

## Items Supplied >

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

## Application(s) >

- Honda VTX 1800C/R/S 02-Up
- Honda VTX 1800F 05-Up
- Honda VTX 1800N 04-Up

## Instruction Manual >

92-1650

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**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 and the right side cover. Remove the chrome dash mounted on the top of the fuel tank. The gas cap will temporarily have to be removed to perform this. Put the gas cap back on after the dash has been carefully moved out of the way (no wires will have to be unplugged.)
2. At the back of the gas tank remove the bolt securing the rear of the tank and gently pull (or wiggle) the fuel tank backwards until it just clears the two rubber locating pucks at the front. It is unnecessary to unplug any wires from the tank. In order to raise the rear of the gas tank on some models for access, **perform the following step in a well-ventilated area, free of open flame. To prevent severe fuel spillage and draining of the tank** use locking pliers to pinch off the rubber fuel hose at the left rear corner of the tank prior to disconnecting it. Immediately install the supplied rubber cap on the tank fuel nipple to prevent tank draining, Figure 3. Once this has been done, lift the rear of the tank up approximately 8" and use a secure prop to hold it in that position.
3. Remove the Allen bolts on the air cleaner assembly, remove the cover and the filter. Next remove the Phillips head screws around the air funnels and remove it. Now pull the air box away from the throttle bodies just until it drops down about 2". If desired for greater access, the air box may be completely removed by disconnecting the wires and vacuum hoses.
4. Place the Fi2000R module on top of the ECU and route the wire harness forward and under the gas tank-mounting bracket, then up and over the ignition coil mounting bolts and into the area behind the air box mounting location
5. The injector connectors are accessible directly under the frame backbone, the front injector connector is brown, and the rear is gray. Unplug them and plug the Fi2000R matching connectors to the injectors, the forward most Fi2000R connector matches to the injector that has the original brown harness connector, Figure 1. Next, plug the corresponding male Fi2000R connector into the original Honda Fi2000R connectors.
6. Position the air box back in line with the throttle bodies and push it back into place, reinstall the screws, filter and external cover and fuel line.
7. Attach the black ground wire to the bolt (10mm head) at the top of the area covered by the right-hand side panel. Position and Velcro the Fi2000R on to the ECU as shown in Figure 2.

**\* 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.**

8. Remove the door from the Fi2000R module to expose the LED's. Verify the wire connections by, (1), turning the ignition on while watching the 3 LED's. They will all light up for a few seconds, and then go off. This is correct. If there are no lights visible, make sure the side stand is up, bike is in neutral, clutch is in and handlebar engine switch is set to run. If there are still no lights visible, 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 the injector connectors are correctly attached. Reattach the access door when finished and install remaining components.  
**NOTE:** Make sure the ignition is turned off before changing any connection.

### 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 \*\***

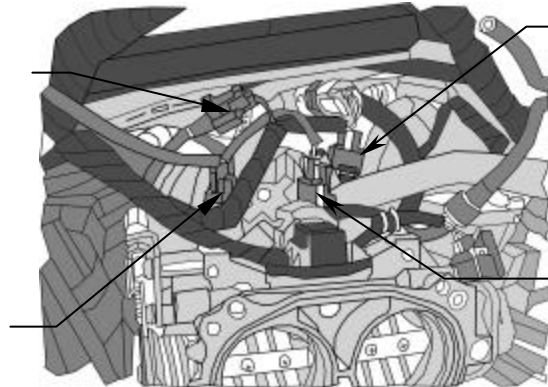
1. Start with the base setting, Figure 4, even if you have a full exhaust system. Adjust and test only *ONE* adjustment pot at a time until you are happy with the result.
2. Start with the left hand or green light pot. This adjustment works either from idle or above idle (varies with bike) to a R.P.M. 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 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 8, in the installation body of these instructions.

Original female harness connector for rear injector with male connector from Fi2000R harness

Fi2000R female connector to rear injector



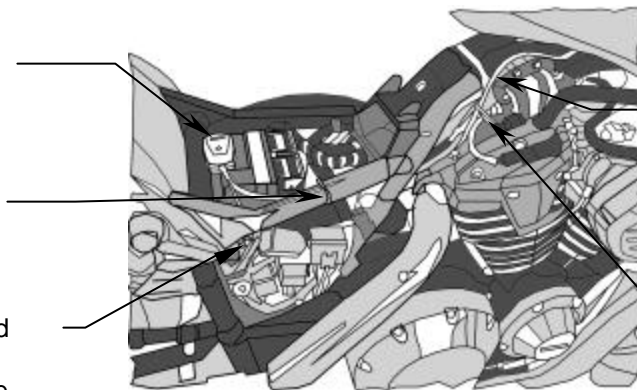
Original brown female harness connector for injector with male connector from Fi2000R harness

Fi2000R gray female connector to injector

**FIGURE 1**

Fi2000R installation location with Velcro  
Zip tie Location Large

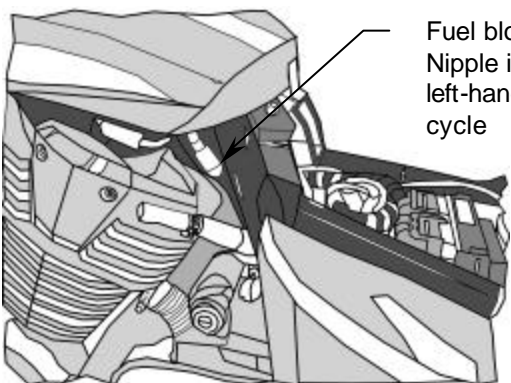
Fi2000R ground wire connected to bolt on frame



Fi2000R Wire harness routing

Zip tie location (small)

**FIGURE 2**

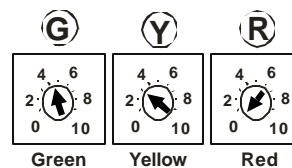


Fuel block off Nipple installed on left-hand side of cycle

**FIGURE 3**

**Default Pot Settings:**

**4.5    3    0**



Green    Yellow    Red

**FIGURE 4**