2007.5-10 GM Duramax 6.6L LMM

Edge Evolution Programmer

Installation Instructions & Manual

P/N: 25003

READ IMPORTANT SAFETY INFORMATION IN THIS MANUAL

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Manual Version 10

IMPORTANT SAFETY INFORMATION

SAFETY TERMS

Throughout this User Guide (hereafter referred to as User Manual or Manual) you will see important messages regarding your safety or the protection of your vehicle. These messages will be designated by the words WARNING or CAUTION.

WARNING indicates a condition that may cause serious injury or death to you, your passengers or others nearby. Pay careful attention to these Warning messages, and always comply with them. They could save a life.

CAUTION indicates a condition that could cause damage to your vehicle. It is important to install and operate your EDGE product in conformance with instructions in this Manual. Caution messages alert you to particularly important things to watch for to keep your vehicle operating the way you want it to.

The Edge product you have bought is a high-performance product. As such, it does present some risks of which you should be fully aware. Do not use this product until you have carefully read all the following safety information and the Owner Agreement.

WARNING

Misapplication or misuse of this product could lead to a serious or fatal accident. Comply with all safety information below, and in your vehicle owner's manual. Follow safety, installation and operating instructions in this User

SAFETY GUIDELINES

1. Do not exceed legal speed limits on public roadways. Use any enhanced speed capabilities of this product only in closed circuit, legally sanctioned racing environments expressly for this purpose. Loss of control from speeding on a public road could seriously injure you, your passengers, or others on the roadway.

2. Select a position on the windshield or dashboard to mount the device where it will not impair your view. You must be able to see the road, traffic, and pedestrians without interference. Be sure your mounting location meets state and local laws regarding placement of devices on the windshield or dashboard.

3. Do not operate the device while driving. Perform all adjustments or changes while stopped. Changing a setting while under way can interfere with your attention to roadway conditions.

4. "Stacking" performance-enhancing devices or other improper installation could cause powertrain failure on the road. Other products may have features incompatible with your Edge device. Follow all installation and operating instructions, and don't stack products.

5. Some modifications may affect other parts of your vehicle. For example, if you remove/adjust the speed limiter in your vehicle, be sure your tires and other components are rated for the increased speeds they will have to withstand. Not doing so can lead to loss of vehicle control. Modify the speed limiter only for use in closed circuit, legally sanctioned racing environments, not for use on public roadways.

6. Do not use the Performance Tests feature to break any traffic laws. Perform these tests only where they are legal and safe.

7. Some features may not function on all vehicle models. Check a newly-installed device for all features you intend to use. Do not rely on their working without checking first.

NOTE: *Dispose of this product consistent with local codes. Return to your electronics supplier for proper handling.*

PRODUCT REGISTRATION

Please take the time to register your product. To register your product, follow the instructions at this link. http://www.edgeproducts.com/product_registration.php

Benefits of product registration:

- **Your Safety** – registering your product allows us to know exactly which product you have and provide important product updates to you that improve the quality and/or safety of the product
- **Enhanced Features** – almost all Edge products are easily updated via the internet. We are constantly adding new features and improvements to our product that we know you will want to enjoy
- **Confirmation of Ownership** – provides a record in case of product loss, theft, or required warranty work. When you call us for support our team will already have much of the information they need to help you!
- **Improved Product Development** – helps us better understand you (our customers) and design products that meet your needs
- **Special Offers** – allows us to inform you about special offers on accessories and/or new products that fit your vehicle and enhance your driving experience
- **AND…**
- **Extended Warranty Plan Opportunity** – within the first 90 days of ownership, Edge offers the option to buy a 1-year warranty extension to all customers who register their product!

Before installing this EDGE product, the Evolution unit must be updated. The Fusion software required for updating your product on your computer is included in this package as a CD. Follow the instructions located in the Fusion Section at the back of this Manual.

All Edge modules and programmers are built to operate with OEM calibrations. When you take your vehicle to a service center they may, by your request or otherwise, update your vehicles calibrations. Therefore it is important that you return your vehicle to stock before taking it in for service. Edge updates its active products (i.e. those currently being manufactured) to work effectively with updated OEM calibrations. However, this process can take some time as Edge is not always made aware of calibration changes made by the OEM. In the case of discontinued products, Edge cannot ensure that your unit will work effectively if you take your vehicle to a dealership and you are given, by your request or otherwise, a new calibration.

Programming your vehicle may expose existing defects in your vehicle's PCM that could disable your vehicle. It is advised that you do not program your vehicle in remote locations in case of vehicle failure.

Caution: The Evolution employs carefully modified strategies that are designed to be utilized on unmodified (stock) vehicles only.

Many aftermarket components such as cold air intake (CAI) kits, exhaust systems, and throttle body spacers as well as forced induction systems (turbochargers, superchargers, nitrous oxide, etc) alter the calculated airflow characteristics of the engine. In addition, mechanical modifications to the engine such as displacement changes, camshaft modification, and cylinder head modification may alter calculated airflow characteristics.

Using any of these modifications (either alone or in any combination) in conjunction with the Evolution is NOT RECOMMENDED as it may cause an excessively lean condition which could result in engine damage.

Edge Products will not be responsible for any damages caused by using the Evolution on a vehicle that has been modified from a stock configuration.

If you have used another tuner/programmer on your vehicle, you will need to program back to stock and remove the device before using the Edge Products Device.

Failure to return to stock may result in PCM failure or engine damage.

About the Evolution

IMPORTANT: *Read all Safety, Warranty, and Installation Instructions before installing this product. Read through these instructions completely so that you understand each step prior to installation.*

Congratulations on purchasing the *Evolution* by Edge Products, LLC, the leader in truck performance and power gain technology. The following manual contains information and instructions on the proper use of the *Evolution*. Please read carefully before proceeding to program your vehicle.

Note: *At the back of this manual, we have included commonly used acronyms. This should help while using the Evolution.*

Stock Program

The *Evolution* automatically makes a backup of your stock program from your PCM before writing a new program onto your PCM. This assures that you will have the stock program if/when you desire to reprogram your vehicle to its original stock program.

We *strongly* recommended prior to returning your vehicle to a service center or emissions check that you return your vehicle's computer to the stock program. In the event that the service center re-flashes your vehicle's computer (a common practice) and you have NOT returned it to stock, your *Evolution* programmer will be not work properly. If this happens, call our technical support at (888) 360-EDGE and they can help you recover your *Evolution* for a small fee. Follow the steps included in this manual for returning your program to stock.

Economy Program

This setting is the lowest level setting. It has been specifically tuned for optimum fuel economy, we recommend using this level for daily driving.

Towing Program

WARNING *Do not exceed your vehicle's max GVWR as outlined in the vehicle's owner's manual. Doing so may result in loss of vehicle control and cause bodily injury.*

This setting is tuned specifically for towing. This level is recommended for most towing situations.

Performance Program

This setting is a high performance level, and is not recommended for towing. ***Speed limiter is automatically removed in this program.**

Extreme Program

This is the highest setting for the *Evolution*. The fuel injection and timing strategies are aggressively tuned to extract the maximum performance from your vehicle without sacrificing drivability or durability. ***Speed limiter is automatically removed in this program.**

Due to the high performance nature of this setting, towing or hauling heavy loads is not recommended.

Power Levels

The following power gains are representative of an actual test vehicle. These gains were measured on a Super Flow Dyno at an altitude of 4400 Ft. above sea level, and represent power delivered to the rear wheels of the test truck. The only modification made to the test truck was the addition of the Evolution. Power gains may vary somewhat on a different vehicle or in different geographic settings.

POWER LEVEL	TOTAL HP GAIN	TOTAL TQ GAIN
Economy-Lvl 1	**30**	**60**
Towing-Lvl 2	**50**	**90**
Performance-Lvl 3	**75**	**150**
Extreme-Lvl 4	**80**	**200**

WARNING *Do not combine, or "stack" chips (modules) to gain more horsepower. The chips could be incompatible and result in powertrain failure or create dangerous conditions (such as adverse running conditions, high idle, DTC codes, etc.) leading to a serious or fatal accident.*

Hot Unlock Code

To unlock additional features for your Evolution you will need to visit www.edgeproducts.com and download the **Hot Unlock** waiver form. (http://www.edgeproducts.com/product_images/customer_support_article-pdf-32.pdf)
You will find this form in the sub-menu Hot Unlock Form, located on the home page of the website. Once you completely fill out the form, you will fax it to the number listed on the Hot Unlock Form. The Hot Unlock option costs $100.00.

The Unlocking of your Evolution allows the following features:

- **3 Additional power levels**

Hot 1	**100 HP**	**215 TQ**
Hot 2	**115 HP**	**230 TQ**
Hot 3	**130 HP**	**250 TQ**

- **Manual Regeneration (Forced regeneration. See following Regeneration Note and Active/Passive regeneration sections.)**

Important Regeneration Information

Your vehicle is equipped with a diesel particulate filter (DPF). This filter is used in conjunction with a diesel oxidation catalyst. Together they work to reduce the amount of harmful exhaust emitted from the tailpipe. As soot builds up in the DPF it will begin restricting the filter. The soot that gathers is automatically purged in one of two ways: Passive Regeneration & Active Regeneration. Both methods occur automatically and require no action on your part. During either of these regeneration methods, you may notice an increase or change in the exhaust noise & increased EGT.

Forced regeneration

The forced regeneration requires that you enter a PIN every time you want to set the truck into a regeneration cycle to clean the DPF filter. Your truck will go into a regen cycle on its own periodically, however should you need to clean out the filter for any reason, the forced regen is always an option. This option should be used with caution as well as used sparingly due to the elevated idle, and the large amount of fuel that will be used. In order for the forced regen to start, the truck must be up to operating temperature (160º+). Once the regeneration period starts, the trucks idle will slowly elevate to 2500 RPMs. The idle will hold steady at 2500 RPMS for the duration of the regeneration, during which time the exhaust vapors will be extremely hot. So use extreme caution during this period. Once the Forced regeneration period is completing, the idle will then fall back to idle speed.

1. The Evolution will display several PIDs as the truck is manually regenerating.
    a. (ECT)- Engine Coolant Temp- Fº
    b. (Stat)-DPF Status- On/Off
    c. (INH)-DPF Inhibit Reason- Represented with a number
    d. (DPFP)-DPF pressure- PSI
    e. (Soot)-Soot Mass -Grams
    f. (EGT-1)-Stock Exhaust Gas Temp Sensor.-Fº
    g. (EGT2)-Stock Exhaust Gas Temp Sensor-Fº
    h. (Fuel)-Fuel Remaining % of fuel left in the tank (readings may vary from that of the fuel gauge)

2. The **PIN** to activate the manual regeneration is**: 3343.** Each time you would like to activate the manual regeneration period you must enter this code.

CAUTION: Exhaust temperature(EGT) will be greater than 300 C/572 F during service regeneration. To prevent injury or property damage do the following:

1) Park the vehicle outdoors away from people, other vehicles, and combustible materials.
2) Do not leave the vehicle unattended.
3) Do not connect any shop exhaust hoses to the vehicle's tailpipe.

Due to the elevated engine temperatures during this procedure, it is best to open the hood and keep the front of the vehicle clear of anything that would impede air flow through the radiator.

This procedure can be interrupted at any time in an emergency by switching off the ignition or pressing the brake.

*** Before proceeding ***

1) Check coolant and oil level before and after the procedure.
2) Engine and exhaust system damage can occur if used improperly.
3) Do not initiate service mode if non-DPF faults are present.
4) Oil changes may be necessary after running this service mode.
5) Do not leave the vehicle unattended.

*** STEPS ***

1) Apply the parking brake.
2) Start the engine.
3) Transmission in park/nuetral.
4) This procedure can take up to 30 minutes.
5) Test completed when engine idle returns to normal.

Passive Regeneration

Passive Regeneration occurs when the exhaust temperature (EGT) reaches an appropriate level in order to oxidize or burn soot to clean the DPF. This method happens as a result of normal engine operating conditions, typically when the engine reaches an EGT high enough to burn off the soot (i.e. heavy towing, high load conditions etc.)

Active Regeneration

If EGT’s do not get hot enough to cause Passive Regeneration, then your truck’s engine-control system automatically initiates an active regeneration.

During active regeneration, the DPF is cleaned by raising the exhaust temperature to a point where the soot is burned away. This is accomplished through various engine actions which raise the EGT's in the oxidation catalyst/DPF system to an appropriate high level where the soot is burned off. After the soot is burned off, the EGT's and back-pressure (restriction) fall back to normal levels.

HOW DOES THE EVOLUTION AFFECT THE DPF?

The Evolution utilizes aggressive fueling strategies in order to achieve horsepower gains. The added fueling may cause more instances of Passive Regeneration. Additionally, depending on your settings/driving style, you may also see Active Regeneration occur more often than you would with a stock vehicle.

In order to minimize the number of times that your vehicle will initiate Active regeneration;

- Avoid towing in levels higher than the Towing level.
- Avoid short aggressive bursts of acceleration, this may cause a large build up of soot, and the short sprints may not allow a regeneration cycle to initiate.

Important Note: *It is the customer's responsibility to watch for and ensure complete regeneration cycles. Edge Products' devices do not adversely affect the regeneration cycle of your vehicle. Any vehicle exhaust- and emission-system issues are the sole responsibility of the vehicle owner and the OEM. No DPF warranties are expressed or implied.*

Features

PIDs

The *Evolution* allows the user to view up to 4 PIDs at one time. PIDs identify an address in memory which contains vehicle operating information a driver may wish to monitor. (See the *Set Up* section)

Scrolling PIDs

Once in the PID display screen you can press the ENTER button to enter scrolling PIDs mode. When you are in this mode an asterisk will be displayed in the upper right corner. You can then scroll through the PIDs by using the UP and DOWN arrow keys. You can always scroll back to your customized screen or once you have scrolled through all of the PIDs you will return to

your customized screen. Press the ENTER again to exit the Scrolling PID mode.

Diagnostics

The *Evolution* is also a powerful diagnostics tool. You can view any diagnostic trouble codes (DTCs) your vehicle may have, which in turn allows you to fix them. It will also allow you to turn off that annoying "Check Engine" light when the problem has been addressed (no more expensive trips to the dealer for a diagnostics scan).

0-60 and Quarter Mile time

Another feature often only found on the Edge Product monitors, is the ability to determine your quarter mile times as well as your 0-60 times, and has a unique Christmas tree starting sequence.

WARNING ***Do not use the Performance Tests feature to break any traffic laws. Perform these tests only where they are legal and safe.***

Alerts

If you would like to know when a certain parameter, such as transmission temperature, reaches a desired value you can set an alert to that value. When the preset value is reached, the *Evolution*'s screen will flash red and display the triggered alert and the current value for that particular alert parameter. Please note that Alerts may flash only if that parameter is being actively displayed on the *Evolution* monitor.

Records

While driving, the *Evolution* will automatically record the highest values of some parameters. These records can be viewed and reset at any time. Please note that some parameters may record only if that parameter is actively displayed on the *Evolution* monitor.

NOTE: *For both* **Alerts** *and* **Records***, some truck types and years may flash alert and record peak parameter values even when not displayed on the Evolution monitor.*

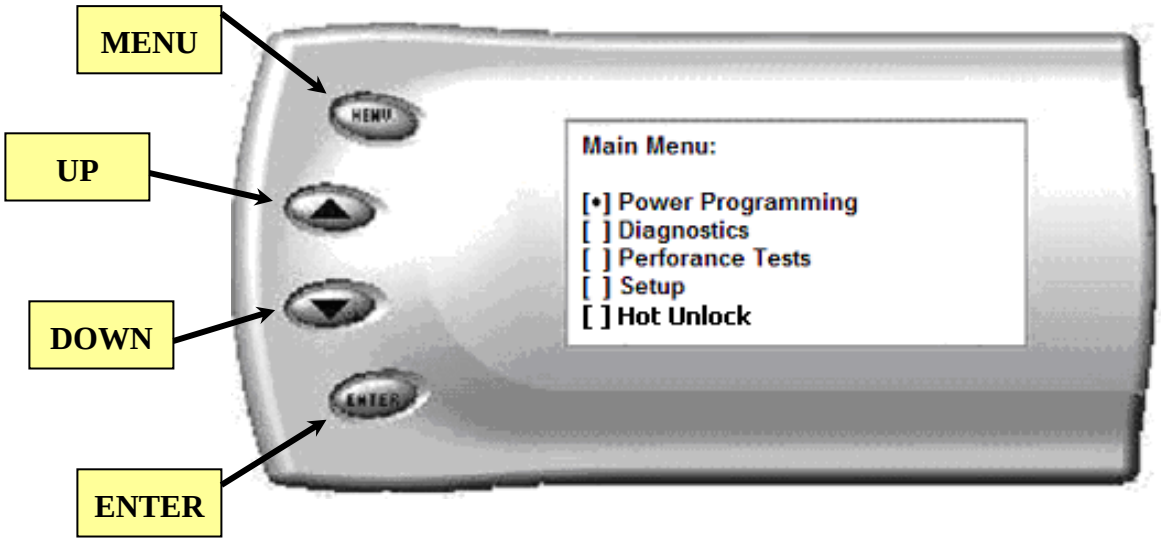
Custom Options

While programming your vehicle, you have the option to customize our tuning. For example, you can change your tire size value which can correct your odometer readings that result from changing tire sizes.

Refer to the *Custom Options* section for a complete list and description of options that are available. These can be changed while programming your vehicle.

Display and Keypad

The following picture is a sample *Evolution* screen. Great effort has gone into making the *Evolution* programmer very simple to use. The [UP] and [DOWN] arrow keys are used to scroll through options on the screen. The [ENTER] key is used to select desired options from a menu or move to the next screen. The [MENU] key is used to enter the Main Menu from the parameter display or return to the previous screen. This version of the *Evolution* also has the option to change the backlighting color of the display to a wide range of colors.



NOTE: *The evolution uses a LCD display which has inherent limitations in operating temperature. If your screen is black, blank, or distorted and the temperature is above 158 degrees F (70 degrees C), please allow the device to cool and then it should work correctly. At extremely low temperatures the display will update very slowly. Again wait for the device to warm to normal operating temperatures for the screen to function properly.*

NOTE: If you activate *Hot Unlock*, the screen view menu will show *Manual Regeneration*.

Getting Connected

Installing the EGT Probe

WARNING *When installing the EGT Thermocouple, wear eye protection and protective clothing to protect from getting metal chips in your eyes. Also, since exhaust manifolds can be very hot, allow the engine to cool before drilling. When working under the vehicle, make sure the park brake is set. If the vehicle must be raised, carefully follow the stand and vehicle safety guidelines for placement and use of jacks and stands.*

CAUTION: *One effective way to avoid metal fragment contamination in your engine manifold is to apply grease in the tip of the drill bit and threads of your tap tool when drilling/tapping the hole in your manifold. Reduce pressure on the drill when the drill breaks through the manifold wall to reduce risk of pushing metal chips into the manifold.*

TIP: *See figure B and C for access and finished installation pictures.*

1. Obtain a 1/8" National Pipe Tap (NPT) available from your hardware store. Drill a 21/64" (5/16" optional) hole through the manifold wall, and then use the pipe tap to cut the threads. Follow the instructions provided with the tap. The pipe tap is tapered, so you will only want to turn the tap until the bottom threads of the tap are slightly deeper than flush with the inside of the exhaust manifold wall. Use caution not to tap too deep since this would cause the thermocouple fitting and probe to seat too deep. (*See Figure A*. **Do not drill the hole in the middle of the manifold**.)
2. Now that the manifold has been drilled and tapped, remove the fitting from the Thermocouple and install by tightening the tapered thread end into the manifold with a 9/16" end wrench. (Ideally the tip of the fitting would be less than or flush with the inside of the exhaust flow path.) Tighten the fitting so that it is securely seated. Then install the probe into the fitting, and tighten the top nut of the fitting just tight enough to keep the probe firmly mounted. hole *(see figure A-1)* Make sure that the probe cable is positioned to allow best path and minimal bending, for cable routing to the top of the engine compartment.

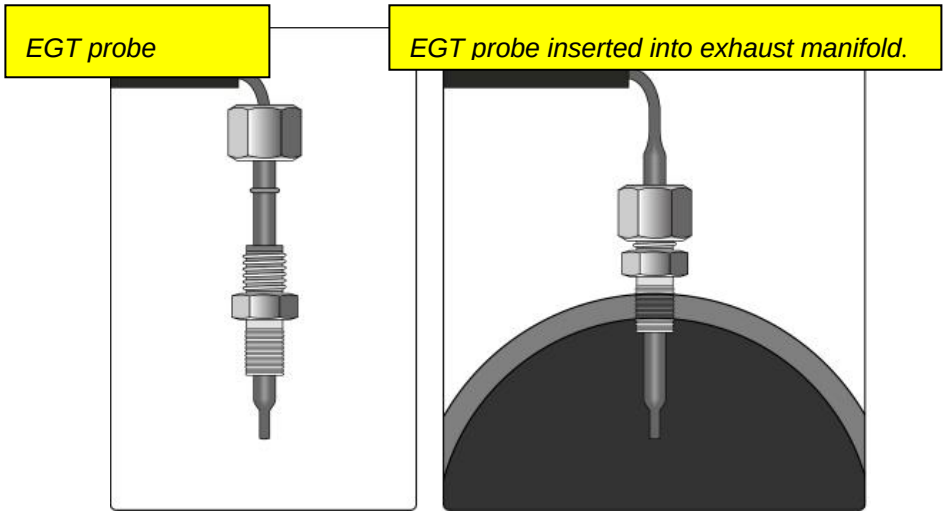


Figure A **Figure A-1**

Tip: Pulling back the wheel splash guard provides easy access to the exhaust manifold for tapping the EGT cable.

Figure B

Figure C

3. Run the thermocouple wire along the top of the fire wall. There are three small black clips on the top of the fire wall, slide a zip tie behind each clip and secure the Thermocouple cable with the zip ties, this will hold the cable up and out of the way of moving engine parts. (*See Figure D)*

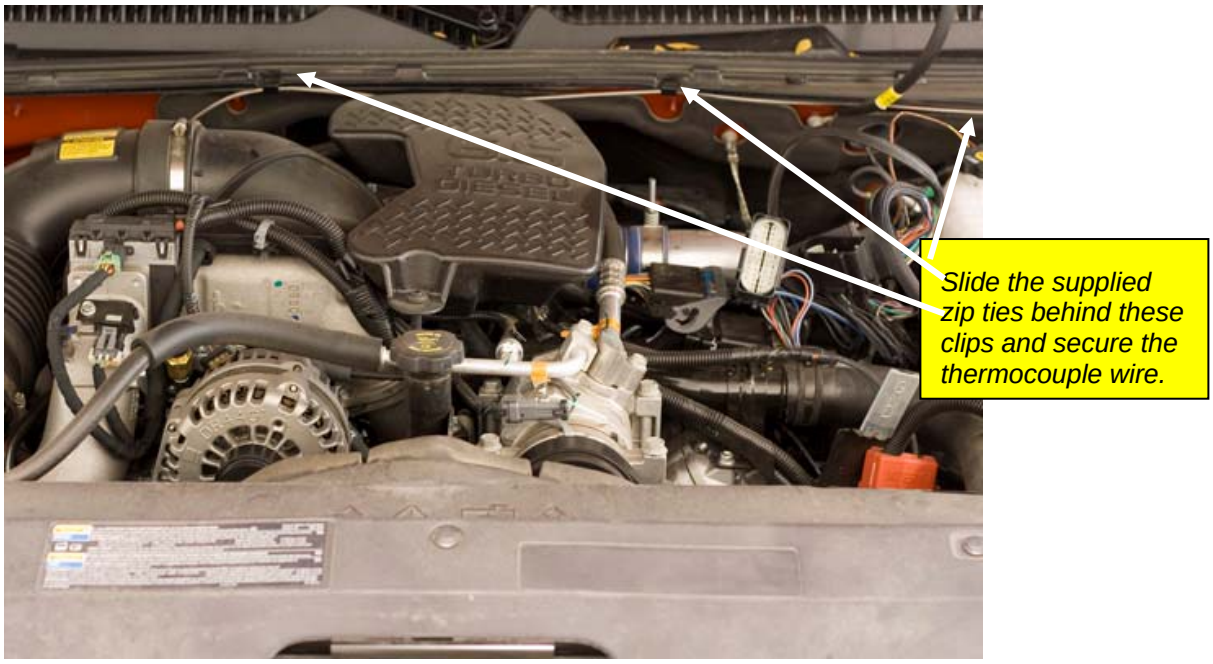


Figure D

4. You will need to run the connecter side of the thermocouple through the fire wall and connect it to the OBDII connecter. Use the main grommet on the firewall (*as shown in figure E*).

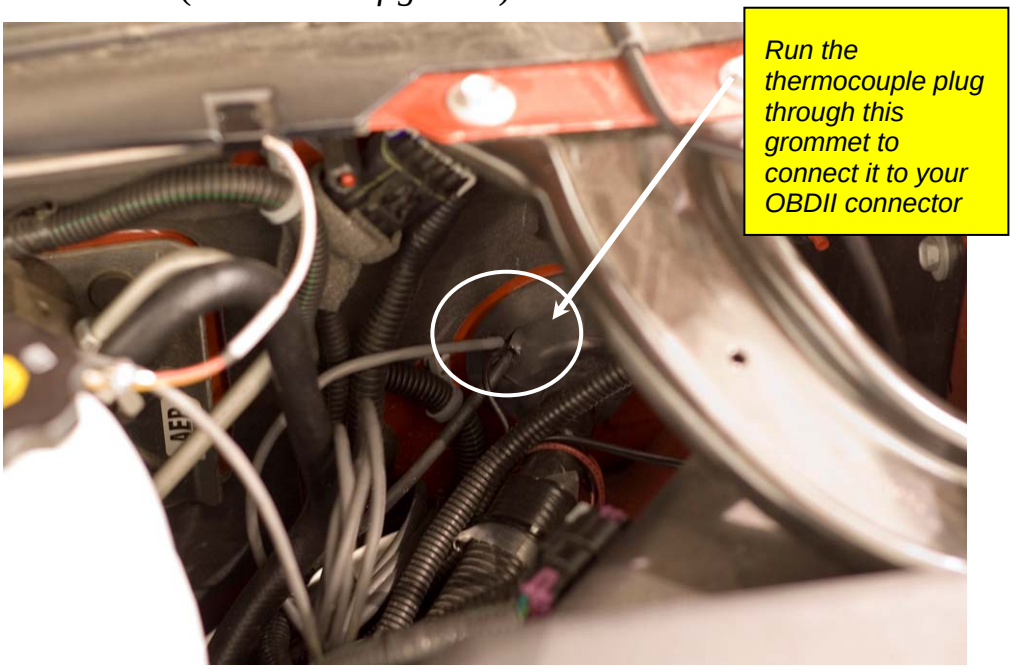


Figure E

5. Run the cable up under the dash and secure it with the supplied Zip ties. After the supplied OBDII connector cable is installed, connect the end of the thermocouple cable to the port on the right side of the OBDII connector (*as shown in Figure F*).

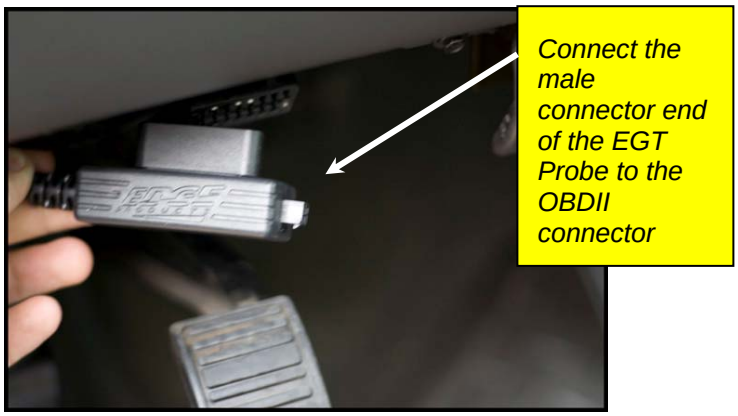


Figure F

Installing the Evolution

The *Evolution* programmer connects to the diagnostic port of your vehicle. Follow these steps to install the *Evolution*:

1. Begin by turning your ignition key to the OFF position. Locate the black diagnostic (OBDII or cover may say Data Link) connector. (*Figure #1*) It is located directly to the left of the E-brake release handle. (As you sit in your vehicle, located under the dash above the brake pedal)

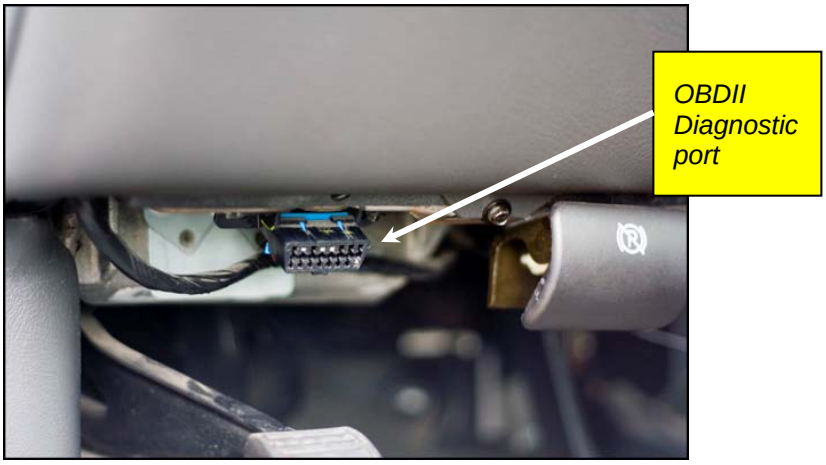


Figure #1

2. Open the driver's side door, and remove the access panel on the left side of the dashboard (*Figure #2*). Pull the end of the ODBII cable outwards (*shown in Figure #3*). Remove two Torx screws using a #15 torx bit, and snake the cable behind the panel with the vent, up to the A-pillar. Replace the screws, and access panel. The cable will protrude from the dashboard up along the A-pillar and be able to move freely when pulled (*Figure #4*).

Figure #2

Figure #3

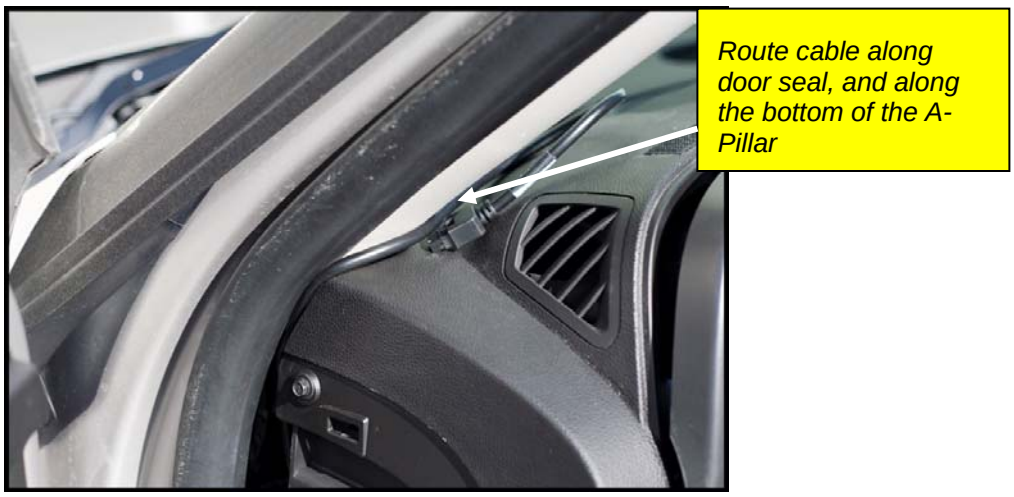


Figure #4

3. With roughly 8 to 10 inches of cable fed through the dashboard, set the Pod onto the dashboard (*shown in Figure #5*) with the end of the cable protruding through the front of the Pod. Remove the Dash Bezel by sliding your fingers behind it and pulling firmly toward the steering wheel. Slide the tab on the bottom of the pod behind the bezel, and snap the bezel back into place.

Figure #5

4. To secure the pod: Remove bracket kit and pod from the *Evolution* box. Note that the brackets are numbered and will be placed in the appropriate numbered locations inside the pod. The double sided tape on the bracket is attached to the inside pod surface over matching numbers.

   NOTE: *Be sure to check the position of the brackets while the Pod is resting in its desired location on the dash prior to attaching them to the Pod with the double sided tape over the matching numbers.*

5. Clean the pod location on the dash with hot soapy water and rinse, or use 70% Isopropyl alcohol. Make sure dash is completely dry. Attach the supplied Velcro to the bottom of the mounting brackets in the pod. Leave the protective backing on the bottom piece of Velcro, and test fit the pod so you have an idea of where you want it. Once you have determined the appropriate positioning, remove the backing paper from the Velcro, place the pod in it's desired location, and firmly press down on the brackets (through the front of the pod) to secure the Velcro in place.
6. Insert the rubber gasket into the Pod, and connect the Evolution to the cable (*Figure #6*).

Figure #6

7. Any excess cable may be stuffed behind the *Evolution* or may be pulled back through the dash to eliminate slack. (*Final installation is shown in Figure #7*) Use supplied cable ties to secure any excess cable underneath the dash to prevent the cable interfering with proper pedal operation.

Figure #7

8. With the Pod and *Evolution* securely in place, turn the ignition key ON, and then plug the cable into the OBDII connector (*Figure #8*).

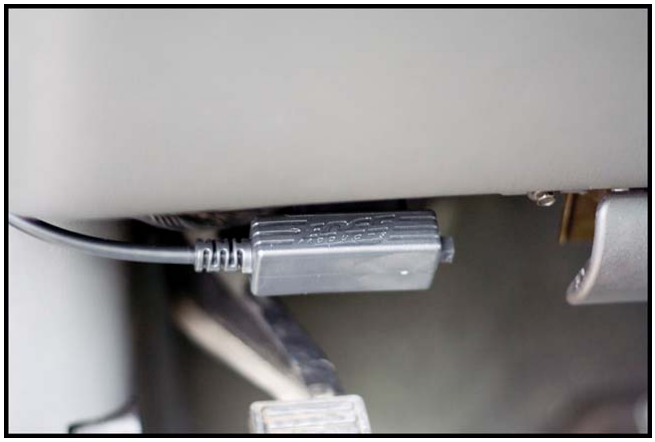
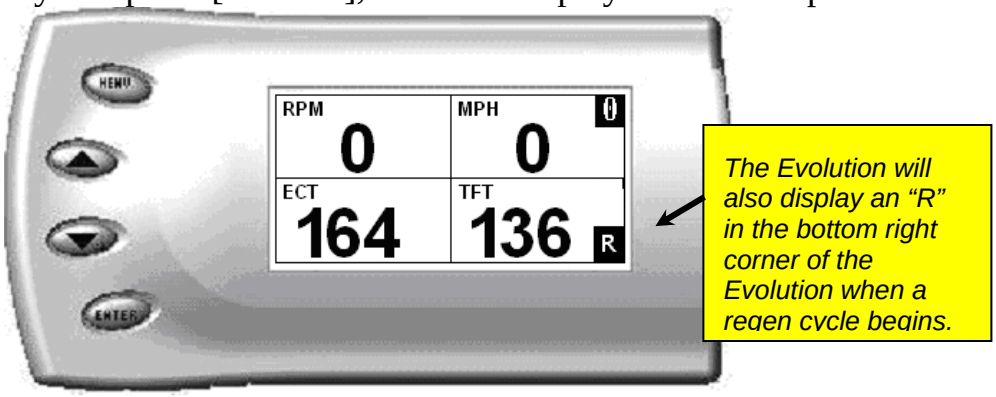


Figure #8

Note: *Unplug the OBDII connector if the truck will be sitting for a long period of time. This will eliminate unnecessary power draw.*

9. The *Evolution* logo will display followed by a warning and compliance directive. To indicate you accept and acknowledge the warning and compliance, press the [ENTER] button

10. After pressing [ENTER], a disclaimer screen will be displayed, read this screen carefully and press [ENTER], the main display will come up.



Note: *Parameters and values might vary.*

11. There are six boxes that will display information about your vehicle. The black box in the lower right hand corner displays an "R" to indicate when

the truck is in a regeneration cycle. When the cycle is complete, this black box will disappear. The black box in the top right corner displays which power level is currently programmed onto your vehicle.

0 – Vehicle is currently at stock.
1 – Vehicle has been programmed to *Economy* (Level 1).
2 – Vehicle has been programmed to *Towing* (Level 2).
3 – Vehicle has been programmed to *Performance* (Level 3).
4 – Vehicle has been programmed to *Extreme* (Level 4).

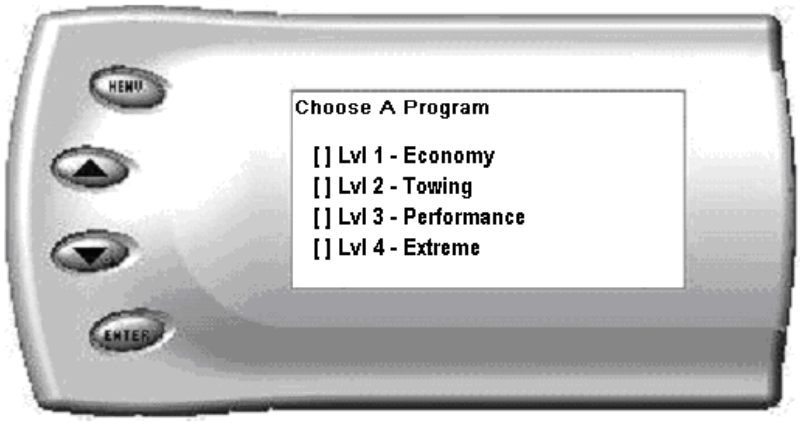
The other four boxes can show up to 4 PIDs (Parameter IDs) of your vehicle. By default, they are your vehicle's RPM, BST (boost), TFT (transmission fluid temperature), and EGT (exhaust gas temperature). Optional parameters and display formats may be selected in the *Changing Display* section of this manual.

12. From this display, press [MENU] to select and use other features of the *Evolution*. The display backlight brightness can also be controlled from this display by using the [UP] and [DOWN] arrow keys.

Power Programming

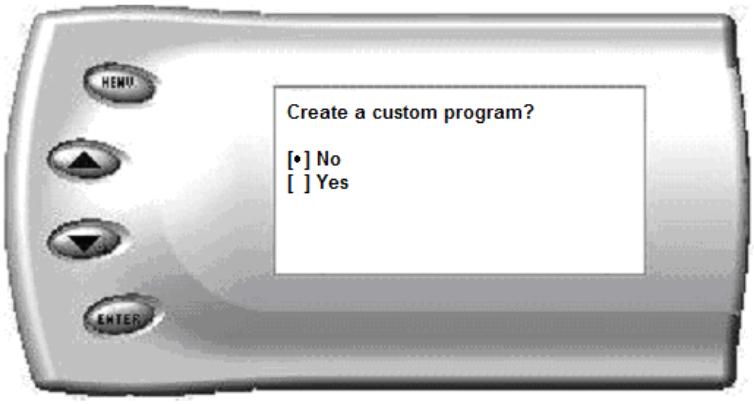
Caution: *Vehicle manufacturers do not recommend vehicle programming in extreme temperature. Please see the service manual of your vehicle to ensure that programming is being done in accordance to the original equipment manufacturers specifications.*

From the main screen, press [MENU] to enter the main menu. Then select *Power Programming*. The following screen appears:



1. Select the level that best meets your needs. For more information about each level, read the *About the Evolution* section in this manual.

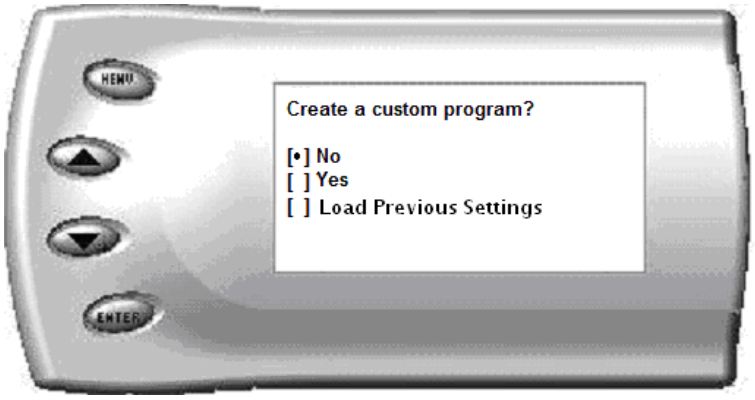
Confirm your selection by pressing [ENTER] on the following screen. After confirming, the evolution will prepare the stock files, save the stock files, and then the screen below will appear:



2. You have the option to change certain parameters of the level you chose. If you would like to learn more about what parameters are available and how to use them, then read the *Custom Options* section in this manual. To use the standard program without customizing options, simply press [ENTER] (choose NO).
3. The *Evolution* will ask you to make sure the engine is off and the key is on.
4. During the first use, the *Evolution* will read the original calibration from your PCM and then build all the necessary programs. This will take several minutes. This step is skipped during all further programming operations.
5. The *Evolution* will erase your PCM and then write the selected calibration (level) onto the PCM. This will also take several minutes. If at any time you receive an error message, refer to the *Troubleshooting* section at the back of this manual for further instructions.
6. When the *Evolution* is done programming, continue to follow the directions on the screen. The following screen will appear and you can press [ENTER] or [MENU] to return to the Main Menu:

Custom Options

When preparing to program your vehicle, you will have the option to change certain parameters. Choosing YES when prompted to "Create a custom program?" will load the *Custom Options* menu. (after original custom options loaded, future changes will allow you to *Load Previous Settings* options.)



Note: ***Custom Options are provided to allow for flexibility based on driver preferences. Any option customization done by the user is not warranted by Edge Products. Please use at your own discretion.***

Tire Size

The *Evolution* has the ability to correct for changes in tire size. If you have changed your tires to a different size the PCM will miscalculate vehicle speed which can affect shifting as well as the speedometer. Correcting the tire size will allow the PCM to accurately calculate vehicle speed and odometer readings. You will not need to change the value displayed if you are running factory size tires. If you choose to change your tire size, four formats are available for you to use. You only need to choose one format.

P-METRIC– This is one of the most common formats used. The tire size will be printed on the tire.

Example: 275 / 75 R16

ENGLISH – This looks much like the P_METRIC format. The first number will represent the height of the tire in inches

Example: 35 x 20 R17

HEIGHT – Some tires only have the height of the tire in inches.

Example: 35.5"

CIRCUMFERENCE –

The most accurate way of entering in your tire size will be to measure the circumference of your tire. You may also measure your tire's circumference by marking your tire and rolling it one complete revolution and measuring the distance in millimeters.

After choosing to set your tire size, the follow screen appears:

The numbers on this screen represent the circumference (in mm) of your tire size. The default value the *Evolution* displays is the current value stored in the PCM. Adjust the tire size by pressing the [UP] and [DOWN] arrow keys.

The following table will help you determine your tire circumference by matching your tire size with the common sizes listed. For example, if your tire size is 285/ 65-18, the value (circumference) you enter into the *Evolution* is 2600. You may also use the formula provided to determine your approximate tire circumference. Finally, you may also measure your tire's circumference by marking your tire and rolling it one complete revolution and measuring the distance in inches or millimeters. If you measure in inches, multiply the distance by 25.4 to convert to mm. (ex. 91.3 inches x 25.4 = 2319 mm). The Evolution supports tire sizes ranging from 2000mm to 3500mm in increments of 1mm.

Width	Ratio	Rim	Circumference
265	70	16	2441mm
275	70	16	2485mm
305	70	16	2617mm
215	75	16	2289mm
245	75	16	2430mm
265	75	16	2524mm
285	75	16	2618mm
295	75	16	2666mm
305	75	16	2713mm
315	75	16	2760mm
325	75	16	2807mm
265	70	17	2521mm
285	75	17	2698mm
315	75	17	2840mm
275	65	18	2559mm
285	65	18	2600mm
285	60	18	2510mm
325	60	18	2660mm

Tire Size	
33	2632mm
35	2792mm
37	2951mm
38	3031mm

Circumference Equation:

[(width * ratio * 0.02) + (rim * 25.4)] * 3.1415

Steps:

1. Multiply ***Width***, ***Ratio*** and ***0.02***
2. Multiply ***Rim*** and ***25.4***
3. Add Step #1 with Step #2
4. Multiply Step #3 with ***3.1416***
5. The result will be the circumference of your tire in mm.

Note: if your tire size is not listed use the above formula

Note: *Setting the tire size larger than 2900 mm may result in an ABS Warning light and the disabling of your ABS System.*

Caution: ***The following options are available and when adjusting the values, it is highly advised to make gradual changes as opposed to aggressive changes. This will help avoid possible powertrain damage.***

Speed Limiter

The Speed Limiter restricts the top speed of the vehicle. Factory speed limit values are generally based on the tolerances of the driveline components. The evolution will allow you to raise your speed-limiter in increments of 5 mph starting at 40 mph, and ending at 200 mph.

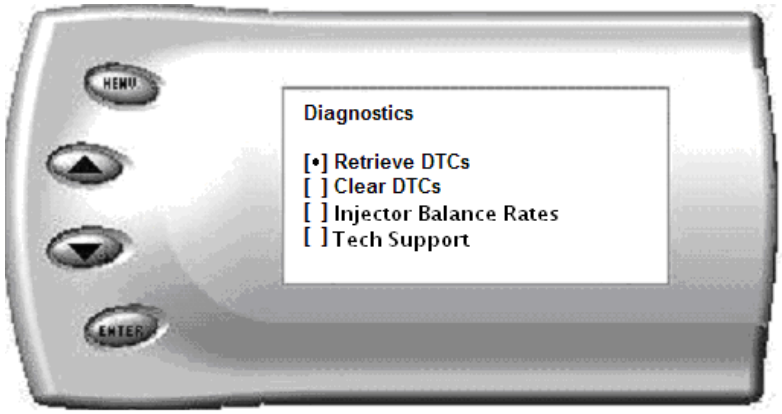
WARNING *If you drive on public roads after removal or adjustment of the speed limiter, you must still obey all driving laws, including adhering to posted speed limits. To drive at racing speeds on public roads seriously endangers you, your passengers, and others nearby. Driving at high speeds with inadequate tires or other components can lead to serious or fatal injury.*

CAUTION: *Removing/adjusting the speed limiter for purposes inconsistent with the product's intended function violates the product's intended use and will invalidate the product's warranty. Edge Products is not responsible for or liable for the consequences of improper product use.*

Diagnostics

The diagnostics scanner included with your *Evolution* is a powerful tool that allows you to view and clear diagnostic trouble codes (DTCs) on your vehicle, DTCs are the messages your vehicle's computer stores when it detects a problem with your vehicle. The "Check Engine" light on your dash is activated by the presence of most DTCs.

If you selected *Diagnostics* from the main menu of the *Evolution*, the screen displays the following message:



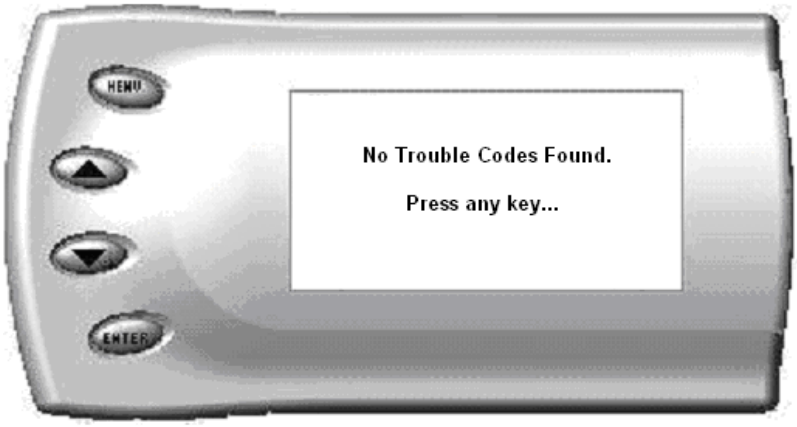
Retrieving Codes

If you want to retrieve and view the DTCs on your vehicle, select the *Retrieve* option. Make sure your ignition is in the ON position.

After selecting the *Retrieve* option, any stored DTCs will appear on the screen like the following example:

Press [MENU] to exit the DTC list and return to the previous menu.

If you have no trouble codes, the following screen will appear:



Clearing Codes

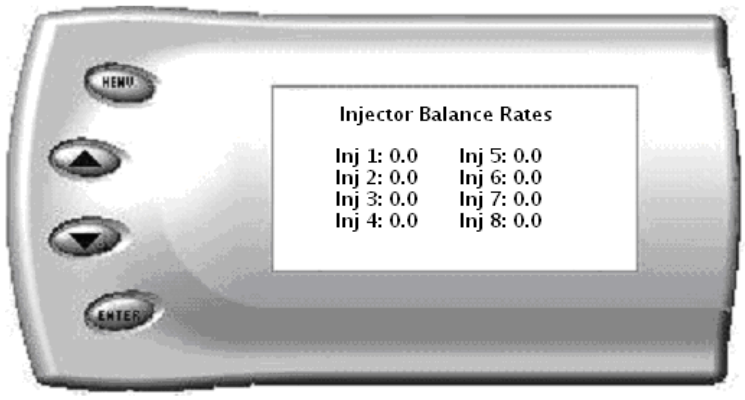
If you want to clear the DTCs on your vehicle, select the *Clear DTCs* option.

After selecting the *Clear DTCs* option, any current stored DTCs will be cleared from your vehicle and the "Check Engine" light will go out. However, if you do not address the issue that originally caused the DTC, the DTC will set again and the "Check Engine" light will come back on. Once the DTCs have been cleared, press [ENTER] to return to the previous menu.

CAUTION*: If you do not address the issue that originally caused the DTC, the DTC will set again and the "Check Engine" light will come back on. If a trouble code is set repeatedly and does not clear, the user must take action to define and correct the problem. Failure to correct the problem could result in powertrain damage. The user must become familiar with the codes and the potential problems if left uncorrected.*

WARNING *Some Codes are set as a result of using aftermarket products. Some trouble codes may have safety implications. Do not clear codes unless you are familiar with the code and concerns if not corrected. Use only when necessary, and address all trouble code warnings.*

Injector Balance Rates



Injector balance rates can give you vital information to indicate a bad batch of fuel or possibly excessive injector wear. Balance rates should be between +4mm and -6.9mm in park or neutral.

Tech Support

Information found in this section is normally only accessed when instructed by an Edge support person. For example, *Version Info* displays the current Bootloader, Firmware, and Calibration versions installed on your *Evolution.* Your vehicle's HEX code is also shown. Using the Fusion® software, you will be able to access online updates to ensure your *Evolution* is always up to date.

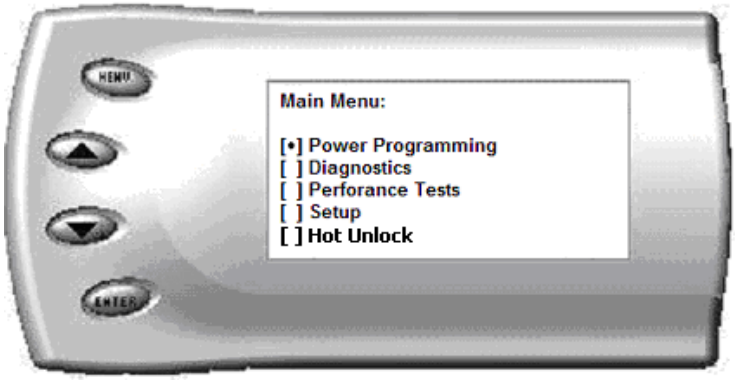
Note: *Make sure you return your vehicle to stock before attempting an update, or the PC software will not allow you to continue.*

Performance Testing

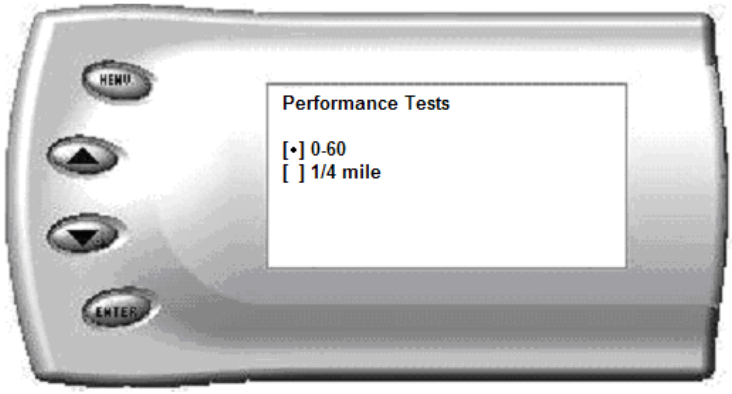
WARNING ***Do not use the Performance Tests feature to break any traffic laws. Perform these tests only where they are legal and safe.***

The *Evolution* allows you to test the performance of your vehicle by timing the 0-60 and the quarter mile times. It is helpful to remember these might not be results you would receive from actual races. Incorrect speedometer reading and tire slippage can cause slight miscalculations in the displayed results. To run these tests, perform the following steps:

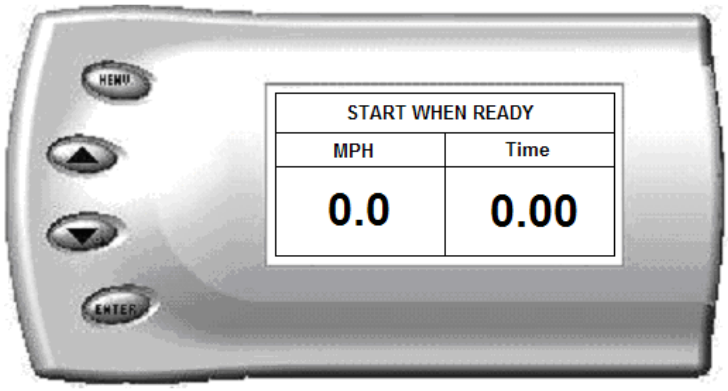
1. Press [MENU] and the *Main Menu* screen should appear:



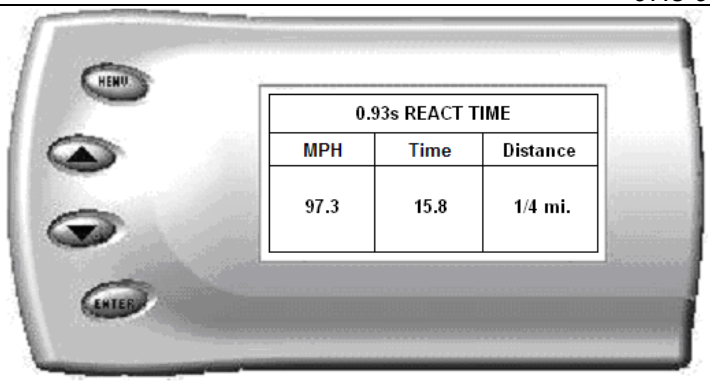
2. Select the *Performance Tests* option. The following screen appears:



3. Select the desired performance test (0-60 screen is shown below). If your vehicle is moving at this time, the *Evolution* will ask you to come to a stop.



4. For the 0-60 MPH run, press the accelerator pedal and the test automatically begins. For the ¼ mile test, you will be asked to press a key when ready. It will then cycle through a starting light sequence (Christmas tree) and tells you when to go. As you drive, the screen should be displaying your current speed. When the test is complete (the desired distance or speed is reached), the test will automatically stop and your time will be displayed on the screen as follows (quarter mile result example):



This will show how long it took you to cover 60 feet, 1/8 mile, and ¼ mile. In addition, your MPH at ¼ mile will also be shown (see the example above). The best run is stored for later viewing. You may also use the back of this manual to write down your times.

At the end of a ¼ mile run, you will see a reaction time at the top of the screen. This time begins when the final yellow light is displayed. The time between the final yellow and the green is a ½ second, so a perfect reaction time is a ½ second. The average person will see a response time of around 1 second. You'll get an "Illegal Start" message if you start before the green and you're screen will turn red. You can still finish the run, but the screen will let you know that you started before the green light.

Note: *Along with the best speed and time being recorded for viewing in the Records section, your most recent run data will also be stored.*

5. After the test is complete, press [MENU] to return to the Performance Menu.

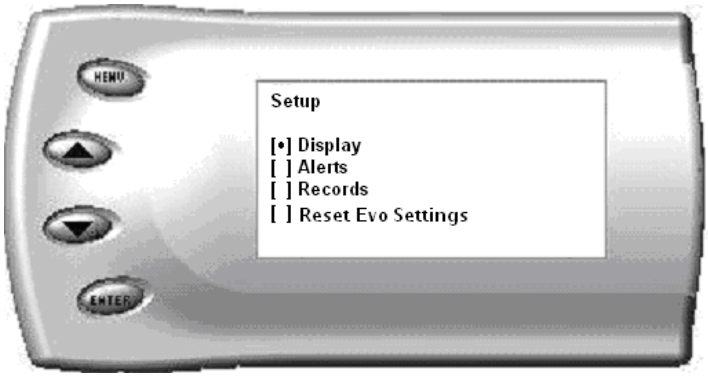
Setup

The *Evolution* gives you even more additional features. You can choose from several different parameters to monitor, how these parameters are displayed, set parameter alerts, and view the highest value that certain parameters have reached.

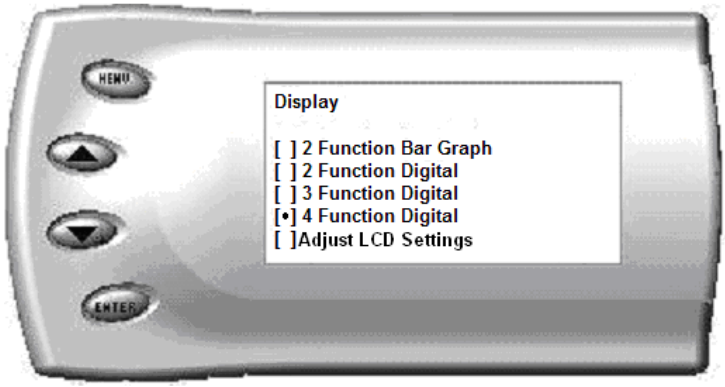
Changing the Display View

The *Evolution* allows you to view multiple engine parameters on the same screen. To select a desired view, perform the following steps:

1. From the *Main Menu* select the *Setup* option. The *Setup* screen appears as follows:

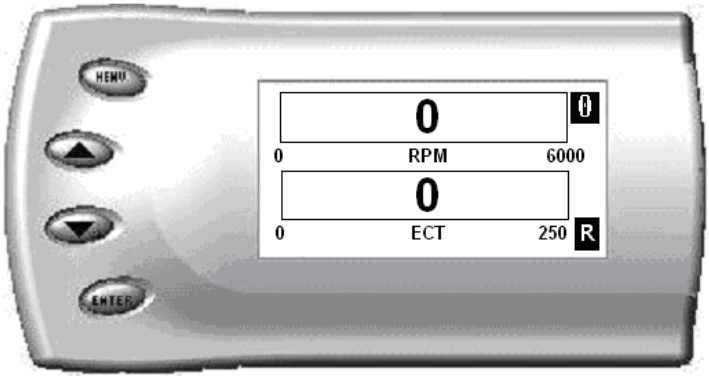


2. Select the *Display* option. The following screen appears:



3. Select the desired viewing option by using the [UP] and [DOWN] arrows and pressing the [ENTER] key on the desired display type. Below are examples of the display options:

Two Function Bar Graph Display Sample



Two Function Digital Display Sample

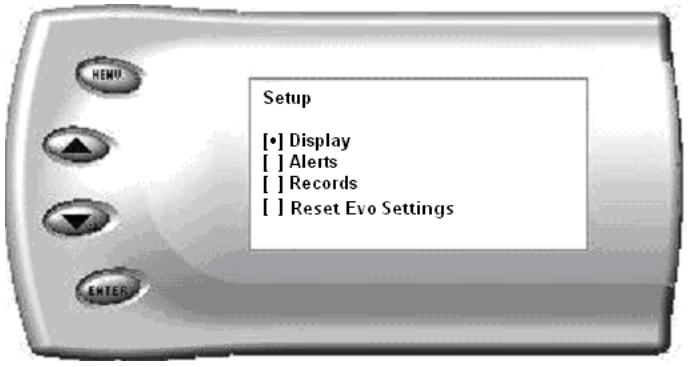
Three Function Digital Display Sample

Four Function Digital Display Sample

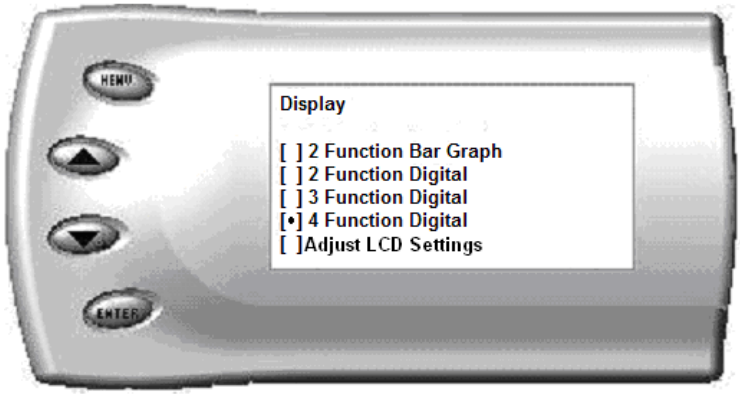
Changing the Variables on the Screen

To change the variables on the screen, perform the following steps:

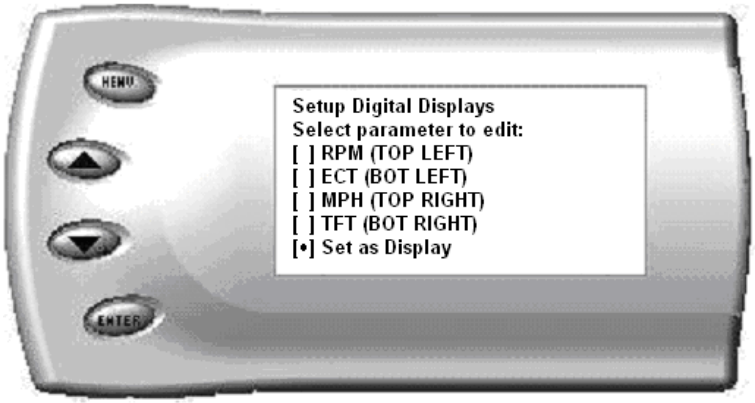
1. From the *Main Menu* select the *Setup* option. The *Setup* screen appears as follows:



2. Select the *Display* option. The following screen appears:



3. Select the style which you would like the parameters to be displayed on your screen and press [ENTER]. Depending on which display you select, a screen similar to the following appears:



4. This screen lists the current parameters being displayed and their respective positions on the screen (i.e., TOP LEFT, etc.). Select the position you would like to change and press [ENTER]. A list of available parameters will be displayed. Select the parameter you would like to view and press [ENTER]. (A list of commonly used acronyms is located in the back of this manual and an in depth list of the PIDs supported follows). Once you have selected your desired parameters, select the *Set as Display* option and press [ENTER]. You will return to the *Setup* menu with your new settings saved.

   Below is a list of the 30 PIDs you can display and description of each:

- RPM (Revolutions Per Minute) – *Displays current engine speed in RPM.*
- MPH (Miles Per Hour) – **Note:** *Dash display may be +/-3 MPH off from the digital display due to mechanical differences in the spring, etc. used to control the gauge.*
- ECT (Engine Coolant Temperature) – Degrees F.
- LOAD (Engine Load) – Calculated engine Load
- GEAR (Current Gear) – Current gear. A 'lock' symbol will appear next to the gear number once the torque converter locks.
- TFT (Trans Fluid Temperature) – Degrees F.
- BST (Boost Press) – PSI
- MAF (Mass Air Flow) – Grams Per Second
- IAT (Intake Air Temperature in manifold) – Degrees F.
- DFRP (Desired Fuel Rail Pressure) – PSI – This is what pressure the PCM would like the fuel rail pressure to be at.
- AFRP (Actual Fuel Rail Pressure) – PSI – This is the actual pressure in the fuel rail.
- OSS (Output Shaft Speed) – RPM
- MAP (Manifold absolute Pressure) – kPa
- MIT (Main Injection Timing) – Degrees
- BAT (Battery voltage) – Volts
- CFR (Calculated Fuel Rate) – mm3
- VPOS (Turbo Vane Position) - %
- APP (Accelerator Pedal Position) - %
- IATT (Intake Air Temperature in intake tube) – Degrees F

- AAT (Ambient Air Temp) – Degrees F
- EOP (Engine Oil Pressure) – PSI
- Fuel (Fuel Tank Remaining) - %
- EGT1 (Exhaust Gas Temp) – Degrees F
- EGT2 (Exhaust Gas Temp) - Degrees F
- BARO (Barometric Pressure) – kPa
- FTMP (Fuel Temperature) - Degrees F
- DIDL (Desired Idle) – RPM
- EGT (Exhaust Gas Temperature) – Degrees F
- DPF (Diesel Particulate Filter) Regeneration Cycle: Status- On/Off
- Soot (Soot Mass) – Grams

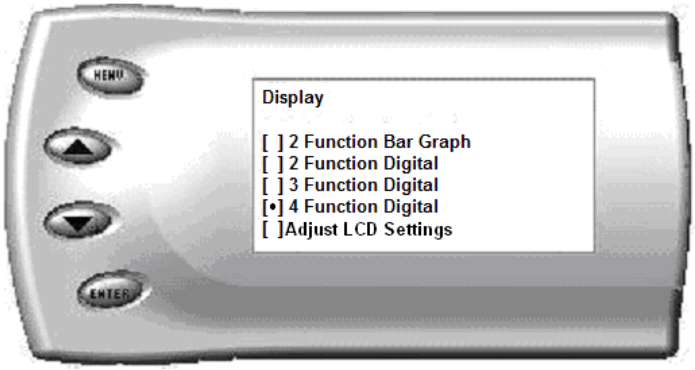
Changing the Backlighting

Adjusting the Backlight Color

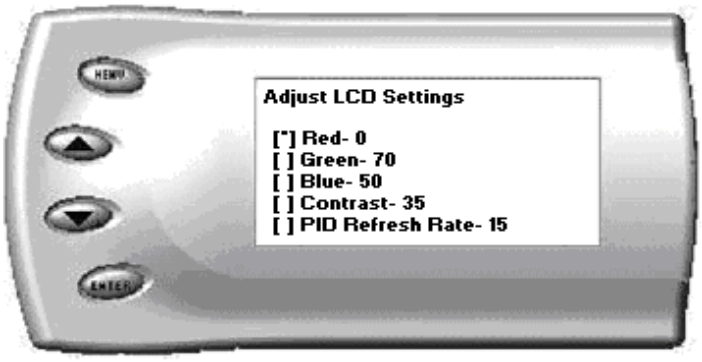
To change the backlighting color, perform the following steps:

1. From the *Main Menu* select the *Setup* option. The *Setup* screen appears as follows:

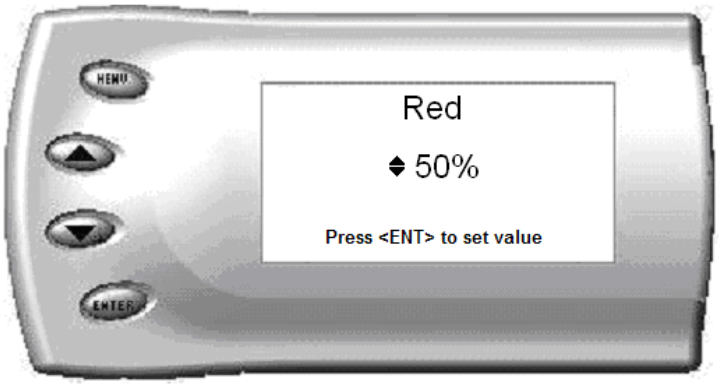
2. Select the *Display* option. The following screen appears:



3. Select the *Adjust LCD Settings* option. The following screen appears:



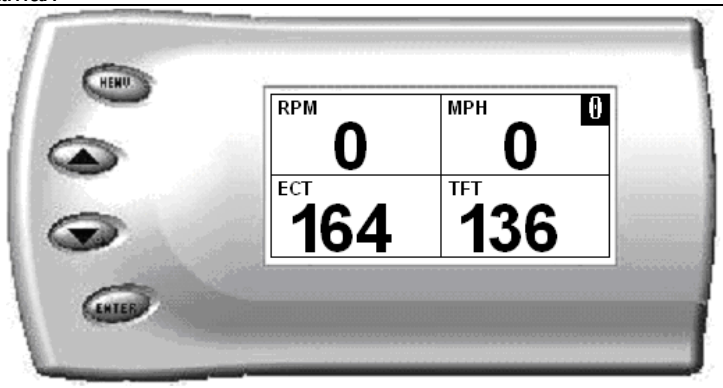
4. Select the color you would like to change.
5. Depending on the color you select, a screen similar to the following appears (example of Red):



6. As you adjust the percentage shown on the screen, you should notice a change in the color of the screen. Once the desired color value has been reached, press [ENTER]. If you would like to return to the previous screen and abort the current color change, press [MENU].
7. PID Refresh Rate- Adjusting the refresh rate will change how fast the information is updated on the monitor.

Adjusting the Backlight Brightness

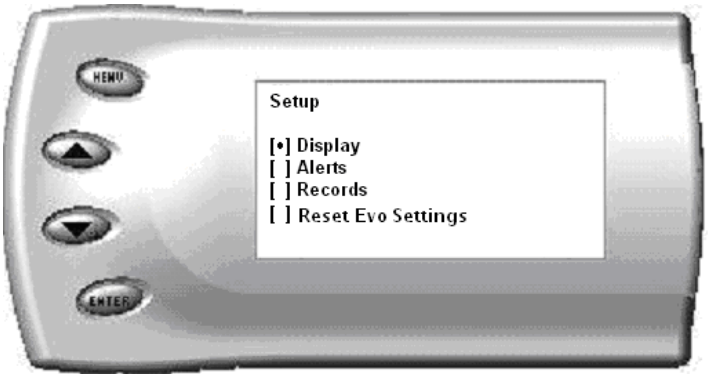
When viewing engine parameters (like the sample below) press the [UP] and [DOWN] arrow keys to adjust the brightness of the display. Each time the button is pressed the backlight will either brighten or dim by 10% of the total brightness. The default setting is 100% brightness.



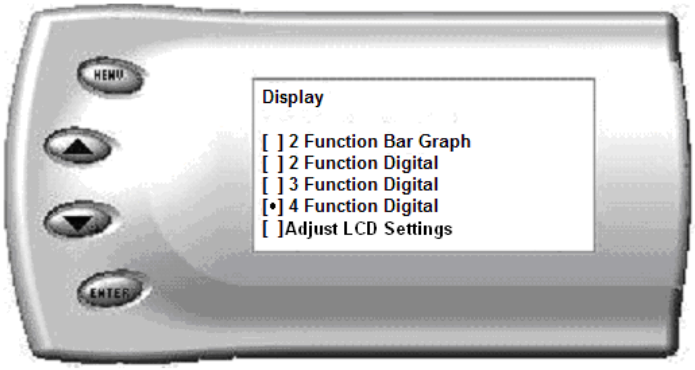
Adjusting the Contrast

To change the contrast, perform the following steps:

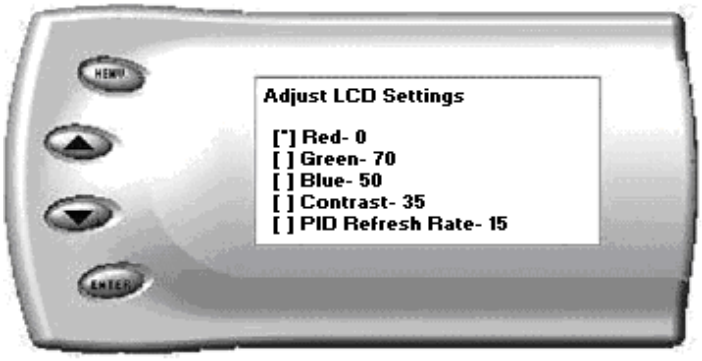
8. From the *Main Menu* select the *Setup* option. The *Setup* screen appears as follows:



9. Select the *Display* option. The following screen appears:



10. Select the *Adjust LCD Settings* option. The following screen appears:



11. Select *Contrast*, and use the up and down arrows to adjust the contrast to where you'd like. Press [ENTER] and {MENU] to return to Main Menu.

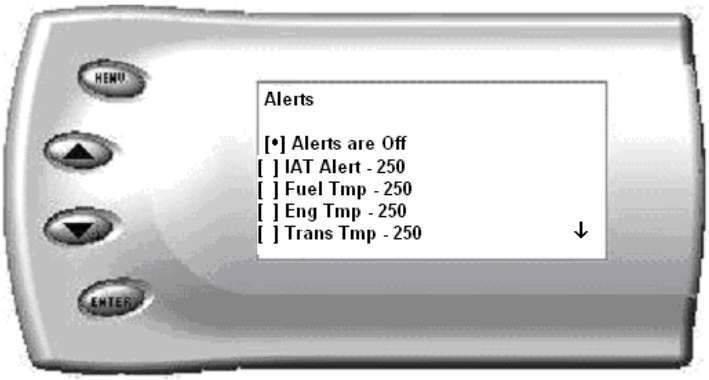
Alerts

If you would like to know when a certain parameter reaches a certain value, you can set an alert for that parameter by following these steps:

Following is a list of Alerts you may set and adjust.

- EGT Alert
- EngTmp Alert
- Boost Alert
- Speed Alert
- InjTime Alert (Injection Timing)
- RPM Alert
- FuelTmp Alert
- FRP Alert (Fuel Rail Pressure)
- TransTmp Alert
- Soot Mass Alert

1. From the *Main Menu* select the *Setup* option. Then from the *Setup* menu, select the *Alerts* option. The following screen appears:



2. By default, the alerts are off. To turn them on, select the *Alerts are Off* option and press [ENTER]. The text line will now read *Alerts are On*. To change the value of a certain alert, select the parameter you want to change and press [ENTER]. The screen similar to the following will appear:

3. Press the [UP] and [DOWN] arrow keys until you have reached the desired value. Pressing [ENTER] will save the current alert value. If you would like to return to the previous screen and abort the current value change, press [MENU].
4. When alerts are On, and multiple alerts are detected, the *Evolution* will only display one. For example: if you exceed the set point for both MPH and RPM, the first alert the *Evolution* detects will be the one displayed. Pressing any button will temporarily disable the alert until the vehicle falls below the set point and then will automatically re-enable.

Records

The *Evolution* automatically records the highest value of some of the parameters. To view these records and to reset them, do the following:

1. From the *Main Menu* select the *Setup* option. The *Setup* screen appears as follows:

2. Select the *Records* option. The following screen appears:

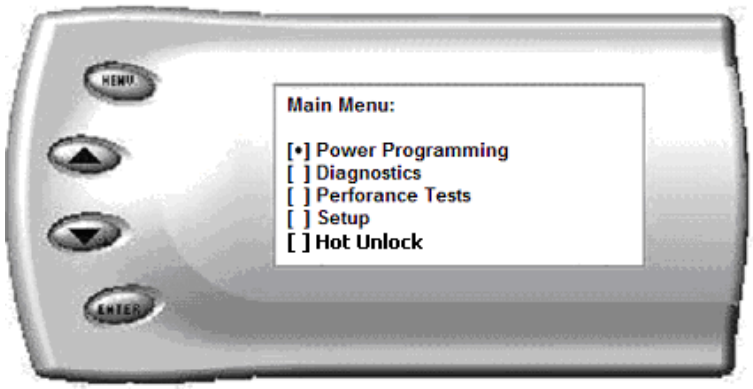
3. This is where you can view all of the current recorded high values. The arrow located at the bottom right corner of the screen indicates there are more parameters than the display can show. Use the [UP] and [DOWN] arrow keys to scroll through the list of records. If you would like to reset a single parameter, select the desired parameter and press [ENTER]. If you would like to reset all of the records, select the *Clear All* option and press [ENTER]. To exit out of this list press [MENU].

Reset Evo Settings

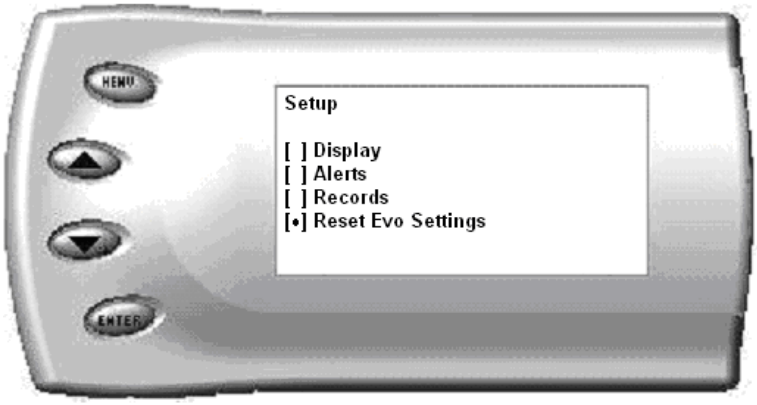
If you would like to restore the *Evolution* back to its original factory settings, follow these steps.

Note: *This will not program the vehicle back to stock power; it will only reset the Evolution display options, alerts and records back to the preset defaults from Edge Products. To reset power level, return to "Power Programming", and select "Return to Stock".*

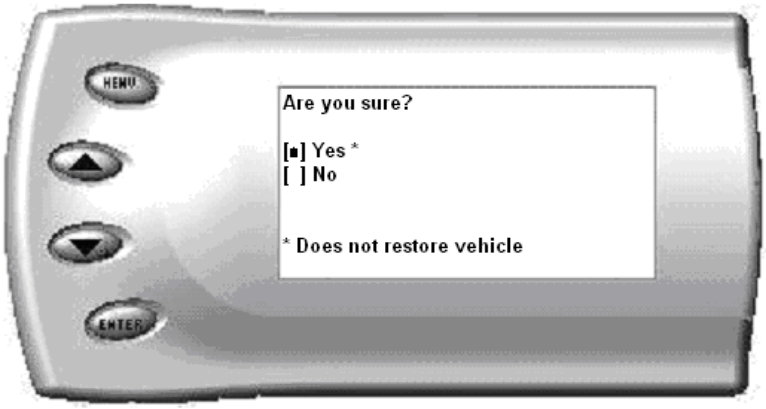
1. Enter into the *Main Menu*. The *Main Menu* screen appears as follows:



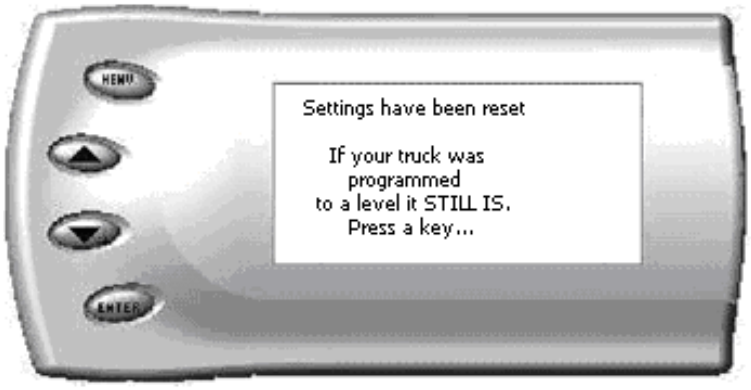
2. Select *Setup* and press *Enter*. The following screen will be shown:



3. Select *Reset Evo Settings* and press *Enter*. The following screen will be shown.



4. Select *Yes* and press *Enter*. The following screen will be shown.



5. The *Evolution* settings have now been reset to match the settings as originally purchased and supplied from Edge Products. Press [MENU] to return to the *Main Menu.*

Fusion® PC Software

Internet Connection Required to Update

Fusion® Software allows the user to update their device to the latest version of firmware and calibration files. This software is included on the disc provided with your device. It can also be downloaded for free from Edge Products web site at www.edgeproducts.com , or the CD can be requested by calling 888-360-EDGE (3343).

Note: *Be sure to install both the SOFTWARE and the DRIVERS that come included in the download or on the disk before you connect your device to your PC. During the installation you will be prompted to install the drivers, choose yes.*

For step by step installation instructions please copy this link into your web browser
http://www.edgeproducts.com/product_images/product_update-file-11.pdf

Once you've successfully installed the Fusion Software and Drivers, click on the Fusion icon on your PC desktop. You may be prompted for a Fusion login. If you have not yet created an account, click on "Create a New User" and you will be taken to a webpage to create your login information. After entering your information, a password will be sent to the email address you provide. Please be sure that your email account does not block emails from "edgeproducts.com". Upon receiving the password, enter your email address and password into the login screen. You'll be prompted to connect the

device to launch the update. After connecting the device, you'll see the following screen. Click yes to continue with the update.

Note: *Be sure to return your vehicle to stock before connecting the device to Fusion.*

Note: *If the USB connector you received has 2 plugs, it is recommended that you plug both USB connectors into the computer before connecting the device to the other end to ensure proper operation.*

After you've selected yes on the previous screen the Fusion software will go through the steps in order to update the device. Once it's completed you'll see the following screen

Click OK and the update will be completed. You'll now have the latest Firmware, and Calibration on your device.

When your device is connected to Fusion, the Device Model, Level, Bootloader, Firmware, Calibration and Serial Number are all displayed at the bottom of the screen. These numbers will be useful to quickly view the state of your device, and whether or not it is currently programmed to a vehicle.

MODEL: The model number for your device

LVL: The currently programmed level

BOOTLOADER: The bootloader version currently on your device

FIRMWARE: The firmware version currently on your device

CALIBRATION: The calibration version currently on your device

SERIAL NUMBER: The serial number assigned to your device

Possible Programming Errors

Update Required

Fusion is designed to help the development team at Edge Products support new vehicle calibrations. When you connect your device to the vehicle, the first step it takes is identifying your vehicle's stock file. If the stock file isn't currently supported the device will display a screen alerting you that the stock file is not yet supported, and prompt you to press a button/touch the screen in order to read and save the stock file. Once the device has saved the stock calibration, it will prompt you to connect the device to Fusion. Fusion will ask you if you want to upload your vehicle's stock files to our server. Choosing yes will upload the files to the server, and alert the development team. This will help the development team at Edge Products provide support for your vehicle's calibration as quickly as possible.

Non Stock condition

During programming, the device will read the stock file on your vehicle and compare it to a corresponding stock file that has been verified by Edge Products. If there is a mismatch the device will alert you, and display this message, "Non-stock condition detected. This is most likely because your vehicle has been programmed with a competitive product. It is recommended that you return your vehicle to a stock condition with the product that changed it. Alternatively, you can plug your device into the internet update system and it will load the necessary files onto your device to return your vehicle to stock."

If you don't have the competitive product that programmed your truck, connect the device to Fusion where you'll be prompted to download the correct stock files. Once downloaded, simply connect the device to your vehicle, and the device will program the verified stock files to your vehicle.

Troubleshooting/Tips

Tip: Programming your vehicle may expose existing defects in your vehicle's PCM that could disable your vehicle. It is advised that you do not program your vehicle in remote locations in case of failure.

Tip: Keep in mind that the *Evolution* is a high performance product and that not all vehicles deliver the exact same power output when programmed with the *Evolution*. It is recommended that you select a program that will best fit your needs. Whether towing, or traveling long distances at high speeds, choose your power level wisely and keep in mind the condition and tolerances of your vehicle when selecting a suitable power level.

- **NO DISPLAY WITH KEY ON –** If you should get no display when turning the key on, check all of your fuses and make sure your battery is fully charged. Disconnect and reconnect the OBD-II cable to ensure the Evolution restarts properly. If the unit restarts but fails to stay on, or fails to turn on when the key is on, there is most likely a communications issue. Contact Edge Products Technical Support for further assistance.
- **NO START –** If you experience a "No-Start" condition after programming your PCM, return to the *Power Programming* menu and select *Return to Stock*. This will allow the *Evolution* to reprogram the PCM with the factory calibration and recover the PCM. If, after reprogramming, you still have a "No-Start" condition, contact Edge Products Technical Support. A member of our support team can further instruct you on possible recovery procedures.
- **MISSING FILE** – If you have a missing file error during power programming, press [ENTER], turn off the key and follow the manual instructions to update your Evolution using the Fusion Software.
- **ERROR 86 or 87 –** Connect the Evolution to the Fusion Software. Choose 'Yes' to the screens that the Fusion Software immediately displays. Make sure the Fusion Software can connect to the internet.

- **ERROR CODE 0xF1 (AFTER PCM READ)** – If you are receiving this error code right after the *Evolution* reads your PCM, check for updates using the Fusion® software. If the problem continues, go to the *Utilities* menu and select *Read Stock Calibration*. Then call tech support to take steps to create a new calibration for your vehicle.
- **ERROR CODE 0xF1 (IN CUSTOM MENU)** – If you are receiving this error code while trying to configure your custom options, disconnect from the OBDII connector, turn the key to the ON position, and plug the *Evolution* back in. After getting to the main screen (past Intro and Disclaimer), wait 15 seconds. This will give your unit time to load parameters it needs to perform the custom changes. You should now be able to perform your custom changes.
- **TROUBLE CONNECTING TO THE FUSION SOFTWARE –** If you are having trouble connecting to the Fusion software, the first thing to check is whether or not you have HotSync on your computer. HotSync is software used to sync your PDA/Palm to your computer. If you do have HotSync on your computer, follow these steps:

  1. Right click on the HotSync icon that looks like this: 
  2. You will get a menu that looks like this:

  3. By default the Local Serial will have a check by it, uncheck Local Serial. Once you have done this, you will need to restart your computer.

If the problem persists after restarting your computer, please call Edge Products Technical Support.

Warranty Information

LIMITED 1 YEAR WARRANTY

Edge Products, LLC, (hereafter "**SELLER**") gives Limited Warranty as to description, quality, merchantability, fitness for any product's purpose, productiveness, or any other matter of **SELLER's** product sold herewith. The **SELLER** shall be in no way responsible for the product's open use and service and the **BUYER** hereby waives all rights other than those expressly written herein. This Warranty shall not be extended or varied except by a written instrument signed by **SELLER** and **BUYER**.

The Warranty is Limited to one (1) year from the date of sale and limited solely to the parts contained within the product's kit. All products that are in question of Warranty must be returned shipping prepaid to the **SELLER** and must be accompanied by a dated proof of purchase receipt. All Warranty claims are subject to approval by Edge Products Inc.

Under no circumstances shall the **SELLER** be liable for any labor charged or travel time incurred in diagnosis for defects, removal, or reinstallation of this product, or any other contingent expenses.

If the **BUYER** sends back a failed unit that is out of warranty and chooses to buy a refurbished unit, the refurbished unit will only carry a 90 day warranty. If the **BUYER** purchases a new unit at a predetermined discounted rate, it will have the standard 1 year warranty.

Under no circumstances will the **SELLER** be liable for any damage or expenses insured by reason of the use or sale of any such equipment.

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE **BUYER** HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.

IN THE EVENT THAT THE BUYER DOES NOT AGREE WITH THIS AGREEMENT, THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN THIRTY (30) DAYS FROM DATE OF PURCHASE FOR A FULL REFUND.

IMPORTANT INFORMATION ABOUT YOUR VEHICLE'S WARRANTY

Many of our customers ask, "Will your product void my vehicle's manufacturer's warranty?" While the answer is straightforward from a legal standpoint, it's important to educate our customers (and all aftermarket consumers) on some industry realities and offer some common sense precautions to minimize your risk. Edge is committed to providing quality products that are safe to use. Our products do not cause damage to a vehicle when used as intended. *Please keep in mind that towing in anything higher than the towing level and hard driving in race or extreme performance levels is not recommended.*

Consumers of aftermarket products are protected by the Federal Magnusson-Moss Warranty Act. The Act states that if something breaks on your vehicle and you take it in for warranty repair, the dealer must honor your warranty unless whatever modifications you have added to your vehicle actually caused the problem in question.

However, the reality is that many dealerships have been known to void warranties on vehicles that use aftermarket products as a matter of policy. This applies in particular to those aftermarket products that produce horsepower, such as performance enhancement "chips," modified intake manifolds, or aftermarket exhaust systems, regardless of product brand.

You have strong legal protection as a consumer in regard to your vehicle's warranty. However, Edge strongly recommends you always disconnect and remove your module/programmer and monitor when you take your vehicle to a dealer for warranty work. In addition, leaving the product connected may affect dealer diagnostic analysis and CAN tool functions. Edge makes every effort to produce product that can be easily removed. **NOTE:** *Even if you disconnect your unit, your dealer can detect the use of any programmer—even if the unit has been removed.*

Thank you for purchasing the *Evolution* by Edge Products, LLC. The *Evolution* programmer has been developed and produced from the highest quality materials available to ensure the best performance for years to come. If you have any concerns or questions, please contact us.

Note: *This warranty is void for any new products purchased through auction websites. Warranty is valid only for new products purchased through Authorized Dealers (proof of purchase required for all warranty claims).*

Commonly Used Acronyms

ACT = Air Charge Temp
ACV = Thermactor Air Control Sensor
AOD = Automatic Overdrive Transmission
APP = Accelerator Petal Position
AXOD = Automatic Overdrive Transmission
BAT = Battery Voltage
BCM = Body Control Module
BOO = Brake On/Off Switch
BP = Barometric Pressure Sensor
CCD = Computer Controlled Dwell
CCO = Converter Clutch Override
CDR = Crankcase Depression Regulator
CEL = Check Engine Light
CFI = Central Fuel Injection
CHT = Cylinder Head Temperature
CID = Cylinder Identification Sensor
CKP = Crank Position Sensor
CMP = Cam Position Sensor
CPS = Crankshaft Position Sensor
DTC = Diagnostic Trouble Codes
ECA = Electronic Control Assembly
ECM = Electronic Control Module
ECT = Engine Coolant Temp
EDF = Electric Drive Fan Relay
EDIS = Electronic Distributor
EGO = Exhaust Gas Oxygen Sensor
EGR = Exhaust Gas Recirculation
EGRC = EGR Control Solenoid
EOT = Engine Oil Temperature
EVP = EGR Position Sensor
EVR = EGR Valve Regulator
FDM = Fuel Delivery Module
FPM = Fuel Pump Monitor
FRP = Fuel Rail Pressure
HEGO = Heated Exhaust Gas Sensor
IAT = Intake Air Temperature
ICM = Integrated Controller Module
IDM = Ignition Driver Module
ISC = Idle Speed Control
ITS = Idle Tracking Switch
IVS = Idle Validation Switch (Diesel)
KAM = Keep Alive Memory
KOEO = Key On Engine Off
KOER = Key On Engine Running
KS = Knock Sensor
LOAD = Engine Load
LOS = Limited Operation Strategy
LPD = Line Pressure Desired
LUS = Lock-up Solenoid
MAF = Mass Airflow
MAFV = Mass Airflow Sensor Voltage
MAP = Manifold Absolute Pressure
MAT = Manifold Air Temp
MCU = Microprocessor Control Unit
MIL = Malfunction Indicator Light
MPH = Miles Per Hour
OHC = Over Head Camshaft
OSS = Output Shaft Speed
PCM = Powertrain Control Module
PFE = Pressure Feedback EGR Sensor
PIP = Profile Ignition Pickup
PSPS = Power Steering Pressure Switch
RPM = Revolutions Per Minute
SES = Service Engine Soon
SIL = Shift Indicator Light
SPARK = Spark Advance/Retard
SPOUT = Spark Output Signal (from ECA)
STAR = Self Test Automatic Readout
TAPS = Throttle Angle Position Sensor
TCM = Transmission Control Module
TFI = Thick Film Ignition System
TFT = Transmission Fluid Temperature
TGS = Top Gear Switch
THS = Transmission Temperature Switch
TPS = Throttle Position Sensor
TQC = Torque Control
TSS = Turbine Shaft Speed
TTS = Transmission Temperature Switch
VAF = Vane Air Flow Sensor
VAT = Vane Air Temperature
VCT = Variable Cam Timing
VSS = Vehicle Speed Sensor
WAC = WOT A/C Cut-off Switch
WOT = Wide Open Throttle

Technical Support: 888-360-3343

To expedite your support call, please have your Vehicle Information, Part Number, Serial Number, and Date of Manufacture ready prior to calling Technical Support. The *Edge Products* information is found on the label located on the bottom of the device.