the proper pot settings. 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 may 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 Fi2000 may have the ability to adjust for.

### TROUBLE SHOOTING

If you have any problems refer to note 9 in the main body of these instructions.

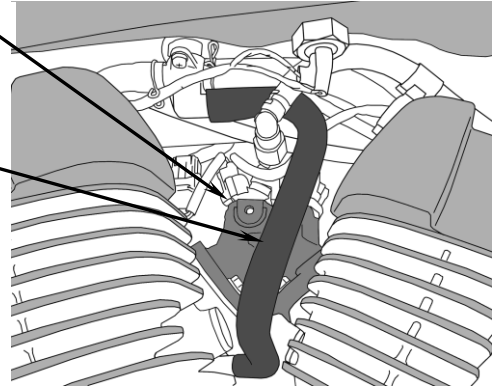


**FIGURE 1**

INTAKE MANIFOLD

TEMPORARILY DISCONNECT AIR RECIRCULATION HOSE TO AID IN INSTALLATION OF INJECTOR CONNECTORS

VELCRO Fi2000 TO THE LOCATION SHOWN AND REINSTALL COVER

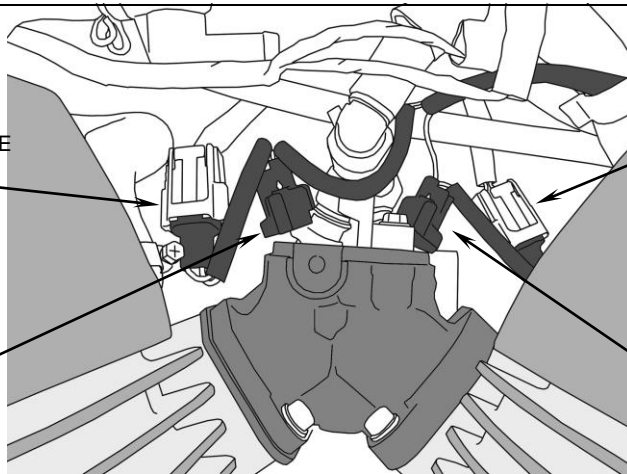


**FIGURE 2**

ZIP TIE Fi2000 HARNESS TO STOCK WIRE HARNESS

STOCK FRONT FEMALE CONNECTOR WITH FRONT MALE Fi2000 CONNECTOR

Fi2000 FRONT FEMALE CONNECTOR INSTALLED ON STOCK FRONT INJECTOR

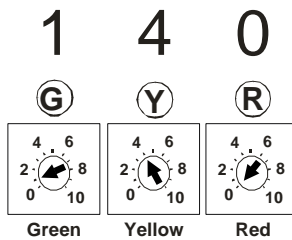


STOCK REAR FEMALE CONNECTOR WITH REAR MALE Fi2000 CONNECTOR

Fi2000 REAR FEMALE CONNECTOR INSTALLED ON STOCK REAR INJECTOR

**FIGURE 3**

**Default Pot Settings**



**FIGURE 4**