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 (BLACK #3)
- 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. N**ote: 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.

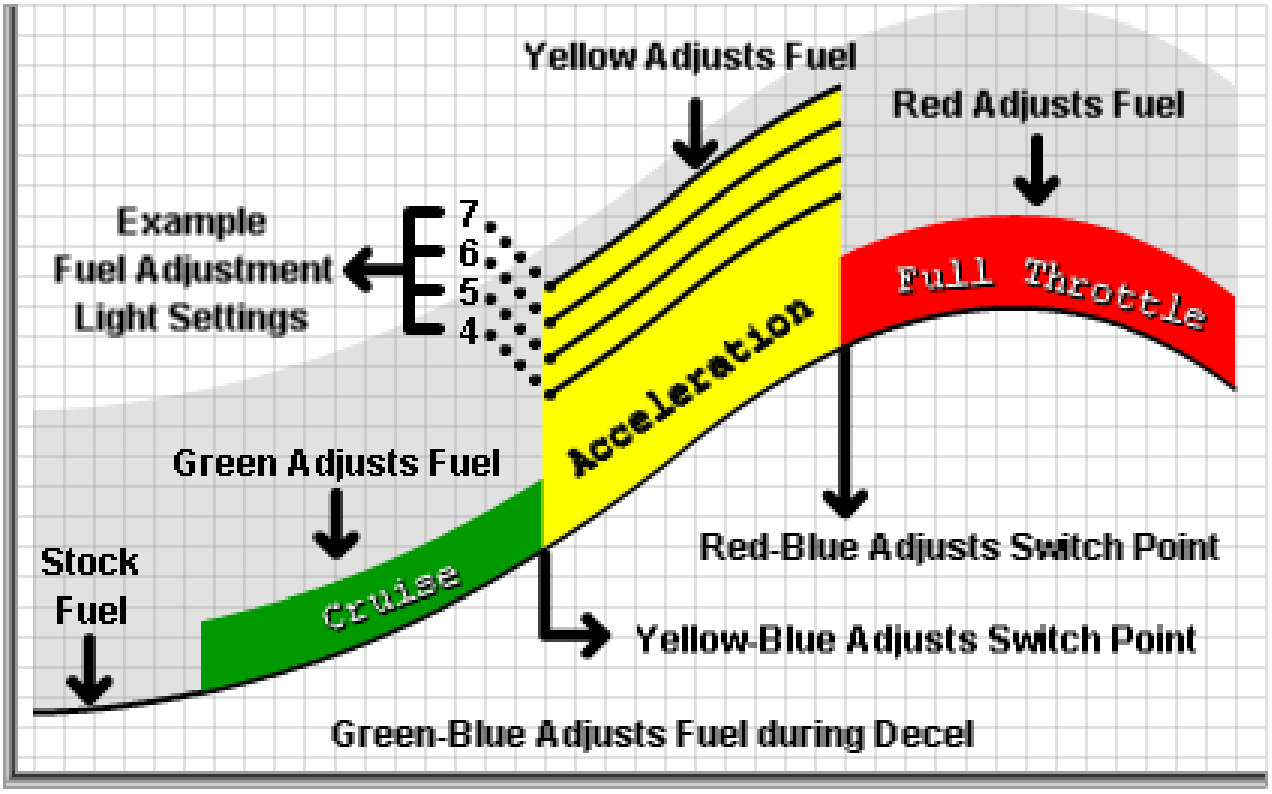
Mode 3 – RED – FULL THROTTLE FUEL
Represents fuel modification under FULL THROTTLE conditions. When the LED display shows solid RED lights then the RED zone is active and fuel is modified by this mode. **Mode has the largest affect on tuning for the vehicle's top horsepower value.**

Mode 4 – GREEN-BLUE – DECEL FUEL – INDICATED BY 8TH LED DISPLAYING BLUE
Represents fuel modification under slowing down conditions. When 8th led shows a solid BLUE light then the zone is active and modifying fuel. **This mode is used to help tune for backfiring and popping conditions.**

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 – HD VROD 2008-11 P1

1. Remove the tank shell, left and right front frame covers and the horn assembly.
2. Locate and disconnect the IAT sensor.
3. Use a screwdriver to disengage the 8 clips retaining the airbox lid. The front clip is not visible and must be reached from the left side.
4. Remove the plastic nut, air filter cover and filter.
5. Locate and disconnect the rear crankcase breather hose inside air box and push through air box floor.
6. Slide the large O rings up the stacks to access the stack mounting screws. (The O rings retain the screws should they become loose.) Remove the 6 screws and the velocity stacks.
7. Disengage the front crankcase breather hose and remove the airbox floor. There is no clamp on this hose.
8. Depress the locking bails and remove the injector connectors. Rear first, then front. Do not pull the wires.
9. Feed the factory injector harness out the left side.
10. Route the EJK harness between the frame and the OEM harness that goes over the battery negative.
11. Continue pulling the EJK harness through, routing it on top of the main (plastic braid covered) harness. Route the connectors inside the frame, down through the engine V and out where the stock injector harness is.
12. Connect the EJK harness to the stock harness. Pay attention to the color-coding. The EJK harness with the yellow and white leads is for the front injector. It is essential the connectors be installed properly at the front and rear injectors. Feed the EJK injector connectors under the throttle body and connect them to their respective injectors.
    a. IMPORTANT: Make sure the connection is firmly secure and allows a little slack at the connection to prevent engine vibration from damaging/breaking a wire on the harness.
13. The front factory O2 connector is located inside the left radiator cover. Remove the screw located on the bottom of the cover and slide the cover away from the radiator to access the O2 connector. Connect the EJK front O2 lead (pink/tan) in between the O2 sensor and the main harness. Tuck the connectors inside the radiator cover and reinstall the fastener.
    a. IMPORTANT: Make sure the connection is firmly secure and allows a little slack at the connection to prevent engine vibration from damaging/breaking a wire on the harness.
14. The rear factory O2 connector is located at the left rear of the tank shell. With the shell removed it should be visible under the existing wiring. Route the EJK rear O2 harness (purple) along the left frame and connect between the O2 sensor and the main harness.
15. Cable tie the EJK rear O2 and Injector harness to the main wire harness on the left frame. Cable tie the front O2 harness to the frame. Keep all wiring away from the fan.
    a. IMPORTANT: Make sure the connection is firmly secure and allows a little slack at the connection to prevent engine vibration from damaging/breaking a wire on the harness.
16. Install the horn.
17. Pull any excess slack in the EJK harness back to the front.
18. Use the Velcro provided to mount the EJK to the top of the battery or under a side cover.
19. Connect the EJK ground lead to negative terminal of battery along with factory ground lead. (See owner's manual for help if needed).
20. On initial start up the unit will scroll green LEDs across the controller face plate and then go to a solid green or slowly blinking green LED. This means the unit is installed correctly and functioning properly. If you get flashing green LEDs in the 1st and 8th position, please verify your connections and try to start the bike again.

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 2

Figure 3

Figure 4

Figure 5

Figure 6

Figure 7

Figure 8