



Thank You for purchasing the Electronic Jet Kit. This fuel controller is designed to be used on stock or modified vehicles. These instructions will walk you through the simple Plug N' Play installation and general tuning. If you have any other questions please contact your Sales Representative or visit us at:

[WWW.ELECTRONICJETKIT.COM](http://WWW.ELECTRONICJETKIT.COM)

### KIT CONTENTS:

- Fuel Controller
- Instructions Set
- Quick Reference Card (Green #5)
- Zip Ties
- Velcro
- Oxygen Sensor Bypasses - Optional  
(For models with OEM Oxygen Sensors)

### IMPORTANT - PLEASE READ CAREFULLY:

The Electronic Jet Kit (EJK) is legal ONLY for closed course vehicles. The EJK is not applicable, nor intended for use on Emissions Controlled street, highway or off-road vehicles. The EJK is not applicable, nor intended for use on aircraft.

### WARRANTY:

This product is warranted for 2 years from original date of purchase against defects in materials or workmanship. The customer must provide a valid proof of purchase to obtain the benefits of the warranty. Any modifications of the EJK (cut wires, soldered wires, extensive abuse, etc.) will void the warranty.

## INSTALLATION INSTRUCTIONS

1. Before installing the EJK locate the battery and disconnect the negative lead going to the battery.
2. Locate Fuel Injector(s) on the throttle body. The throttle body is positioned between the engine and the airbox. If the application has multiple injectors then there will be multiple throttle bodies.
3. Unplug Factory harness from the injector. Then plug matching EJK connector on to the injector. (these are female connectors)
4. Plug male EJK connector into the Factory female connector. Repeat steps if there are multiple injectors.

**Please refer to Figures 1 & 2 below. The pictures show an example of a single factory injector harness plugged in. The EJK harness is plugged inline with factory connections.**

5. Route the harness along the frame keeping it away from hot and moving parts. Use zip ties to secure where necessary.
6. Attach EJK black ground wire and negative battery cable back to the negative post of battery. If the vehicle doesn't have a battery connect the black ground wire to the frame.
7. Mount EJK in a safe location that will not effect the operation of the vehicle. Suggested locations are underneath the seat, rear tail section, side covers, etc or where ever accessible.

Once reassembly is complete start the vehicle. The EJK will have scrolling green LEDs for 3-5 seconds if install is correct. If there are flashing green and red LEDs then there is a connection issue. Please verify connections and restart vehicle. Any other questions about the installation of the EJK please contact your Sales Representative or visit us at:

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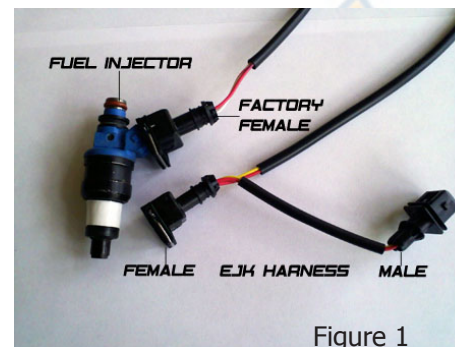


Figure 1

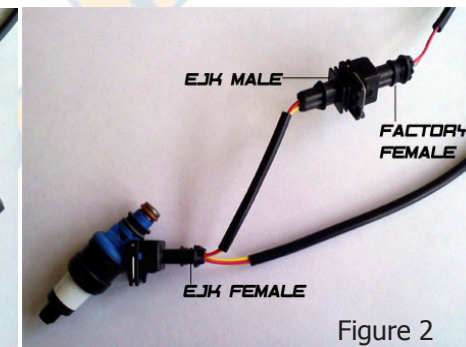


Figure 2

## TUNING INSTRUCTIONS

The EJK controller can be adjusted "on the fly" to tune your vehicle. No computer or other external device is needed to make tuning adjustments. All that is required is for your vehicle to be running which provides power to the EJK controller. All EJK controllers come pre-programmed to the recommended base light settings which represents a typical stage 1 (air filter + exhaust) vehicle modification. It is recommended to install the EJK controller and take a test ride first before making any mode adjustments.

Six modes are available to make adjustments. You enter the adjustment mode by pressing the MODE button. Correctly entering the adjustment mode will display flashing LEDs on the LED display. Pressing the MODE button repetitively will move you through all the modes. Take note that the MODE button is sensitive and will at times skip a mode. Pressing the MODE button at the last mode will bring you back to the first mode. To exit the adjustment mode and return to operation mode you just wait several seconds until the LED display reverts back to solid LED colors.

The six modes available are distinguished by an LED color combination. The six modes in respective order are as follows: Green, Yellow, Red, Green-Blue, Yellow-Blue, and Red-Blue. All six modes have 15 possible light settings. The settings are adjusted by pressing the PLUS (+) and MINUS (-) buttons. For easy reference the LEDs are numbered 1 through 8. Half step settings are represented by two same color LEDs flashing (ex: 4.5 has 4th and 5th LEDs lit). The 0.5 setting is represented by the 1st LED blinking at a much faster rate. Modes 4, 5, and 6 are distinguished by the 8th LED also blinking blue.

Every mode represents an adjustable feature within your vehicle's drive cycle. Reference the Example Drive Cycle diagram to gain a visual understanding. Each mode can be defined as either a FUELING mode or a SWITCH POINT mode as follows:

**FUELING MODES** - Modify the fuel amount compared to the stock fuel when the corresponding zone is active. The higher the light setting the MORE fuel is being added. The lower the light setting the closer you are to running STOCK fuel levels. Light settings for GEN 3.5 controllers below 3 are SUBTRACTING fuel from the STOCK fuel level.

**SWITCH POINT MODES** - Determine the transition point between two corresponding zones. The higher the light setting the longer it takes for a zone to engage. The lower the light setting the faster a zone will engage. Note: Switch point modes do not have to be adjusted that frequently.

**Additional Notes:** The EJK controller can be set to a stock fueling without uninstalling the unit.  
 GEN 3 controllers - Set the FUELING modes all to light setting 0.5 to revert back to stock.  
 GEN 3.5 controllers - Set the FUELING modes all to light setting 3 to revert back to stock.

**Mode 1 - GREEN - CRUISE FUEL**

Represents fuel modification under CRUISE conditions. When the LED display shows solid GREEN lights then the GREEN zone is active and fuel is modified by this mode. Mode has the largest affect on fuel mileage.

**Mode 2 - YELLOW - ACCELERATION FUEL**

Represents fuel modification under ACCELERATION conditions. When the LED display shows solid YELLOW lights then the YELLOW zone is active and fuel is modified by this mode.

**Mode 3 - RED - FULL THROTTLE FUEL**

Represents fuel modification under FULL THROTTLE conditions. When the LED display shows solid RED lights then the RED zone is active and fuel is modified by this mode. Mode has the largest affect on tuning for the vehicle's top horsepower value.

**Mode 4 - GREEN-BLUE - CRUISE UPPER SWITCH POINT**

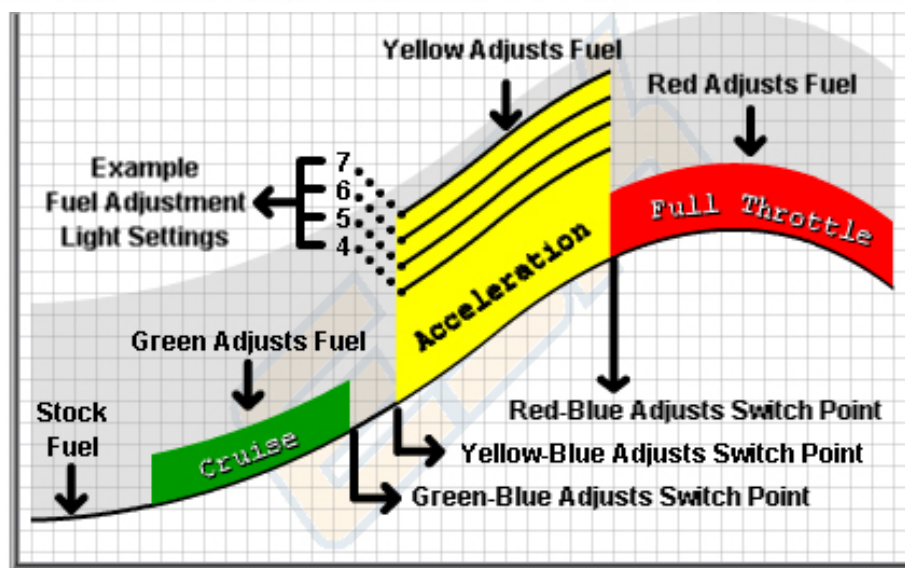
Represents point when GREEN zone shuts off. Light settings correspond to RPM values. Used to target a low RPM range for cruise fuel.

**Mode 5 - YELLOW-BLUE MODE - ACCELERATION SWITCH POINT**

Represents transition between GREEN and YELLOW zones which relates to cruising and accelerating conditions. The YELLOW zone is load based and engages differently between gears and riding conditions.

**Mode 6 - RED-BLUE MODE - FULL THROTTLE SWITCH POINT**

Represents transition between YELLOW and RED zones which relates to accelerating and full throttle conditions. The RED zone is load based and engages differently between gears and riding conditions.



EXAMPLE DRIVE CYCLE



### Record Settings

G	Y	R	GB	YB	RB

## **Installation Instructions**

### **Yamaha YZF R1 2002-2008**

For reference in the following instructions, EJK is used to refer to the physical Electronic Jet Kit or EFI controller you are installing on your vehicle.

1. Make sure the vehicle is completely cool before starting the installation. Also make sure the vehicle is secure and will not roll around.
2. Start by removing the rear seat (Figure 1).
3. Remove two bolts at rear of the front seat and remove front seat (Figure 2).
4. Remove bolt at front and center of fuel tank (Figure 3).
5. Remove both Phillips screws at the right rear and left rear of fuel tank lower trim panels. The panel is an interlock type. Slide front to back to release (Figures 4).
6. Once both trim panels have been removed the left and right fuel tank hold down bolts can be removed (Figure 5).
7. Tilt the fuel tank up and support with a prop (Figure 6).
8. Locate the four grey injector connectors at the rear of the air box, under the fuel rail (Figure 7).
9. Remove grey injector connectors one at a time and connect the EJK grey connectors to injectors and connect the EJK black connectors to the stock grey connectors. Repeat this step for all four injectors (Figure 8).
10. Loosen the ground lug on the negative side of the battery and connect the EJK black ground wire and then tighten back up.

11. Attempt to start the bike. Upon startup you should see green LEDs scrolling from left to right and back for a couple seconds and then the controller should go to some steady green LEDs.
12. The EJK wire harness can be routed so that the EJK can be mounted in the rear compartment. An alternate mounting location is at the front of the bike in the cockpit.
13. Reassembly of the bike is the opposite of the disassembly.

#### **Final Installation Note**

Re-check your wire routing and the EJK location to make certain that in no way the wires can come into contact with any moving parts or high heat source. The EJK should be mounted in a way as to not cause a handling problem with the machine.

#### **Troubleshooting**

If the number 1 LED is flashing green and the number 8 LED is flashing red at idle then this indicates a connection issue. Re-check the wires from the EJK and make sure they are connected to the proper wire of your bike's stock harness. The EJK unit only needs power and a proper ground to show this error display.

If the bike fails to start then you will also need to re-check the wiring. If you have not connected the ground wire to the negative post of the battery then make sure you have attached the wire to a proper grounding source on the frame.

#### **Support**

All EJK units are backed by a great support team. First contact your dealer or product representative where you purchased the product and check if they can assist you. If all else fails then feel free to contact the manufacturer directly to gain additional support. Call toll free at 1-877-764-3337.

Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8

