

Items Supplied >

- 1 – Fi2000R FUEL INJECTION MODULE
- 1 – 6" 18# TEST ZIP TIE
- 1 – VELCRO STRIPE

Application(s) >

KAWASAKI	
VN1700 CLASSIC/LT	09-13
VN1700 NOMAD	09-13
VN1700 VOYAGER	09-13
VN1700 VAQUERO	11-13

Instruction Manual >

92-1965

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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 for the passenger and then the seat for the Rider.
2. Remove 3 buttonhead screws securing instrument bezel and remove retaining ring around ignition switch, see Figure 1, be sure not to scratch chrome. Unplug large wire harness plug from rear of bezel, and remove bezel to prevent it from scratching fuel tank, when fuel tank will be loosened.
3. Remove two M8 hex bolts and seat-retaining bracket securing rear of fuel tank. Prop fuel tank up approximately 2 inches to gain access to fuel injectors and connectors. Use a long set of offset needle nose pliers to remove front and rear female fuel injector harness connectors. Note which connectors are for front and rear injectors, the front may have a "F" noted on the harness near the female connector.
4. Remove battery cover by removing two Phillips screws, to gain access to battery.
5. Place Fi2000 in under seat area, see Figure 2, and route fuel injector connector harness up right frame rail, continue routing forward along frame rail underneath right side of fuel tank up to fuel injector connectors between cylinder heads. Mate the longer female Fi2000 Connector to the front injector and mate the front original female connector to the male Fi2000 connector, see Figure 3. Mate the shorter female Fi2000 connector to rear injector and mate original rear female connector to shorter male Fi2000 connector.
6. Make sure injector connector harness is routed next to frame rail and install harness in existing rubber harness securing loop along frame rail. Pull extra harness slack towards rear of motorcycle, but not to taut.
7. Now remove screw securing ground wire to battery. Place black ground wire from Fi2000 on top of negative ground wire and reinstall screw, see Figure 4. Make sure ground wire is routed downward in a similar orientation as main ground wire. Reinstall battery cover with 2 screws.
8. Velcro the Fi2000R module to the battery cover / tool kit tray as shown in Figure 2, using supplied Velcro.
9. Lower the fuel tank back into position and reconnect and install instrument bezel. Wait to install bezel screws, retaining ring, seat retaining bracket, bolts, and seat until Fi2000 wire connections and function have been verified.

CONTINUE TO NEXT PAGE!

*** 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.**

10. Remove the door from the Fi2000R module to expose the LED's. Verify the wire connections by, (1), turning on the ignition 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 verification is completed. **NOTE:** Make sure the ignition is turned off before changing any connection.
11. Reinstall the instrument bezel ignition retaining ring and be sure to align the word "OFF", to the top to allow for proper installation. Reinstall the screws securing the bezel. Reinstall seat bracket along with M8 bolts securing rear of fuel tank. Reinstall rider and passenger seats. Be sure all fasteners have been properly tightened.

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, others 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 engine ****

1. Start with the base setting; see Figure 5, 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 4th or 5th 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 Fi2000R may have the ability to adjust for.

TROUBLE SHOOTING:

If you have any problems refer to: Step 10, in the installation body of these instructions.

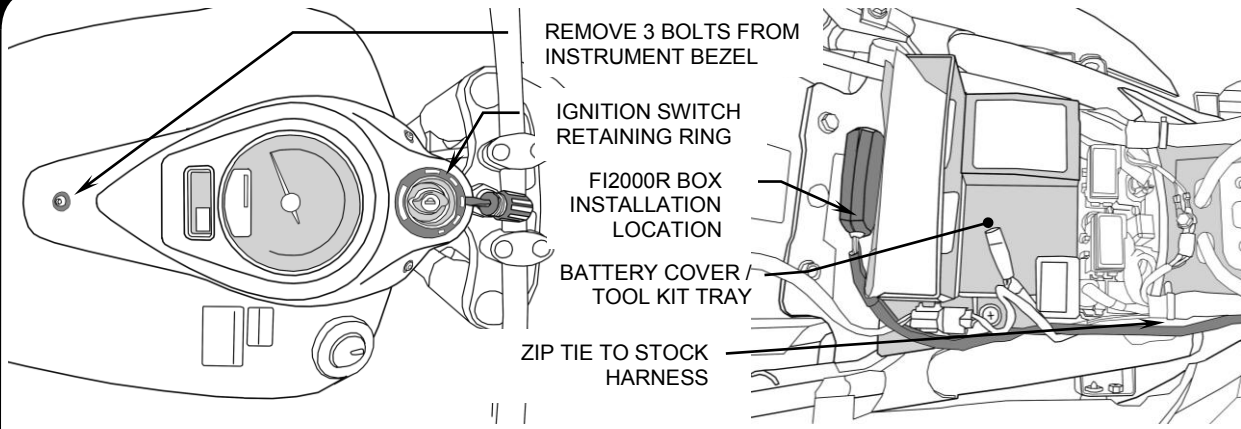
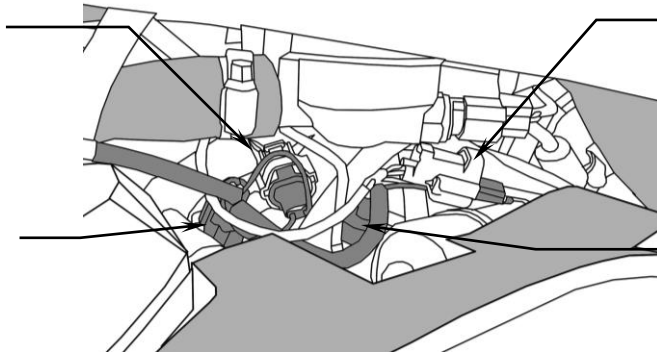


FIGURE 1: INSTRUMENT BEZEL REMOVAL

FIGURE 2: Fi2000 LOCATION

MALE FI2000R CONNECTOR ATTACHED TO FACTORY FEMALE CONNECTOR

FEMALE FI2000R CONNECTOR ATTACHED TO FUEL INJECTOR (REAR CYLINDER)



MALE FI2000R CONNECTOR ATTACHED TO FACTORY FEMALE CONNECTOR

FEMALE FI2000R CONNECTOR ATTACHED TO FUEL INJECTOR (FRONT CYLINDER)

FIGURE 3: Fi2000R ECU INSTALLATION LOCATION

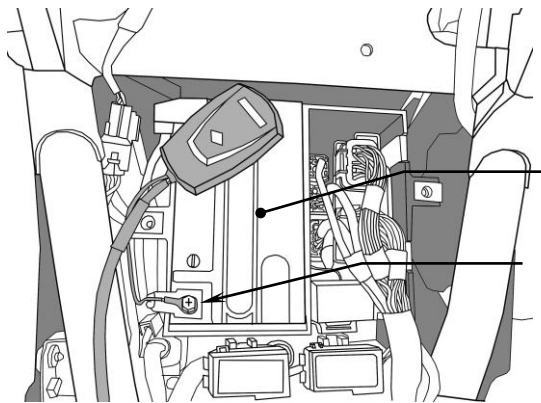


FIGURE 4
GROUND WIRE INSTALLATION

Default Pot Settings:

4.5 4.5 0

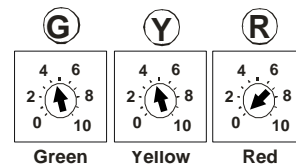


FIGURE 5