

JUICE ATTITUDE

***Dodge 6.7L Cummins Series
Edge Juice and Attitude
Installation Instructions and Manual***

Old P/N: EJD3000DWAM

New P/N: 30107



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Edge Products
1080 South Depot Drive
Ogden, UT 84404
888-360-3343
www.edgeproducts.com
Manual Version 4

The Juice Module is a high performance product

It is strongly recommended to use EGT and boost gauges

THIS IS A HIGH PERFORMANCE PRODUCT. USE AT YOUR OWN RISK.

Do not use this product until you have carefully read the following agreement.

This sets forth the terms and conditions for the use of this product. The installation of this product indicates that the BUYER has read and understands this agreement and accepts its terms and conditions

DISCLAIMER OF LIABILITY

Edge Products LLC and its successors, distributors, jobbers, and dealers (hereafter **SELLER**) shall in no way be responsible for the product's proper use and service. THE BUYER HEREBY WAIVES ALL LIABILITY CLAIMS.

The **BUYER** acknowledges that he/she is not relying on the **SELLER's** skill or judgment to select or furnish goods suitable for any particular purpose and that there are no liabilities which extend beyond the description on the face hereof and the **BUYER** hereby waives all remedies or liabilities, expressed or implied, arising by law or otherwise, (including without any obligations of the **SELLER** with respect to fitness, merchantability and consequential damages) or whether or not occasioned by the **SELLER's** negligence.

The **SELLER** disclaims any warranty and expressly disclaims any liability for personal injury or damages. The **BUYER** acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this agreement and the **BUYER** agrees to indemnify the **SELLER** and to hold the **SELLER** harmless from any claim related to the item of the equipment purchased. Under no circumstances will the **SELLER** be liable for any damages or expenses by reason of use or sale of any such equipment.

The **SELLER** assumes no liability regarding the improper installation or misapplication of its products. It is the installer's responsibility to check for proper installation and if in doubt, contact the manufacturer.

LIMITATION OF 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 60 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.

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 SIXTY (60) DAYS FROM DATE OF PURCHASE FOR A FULL REFUND.

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

AFTERMARKET PRODUCTS AND YOUR VEHICLE'S WARRANTY

Many of our customers ask “will your product void my vehicle’s manufacturers warranty?”. While the answer is straightforward from a legal standpoint, we also want to educate our customers (and after-market consumers) on some industry realities and offer some common sense precautions to minimize your risk.

Consumers of aftermarket products are protected by The Federal Magnusson-Moss Warranty Act. The Act provides that if something breaks on your car and you take it in for warranty repair, the dealer must honor your warranty unless they can prove that whatever modifications you have added to your car actually caused the problem. Edge’s high quality products never have been proven to cause damage to a vehicle when used as intended. Please keep in mind that towing in anything higher than level two and hard driving in levels four and five are not recommended.

While as a consumer, you have strong legal protection with regards to your vehicle’s warranty, there is also a practical reality that different automotive manufacturers and dealers have greatly varying views on aftermarket products, in particular those that produce horsepower, such as performance enhancement chips, modified intake manifolds, or aftermarket exhaust systems. There are dealers and manufacturers out there that will use the presence of a horsepower upgrade to void your vehicle’s warranty. They will do this regardless of whose product you are using. Any aftermarket company that does not acknowledge this is misleading you. This is also the

reason that Edge focuses the bulk of their product development efforts on modules and digital monitors, which can be easily removed before taking your car to a dealer if required.

The bottom line is that while the law protects the consumer and provides for enforcement of the warranty, it is very difficult for most people to hire an attorney and fight a voided warranty. It is for this reason that Edge recommends **always disconnect and remove your module and monitor when you take your vehicle to a dealer for warranty work.**

The *Juice* Module is a high performance product!

It is strongly recommended that EGT gauges and boost gauges be installed with the use of this product.

THIS PRODUCT MUST BE REMOVED WHEN TAKING VEHICLE TO VEHICLE DEALERSHIP OR OTHER SERVICE FACILITY!!

LEAVING PRODUCT INSTALLED MAY AFFECT DEALER DIAGNOSTIC ANALYSIS AND SCAN TOOL FUNCTIONS!!

The installation of this product indicates that the BUYER has read and understands this agreement as well as the “disclaimer of liability” agreement contained at the end of this document and accepts its terms and conditions.

IMPORTANT: Read all Disclaimer, Warranty, and Installation Instructions before installing this product.

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).

About the Dodge Juice

Thank you for purchasing the Edge Juice Module for the Dodge Cummins Diesel®. The Juice module has been developed and produced from the highest quality materials available to ensure the best performance for years to come. If you have any questions, please contact Edge Products. We will be very happy to answer your questions about our complete product line.

The Juice Module is an add-on Engine Control Module (ECM) for the Cummins® Engine that offers additional features not available with the factory setup. Since it is an add-on ECM, it uses all the factory data, and then enhances the factory settings to optimize your truck's performance. These features include:

Engine temperature monitoring and power increase from the Juice module as engine reaches operating temperature

Three selectable power level settings via an in-cab 3-position switch (5 on-the-fly selectable power settings with the Attitude)

The Juice module offers a large power increase over stock throughout the rpm range, but the power is most noticeable in the midrange rpm's. This greatly improves drivability and towing performance. Transmission downshifting is greatly reduced, especially while passing or towing.

The Juice also regulates power delivery and timing based on engine temperature. This means that while the engine temperature is below 140° F no additional fueling or timing is delivered. At 140° F the module begins modifying timing and delivering fuel at 25% of the calculated additional fuel, and the percentage increases as the engine temperature increases, until at full engine temperature (170° F) the Juice delivers 100% of the calculated additional fuel.

Dodge Juice Getting Connected

Supplied Items:

1. Edge Juice Module
2. Harness cable (3 assemblies)
3. Three Wire Ties
4. Two Velcro Strips
5. Power Level Switch (if no Attitude)
6. Fuse Tap

Required Tools:

1. 10mm Box-end wrench or socket/ratchet (to connect ground wire)

Please read these instructions completely so that you understand each step prior to installation.

The Edge Juice Module

This picture shows the Edge Juice Module with the harness cable and Edge Attitude Display wiring (Attitude instructions on pg. 21)

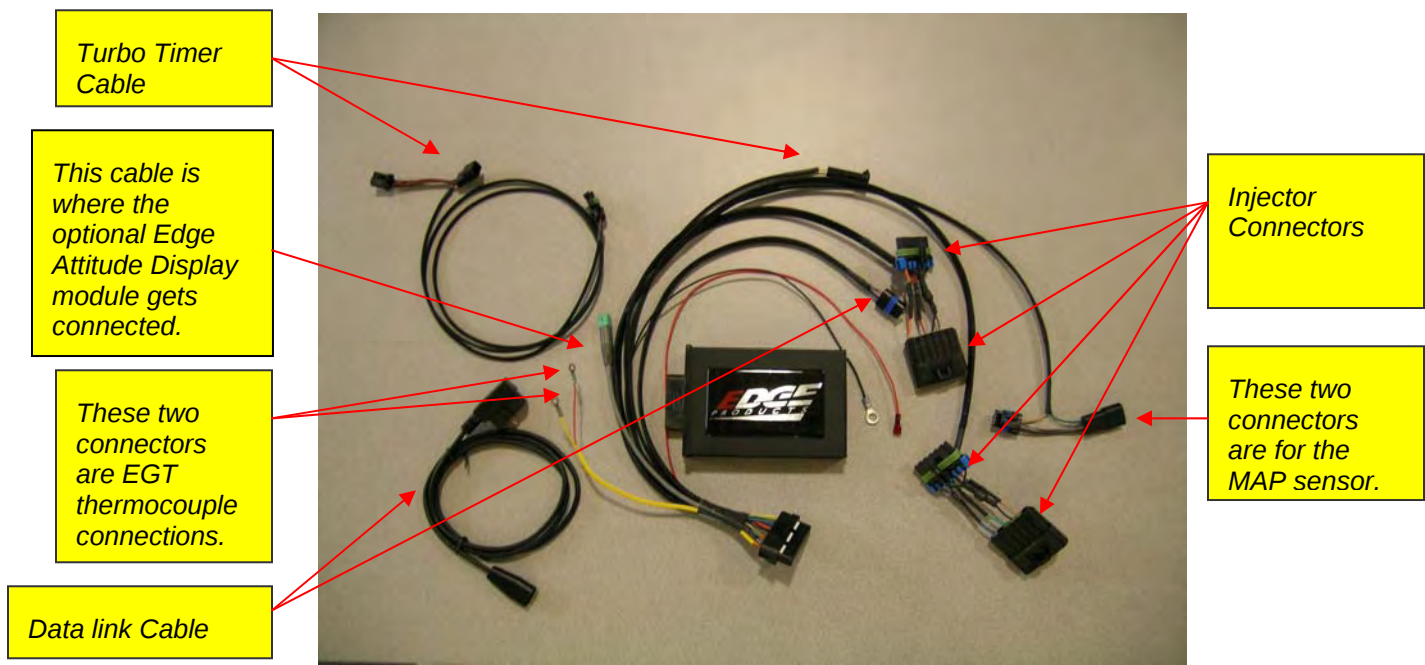


Figure 1

Mounting the Juice Module

The Edge Juice Module is best mounted either along the inside of the battery located near the driver's side fender or on top of the fuse box using the supplied velcro. Note that installation is much easier if you do not mount the juice module until after all of the harness connectors are connected, and the power and ground lines are connected.



Figure 2

Connecting the Harness

1. Disconnect the 2 stock injector connectors by squeezing the tab on the side of the connector, carefully pulling them apart. The connector for injectors 1, 2, & 3 is located closest to the front of the vehicle.

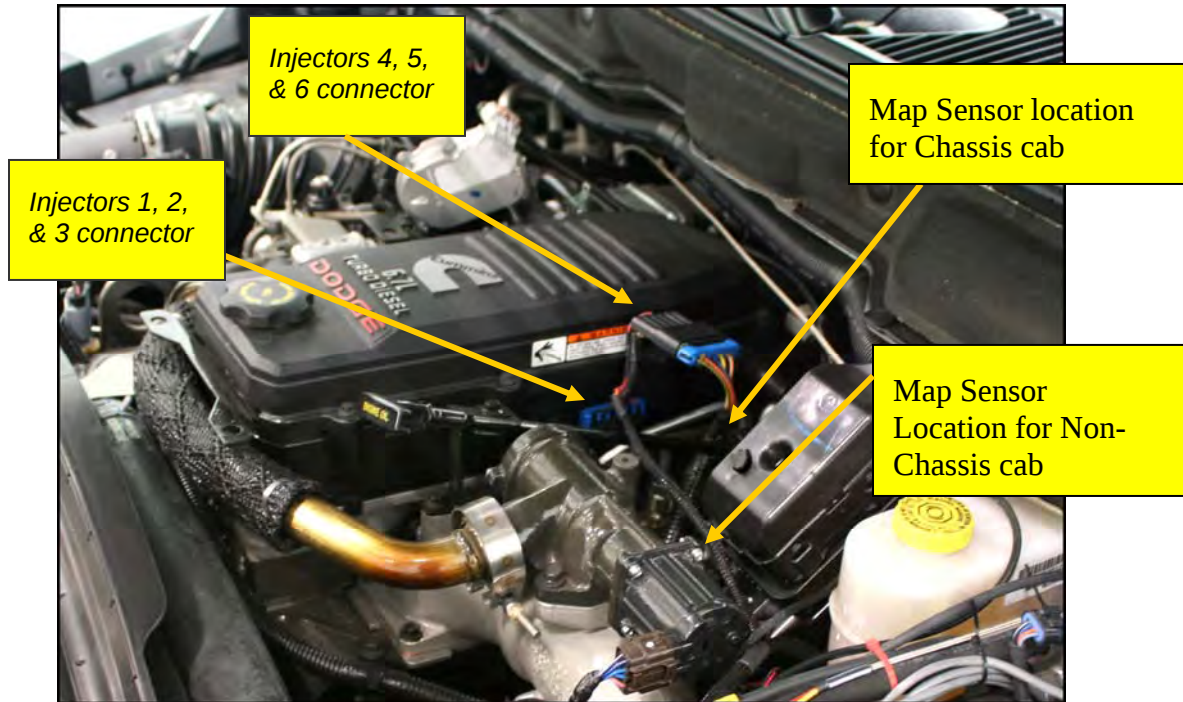


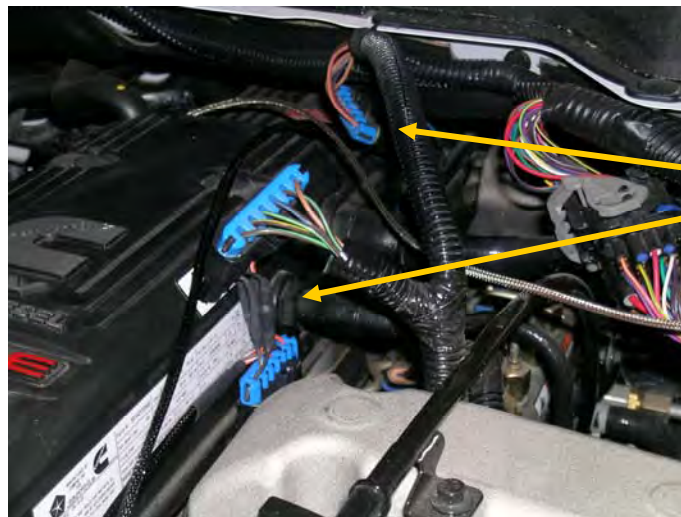
Figure 3

Figure 4

2. Gently insert the Juice connectors into the stock connectors that are fixed to the block and lock in place. Gently insert the stock connectors to the other end of the Juice connectors. The Juice connector for injectors 1, 2, & 3 is closest to the Juice box, and has Orange/White, Red/White and Brown/White wires and a shorter cable length. The connector for injectors 4, 5, & 6 has Blue/White, Green/White, and Tan/White wires and a longer cable length.



Unplug the
stock injector
connectors

Figure 5

Insert the
Edge Juice
injector
connectors
between the
stock
connectors

Figure 6

Notice: Use caution when inserting connector bodies. If the connector does not slide smoothly, remove the connector, inspect the pins, and retry installation. Do not pull on the wires when removing the Juice harness.

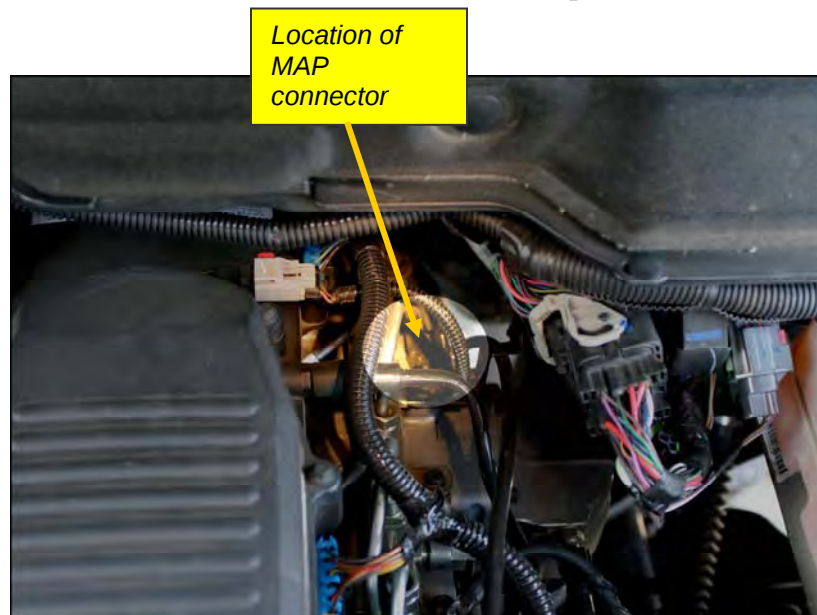
3. Next, connect the ground to the truck by removing the 10mm bolt from the fender, above the battery on the driver's side. Add the black ground wire with the round terminal to the wires already on the bolt. Replace and tighten the bolt.



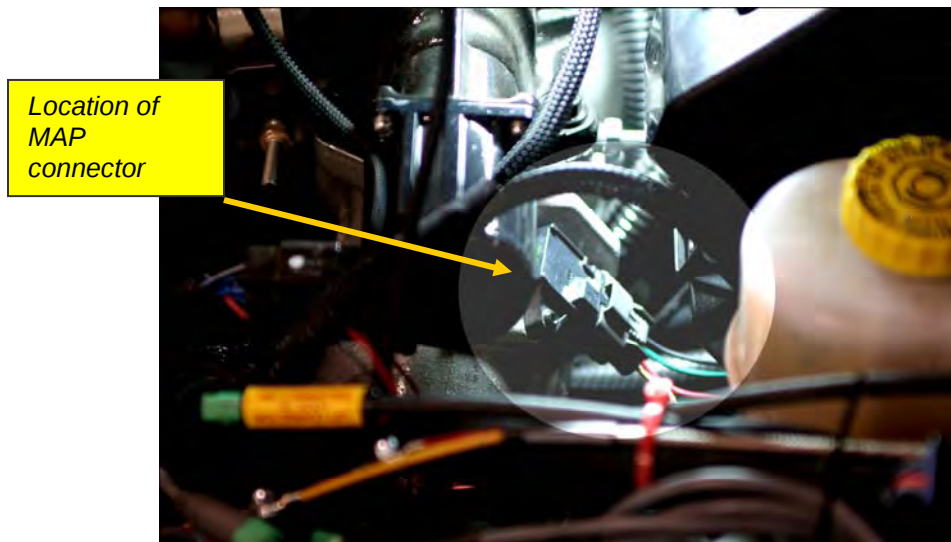
Figure 7

4. Now install the MAP connector which is between the front and back injector connectors on top of the motor, see figures 8 & 9.

The MAP connector location is shown in the picture below.



Chassis Cab Map Location



Non Chassis Cab Map Location

5. Next, install the data link and turbo timer connectors. The data link connector is inside the cab below the steering column.

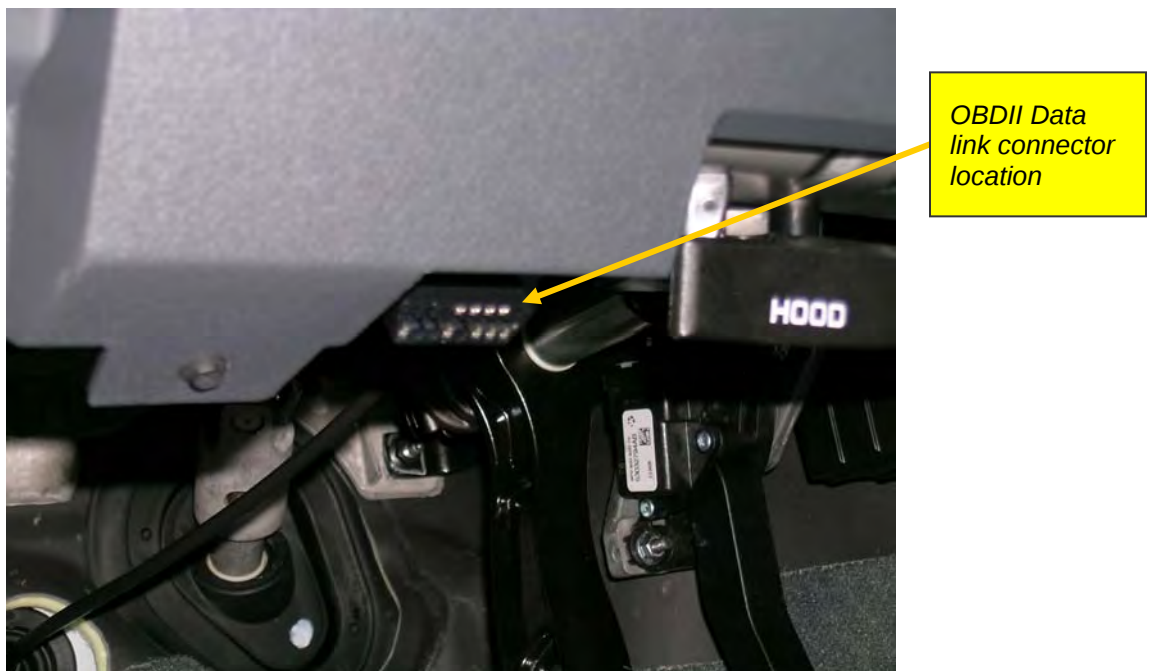


Figure 10

Connect the supplied data link cable to the data link connector.

Connect the
Edge Juice
data link as
shown

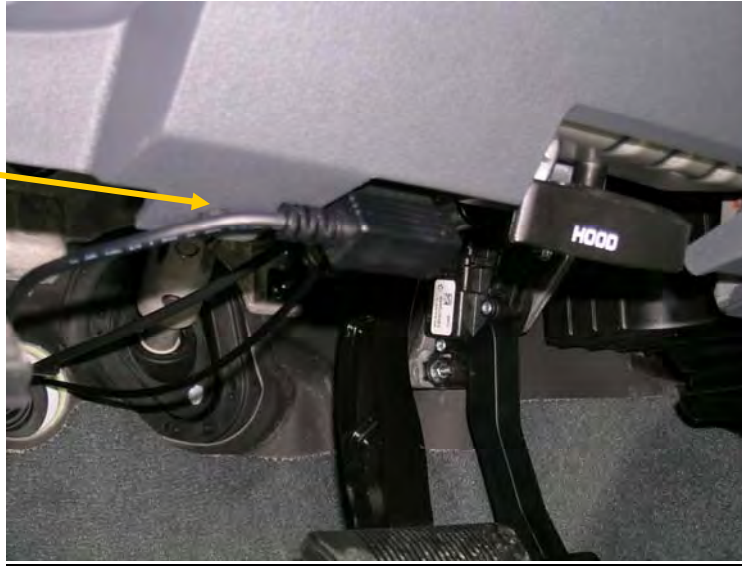


Figure 11

Locate the key position connector inside the steering column. You will need to pull away the plastic covering as shown below to gain easier access. The connector is located on the other side of the steering column plastic as shown. (**Turbo timer will not function w/out Attitude**)

Turbo timer
connector
location

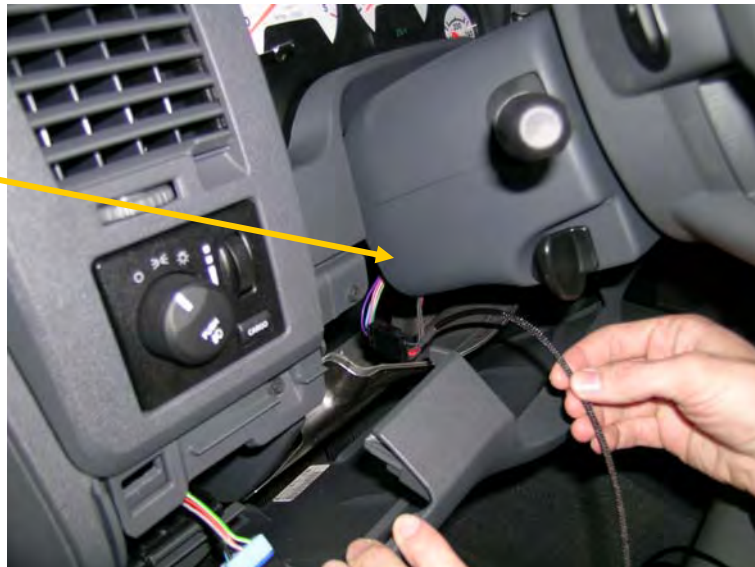


Figure 12

Tip: Look at the Turbo Timer connector from the Juice harness to get a better feel for what you are looking or feeling for. The connector can be reached from underneath.

Connect the Edge turbo timer cable to the key position connector and connect the factory connector to the other end of the Edge cable. The arrow points to the connector's location.

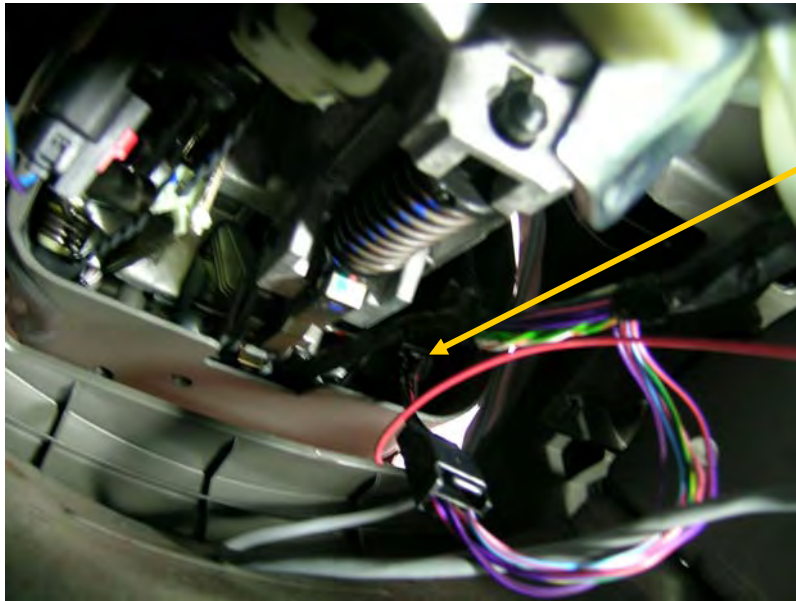
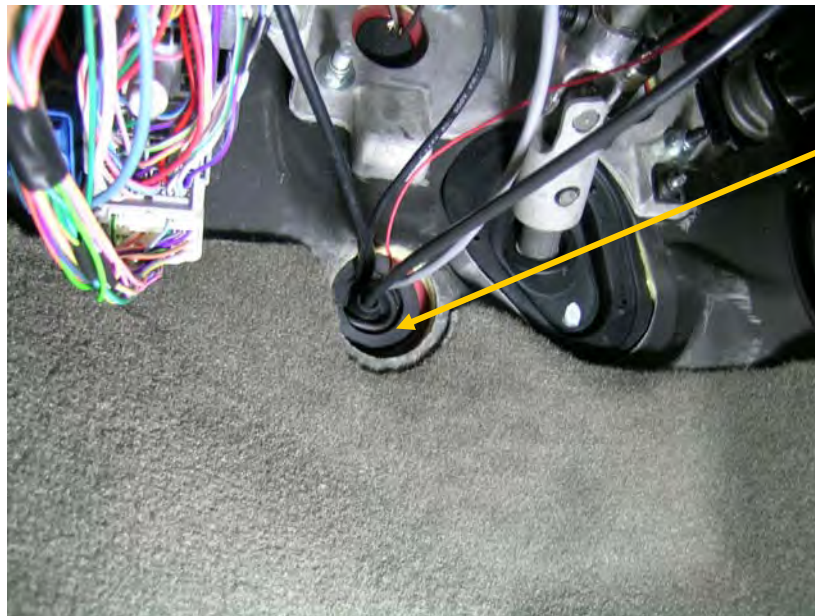


Figure 13

Route both the data link and turbo timer cables through the firewall grommet.

Tip: The turbo timer can be shut off by using the panic button located on the key fob; although once this option is used, either the **lock** or **unlock** button on the key fob needs to be used in order for the turbo timer to be active again.

Chassis Cab Note: *The key FOB operation is unreliable while the turbo timer feature continues to run your vehicle after turning off the key. When the turbo timer is running it is recommended that you either lock the doors manually or repeatedly press the lock button on the FOB until you can verify that your doors have been locked.*



Firewall
grommet
location.

Figure 14

Connect the data link and turbo timer cables to the corresponding connectors on the Juice harness.



Connect the
data link and
turbo timer
cables to the
Juice harness

Figure 15

6. Connect the red power wire by opening the fuse box, remove fuse 30 (15 Amp spare fuse), and re-insert the fuse with the supplied fuse tap. Connect the terminal of the red power wire to the fuse tap making sure that you **allow for clearance of the fuse box lid**. If the terminal

does not fit snugly on the fuse tap, gently squeeze the terminal with needle nose pliers or something similar to make it fit more securely.

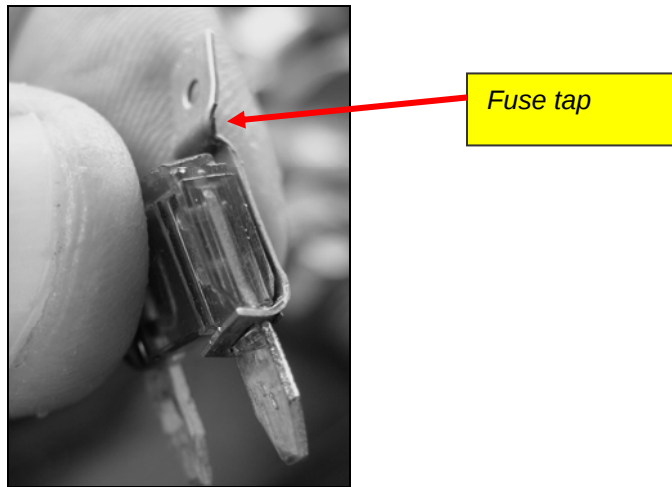


Figure 16

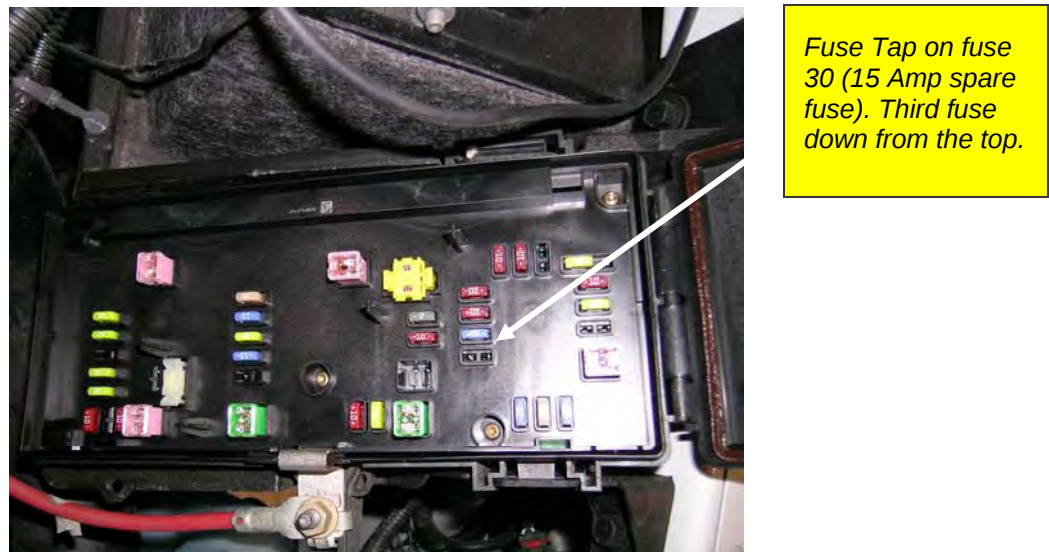
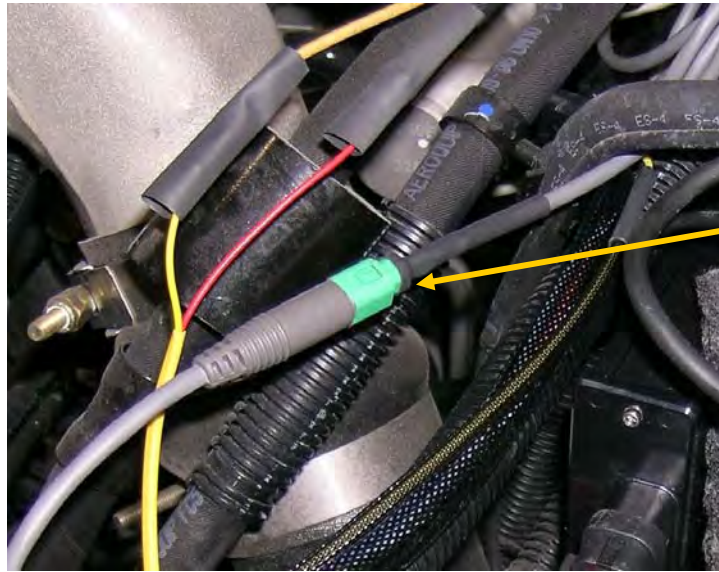


Figure 17

Route the Red power wire out of the fuse box on the side next to the battery.

7. Run the Attitude or 3-way switch cable through the firewall grommet near the steering column. Connect to the corresponding connector on the Juice harness.



Attitude or 3-way
switch connection

Figure 18

Final Inspection

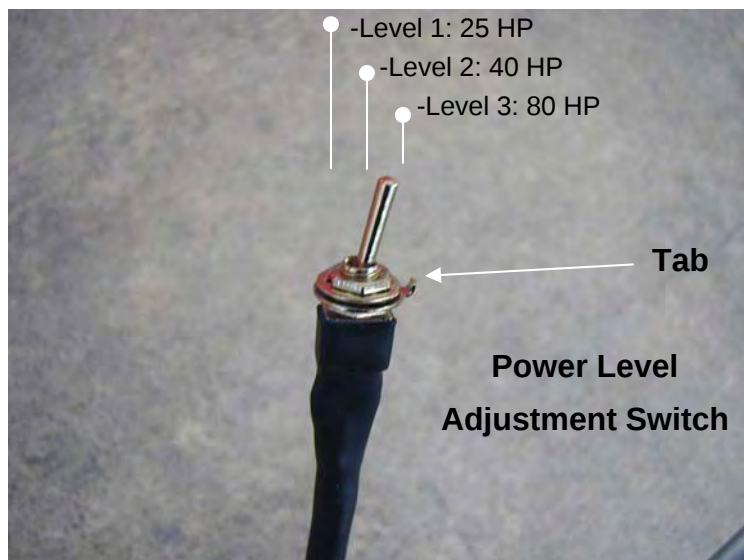
8. Recheck all connections for a properly secure installation. Using the supplied wire ties, secure the wiring harness to prevent possible heat damage.

Start the engine. The engine should start and idle like a stock truck. If the engine does not start or run properly, turn off the motor, remove the key from the ignition, then check the Juice module connections, making sure all connectors are fastened tightly. If failure conditions still exist, contact your Edge Products dealer or Edge Products technical support (1-888-360-3343).

Using the Juice

Adjusting Power Levels

The Juice has three power levels which are adjustable via a 3-position toggle switch. This picture shows the switch and the corresponding power levels. The wire connected to the switch is long enough to allow installation of the switch in the cab of your vehicle.



The *Attitude* monitor allows five power levels plus stock. The Juice module was designed to allow the user to easily select an appropriate power level for normal driving or for towing.

It is recommended that you use the Tow/Haul transmission mode while towing. This provides torque converter lockup in gear 3 reducing transmission heat, and also raising the shift rpm threshold to keep the rpm's higher. It is recommended that you maintain engine rpm above 1800 while towing. When towing, the Juice module allows the engine to pull many grades in the mid rpm's rather than having to downshift and pull them in the high rpm's. This provides for lower EGT (Exhaust Gas Temperature) with the same power output. EGT rises significantly with rpm--especially above 2500. It is highly recommended that you install an EGT gauge while using the Edge Juice. You can also opt to monitor and limit the EGT with the *Attitude* monitor to maintain lower EGT levels.

It is recommended while towing you use power levels 1 or 2 due to EGT and transmission stress

Power Gains

The following power gains are representative of an actual stock test vehicle with no modifications except the Juice module. These gains were measured on a SuperFlow 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 Edge Juice module. Power gains may vary somewhat on a different vehicle or in different geographic settings.

	<i>Horsepower</i>	<i>Torque</i>
Level 1:	25 HP	70
Level 2:	40 HP	90
Level 3:	65 HP	160

Making Sense of It All

This section is designed to help you understand how the additional power will change your driving experience as well as help you figure out what power level will best suit your driving style.

The first thing you will probably notice, especially if this is your first time driving a diesel truck with a performance module, is that this is a whole different animal. You will experience more power, quicker take-offs, better passing and acceleration, and possibly better fuel economy. Power level one is specifically designed to maximize fuel economy improvements. (if you can put off the little guy on your shoulder telling you to **‘step on it hard’**).

If you are towing, the beauty of the extra power the Edge module delivers is that not only will you be able to maintain speed going up a hill, but the added power will also keep you in a higher gear, so your transmission will

not keep “hunting” for lower gears. We recommend level one or level two for towing applications.

The remaining power levels are designed to match fueling with any additional upgrades you may have done to your vehicle. Level 3 is as far as you should go on a stock truck and should never be used while towing. Level 3 is designed to maximize driving performance in all situations except towing.

Levels four and five are race levels and are designed to be used with an upgraded drive train. If you have modified your injectors, upgraded the transmission, changed a turbo or performed other similar enhancements, levels four and five will match fueling to the additional performance created by these upgrades. On a stock truck, it is possible to overstress the engine and transmission while driving in levels four and five.

EGTs: What they mean and why

EGT stands for exhaust gas temperature, and is the single most important indicator of how a diesel engine is performing. Unlike a gasoline motor, a diesel motor will continue to make power as more fuel is added. As more fuel is added, heat will be generated until the motor just gets too hot and things start to melt. This is a situation you want to avoid. Exhaust gas temperature is the ideal measurement of how hot the motor is, since temperature fluctuations in exhaust gas are almost instantaneous. It is possible to generate excessive EGT on a stock truck, particularly if you are towing. This is why we always recommend installing an EGT gauge and why we offer the Attitude monitor, which monitors EGT and will automatically defuel your truck when EGTs get too high. In our experience 1350 degrees F is about as high as you want to let your EGTs go. Keep in mind, the stress on your engine created by the heat is a function of both temperature and time.

As you drive your truck in the various power settings, keep your eye on the EGTs. Depending on how you drive and where you drive, you may find a particular power level is more suitable to your power needs.

The Juice Module and your Transmission

The automatic transmission has a fluid-filled clutch-like device called a torque converter. This device uses the spinning motion of the motor to drive the transmission which drives your wheels. As the truck speed stabilizes, the torque converter engages a mechanical connection which locks the two halves of the torque converter, so the output shaft is going the same speed as the input shaft.

This mechanical linking of the two halves is called ***Torque converter Lock-up***. If the motor produces too much power, this mechanical lock-up can start to slip. When this slippage occurs, the Juice module reduces the power output to prevent continuous slip (only available with Attitude monitor). This is a great feature that provides an extra level of protection for your vehicle. Please keep in mind however, that if you run in level 4 or 5, the additional power is so great that it is possible to overstress a stock transmission if you drive too hard.

Edge on your Side

Edge takes a great deal of pride in the quality of our customer service. If you have any questions or concerns about your Juice module, please feel free to call us at 888-360-3343. Our tech support desk is open from 8:00am to 12:00pm & 12:30pm to 5:00pm Mountain time Monday through Friday.

Attitude Instructions



About the Attitude

The *Attitude* allows you to monitor the performance of your vehicle's vital engine components and output values. The following parameters can be displayed on the main *Attitude* screen:

- Boost PSI
- EGT F (Exhaust Gas Temperature)
- Barometric Pressure (InHg)
- Power Level
- Speed MPH
- Engine Coolant Temp F
- ¹Gear (Torque Converter Lock)
- Intake Air Temp F
- Load % (amount of fuel delivered by stock computer)
- Transmission Temp F
- Throttle %
- RPM
- Percent back down due to high EGT or Boost
- DPF On/Off

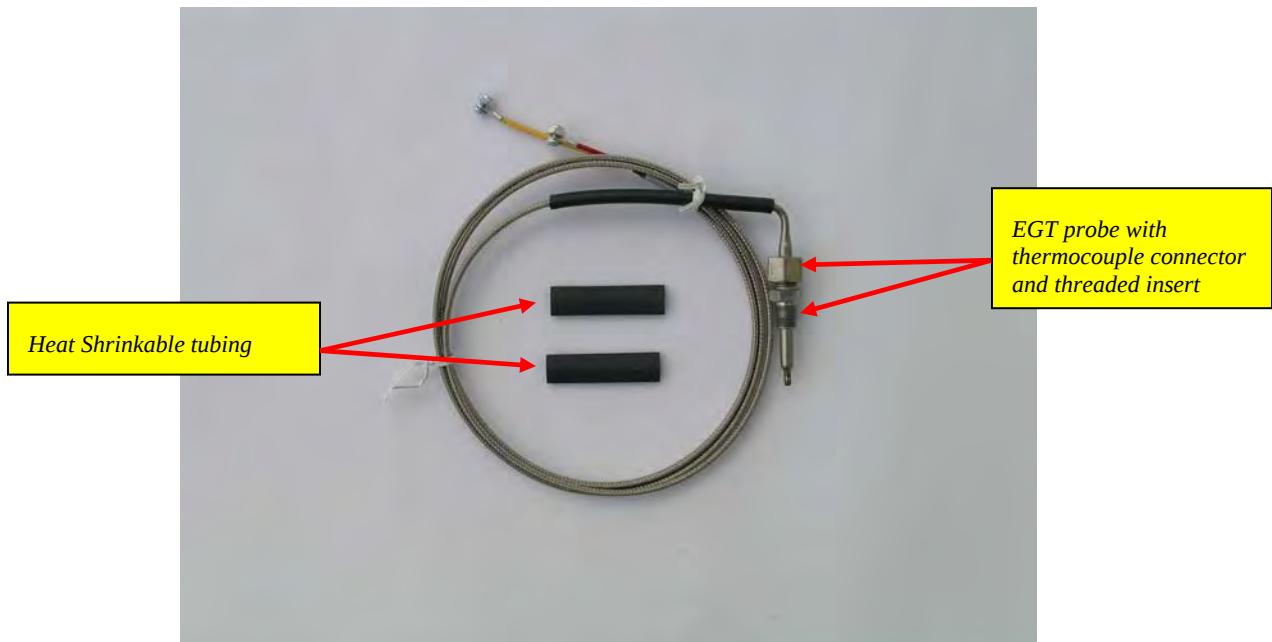
One of the most powerful features of the *Attitude* is the option to monitor the EGT of your vehicle and automatically lower the power output to maintain an EGT below a maximum desired level. The *Attitude* will also alert you both visually and audibly at pre-set engine parameter thresholds and also record the maximum values reached in each of the parameters.

Two more great features include Turbo Cool Down Timer and Retrieving and clearing Diagnostic Trouble Codes (DTC).

Installing the EGT Thermocouple

Tools Needed:

1. Drill
2. 1/8" drill bit or similar size (for pilot hole)
3. 21/64" (best size) or 5/16" drill bit
4. 9/16" wrench or socket
5. 5/8" open end wrench
6. 1/8" National Pipe Tap
7. Phillips screwdriver
8. 5/16" or 8mm wrench (for thermocouple connection to Juice)

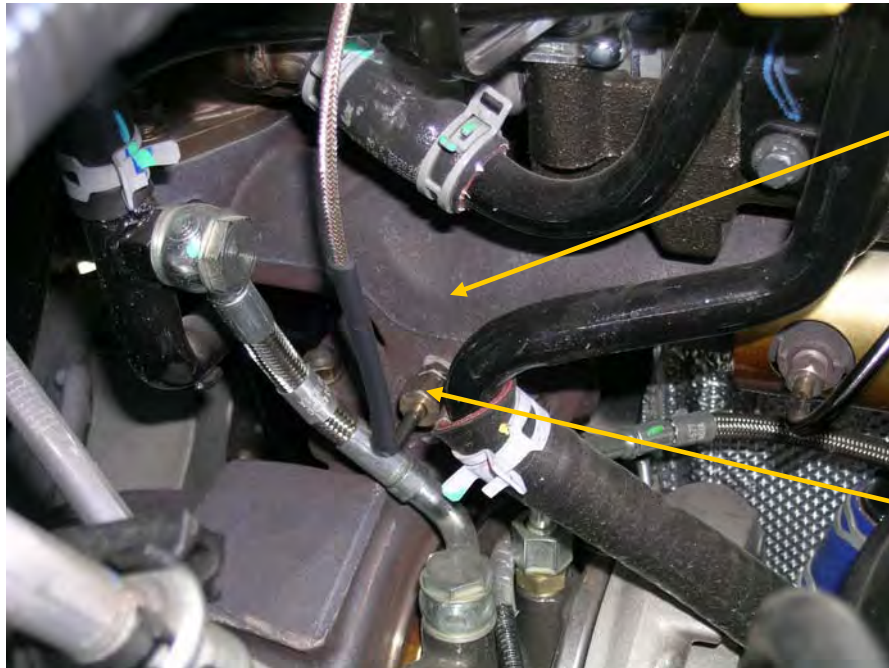


1. To install the EGT probe, first determine where you will drill the hole. The easiest place is shown in the picture on the next page.

TIP: *Idle your engine for a few minutes after EGT probe is installed to rid of any metal shavings that may end up in the manifold.*

Warning: Do not allow the metal on the thermocouple wire to touch the positive battery terminal, it will start to melt.

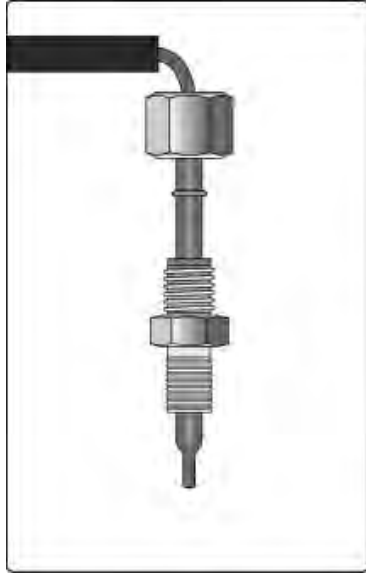
Note: Top arrow indicates a secondary location for EGT probe, bottom arrow was drilled with a right angle drill.



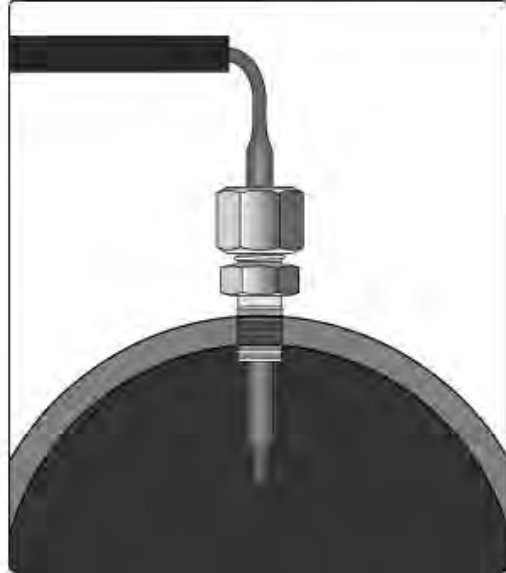
The EGT thermocouple installed into the drilled and tapped exhaust manifold.

The EGT thermocouple installed into the drilled and tapped exhaust manifold.

2. Drill a pilot hole with the 1/8" or similar size drill bit. Then drill a 21/64" or 5/16" hole and use the 1/8" National Pipe Tap to cut the threads in the hole. The pipe tap is tapered, so you 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 far to prevent the probe from touching or getting too close to the manifold wall on the opposite side.
3. Now that you have drilled and tapped the manifold, install the fitting by tightening the tapered thread end into the manifold. Ideally the tip of the fitting should be flush with the inside of the manifold wall, and not much deeper. Tighten the fitting so that it is securely mounted. To install the probe in the fitting, slide the probe into the fitting and tighten the top nut of the fitting just tight enough to keep the probe firmly mounted.



EGT probe



EGT probe inserted into exhaust manifold.

Getting Connected

The Attitude monitor connects under the hood to the Edge *Juice* module. Follow these steps to install the Attitude:

1. Place your *Attitude* monitor on the dash of your vehicle approximately where you want it installed and run the cable through the firewall grommet next to the other cables. Or you can feed the cable through the open driver's door and into the engine compartment via the slot near the hood hinge.
2. Using the supplied Velcro, attach the bracket to the surface of your dash, and secure the Attitude to the bracket using the two-sided tape (see figure 1, Dodge 2003 dash). Desired mounting locations will vary widely.

TIP: Before applying Velcro to your dash, use a cleaning solvent like rubbing alcohol to remove any non-sticking substance like Armour All.

Figure 1



After the bracket is mounted, use the supplied two-sided tape to secure the Attitude to the bracket.

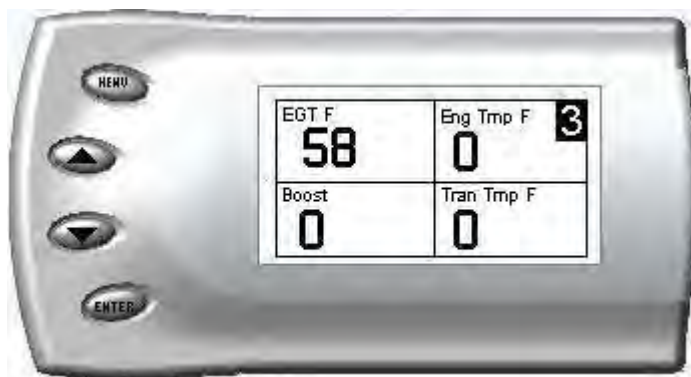
Changing the Display View

1. Connect the *Attitude* to your *Edge Juice* module by snapping together the cables with green connections. Secure any excess cable to prevent entanglement with moving engine parts.

Once your *Attitude* monitor is installed successfully and you have turned on your vehicle, you will see a screen similar to the following:



Press the <ENT> key to accept the terms and conditions in your Owner's Manual. A screen similar to the following appears indicating that your Juice and Attitude were installed correctly.

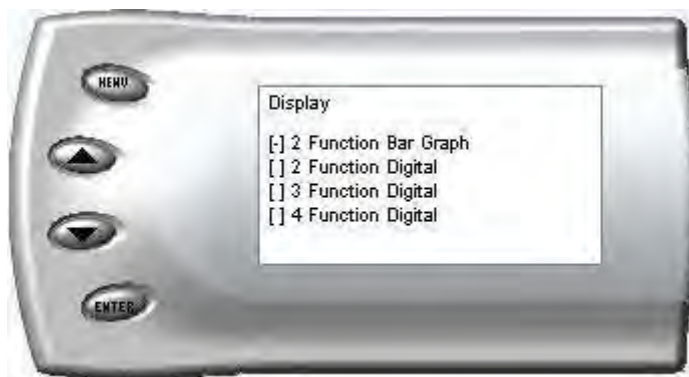


The *Attitude* allows you to view multiple engine parameters on the same screen. To select a desired view, perform the following steps:

1. Press the [Menu] button until the *Setup* screen appears:

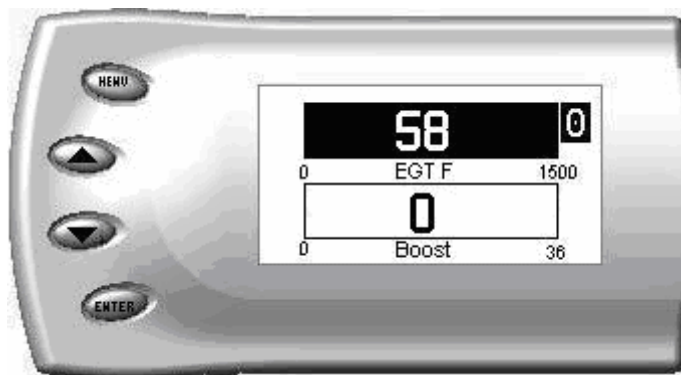


2. Select the Display option and press the [Enter] button. The following screen appears:

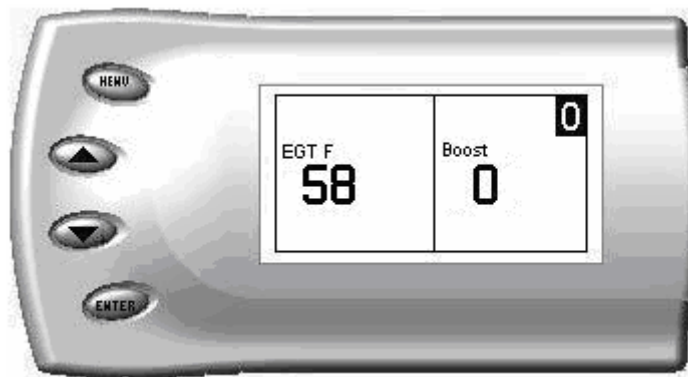


3. Select the desired viewing option by using the up and down arrows and pressing the [Enter] key. Below are examples of the display options:

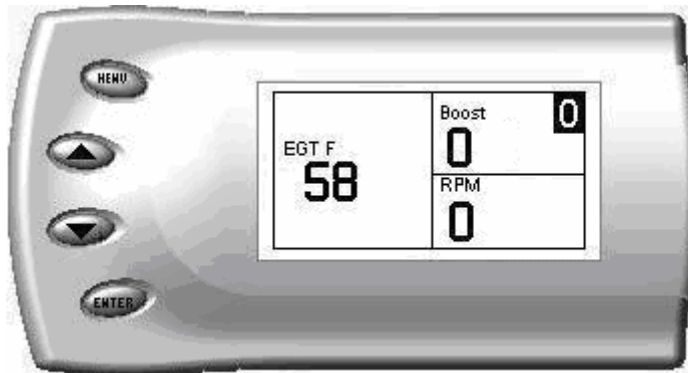
Two Function Bar Graph Display Sample



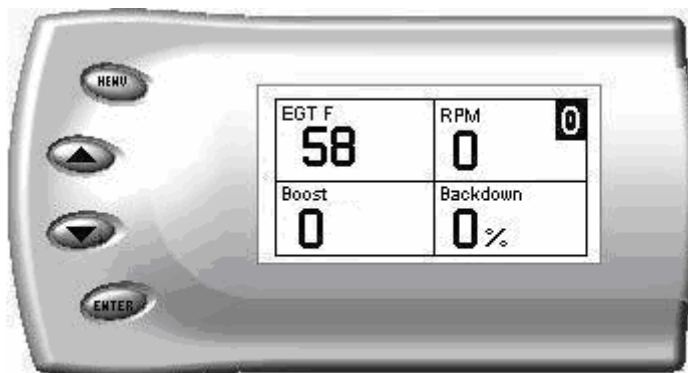
Two Function Digital Display Sample



Three Function Digital Display Sample



Four Function Digital Display Sample



Changing the Variables on the Screen

The following is a list of variables that can be displayed on the Attitude:

- Boost PSI
- EGT F (Exhaust Gas Temp)
- Barometric Pressure (InHg)
- Speed MPH
- Engine Coolant Temp F
- Gear (TCC Lock)
- Intake Air Temp F
- DPF Regeneration (On or Off)
- Load %
- Transmission Temp F (Will read N/A until the motor is running)
- Throttle %
- RPM
- Percent back down due to high EGT or Boost

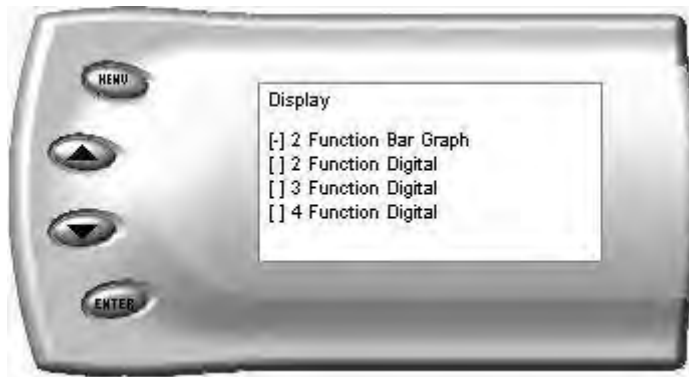
Display

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

1. When viewing the main screen of variables, press the [Menu] button. The following screen appears:



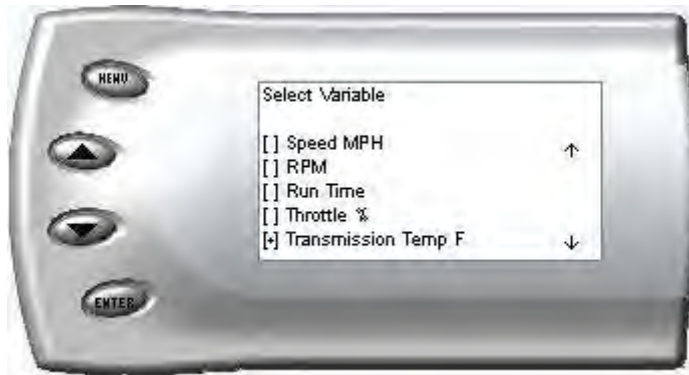
2. Select the Display option and press [Enter]. The following screen appears:



3. Select the desired display style you would like and press [Enter]. Depending on which option you choose, a screen similar to the following appears:



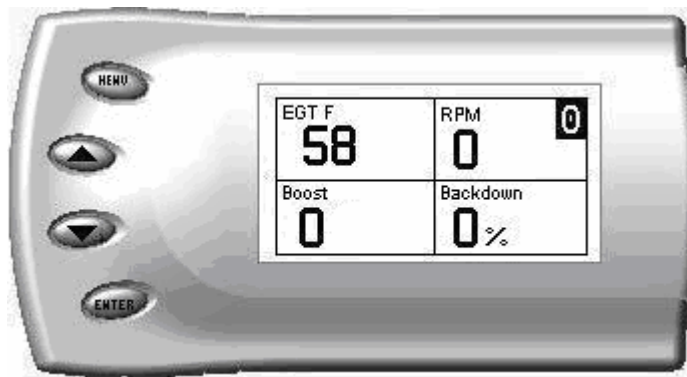
4. This screen lists the current variables you have selected to view and their respective positions on the screen (i.e., TOP LEFT, etc.). Select the variable you would like to change and press [Enter]. A screen listing the possible replacement variables similar to the following appears:



5. Select the variable you would like to view and press [Enter]. The Setup Digital Displays screen appears again listing the variable options you have chosen to view. If you have no more changes, select the *Set As Display* option and press [Enter]. The main screen appears with your desired variable in view.

Adjusting the Backlight

When viewing engine parameters (like the sample below) press the [Enter] button to adjust the backlight. Each time the [Enter] button is pressed, the backlight will change to either bright, dim, or off.



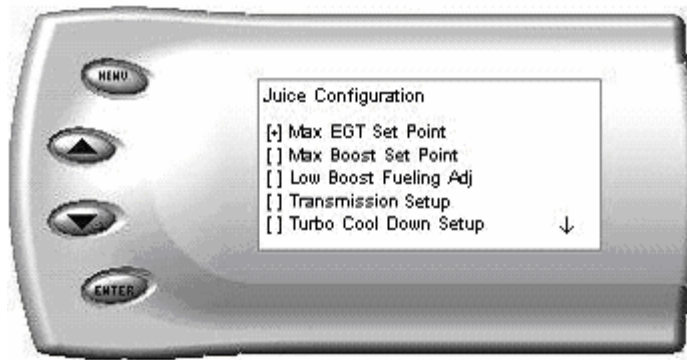
The *Attitude* allows you to configure the Juice module in a variety of ways. To change the Juice configurations, perform the following steps:

Juice Configuration

1. Press the [Menu] button until the setup screen appears:



2. Select the *Juice Configuration* option and press [Enter]. The following screen appears:



3. Select the desired option and press [Enter]. The following are descriptions of each of the Juice Configuration options available:

Juice Configuration

- Max EGT Set Point
- Max Boost Set Point
- Low Boost Fueling Adjust
- Turbo Cool Down Setup
- Transmission setup
- Tire Size
- Timing Option

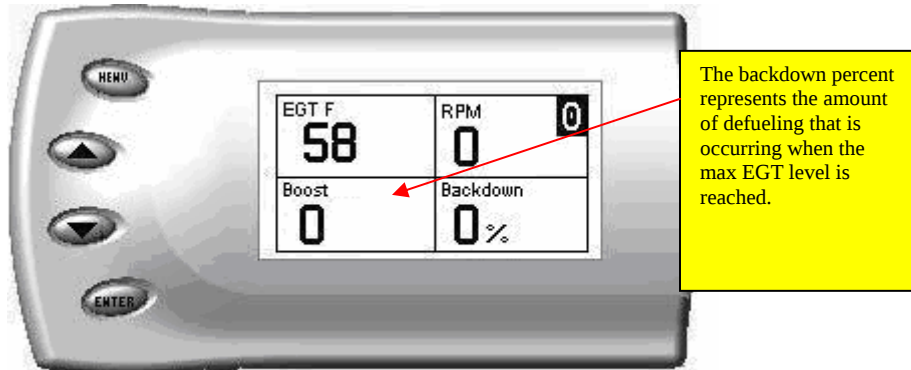
Max EGT Set Point

The Max EGT set point allows you to control the maximum EGT. As the exhaust gas temperature approaches the EGT set point, a percentage of defueling occurs. This percentage is represented by the backdown value you can display on the screen. The percentage represents the amount of *defueling* that is occurring due to the max EGT value being reached. In other words, fueling is decreased at higher percentages. When this value reaches 100% the fueling delivered by the Juice module will be totally disabled. However, **stock fueling will allow the truck to reach its stock EGT levels** which may exceed the preset *Max EGT Set Point* which you set in the Attitude.

Important Note: Any other high performance modifications in addition to the Juice can allow the fueling to exceed stock EGT levels even after 100% defueling by the Attitude is reached, which may result in detrimental EGT levels.

Note: Along with a diesel particulate trap your vehicle is equipped with a NOx (Oxides of Nitrogen) trap. This trap is designed to minimize the amount of NOx that your vehicle emits by absorbing the NOx into the trap. Once the trap is full the vehicle will automatically regenerate the trap by

shutting off the intake and opening the EGR (exhaust gas recirculation) valve. This process will cycle on and off, thus causing an increase in EGT (exhaust gas temperature). The increased EGT allows the trapped NO_x to be removed. While this process is happening you will notice a fluctuation in EGT, even while maintaining a constant load. This process will occur as often as needed and is necessary for the proper operation of your vehicle's emission reduction system.



After selecting the *Max EGT Set Point* option from the Juice Configuration screen (previous steps), the following screen appears:



2. Change the Max EGT set point by pressing the up and down arrow keys to select the maximum temperature that you want the exhaust gas temperature to reach, then pressing [Enter]. When the exhaust gas temperature reaches this value, the power delivery will be decreased to prevent the temperature from exceeding this set value.

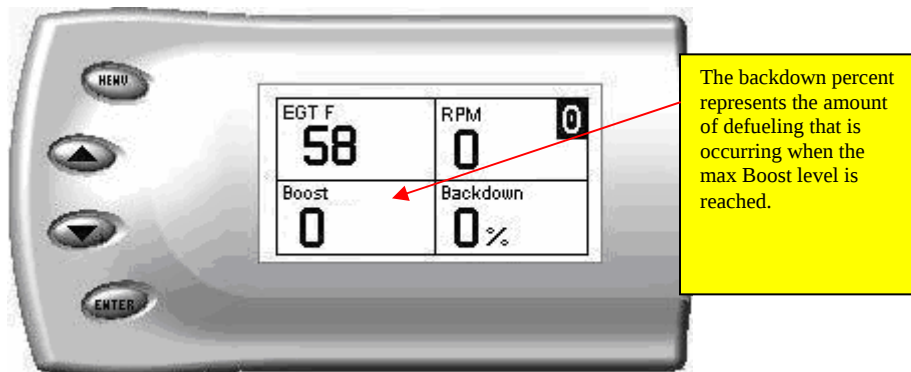
Max Boost Set Point

The Max Boost set point allows you to control the maximum pressure from the turbo charger. As the turbo boost approaches the maximum boost set point, a percentage of defueling occurs. This percentage is represented by the backdown value you can display on the screen. The percentage represents the amount of *defueling* that is occurring due to the max boost value being reached. In other words, more fueling is decreased at higher

percentages. When this value reaches 100% the fueling delivered by the Juice module has been totally disabled. However, stock fueling will allow the truck to reach its stock boost levels which may exceed the preset *Max Boost Set Point* which you established in the Attitude.

Important Note: Any other high performance modifications in addition to the Juice can allow the fueling to exceed stock Boost levels even after 100% defueling by the Attitude is reached, which may result in detrimental Boost levels.

Important Note #2: The amount of boost achieved for your vehicle will vary; *the max boost that the factory sensor will read to is 40psi, so the attitude will only display up to that point.* Depending on elevation and other factors, you may have to change the default max boost set point and boost alert to accommodate your conditions.



After selecting the *Max Boost Set Point* option from the Juice Configuration screen (previous steps), the following screen appears:



3. Change the Max Boost set point by pressing the up and down arrow keys to select the maximum pounds of boost that the turbo is allowed to produce. Once the number is set, press [Enter]. When the boost level reaches this value, the power delivery will be reduced so as not to allow the boost to exceed this set value.

Disabling EGT and Boost Backdown

There are times you may want to disable the EGT and Boost backdown feature for a limited period such as in a competition setting. For whatever the reason you can disable the EGT and Boost backdown for a period of 1-120 minutes.

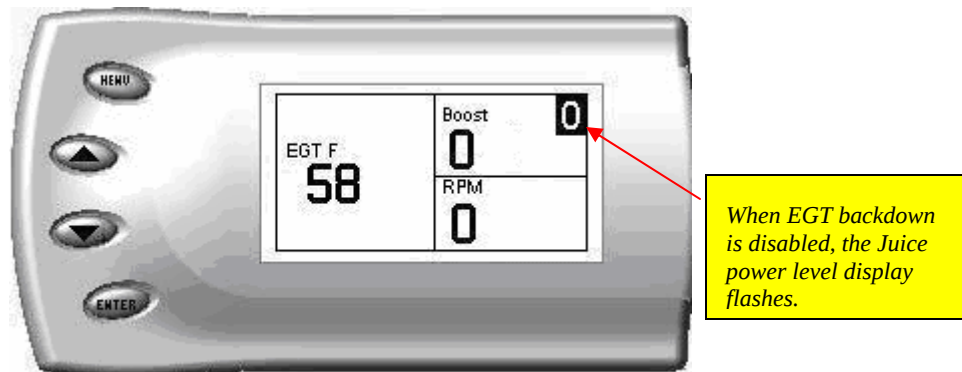
Warning: Disabling this feature could lead to dangerous EGT and Boost levels. Transmission slip protection is also disabled when you use this function.

To remove the option that backs down the power at a set point, perform the following steps:

1. Make sure the Attitude is set to view the EGT level as one of the engine parameters.
2. When you are viewing EGT as one of the engine parameters, press [Enter] twice quickly and the following screen will appear:



3. The number on this screen represents the number of minutes the Backdown feature will be disabled. Press the up or down arrow keys to select the desired number of minutes you would like this feature disabled. (The number of minutes you do **NOT** want your power decreased because of high EGT or Boost levels.)
4. After you have selected the number of minutes you would like the backdown option disabled, press [Enter]. The screen will return to your previous view mode, and the Juice power level indicator will flash until the designated time for disabling has been reached. When the Juice power level indicator quits flashing, your set max EGT and Boost backdown levels will go back into effect.



Low End Responsiveness Adjustment

In the Juice Configuration menu, select the *Low End Responsiveness* option (Figure #1)

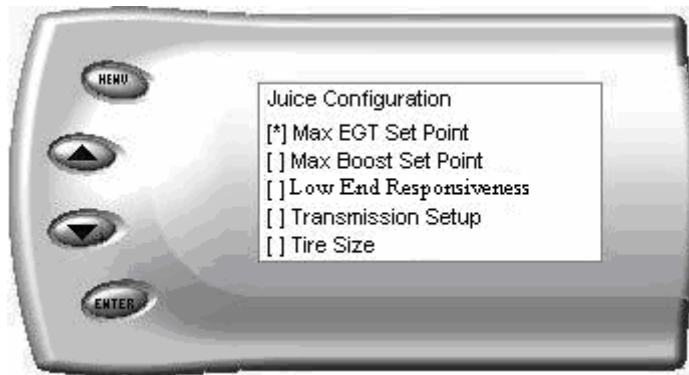


Figure #1

You will then see the Low-End Responsiveness menu (Figure #2). On this screen you will see the power level on the left, and the current Low-End Responsiveness sub-level setting on the right. To change the Low-End Responsiveness sub-level, first select the power level where you want to adjust the Low End Responsiveness, press Enter.

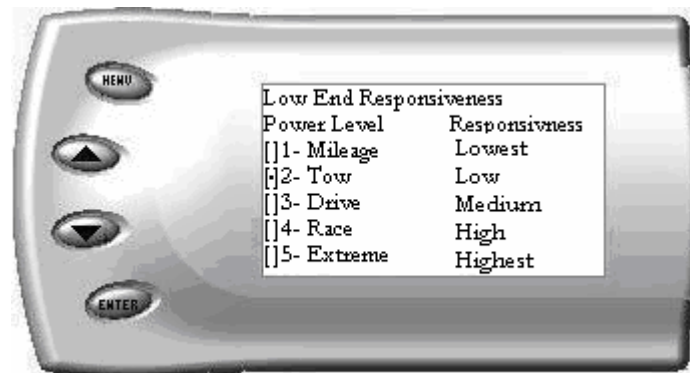
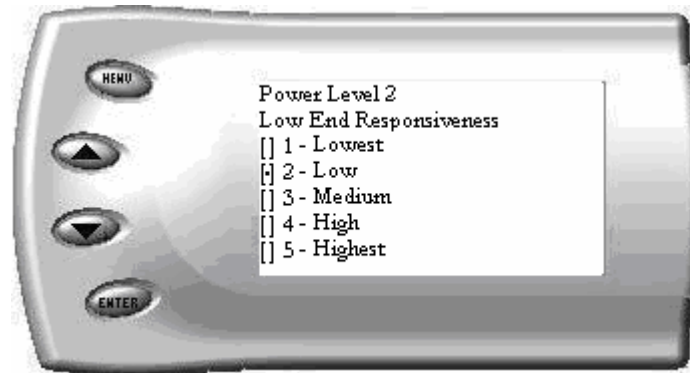


Figure #2

To change the Low-End responsiveness sub-level, select the power level you want to adjust by scrolling to the appropriate power level & pressing enter

After you press [Enter], the following screen appears allowing you to select the Low End Responsiveness Adjustment sub-level that will be unique to the Power Level you chose, unless you change the setting, the low-end responsiveness will remain set to the option you choose on this screen (figure #3).



The Low-End Responsiveness Levels are rated from least responsive to most responsive. Choosing level 5 will give you the most low end response in the power level identified at the top of the screen. Choosing level 1 will net the least amount of responsiveness in the power level listed at the top of the screen.

IMPORTANT REGENERATION NOTE!!

Passive Regeneration

Passive Regeneration happens 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.)

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.

Active Regeneration

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.

***Note:** Along with a diesel particulate trap your vehicle is equipped with a NOx (Oxides of Nitrogen) trap. This trap is designed to minimize the amount of NOx that your vehicle emits by absorbing the NOx into the trap. Once the trap is full the vehicle will automatically regenerate the trap by shutting off the intake and opening the EGR (exhaust gas recirculation) valve. This process will cycle on and off, thus causing an increase in EGT (exhaust gas temperature). The increased EGT allows the trapped NOx to be removed. While this process is happening you will notice a fluctuation in EGT, even while maintaining a constant load. This process will occur as often as needed and is necessary for the proper operation of your vehicle's emission reduction system.*

HOW DOES THE JUICE MODULE AFFECT THE DPF?

The Juice Module 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 driving aggressively with the Low End Responsiveness set to most responsive*
- *Avoid towing with the Low End Responsiveness set to most responsive*
- *Avoid towing in levels higher than level 2*
- *Avoid short aggressive bursts of acceleration, this may cause a large build up off soot, and the short sprints may not allow a regeneration cycle to initiate.*

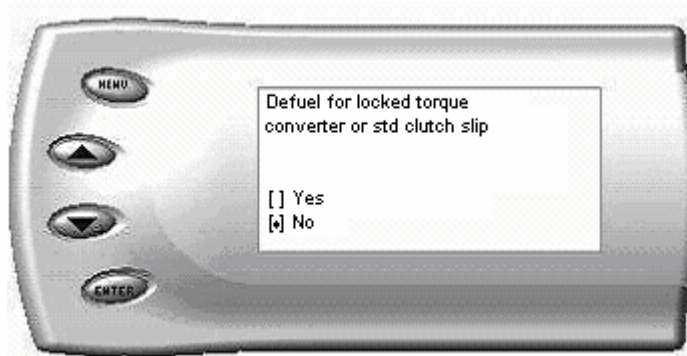
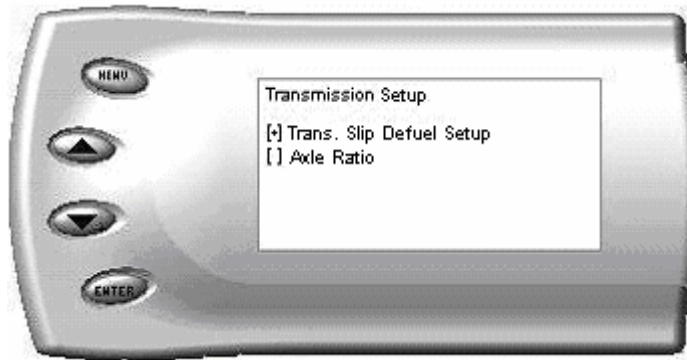
Benefits the juice has on the DPF system

The Attitude contains two useful features for monitoring your truck's regeneration cycle. The Attitude has a built-in audible alert notifying you when the cycle is initiated. Additionally, the Attitude comes factory set to display the regeneration cycle status as one of the four default displayed PIDs. Edge strongly recommends you monitor and display the regeneration cycle in order to allow for a proper and complete regeneration cycle. Since the release of the DPF on the 2007 6.7L Dodge pickup, it has been confirmed that DPFs may clog and become unusable if owners do not allow for a complete regeneration cycle. Even then, DPFs may still become clogged and unusable under normal use, with OEM equipment or aftermarket parts installed.

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.*

Transmission Setup

This option determines if the transmission slip protection feature is on or off. If this feature is ON and slip is detected across the torque converter (while locked) or clutch, the Juice / Attitude will reduce the amount of fuel delivered to the engine until slip is no longer detected. **If you detect a power loss during hard acceleration, this may be the reason.**



Axle Ratio

Choose axle ratio. Used to determine Torque converter or clutch slip. Most vehicles come from the factory with a 3.73 axle ratio. You have to special order a 4.10 axle ratio, unless your truck is an *automatic chassis cab*, then your truck comes with a 4:10 ratio.



A lock symbol will appear next to the current gear on the Attitude display if the torque converter is locked. (Automatic transmission only)

Turbo Cool-Down Setup

This feature is only available with the Attitude monitor installed and allows the engine to continue running (after key-off) until one of two conditions are met. 1)

if the EGT falls below the preset target EGT set point or 2) the time set expires. Press the brake pedal to override this feature and shut off the motor.

Tip: *The turbo timer can be shut off by using the panic button located on the key fob; although once this option is used, either the lock or unlock button on the key fob needs to be used in order for the turbo timer to be active again.*

Chassis Cab Note: *The key FOB operation is unreliable while the turbo timer feature continues to run your vehicle after turning off the key. When the turbo timer is running it is recommended that you either lock the doors manually or repeatedly press the lock button on the FOB until you can verify that your doors have been locked.*

WARNING: Due to potential exhaust buildup, **do not use** this feature if your vehicle's motor will be running unattended in a garage or enclosed area.



Use EGT



NOTE:

The Turbo Timer will not function unless:

1. At least ten seconds have passed after key on

2. After the ten seconds have expired, the

Use Time



Tire Size

If your vehicle has stock tires, there is no need to change the value on this screen. After selecting the Tire Size option from the Juice Configuration screen (previous steps), the following screen appears:



The numbers on this screen represent the circumference of your tire in mm. Adjust the tire size by pressing the up/down arrow keys. The table below will help you determine your wheel circumference by matching your tire size with the sizes listed. For example, if your tire size is 285/ 65/ 18R, the value (circumference) you enter into the *Attitude* is 2599.0. Another alternative is to measure your tire's circumference by marking your tire and rolling it one complete revolution and measuring the distance then multiply the inches by 25.4 (i.e., 91.3 inches x 25.4 = 2319.0 mm). The tire size chart is on the following page.

Width	Ratio	Rim	Circumference
215	75	16	2288.8 mm (select 2300)
245	75	16	2430.0 mm
265	75	16	2524.2 mm
285	75	16	2618.4 mm
295	75	16	2665.5 mm
305	75	16	2712.6 mm
315	75	16	2759.7 mm
325	75	16	2806.8 mm
265	70	17	2520.8 mm
285	75	17	2698.2 mm
315	75	17	2839.5 mm
285	65	18	2599.0 mm
285	60	18	2509.5 mm
325	60	18	2660.2 mm
265	70	16	2441.0 mm
275	70	16	2485.0 mm
305	70	16	2616.9 mm

Tire Size

33	2631.9 mm
35	2791.5 mm
37	2951.0 mm
38	3030.7 mm

Retrieve / Clear Diagnostic Trouble Codes (DTC)

This function interrogates the PCM and retrieves and displays any trouble codes available.



Clearing Trouble Codes

Diagnostic trouble codes in the PCM can be cleared by selecting the “Clear DTCs” from the menu.

A feature has been added that will allow automatic trouble code clearing on power up which can be enabled by selecting the option from the menu. ***If this option is active, you must wait till the juice clears all trouble codes before continuing to start the vehicle.***



Alerts

The Attitude can actually alert you when certain engine parameter levels are met such as EGT, Boost, and Engine Temperature. When these parameter thresholds are met or exceeded, the Attitude screen will display the value and you will hear a repeating audible alarm. The volume of this audible alarm can not be changed.

- EGT Alert
- Boost Alert
- Engine Temp Alert
- Transmission Temp Alert
- Speed Alert
- DPF Regeneration Alert On\Off

To set alerts, perform the following steps:

1. Press the [Menu] button until the *Setup* screen appears:



2. Select the *Alerts* option and press [Enter]. The following screen appears:



3. Turn alerts *On* by scrolling to the *Alerts are On/Off* option and press [Enter] to turn alerts On or Off.

To change the EGT Alert value [default is 1350] scroll to the *EGT Alert* option and press [Enter]. The following screen appears:



4. Press the up and down arrow keys until you see the desired EGT level at which you want to be alerted and press [Enter] to set that value.
5. To change the Boost Alert value [default is 36] scroll to the *Boost Alert* option and press [Enter]. The following screen appears:



6. Press the up and down arrow keys until you see the desired Boost level at which you want to be alerted and press [Enter] to set that value.
7. To change the Engine Temperature Alert value [default is 210] scroll to the *EngTmp Alert* option and press [Enter]. The following screen appears:



8. Press the up and down arrow keys until you see the desired Engine Temp level at which you want to be alerted and press [Enter] to set that value.
9. To change the Transmission Temperature Alert value [default is 230] scroll to the *TranTemp Alert* option and press [Enter]. The following screen appears:



10. Press the up and down arrow keys until you see the desired Transmission Temp level at which you want to be alerted and press [Enter] to set that value.
Transmission temp will show N/A unless the motor is running.

11. To change the Speed Alert value [default is 70] scroll to the *Speed Alert* option and press [Enter]. The following screen appears:



12. Press the up and down arrow keys until you see the desired Speed at which you want to be alerted and press [Enter] to set that value.

Note: If you desire to temporarily stop the Attitude from alerting you to a specific threshold, while the actual alert is signaling you, press any key (menu, arrow or enter) and the alert will temporarily stop. When all of the alarm parameters drop below the set thresholds, then exceed them again, the alert will start up again.

Records

The *Attitude* can keep a record of the maximum engine parameter values that your vehicle produces. These records are stored in the Records section of the Attitude.

- Engine Temp F
- 0-60
- ¼ mile
- Backdown
- RPM
- Trans Temp F
- Speed

To view or clear these values, perform the following steps:

1. Press the [Menu] button until the *Setup* screen appears:



2. Select the *Records* option and press [Enter]. The following screen appears:



3. All of the records are stored on this screen. To clear an individual record, select that record and press [Enter]. To clear all the values, select *Clear All* and press [Enter].

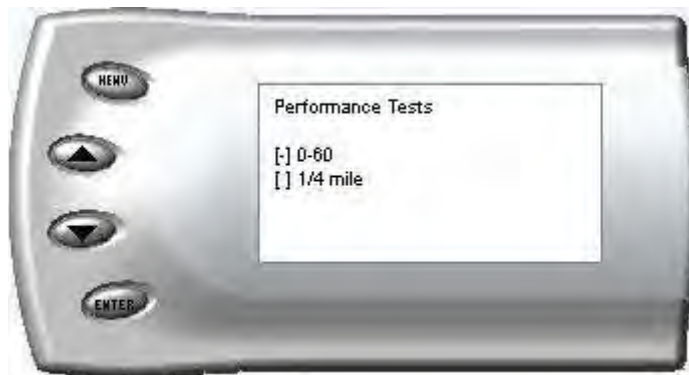
Performance Tests

The *Attitude* allows you to test the performance of your vehicle by timing the 0-60 and the 1/4 mile times. To run these tests, perform the following steps:

1. Press the [Menu] button until the *Setup* screen appears:



2. Select the *Performance Tests* option and press [Enter]. The following screen appears:



3. Select the desired performance test and press [Enter]. The following screen appears:



4. When your vehicle is at a complete stop, the following screen automatically appears:

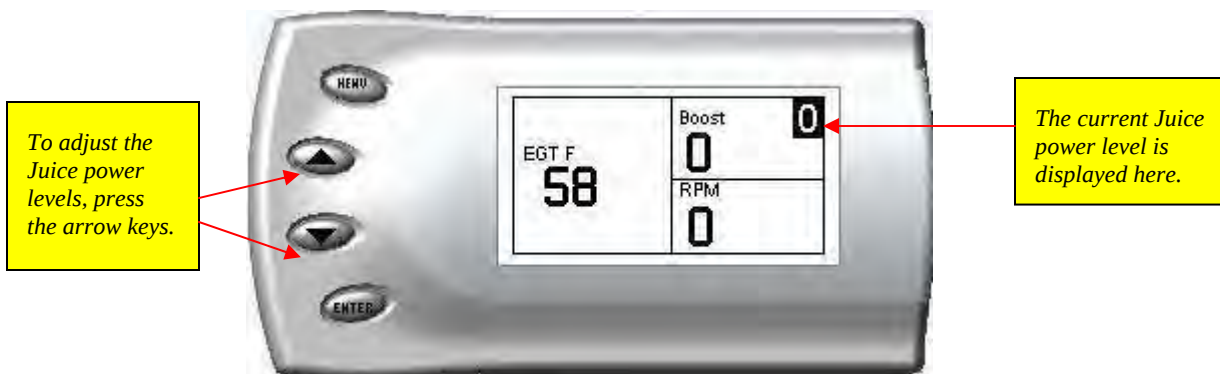


5. When you press the accelerator pedal, the screen returns to the display mode and automatically begins the performance test. During testing, a "T" appears in the upper right corner of the screen indicating that testing is in process. When the test is complete (the desired distance or speed is reached) the test will automatically stop and your time will be displayed on the screen like the following (quarter mile result example):



Adjusting Juice Power Levels

The Juice power level is displayed in the upper right-hand corner of the screen when vehicle parameters are being viewed. To adjust the power levels, press the arrow keys to the desired level. Levels can be changed at any time while viewing vehicle parameters.



NOTE: The 3 stage power switch on the Juice module is disabled when the Attitude monitor is installed. (The switch does not have to be set at a certain power level when the Attitude module is installed.) Power levels must be adjusted using the Attitude module.

Power Gains

The following power gains are representative of an actual test vehicle. Power gains may vary somewhat on a different vehicle or in different geographic settings.

	Horsepower	Torque
Level 0:	0	0
Level 1:	25 HP	70
Level 2:	40 HP	90
Level 3:	50 HP	120
Level 4:	65 HP	160
Level 5:	80 HP	200

Hot Unlock Code

Edge Products allows you to upgrade your Juice/Attitude to include a level 6 power level. To get the unlock code you must contact Edge Products Technical Support (888-360-EDGE) and give them the *Juice* serial number. The *Juice* serial number can be found in the Enter Hot Unlock Code screen on the Setup menu of the *Attitude*. They in turn will give you a 4 digit code to unlock level 6. There is a cost associated with accessing level 6 and a release liability waiver must be signed which can be found at www.edgeproducts.com. To enter the unlock code, select the Enter Hot Unlock Code option in the Setup menu and press enter. A screen similar to the one below will appear. Enter the 4 digit code and press Enter. The *Attitude* should inform you that Hot mode is available.



Hot Level Power Gain

Level 6: 100 HP 250 ft-lbs Torque

Technical Support: 888-360-3343

**To expedite your support call, please have part number (i.e., 30107),
version number, and Date of Manufacture ready prior to calling
Technical Support.**