

## Items Supplied >

- 1 – Fi2000R Fuel Injection Module
- 2 – Oxygen Sensor Eliminators

## Application(s) >

HARLEY ROCKER  
FXCW/C

2008-2011

## Instruction Manual >

92-1611R

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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.**

1. Unbolt the seat and remove the plastic battery cover. Disconnect the positive and negative battery terminals and remove battery from motorcycle.
2. Remove the rear gas tank cover nut. Unbolt the front gas tank bolt, nut and washers. Remove the rear tank nut located underneath the tank cover. Prop the rear of the gas tank up approximately 2". **Note:** Do not put strain on the fuel lines connected to the bottom/front portion of the gas tank. Also be careful not to scratch the paint in this area.
3. Under the gas tank locate the factory female connector on each fuel injector. Depress the clip on the connector and pull the connector free and move it out of the way. **Note:** A pair of needle nose pliers and a long flat blade screwdriver helps with this job. See Figure 1.
4. Lay the Fi2000 module in the area underneath the seat, but do not attach it to the motorcycle. Route the injector wire harness forward up the right side of the frame backbone and under the plastic wiring cover.
5. Attach the Fi2000 module's forward female injector plug, to the front injector. Take the original female H.D. connector and insert the corresponding Fi2000 male connector into it. See Figure 1.
6. Attach the Fi2000 module's shorter rear female injector plug, onto the rear injector. Then take the original female H.D. connector and insert the corresponding male Fi2000 connector into it. See Figure 1. Make sure all connectors are routed and tucked away to prevent chaffing on the engine.
7. To install the rear O<sub>2</sub> sensor eliminator remove the plastic push rivet located under the battery. See Figure 2. This will release the O<sub>2</sub> sensor connector under the oil tank. Unplug the connector that comes from the rear O<sub>2</sub> sensor, and replace that end with one of the oxygen sensor eliminators. Reinstall the plastic push rivet into the original location.
8. Locate the voltage regulator at the front of the motorcycle and remove the 2 Allen bolts that secure the voltage regulator bracket to the frame. Remove the rectangular cover over the top of this bracket and ease the voltage regulator forward just enough to access the front O<sub>2</sub> connector. Locate the front oxygen sensor connection, slide it off its wiring clip and unplug the connector. Replace the sensor wire end with an O<sub>2</sub> eliminator, and then replace the connection onto its wiring clip. Reinstall the panel and the voltage regulator.
9. Reinstall the battery to the stock location and connect the Fi2000 ground wire to the negative post along with the other accessory wires. Connect the battery terminals to their appropriate posts. See Figure 3.

**\* For California riders we offer Air Resources Board approved Fi2000 ARB units with Executive Order number D-633-2. All other Fi2000 models are not legal for street use in California.**

10. Before re-installing the gas tank and seat verify your connections. Remove the door from the Fi2000 box to expose the LED's. **NOTE:** The Fi2000 base pot settings come preset from the factory for the Rocker with aftermarket air cleaner and exhaust shown in Figure 4. Verify the wire connections by (1) turning the ignition on, prior to starting, and see if all three LED's are on steady then cycle off after a few seconds. If you have no light, your ground connection (BLACK wire) has not made proper contact or your front injector connection is not complete. (2) After achieving a steady light from all three LED's, start the motorcycle, wait 15 seconds and let it idle, 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 door when finished. Note: Make sure the ignition is turned off before changing any connection.
11. Place the Fi2000 box on the left side between the battery and frame. See Figure 3.
12. Reinstall the fuel tank and seat in the opposite order they were removed, as well as the regulator and cover. Be sure all hardware is tightened to factory specifications.

## ADVANCED TUNING

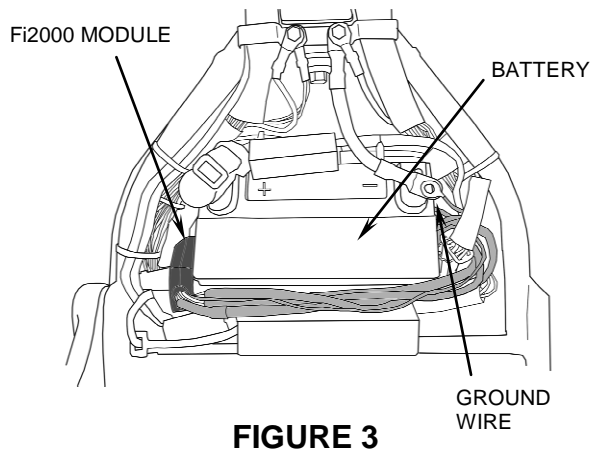
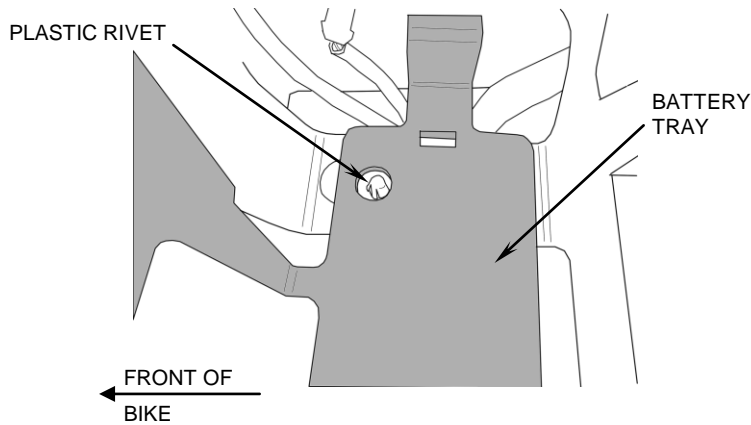
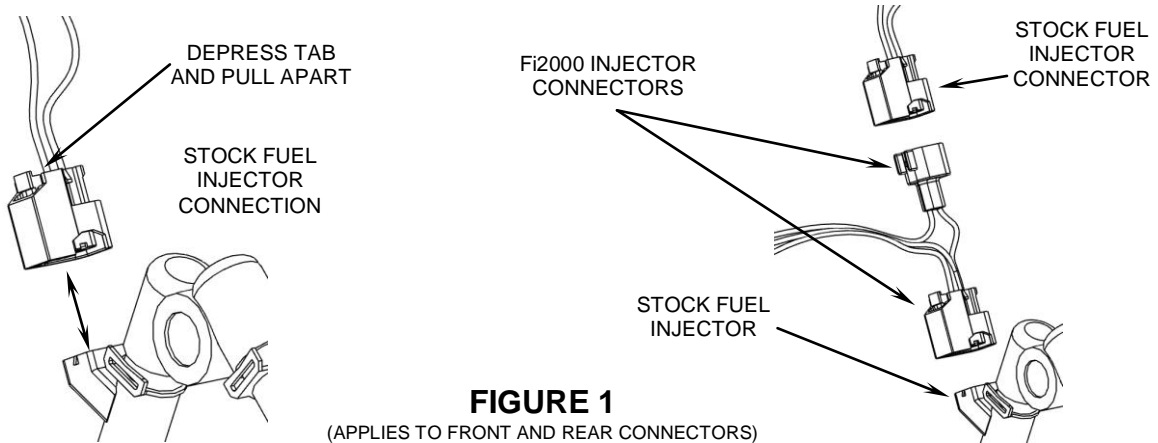
The Fi2000R has the ability to efficiently tune the EFI system on your motorcycle for slip-on or full exhaust systems. It comes pre-set from the factory for popular brand name slip-on mufflers. Both dyno testing and on-road exhaust gas analysis have been used to develop the best base settings for drivability 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 4000 (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

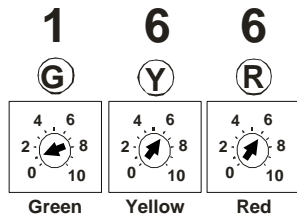
If you have any problems refer to Step 10 in the main body of the instructions.



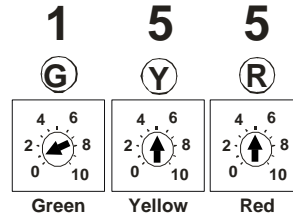
## FIGURE 4

Fi2000 Default pot setting

**Aftermarket Air Cleaner, Exhaust**  
Default Pot Settings:



**All Stock**  
Default Pot Settings:



Tech Support <https://fi2000.com>