



**INSTALL AND RIDE.
EFI MADE EASY.**

Thank you for purchasing the Electronic Jet Kit (EJK) from Dobeck Performance. This EFI controller is designed to be used on stock or modified vehicles. The following instructions will walk you through a generic installation and go over controller tuning basics. More advanced install instructions, technical information, controller settings, etc...can be found at:

www.ElectronicJetKit.com

**PLEASE BE SURE TO CHECK OUT THE ADJUSTMENT DEMO
LOCATED AT THE BOTTOM OF THE HOME PAGE!!**

**PLEASE READ ALL INSTRUCTIONS BEFORE STARTING
INSTALLATION. BE SURE YOUR VEHICLE'S ENGINE IS COLD.**

IMPORTANT – PLEASE READ CAREFULLY

The 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.

PACKAGE CONTENTS

- FUEL CONTROLLER
- INSTRUCTIONS SET
- 3 x ZIP TIES
- VELCRO PATCH
- REFERENCE CARD (BLUE #4)
- EJK Sticker
- Dobeck Performance Sticker

The following are optional parts:

- OXYGEN SENSOR BYPASSES

The following may be purchased separately:

- HANDLE BAR MOUNTING
- DP DOCKING STATION
- USB TO IRDA ADAPTER
- POWERLAB ACCOUNT

Check out updated and advanced information at www.ElectronicJetKit.com

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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. Most EJK controllers come pre-programmed to the recommended base light settings which represents a typical stage 1 (intake + 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. **Note: 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 can be **SUBTRACTING** fuel from the STOCK fuel level.

Note: The EJK controller can be set to 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 FUEL settings vary according to application. Check ElectronicJetKit.com for info.

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.

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 – VOLTAGE CONTROL SWITCH POINT – INDICATED BY 8TH LED DISPLAYING BLUE

Represents transition between factory open loop and closed loop. When the LED display shows a solid BLUE light in the 8th position then the controller is interfacing with the ECU closed loop mode. **Mode rarely needs to be adjusted.**

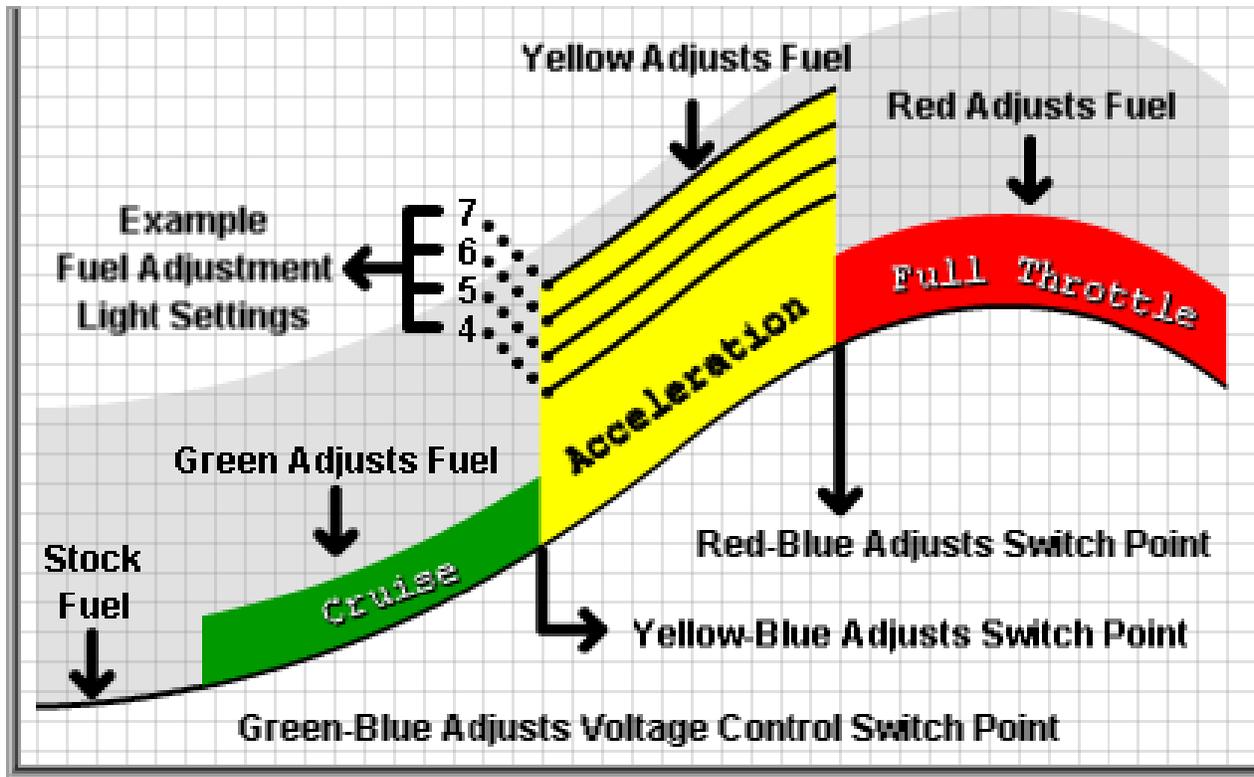
Mode 5 – YELLOW-BLUE MODE – ACCELERATION SWITCH POINT

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



CONTROLLER LAYOUT



RECORD INITIAL RECOMMENDED SETTINGS

We highly suggest recording the preset settings before you start changing any of the modes. Your vehicle will need to be started in order to go through the modes. You can also find the initial preset settings at ElectronicJetKit.com.

GRN	YEL	RED	G/B	Y/B	R/B

Installation Instructions – BMW R1100R/RS/RT/GS 1994-2000

1. Before installing the EJK you must first disconnect the negative lead from the battery.
2. Determine a safe location for the EJK unit. Recommended to mount on the air box or beneath the seat with the supplied Velcro attachment. For initial tuning the box can be mounted where it can be seen and adjusted by the rider.
3. For installation make sure that your motorcycle is cold. **NOTE: ON RT MODELS:** You must remove the left and right body panels. Refer to your BMW service manual. Locate and disconnect the fuel line under the right hand side of the fuel tank using the quick disconnect feature on the fuel fitting if equipped. Refer to the appropriate BMW service guides on removing the fuel tank. Remove the rear fuel tank mounting bolt and slowly lift up the fuel tank (FIG 1). **FOR ALL OTHER MODELS:** Remove the rear fuel tank mounting bolt and lift up the fuel tank without disconnecting the fuel line.
4. Locate the oxygen (O2) sensor. The O2 sensor can be found by tracing the wiring of the sensor in the exhaust to the connector (FIG 2). Run the female and male connector from the EJK along the OEM wiring loom or along the frame of the motorcycle (the more care you provide doing this the fewer problems you are likely to experience in the future).
5. Disconnect the factory O2-sensor plug (FIG 3). Fit the male and female plugs of the EJK into the OEM connector (FIG 4). Reference Figure 5 to see the EJK O2 sensor plug.
6. Locate the fuel injector connector on the right hand side of the bike (FIG 1) and disconnect. As with the O2 sensor, plug the EJK plug into the existing wiring (FIG 4). On the EJK locate the black ground wire and attach to the frame or ideally to the negative pole of the battery.
7. At this point use zip ties to secure the wiring from the EJK to the frame or OEM wiring loom. Avoid chafing or squashing the cables and wires. **NOTE:** Do not attach zip ties too close to the injector and avoid creating sharp bends in the cable.
8. Reassembly of the bike is opposite of the disassembly.
9. After completing the installation of your EJK, restart the computer system on the bike with the following procedure: Detach the ground (negative) lead from the battery. Reattach the lead. Turn ignition to "ON", but do not start the bike. Open the throttle fully three times, from the very beginning to the end of the throttle rotation. Turn off the ignition. **The bikes computer has now been reset.**
10. Now the bike can be started. The EJK will start in a few seconds. The LED's will light up green. You will see a light sequence from side to side. This is the EJK's "check" mode. **NOTE:** Once you have adjusted the settings you do not need to wait for the "check" mode you can ride immediately.

Final Installation Note

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

Troubleshooting

Please make sure you are trying to **START** your vehicle and NOT just turning the key on. 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 controller and make sure they are connected to the proper wire of your vehicle's stock harness. The controller only needs power (RED wire) and a proper ground (BLACK wire) to show this error display.

If the motorcycle 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 controllers 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 within the USA at 1-877-764-3337 or 1-406-388-2377 for international customers.

Figure 1

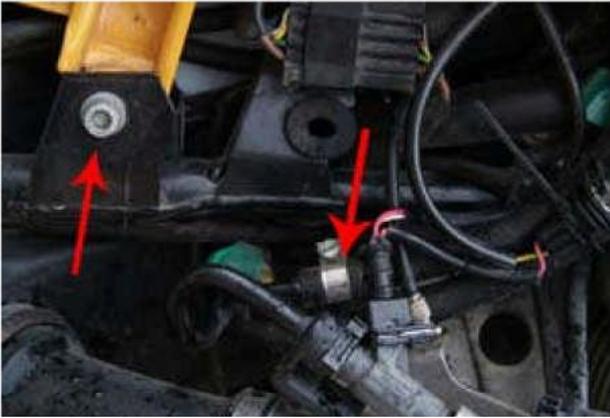


Figure 4



Figure 2

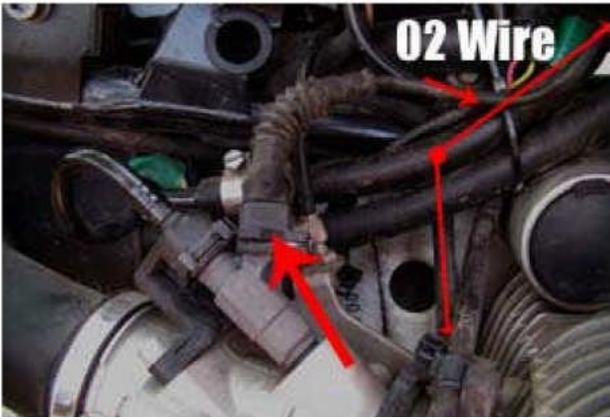


Figure 5

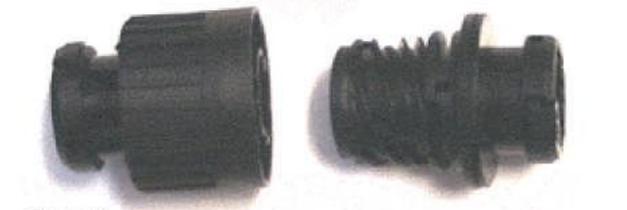


Figure 5

Figure 3

