



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 (Orange #1)
- 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

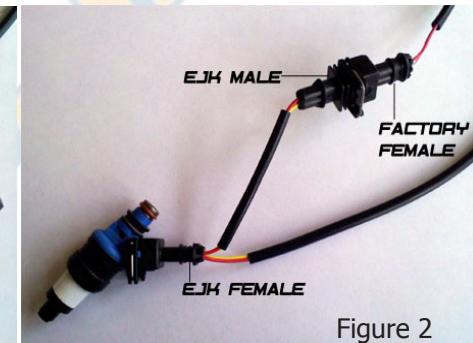


Figure 2

## 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 – Stock FUELING light settings may vary according to application.

### 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 – IDLE SWITCH POINT

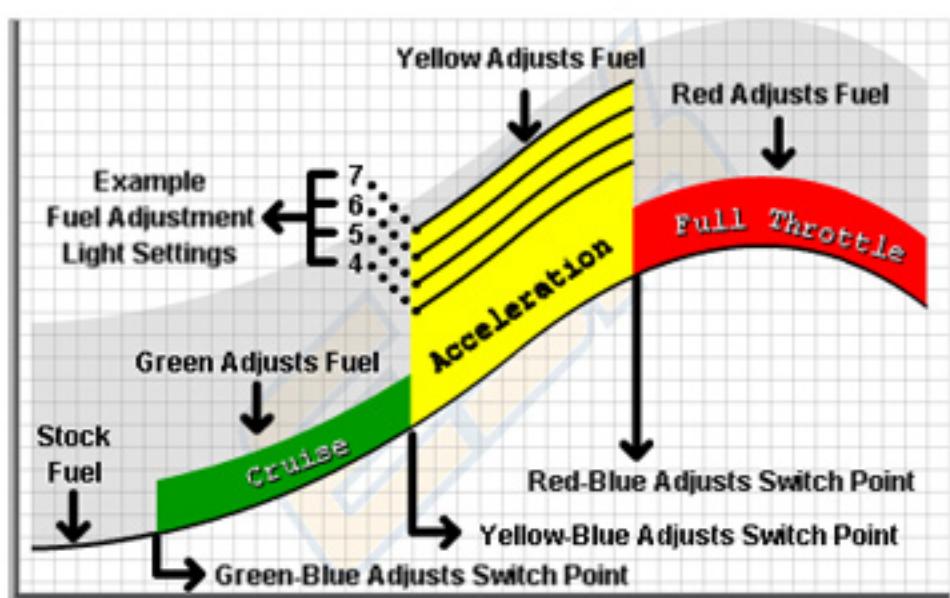
Represents transition between STOCK FUELING and the GREEN zone. Light settings correspond to RPM values. The 1st LED will very slowly blink GREEN when no zone is engaged.

### 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**

### **Honda CB 500 X/F/R**

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. Remove seat.
2. Remove the two 5mm Allen bolts from the left and right side panels and pull away from bike to remove.
3. Remove the two 5mm Allen bolts from the fuel tank top cowling.
4. Remove the two 8mm hex head mounting bolts at the front of the fuel tank.
5. Remove all four 10mm hex bolts from the rear tank mount.
6. Remove the push pins from the inner trim and remove the trim panel from both sides.
7. Remove the left and right side Allen bolts from the upper side cowling.
8. Remove the two Allen bolts from the front left and right side of the radiator framing cover.
9. Disconnect the three wire fuel pump connector located on the left hand side of the fuel tank.
10. Disconnect the overflow hose from the fuel tank.
11. Prop rear end of the fuel tank up (a 2x4 works fine).
12. Disconnect the main fuel line from the fuel tank.
  - a. Loosen the rubber safety seal
  - b. Squeeze the tabs of the fuel connector retainer to disconnect the line (be careful not to damage the fuel line with tools) then remove the fuel line.
  - c. Note: Disconnect the front vent line from the fuel tank, located in the front left hand corner.
13. Removing the fuel tank steps
  - a. Slightly wedge the upper cowling (we used foam blocks) just far enough to remove the fuel tank. (be careful not to scratch the tank or stretch the cowling to far)
  - b. Remove the fuel tank
14. Locate fuel injector(s) on the throttle body. The throttle body is positioned between the engine and the air box.
15. Unplug factory harness from the injector one at a time. Plug matching EJK connector on to the

injector (these are female connectors). Plug male EJK connector into the factory female connector. Repeat step for the other injector. **NOTE: It does not matter which connector pair goes to which injector, but for reference the connector with double pinned red and yellow wires is the EJK's channel number one.**

16. Route the harness along the frame keeping it away from hot and moving parts. Use zip ties to secure where necessary.
17. Attach EJK black ground wire to mass chassis ground location on the left hand side of the bike.
18. Mount EJK in a safe location that will not affect the operation of the vehicle. Suggested locations are underneath the seat, rear tail section, side covers, or where ever accessible.
19. Locate the factory O2 sensor connection and disconnect.
20. Plug in the EJK OX-022 O2 bypass.
21. Plug the pair valve.
  - a. Remove the rubber hose and plug off nipple with tape or rubber cap.
  - b. Reattach the pair valve hose.
22. Attempt to **START** your vehicle and check for the LEDs on the label to energize. If your vehicle starts and the display goes to solid colored LEDs or a very slowly flashing LED then installation was successful. If you have flashing LEDs then go to the troubleshooting section.
23. Replace the fuel tank (Completing steps #12-8 in reverse order).
  - a. Don't forget to replace the front fuel tank vent before mounting tank. (refer to step 12c)
  - b. Special notes: The rear grommet on the fuel tank needs to slide in the air box mount to help support the fuel tank.
24. Reassembly is the opposite of disassembly.

### **CHECK ONLINE FOR PICTURE S OF THE INSTALLATION**

#### **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**

**Make sure to attempt to start your vehicle. Do not simply turn the key on.** If the number 1 LED is flashing green and the number 8 LED is flashing green 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 recheck 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.