

Items Supplied >

- 1 – Fi2000 Fuel Injection Module
- 4 – T-Tap Connectors (1 spare)
- 5 – Zip Ties

Application(s) >

KAWASAKI VN2000 04-10

Instruction Manual >

92-0963

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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. Remove the seat and both side covers, noting to remove the screw from the left side cover before removal. Remove the tool kit from the tool kit storage area.
2. Remove the battery cover and four screws that attach the cover.
3. Remove the screws that attach the battery cables to the battery. Remove the battery.
4. Remove the hex bolt located inside the tool kit storage area. Remove the bolt that attaches the right side cover latching mechanism. Remove the bolt that attaches the seat release cable bracket. Remove the bolt that attaches the divider that separates the shock and battery. It is located by the rear of the shock (See figure 1).
5. Unplug the three wire harness connectors (California motorcycles have four) that reside in the trough on the right side of the ECU cover/tool kit storage lid. The connectors are held in place by either vertical tabs or push barb clips. When the connectors are free, carefully separate the connectors and route them out of the way. Disconnect the tail connector and route it out of the way.
6. Lift up and slide back the metal bracket that the connectors were attached to (it also attaches the seat release cable). Remove the metal bracket.
7. Locate the vertical plastic divider between the battery and shock. Lift it up approximately one inch and grab the front right corner of the ECU lid and lift up and slightly forward. Pull the lid to the right until it clears the shock and comes free from the motorcycle.
8. Locate the Blue w/Red stripe and Blue w/Green stripe injector wires at the ECU plug (the Blue w/Green wire is located next to the Blue w/Red wire in the top row at position number 3, **do not use** the Blue w/Green wire located at position number 4) and attach a t-tap connector to each wire (See figure 2 & 3). Make sure not to attach the t-tap connectors closer than 1" to the stock ECU connector. Feed the Fi2000 Blue/RED and Blue/Green wires from the left side of the motorcycle in front of the fuse panel, into the battery storage area and thru to the t-tap connectors. Attach the Fi2000 wires to the corresponding colored ECU wire taps.
9. Install a t-tap connector to the Red wire in the tail light wire harness just ahead of the gray harness connector (See figure 1). Reinstall the battery (temporarily) and positive battery cable. Reinstall the ground cable and Fi2000 Black wire to the negative battery post. Connect the Fi2000 red wire to the t-tap connector attached to the tail light red wire.

** 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. 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, either your ground connection (BLACK wire) is not solid or, (more likely) your RED wire connection is incorrect. You have either tapped on the wrong wire or the tap has not made contact. (2) After achieving a steady light from all three LED's, start the motorcycle 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, your BLUE w/RED stripe wire connection is incorrect; if all three LED's are flashing, your BLUE w/GREEN stripe wire connection is wrong. Again verify correct color and tap contact. Reattach the door when finished. **Note:** Make sure the ignition is turn off before changing any connection.
11. After verifying the Fi2000 wires are correctly installed, disconnect the Fi2000 Black And Red wires from the motorcycle. Disconnect the positive and negative cables from the battery and remove the battery.
12. Reinstall the ECU cover by pushing it under the shock and moving it into the original position. It may help the reinstallation if you lift up the rear left corner of the cover over the ridge at the back while lifting the vertical plastic divider up until the cover is in position. Insert the divider into the grooves of the lid and engage the front and rear locating pins. Reinstall the bolt in the divider removed in step 4.
13. Reinstall the seat latch release cable bracket and right side cover latch, with the bolts removed in step 4, in their original position making sure not to pinch any wires. Reinstall the tool kit storage hex bolt removed in step 4.
14. Plug the three connectors, disconnected in step 5, back together (if equipped, the black four wire connector that goes to the O2 sensor does not get reconnected; see note below) and position them back into their original mounting tabs. Route the Fi2000 Red and Black wires from the left side thru the notch in front of the fuse panel. Route the Red wire with the main wire harness over the shock to the t-tap connector located near the tail light connector. Fasten the red Fi2000 wire to the main wire harness as shown in fig 1 with four supplied zip ties.
15. Reinstall the battery making sure not to trap the black Fi2000 wire underneath. Reconnect the battery cables and attach the black Fi2000 to the negative battery post. (See figure 1)
16. Reinstall the battery cover and reattach it with the four screws removed in step 2.
17. Velcro the Fi2000 to the inside of the left side cover (See figure 1). Reattach the cover and screw removed in step1.
18. Reinstall the tool kit, right side cover and seat.

Note: If your motorcycle came equipped with an O2 sensor in the stock exhaust and you have installed a Cobra® exhaust system you will need to install a Cobra O2 sensor removal kit part number 92-1101.

ADVANCED TUNING

Your Cobra Fi2000 fuel injection module has been tested and preset for best function and rideability on a stock motorcycle with a 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 cover to expose the pots shown in figure 4.

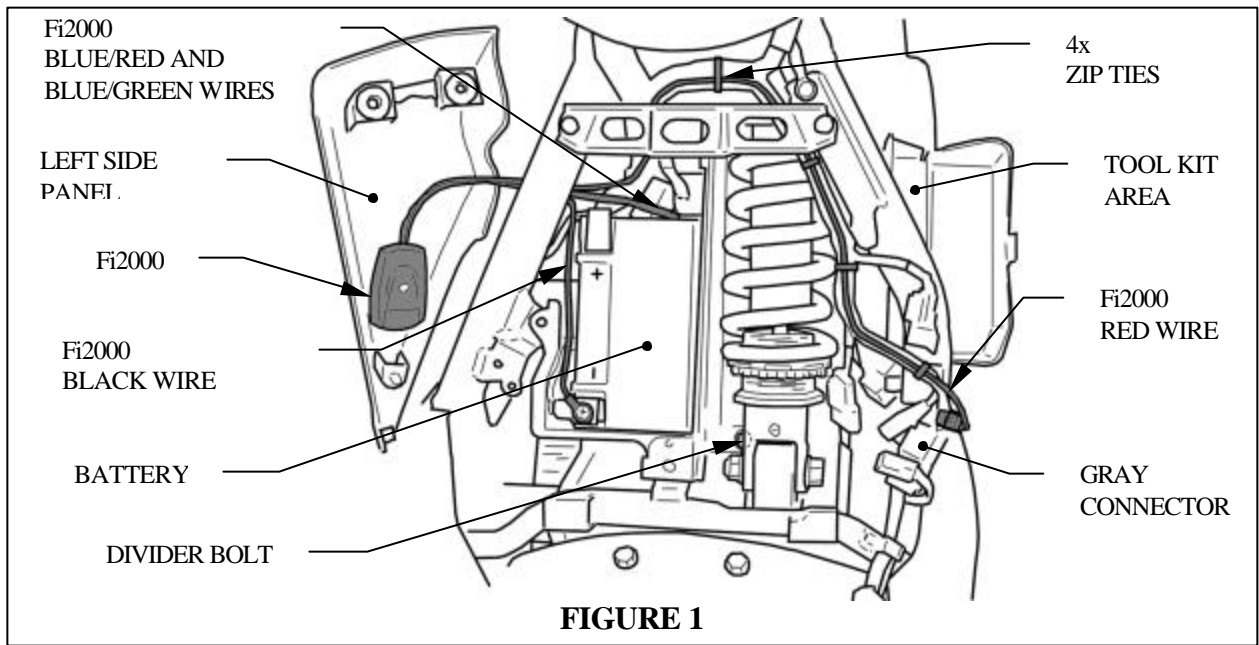
GREEN LED POT (left pot) - this adjustment affects idle and cruise fuel. If you have cruising issues, this is where you would try a different setting. Generally, surging and uneven running while cruising is a lean fuel condition, so try adding a small increase in fuel by turning the adjustment clockwise with a small flat blade screwdriver a 1/2 position. Test drive the bike to feel an improvement and only increase the setting until the surge goes away. Also, backfiring or popping on trailing throttle is generally a lean symptom (or an exhaust gasket leak). Try the same small increases as above just until the backfiring goes away.

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 pot controls the top end (power) fuel. On most bikes the factory gets the top end fuel right, as emissions testing is not done there and most exhausts by themselves won't dramatically change that requirement. Hi-Flow air cleaner assemblies, especially those that remove allot of restriction, can significantly alter the high R.P.M. demand for fuel. This is where you would use the red led pot. Starting at the 3 position, to be safe, test ride the motorcycle up to redline and adjust the pot until you feel the best performance.

TROUBLE SHOOTING

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



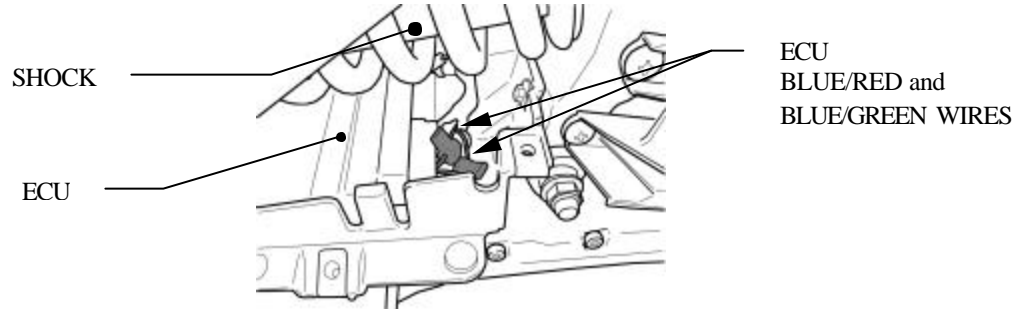


FIGURE 2

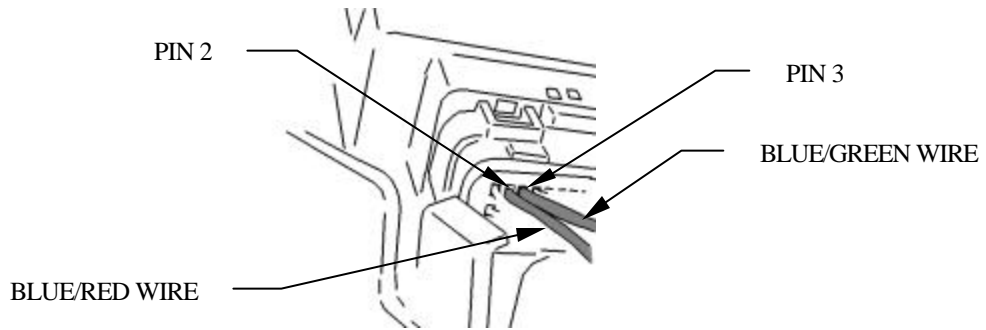


FIGURE 3

Injector Wires: Blue/Red and Blue/Green
Power Wire: Red (tail light)
Default Pot Settings:

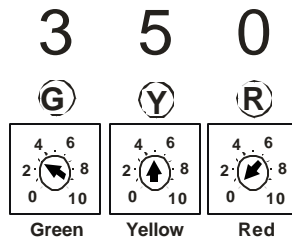


FIGURE 4