Fi2000

Items Supplied >

1 – Fi2000R Fuel Injection Module
2 – Zip Ties 6" #18 Test
1 – Velcro Strip

Application(s) >

Kawasaki Vulcan 1500 Classic 05-08

Instruction Manual > 92-1940

Read all instructions carefully and completely before installing your new Fi2000R module.
It is recommended that a qualified mechanic or technician install this product.
Before installing the Fi2000R it is recommended that the gas tank be low on fuel.

1. Remove the seat, and then remove the bolts securing the fuel tank, disconnect the vent line and lift the back of the tank up. Unplug the second vent tube under the tank and then securely prop the tank in a position about 6" up in the rear from the frame rails to allow access to the fuel injectors and harness.
2. Locate and unplug the two gray factory fuel injector plugs. Install the gray Fi2000R female connectors onto the injectors, using the longer Fi2000R female connector on the vertical injector and the shorter Fi2000R female connector on the horizontal injector, see Figure 1. Now plug the black male Fi2000R connectors into the corresponding original female injector connectors and tuck them out of the way.
3. Run the harness down the left side of the frame as shown in Figure 2. Ziptie it to the existing harness to secure it in place.
4. Using the supplied Velcro pads, place the module in the position shown, in Figure 2. Attach the black ground wire from the Fi2000R to the negative post of the battery.
5. Lower the fuel tank and reconnect vent lines. Prior to reinstalling fuel tank bolt and seat, verify connections.
6. Remove the door from the Fi2000R module to expose the LED's. 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 and install remaining components. **NOTE:** Make sure the ignition is turned off before changing any connection.

**** 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.***

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 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 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^{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 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 6, in the installation body of these instructions.

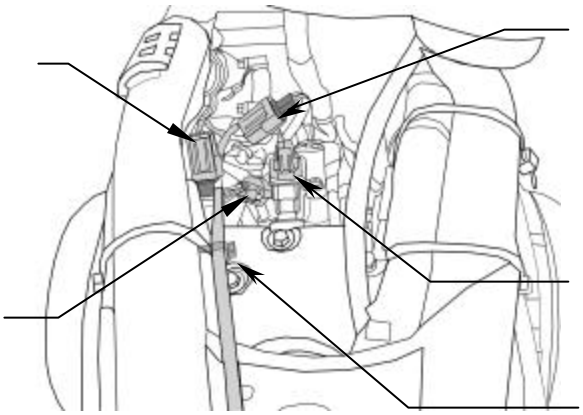

FIGURE 1

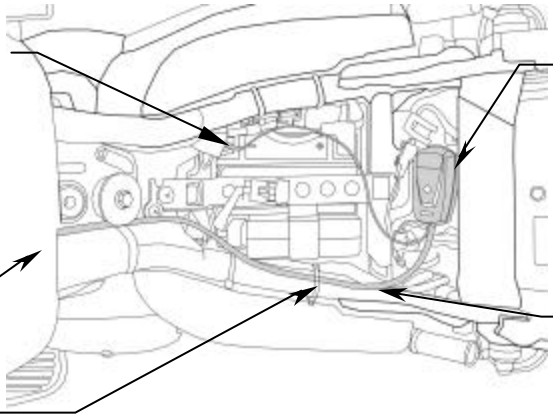

FIGURE 2

VULCAN
1500

Default Pot Settings:

1.5 1.0 0

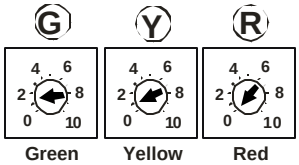

FIGURE 3