

Attitude Instructions
GM Duramax



AFTERMARKET PRODUCTS AND 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, 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 states 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.

While as a consumer you have strong legal protection regarding 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.

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. Edge recommends that you **always disconnect and/or remove any performance device or programmer before you take your vehicle to a dealer for any service**, in order not to interfere with Diagnostic equipment.

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Manual Version 050205

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 Inc. 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 Inc. (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 two (2) years 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.

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.

About the Attitude

Congratulations on purchasing the *Attitude* by Edge Products Incorporated, the leader in diesel electronics and power gain technology. The following manual contains information and instructions on the proper use of the *Attitude*. Please read carefully before proceeding to install the *Attitude* to your vehicle.

IMPORTANT: This version of the Attitude is only compatible with the Edge GM Juice module version 4.73 or later.

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 (maximum of 4 at one time):

- Boost
- EGT (exhaust gas temperature)
- RPM
- % Engine load
- *Engine temperature
- *Gear
- *Speed
- Throttle position
- *Torque converter clutch status
- *Transmission clutch slippage
- Percent back down due to high EGT

*** Important Note: Engine Temperature does not display accurately on all 2001 GM vehicles. Standard transmission vehicles do not display information related to speed (i.e., performance tests, etc.) and transmission related features.**

One of the most powerful features of the *Attitude* is the option to monitor the EGT of your vehicle and automatically lower the fuel input to maintain an EGT below a maximum desired level.

The following items should be included in your *Attitude* package:



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, with the driver's door open, feed the cable through the open door, and into the engine compartment via the slot near the hood hinge.
2. Determine where you want to attach the *Attitude* mounting bracket and insert it into your dashboard. The bracket fits well in the seam of the dash board by separating the seam slightly and sliding in the bottom portion of the bracket until it snaps into place (see figure 1). The following pictures demonstrate how to best mount the Attitude with the new bracket.



Figure 1

The bracket fits well in the seam of the dash board by separating the seam slightly and sliding in the bottom portion of the bracket until it snaps into place.

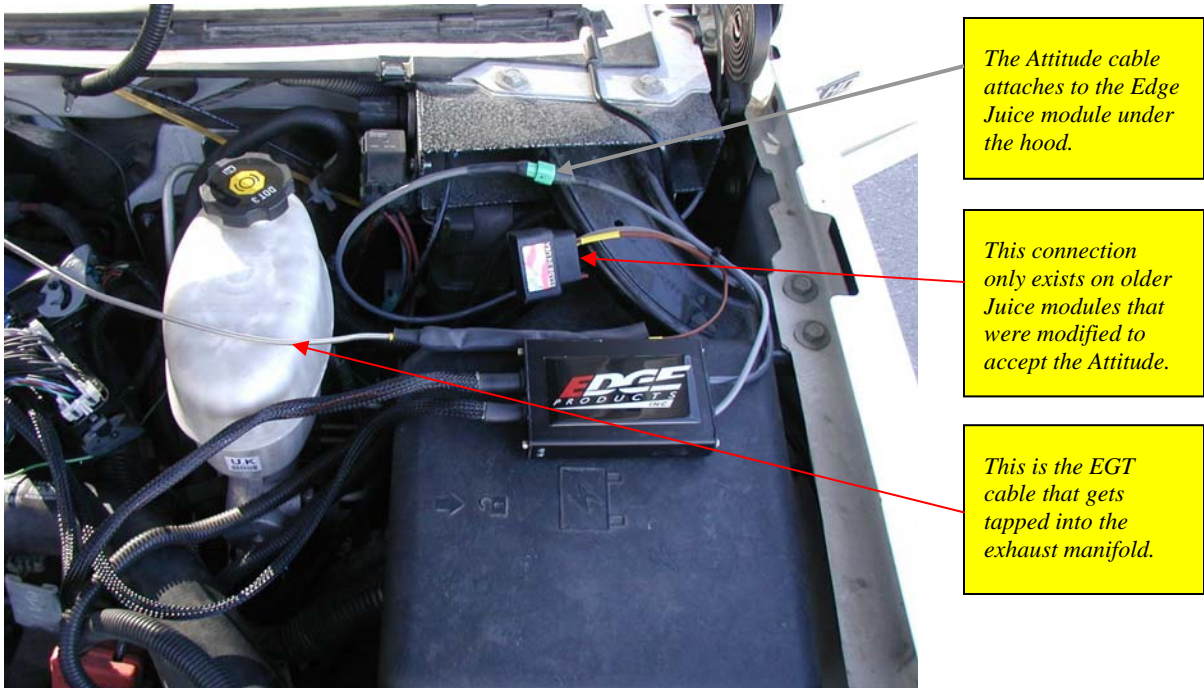


Figure 2

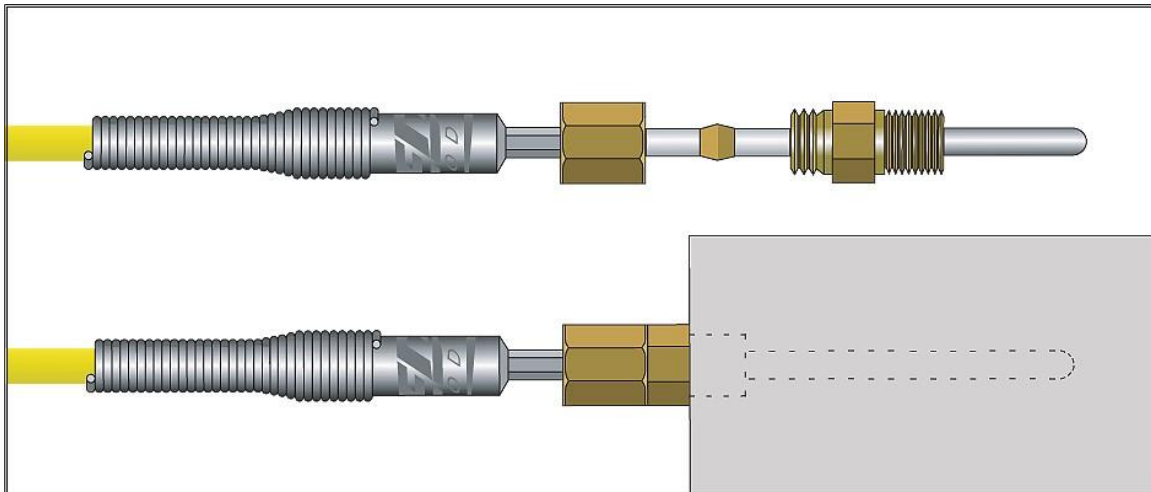
After the bracket is mounted, use the supplied two-sided tape to secure the Attitude to the bracket.

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

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



5. It is necessary to tap a small hole into your exhaust manifold to insert the EGT sensor. Drill the hole using a 5/16" drill bit, then tap it with an 1/8" NPT tap. Once the hole is drilled and tapped, screw in the brass fitting and insert the EGT sensor by sliding it into the hole and tightening the back end brass fittings. Be sure the small brass sleeve is between the two brass fittings as in the diagram below.





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



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

Once your Attitude monitor is installed successfully and you have turned on your vehicle you will be prompted to indicate acceptance of the user agreement contained in this user manual. To indicate you accept the agreement, press the [Enter] button. This screen will appear the first five times the Attitude monitor is used.



Once you have accepted the user agreement, you will see a screen similar to the following:



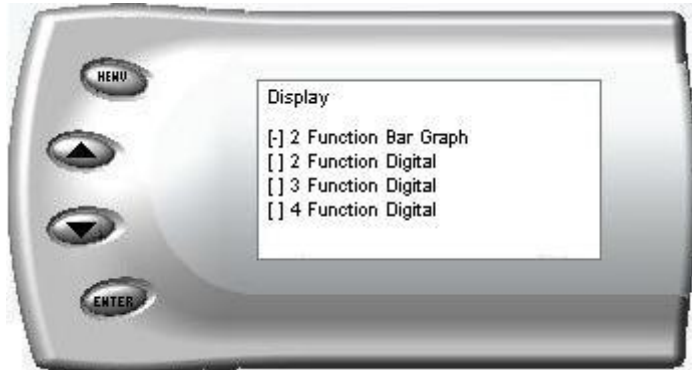
Changing the Display View

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:

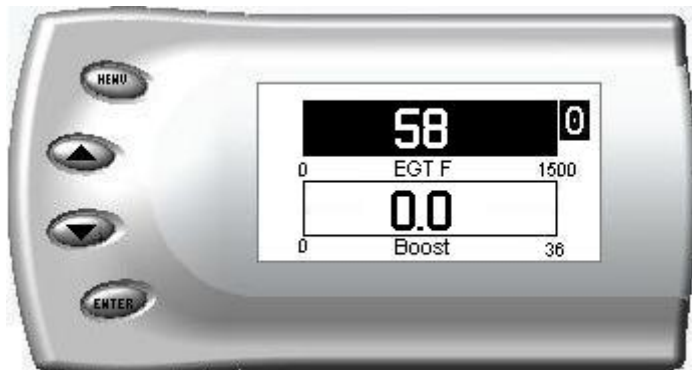


2. Select the Display option and press the [Enter] button. The following screen appears:

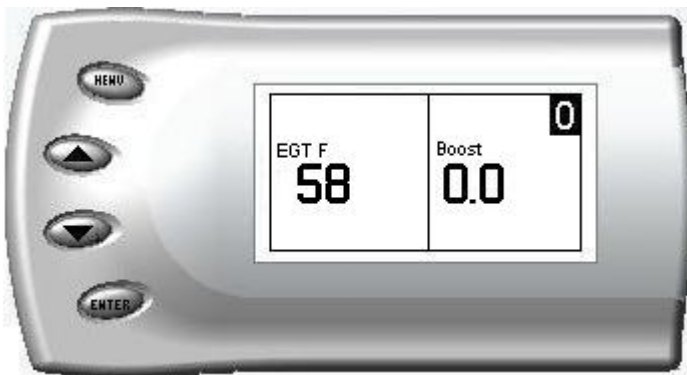


3. Select the desired viewing option by using the up and down arrows and pressing the [Enter] key. Below are examples of the display options:

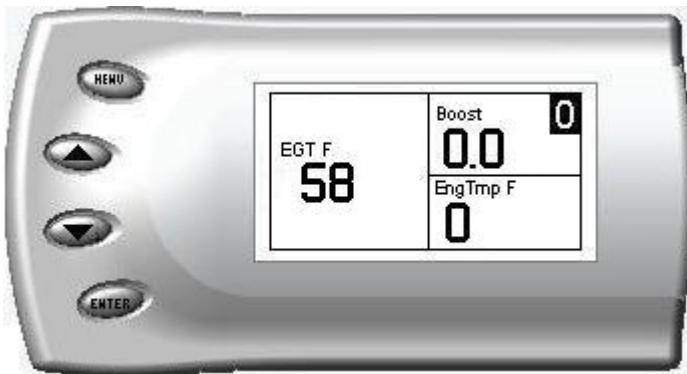
Two Function Bar Graph Display Sample



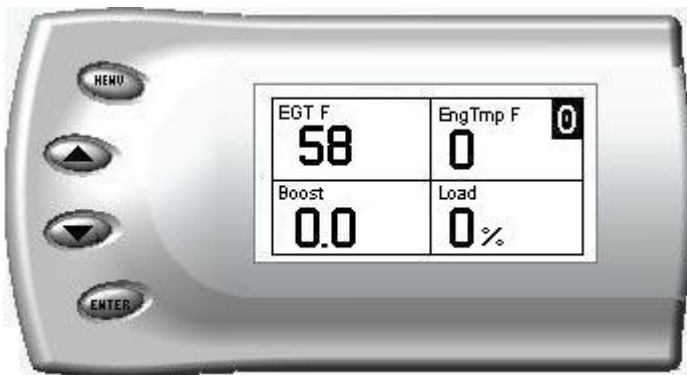
Two Function Digital Display Sample



Three Function Digital Display Sample



Four Function Digital Display Sample



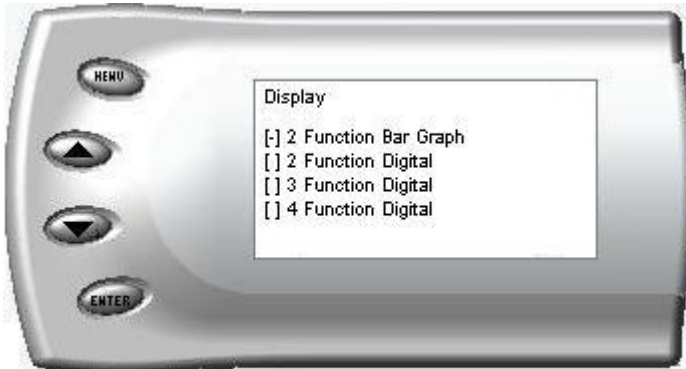
Changing the Variables on the Screen

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:



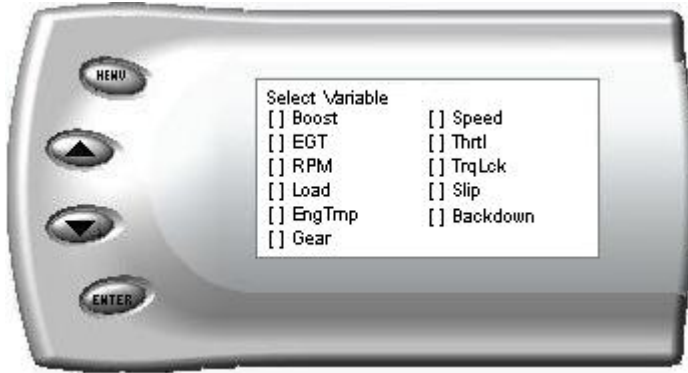
2. Select the Display option and press [Enter]. The following screen appears:



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



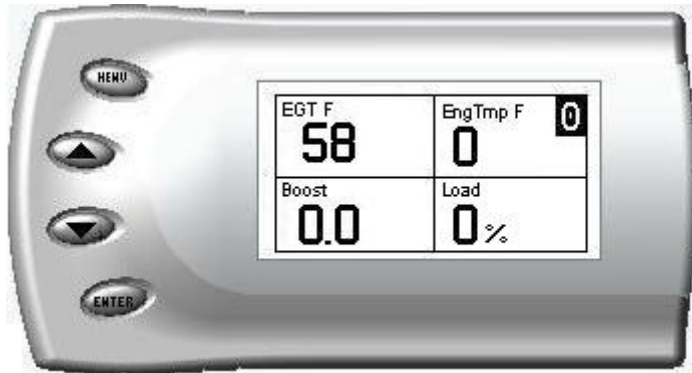
- This screen lists the current variables you have selected to view and their respective positions on the screen (i.e., TOP LEFT, etc.). Select the variable you would like to change and press [Enter]. A screen listing the possible replacement variables similar to the following appears:



- 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.



Alerts

The Attitude can actually alert you when certain engine parameter levels are met such as EGT, Boost, Speed, and Engine Temperature. When these parameter thresholds are met, 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. 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.
4. To change the EGT Alert value [default is 1350] scroll to the *EGT Alert* option and press [Enter]. The following screen appears:



5. 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.
6. To change the Boost Alert value [default is 25] scroll to the *Boost Alert* option and press [Enter]. The following screen appears:



7. 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.
8. To change the Speed Alert value [default is 70] scroll to the *Speed Alert* option and press [Enter]. The following screen appears:



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

10. To change the Engine Temperature Alert value [default is 210] scroll to the *EngTmp Alert* option and press [Enter]. The following screen appears:



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

* **Important Note: Engine Temperature does not display accurately on all 2001 GM vehicles.**

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 actually keep a record of the maximum (or minimum) engine parameter and performance test values that your vehicle produces. These records are stored in the Records section of the Attitude. 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 including your 0-60 and 1/4 mile times. 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 ¼ 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):



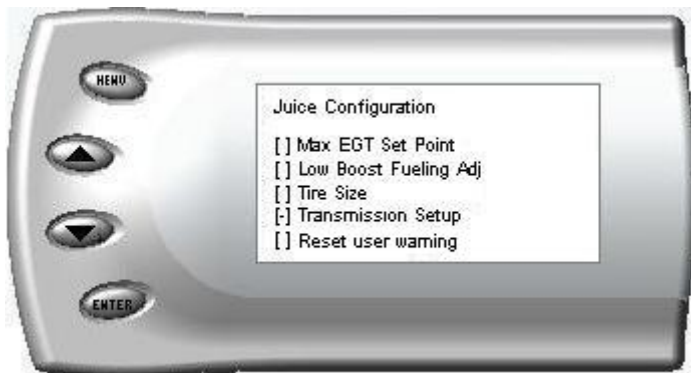
Juice Configuration

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

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



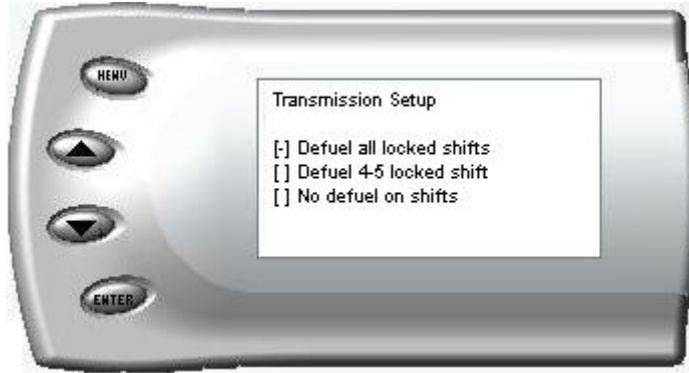
2. Select the *Juice Configuration* option and press [Enter]. The following screen appears:



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

Transmission Setup

After selecting the *Transmission Setup* option from the Juice Configuration screen (previous steps), the following screen appears:



Select the desired option and press the [Enter] key.

Transmission Setup Option Descriptions

Defueling at locked (when the torque converter is locked) shift points reduces the torque output by the engine and allows the torque converter clutch to lock after the shift.

Defuel all locked shifts

With this option, when the torque converter is locked the amount of fuel at the shift point is reduced—thus decreasing torque during the shift point and allowing the torque converter clutch to lock. This will cause less wear on the transmission—and result in overall improved drivability.

Defuel 4-5 locked shift

This option provides a decrease in torque output at the shift point between gears 4 and 5, thus decreasing torque during the shift point and allowing the torque converter clutch to lock. This will cause less wear on the transmission—and result in overall improved drivability.

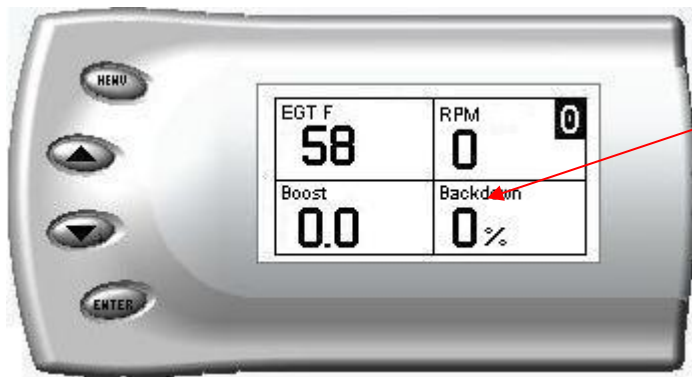
No defuel on shifts

This option provides no decrease in fuel during shift points. Power will be delivered throughout all of the shift points resulting in quicker more responsive shifting.

Max EGT Set Point

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 your 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 has been 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 established 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 dangerous EGT levels.



The backdown percent represents the amount of defueling that is occurring when the max EGT level is reached.

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



1. Change the Max EGT set point by pressing the up and down arrow keys to select the maximum temperature that you want your exhaust gas temperature to reach, then pressing [Enter]. When the exhaust gas temperature reaches this value, the power delivery will be retarded so as not to allow the temperature to exceed this set value.

Disabling Backdown at Set EGT

There are times you may want to disable the EGT backdown feature for a limited period such as when climbing a hill or in a competition setting. For whatever the reason, you may disable the EGT backdown for a period of 1-30 minutes.

Warning: *Disabling this feature could lead to dangerous EGT levels.*

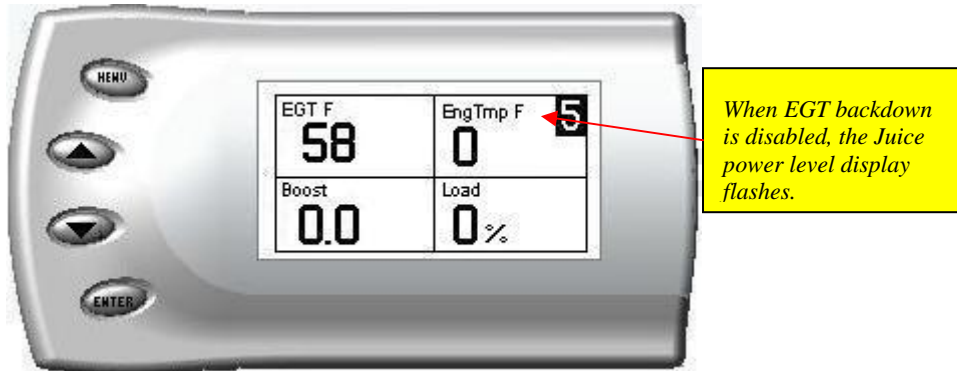
To remove the option that backs down the power at a set EGT point, perform the following steps:

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:



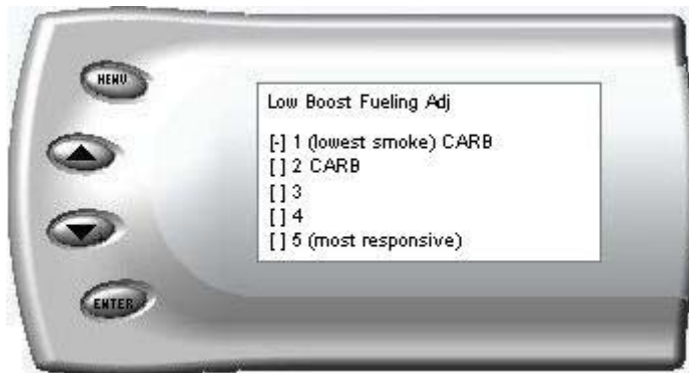
This number is the number of minutes you want to disable the EGT backdown feature.

3. The number on this screen represents the number of minutes the EGT 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 levels.)
4. After you have selected the number of minutes you would like the EGT 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 backdown level will go into effect.



Low Boost Fueling Adjustment

After selecting the *Low Boost Fueling Adj* option from the Juice Configuration screen (previous steps), the following screen appears:



Adjusting the fuel at low boost allows you to adjust the way in which your truck delivers fuel at low boost levels. Select option 1 for the lowest level of fuel at low boost, and select option 5 for the highest level. You will see a significant change in vehicle response and smoke level depending on which option you select.

Tire Size

If your vehicle has stock tires, it is not necessary to change the settings 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. 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).

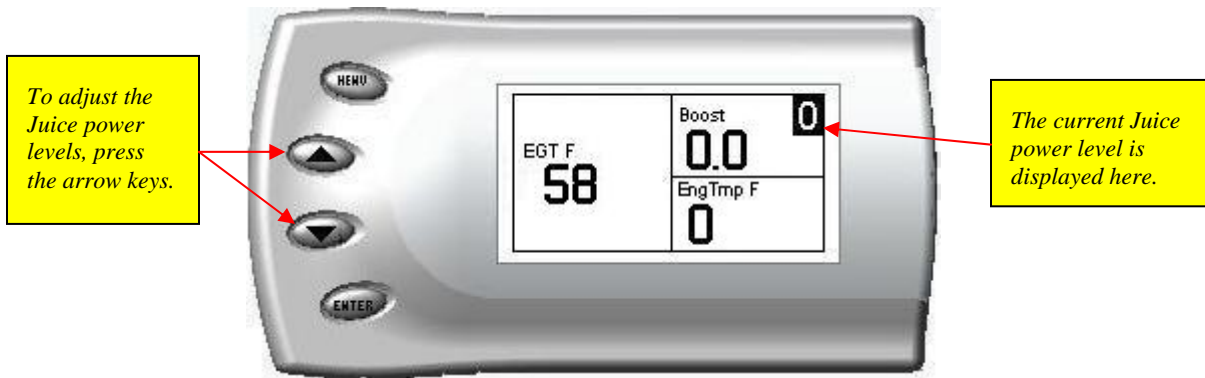
Width	Ratio	Rim	Circumference
215	75	16	2288.8 mm
245	75	16	2430.0 mm
265	75	16	2524.2 mm
285	75	16	2618.4 mm
295	75	16	2665.5 mm
305	75	16	2712.6 mm
315	75	16	2759.7 mm
325	75	16	2806.8 mm
265	70	17	2520.8 mm
285	75	17	2698.2 mm
315	75	17	2839.5 mm
285	65	18	2599.0 mm
285	60	18	2509.5 mm
325	60	18	2660.2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

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 Juice module power level adjuster switch is disabled when the Attitude controller is installed. Power levels must be adjusted using the Attitude controller.

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.

	<i>Horsepower</i>	<i>Torque</i>
Level 0:	0	0
Level 1:	40 HP	150
Level 2:	60 HP	180
Level 3:	75 HP	220
Level 4:	90 HP	250
Level 5:	125 HP	325

Warning: It is strongly advised that you do not combine, or “stack” chips to gain more horsepower.

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Technical Support: (801) 476-3343

To expedite your support call, please have part number (i.e., EAF2100A), version number, and Date of Manufacture ready prior to calling support.