Fi2000®
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Items Supplied >

1 – Fi2000 FUEL INJECTION MODULE
4 – T-TAP- CONNECTORS (1 EXTRA)
1 – VELCRO STRIP

Application(s) >

KAWASAKI VN900	06-19

Instruction Manual > **92-0968**

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. Remove the two Phillips screws that hold the battery cover / tool kit tray and remove it. Place the Fi2000 control module and harness near the battery.
2. Locate the red wire on the taillight wire loom, this harness runs down the right side of the motorcycle on the right side under the seat, see Figure 1. Attach a T-tap connector onto this wire where it is exposed behind the female connector.
3. Locate the ECU and find the exposed wires exiting it on the right side. Locate the blue wire with the red stripe, and next to it, the blue wire with the green stripe, where the wires are exposed attach T-tap connectors to each wire, see Figure 1.
4. Attach the black ground wire to the NEGATIVE post of the battery, and then plug the Fi2000 color matched wires into the corresponding T-taps. Make sure you support the T-tap as you push on the blade connector in to each one.
5. Velcro the Fi2000 module to the battery cover / tool kit tray, as shown and reinstall the it with the two Phillips screws. Prior to reinstalling the seat, verify connections and proper LED Functions.
6. Remove the door from the Fi2000 module to expose the LED's. Verify the wire connections by turning the ignition on, prior to starting, and see if all three LEDs 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.
7. After achieving a steady light from all three LEDs, start the motorcycle and let it idle. While the bike is idling all three LEDs should be on steady. When the RPMs go above 1500 the yellow and red LEDs will turn off and the green LED will stay on steady. To check this, wait at least 10 seconds after starting the engine and then raise the engine speed to 1500-2000RPMs. If the green LED is the only LED on steady, then all connections have been made correctly.
8. If all three LEDs stay on when the RPMs are above 1500, 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 turned off before changing any connections.

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. Visit COBRAUSA.COM to choose the correct Fi2000 for your vehicle.

ADVANCED TUNING

The Fi2000 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, others with race or competition baffles. Full exhaust systems offer even greater variation in construction, features and performance. The Fi2000 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 Fi2000. These suggestions should be followed step by step and help you achieve success.

**** Only attempt adjustments on a fully warmed engine ****

1. Start with the base setting; see Figure 2, 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 correct.
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^{th} or 5^{th} 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 do not 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 Fi2000 may have the ability to adjust for.

TROUBLE SHOOTING:

If you have any problems refer to: Step 6, in the installation body of these instructions.

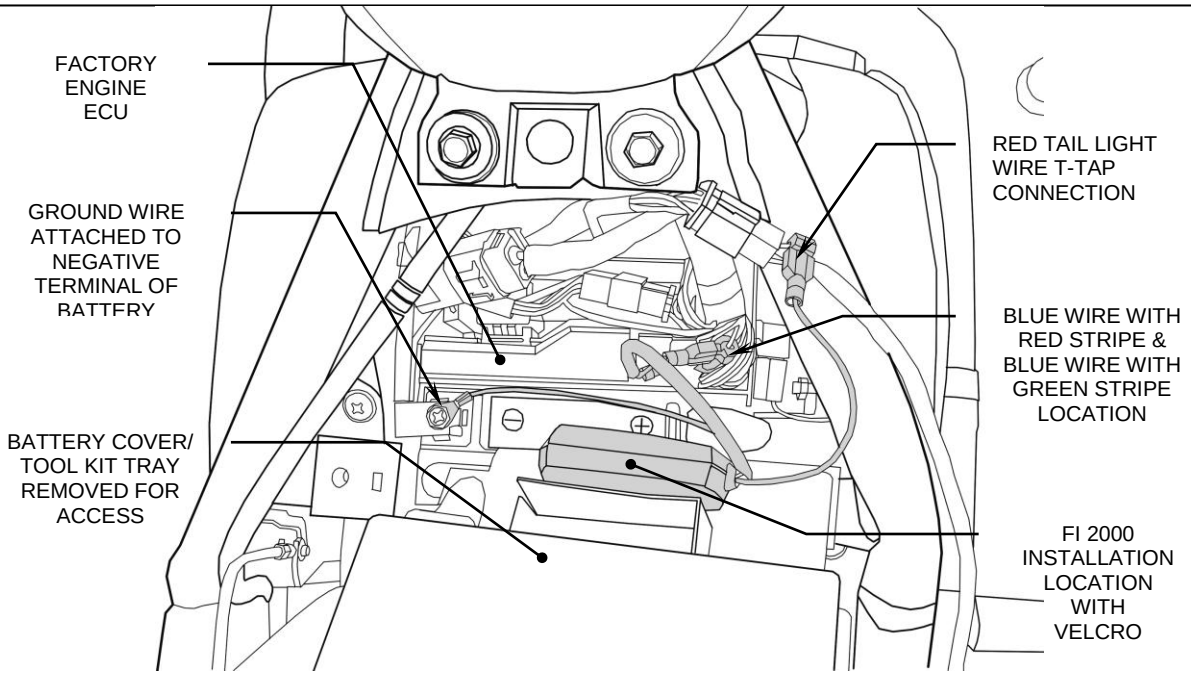

FIGURE 1: Fi2000 ECU AND T-TAP CONNECTION LOCATION

Default Pot Settings:

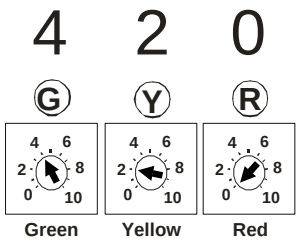

FIGURE 2