

## Items Supplied >

- 1 – Fi2000 Fuel Injection Module
- 6 – Zip Ties 6"
- 1 – Velcro Strip

## Application(s) >

HARLEY DRESSER 2007

## Instruction Manual >

692-1608CL

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**ATTENTION:** All 2007 Harley DRESSER models manufactured before NOVEMBER 1, 2006 require an ENGINE CONTROL MODULE CALIBRATION update from a Harley Davidson Dealer; please reference Harley Davidson SERVICE BULLETIN M-1186. This Fi2000 is meant to function on all 2007 DRESSER models with this update and all 2007 DRESSER models manufactured after this date which should already have this update installed, check with your local dealer for verification.

**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. Remove the seat and air cleaner assembly. Remove rear mounting bolt from fuel tank and prop the fuel tank as high as it will comfortably go.
2. Locate the factory connector on each fuel injector. Depress the tab on the connector and pull the connector free from the injector 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.
3. Lay the Fi2000 module in the open area just behind the fuel tank, Figure 2. By carefully prying the 3 locking tabs, open the right side of the black plastic runner that houses the stock wiring harnesses. Slip the Fi2000 harness into the runner; use the cutout on the left side towards the rear of the runner to feed the harness into it. Route the harness forward about 6 inches and then have it exit at the right side of the runner. Snap the top of the plastic runner back into place.
4. Route the Fi2000 module's forward injector plug, with the red and brown wires behind the existing wires and under the upper motor mount assembly. Connect the Fi2000 gray connector onto the injector and insert the black connector into the original Harley connector, Figure 1.
5. Attach the Fi2000 module's rear female injector plug, with the red and green wires, onto the rear injector. Then take the original female HD connector and insert the corresponding male Fi2000 connector, refer to Figure 1. Tuck both front and rear injector connections out of the way.
6. It is now time to install the oxygen sensor harnesses. In the open area where the Fi2000 module has been placed you will see a round hole (approximately 1" in diameter), in the lower area of the frame. Feed the two O<sub>2</sub> sensor harnesses through this hole. Above the transmission on the right side locate the stock rear O<sub>2</sub> sensor connection. Unplug this and plug the corresponding Fi2000 connectors from the shorter Fi2000 O<sub>2</sub> sensor harness into these connectors see Figure 3.
7. Route the longer O<sub>2</sub> harness through the factory loop holding the rear brake hose then up the right side of the bottom frame rail and ziptie it in 3 locations.
8. Route the harness behind the rear brake assembly and then up the front right frame downtube so the connectors end up at the cross member where the front O<sub>2</sub> connection is located. Ziptie the Fi2000 harness to the right downtube. Cut the 2 zipties holding the factory connection, unplug the connection, and then plug in the corresponding Fi2000 connectors into the factory connectors. Re-ziptie both connections along the frame cross member, using the original ziptie holes, Figure 4.

**\* 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.**

9. Feed the Fi2000 black wire under the frame cross member and attach it to the **NEGATIVE** post of the battery. Velcro the module onto the flat area of the frame in the open area, in a position where it will sit flat, see Figure 2.
10. Before re-installing the fuel tank, seat and air cleaner assembly, verify your connections. Remove the door from the Fi2000 box to expose the LED's. Verify the wire connections by (1) turning the ignition on, prior to starting, and see if all three LED's are on steady. 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. Re-install the seat, air cleaner assembly and fuel tank mounting bolt.

### **ADVANCED TUNING**

Your Cobra Fi2000 fuel injection module has been tested and preset for best function and rideability on a motorcycle with aftermarket aircleaner and Cobra exhaust. 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. Remove the door to expose the pots shown in Figure 4.

**GREEN LED POT (left pot)** – With the Closed Loop function of this module you do not need to adjust this setting, leave it at 1.5. 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 as above until a smooth acceleration returns.

**RED LED POT (right pot)** - this adjustment is the top end or power fuel adjustment. Just like the main jet in a carburetor, it starts to control fuel, as you demand maximum power from your bike and takes over completely above 4000 R.P.M. As performance gains are added to your motorcycle, such as big bore kits, camshafts, flowed cylinder heads, etc., each component will increase the fuel demand of the system. With the red pot turned to its maximum (10) position, the Fi2000 will cope with nearly 100 R.W. horsepower. An all-stock motor will only require a 2 position. You can generally, if you are using quality performance engine upgrades, in a sensible combination equate the numbers evenly from 2 up to 10 based on horsepower gains.

### **TUNING NOTES**

Typically 2 into 1 or our speedster exhaust system require one additional position, on the yellow and red pots, over slip-ons or staggered duals.

On high performance motors, slip-on mufflers do not flow well enough and create fuel setting problems and detonation. Cobra recommends the installation of any of its complete exhaust systems.

### **TROUBLE SHOOTING**

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

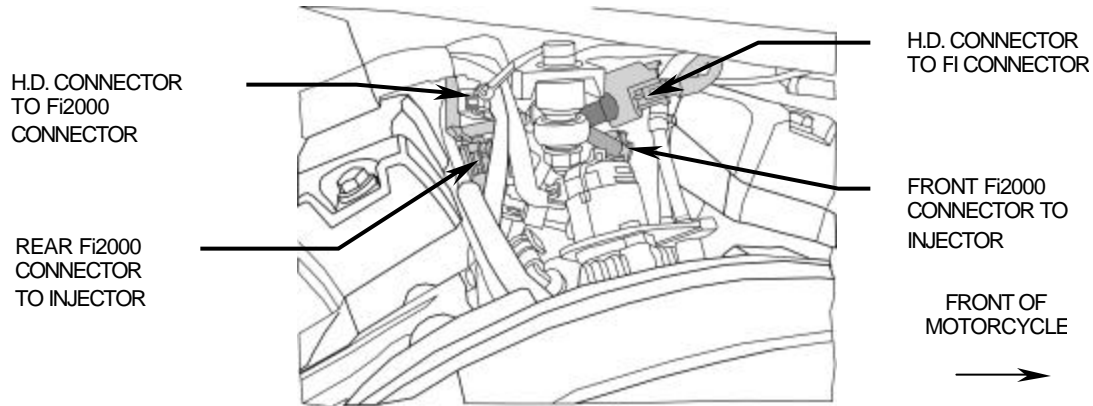


FIGURE 1

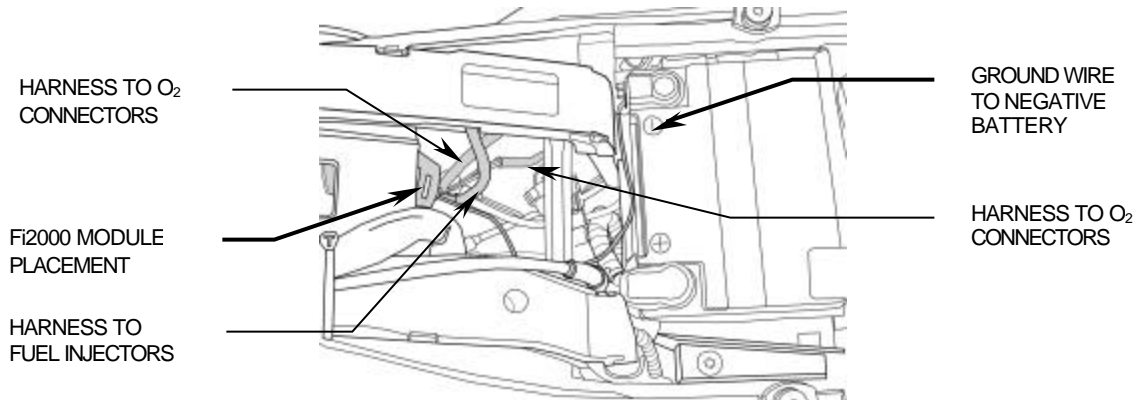


FIGURE 2

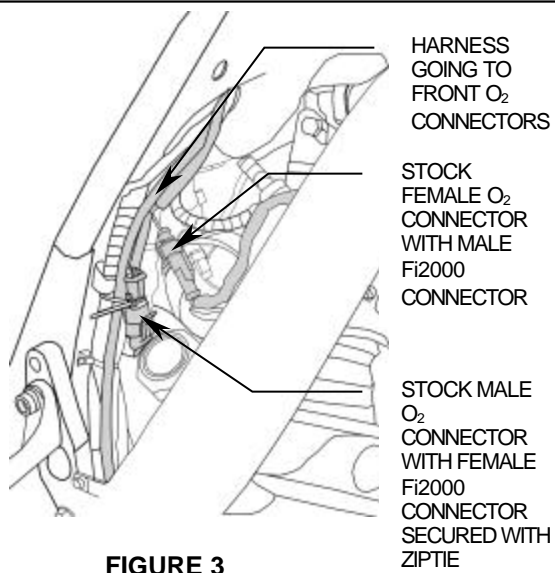


FIGURE 3

STOCK MALE CONNECTOR CONNECTED TO FEMALE Fi2000 CONNECTOR SECURED TO FRAME RAIL WITH ZIPTIE

FEMALE O<sub>2</sub> CONNECTOR WITH MALE Fi2000 CONNECTOR

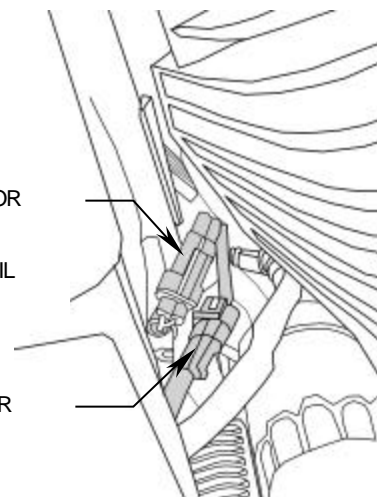


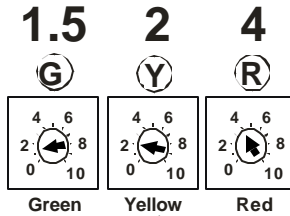
FIGURE 4

## FIGURE 5

Fi2000 Default pot setting

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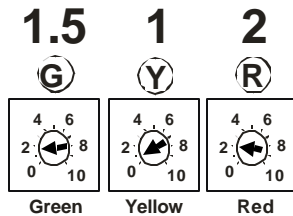
Default Pot Settings:



**Aftermarket Exhaust Only**

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Default Pot Settings:



**All Stock**

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Default Pot Settings:

