

# Items Supplied >

- 1 Fi2000CL Fuel Injection Module
- 2 Zip Tie, 3/16" x 6" Long
- 1 Zip Tie, 3/16" x 4" Long
- 1 Velcro Strip

## Application(s) >

YAMAHA STRYKER 1300 2011-2013

### Instruction Manual >

92-1770CL

Page 1 of 3

Read all instructions carefully and completely before installing your new Fi2000CL module. It is recommended that a qualified mechanic or technician install this product.

Before installing the Fi2000CL it is recommended that the gas tank be low on fuel.

- 1. Remove the seat. Remove the two 12 mm headed bolts securing the rear of the fuel tank, prop the tank up securely to allow access to the fuel injector connectors.
- 2. Position the Fi2000® module in the area under the seat, then feed the Fi2000 injector harness with the four connectors forward under the seat latch bracket, under the fuel tank and along the upper left side frame rail and to the injector area between front and rear engine cylinders, see Figure 1.
- 3. Locate the front and rear injectors and remove stock female connector from front injector, see Figure 2. On Fi2000 injector harness use the longer of the two connector pairs and install the Fi2000 female connector onto the front injector. Install the corresponding male Fi2000 connector into the stock front female injector connector. Repeat for rear injector using the short pair of Fi2000 connectors. Be sure female connectors seat properly on injectors and the stock connectors are fully pressed together with the Fi2000 male connectors. Tuck these connectors out of the way and lower the fuel tank. Secure Fi2000 harness to left frame rail with 6" zip tie.
- 4. Remove the right side cover retained by buttonhead screw and triangular panel below it. Push inward on the center of the plastic peg fastener to remove it as the triangular plastic panel is pulled outward, see Figure 3.
- 5. Route the second Fi2000 harness with the clear connectors forward under the right side frame rail and forward along front of fuel pump tank, then down to the stock oxygen sensor connectors, see Figure 4. Unplug this connection and then plug in the corresponding Fi2000 connectors into the stock connectors. Coil excess wire harness and secure in loop with supplied 6 " zip tie. Replace the triangular cover to hide these connectors. Secure the Fi2000 oxygen sensor harness to the clutch cable sheath using the supplied 4" zip tie.
- 6. Clean off the top of the fuel pump tank and remove backing from supplied Velcro. Mount the Fi2000 on top of the tank, see Figure 1. Lift up the tool tray / battery cover to access the negative post of the battery. Attach the ground wire from the Fi2000 to the negative post. Reinstall the cover. Before reinstalling the seat, verify Fi2000 harness connections have been made properly.
- 7. Remove the door from the Fi2000 module to expose the LED's. NOTE: The Fi2000 base pot settings come preset from the factory for the Stryker with full exhaust, if a slip-on is used change settings, to those in Figure 6. 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.
  NOTE: Make sure the ignition is turned off before changing any connections.
- 8. Reinstall right side cover and triangular plastic cover over oxygen sensor connectors, be sure plastic pin is installed correctly. Lower fuel tank and reinstall 12mm headed bolts securely, reinstall seat.

1

06/11

<sup>\*</sup> It is recommended that you always wear a helmet while riding. Please never operate your motorcycle while under the influence of alcohol and/or drugs. Enjoy the new power of your motorcycle and please ride safely.



Instruction Manual > 92-1770CL Page 2 of 3

#### **ADVANCED TUNING**

Your Cobra Fi2000 fuel injection module has been tested and preset for best function and rideability on a motorcycle with aftermarket air cleaner and Cobra full exhaust, settings shown in Figure 5, if your motorcycle is using the Cobra slip-on exhaust, please change to the settings to those in Figure 6. The Fi2000 does however, have 3 important adjustments that allow you to tune the module for optimum performance, especially if you have performed other changes to your motorcycle. These adjustments also allow you to resolve drivability issues if our stock settings are not exactly right for your bike. Make sure your motorcycle is up to normal operating temperature (15 minutes of riding should be sufficient) before making any adjustments.

GREEN LED POT (left pot) – With the Closed Loop function of this module you do not need to adjust this setting, leave it at the preset value. Without a closed loop system this adjustment would affect idle and cruise fuel. If you had cruising issues, this is where you would try a different setting. Generally, surging and uneven running while cruising is a lean fuel condition, so adding a small increase in fuel by turning this adjustment clockwise with a small flat blade screwdriver a 1/2 of a position would help. The bike would need to be Test-driven to feel an improvement and only the setting would need to be increased until the surge went away. Also, backfiring or popping on trailing throttle is generally a lean symptom (or an exhaust gasket leak). The same small increases as above would be tried just until the backfiring would disappear.

YELLOW LED POT (middle pot) - this adjustment affects acceleration and power fuel. If you have a hesitation or bogging on acceleration, this is where you would try a different setting. Aftermarket air cleaner assemblies generally lean out fuel mixtures, so try small clockwise increases until a smooth acceleration returns. 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.

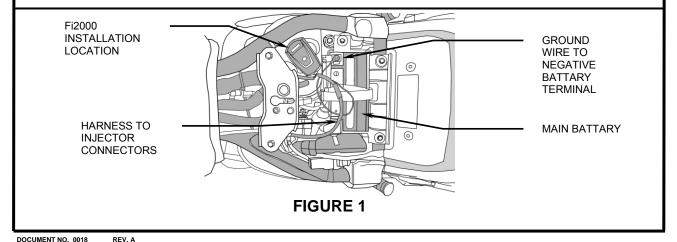
RED LED POT (right pot) - the right hand or red pot is for the fuel setting required when the engine is maximizing its R.P.M. and power delivery. This pot is similar to the main jet in a carburetor. It will take a combination of a minimum R.P.M. and a predetermined amount of engine load to initiate this 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.

#### **TUNING NOTES**

Cobra recommends the installation of any of its complete exhaust systems.

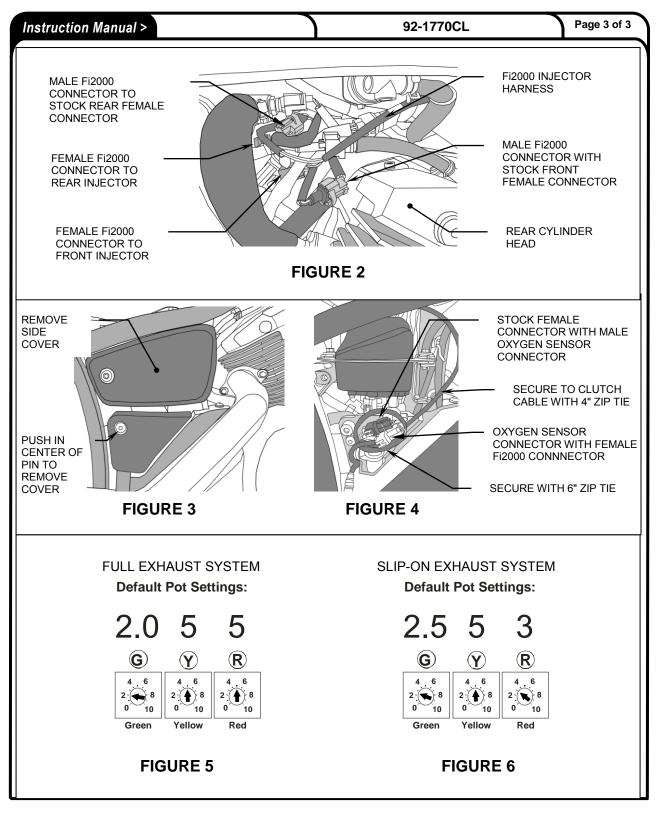
### **TROUBLE SHOOTING**

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



06/11 2





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**06/11** 3