Ford 7.3L Juice Module For the 1999 to 2003 Ford 7.3 Liter Powerstroke® Diesel engine



© 2004, Edge Products Incorporated All rights reserved.

Edge Products Incorporated 1080 South Depot Dr. Ogden, UT 84404 (801) 476-3343 www.edgeproducts.com

Manual Version 110105

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 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.

Thank you for purchasing the Ford 7.3L *Juice* Module for the Ford Powerstroke 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 concerns or questions, please contact us.

The Ford 7.3L Juice Module is a high performance product

It is strongly recommended that EGT, transmission temperature, 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.

Ford 7.3L Juice Module Installation Instructions

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

Supplied Items:

- 1. Ford 7.3L Juice Module with attached harness
- 2. Wire Ties

Needed Items:

- 1. 8mm or 13mm wrench to disconnect battery terminals
- 2. Regular screw driver

Please read these instructions through completely and thoroughly understand each step prior to installation.

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 Federal Magnusson-Moss Warranty Act allows use of aftermarket purchased parts from sources other than the original equipment manufacturer or other specific source.

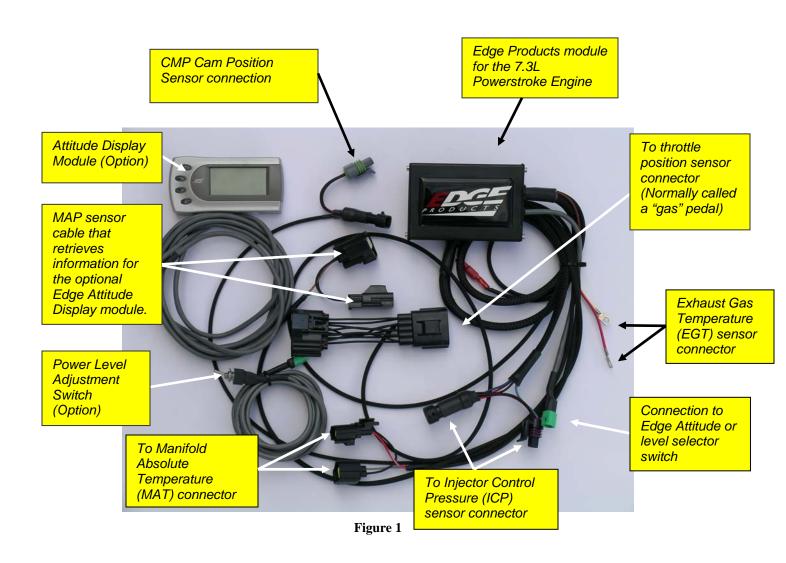
The The Federal Magnusson-Moss Warranty Act states that if a component fails on your car and you take it in for warranty repair, the dealer must honor your warranty unless they can prove that whatever modifications you have added to your car actually caused the problem. Please keep in mind that towing 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.

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 the you always disconnect and remove your module and monitor when you take your vehicle to a dealer for warranty work, in order not to interfere with Diagnostic equipment.

The Ford 7.3L Juice Module for the 7.3 Liter Powerstroke® Engine

The picture below shows the Ford 7.3L Juice Module for the Ford 7.3L engine with all available options – Both the AttitudeTM display monitor and the three position switch. It is essential that the cables that are supplied with this module get connected as shown on the following pages.



<u>Harness Connector</u> – Your Juice module may be equipped with a harness that can be disconnected at the Juice module itself (See figure 1A). It is important to make sure that your juice module is always connected to the harness when the wiring harness is connected to the truck, otherwise the truck may not run properly, or may trip engine "codes."



FIGURE 1A

<u>Engine Codes</u> - As with many aftermarket electronic performance modifications available for the Ford 7.3L Powerstroke® Diesel engine the Ford 7.3L Edge Products module for the Ford 7.3 Powerstroke® Diesel engine will likely set engine "codes."

The engine codes are generally set during heavy acceleration. Although the codes will remain "set" in the PCM, the dash board indicator light should turn off within 15 minutes. Most codes that are set under hard acceleration are called "soft codes". These soft codes are retained in the PCM and can be erased by unhooking the battery for 30 minutes, or by using the Edge Products Evolution to clear the codes.

Codes that may be set:

- P1211 Injector control pressure is different than expected
- P1209 Peak injection pressure fault

The Ford 7.3L Juice Module modifies sensor readings that are monitored by the ECM. These sensor inputs may or may not be what the ECM is expecting at any point in time. Because of the difference in expected readings the ECM may set the engine codes. This is not expected to harm the Ford 7.3L engine and should not cause damage to the engine.

<u>Stacking</u> - This product is designed to be "stacked" with other products. Edge Products has designed this product to take advantage of other performance products and to reduce the fuel to the engine if the Exhaust Gas Temperature gets too high. This feature has been optimized to work best with the Evolution programmer from Edge Products.

Automatic Transmission and shifting — During the development of the Ford 7.3L Juice Module our development team discovered that the stock shifting pattern for the transmission used with the Ford Diesel Powerstroke® engine maintained "stock" shifting even while the engine gave additional horsepower or torque especially when the Juice Module was set to Level 5. Because the transmission shifting may not have been designed to shift with the additional horsepower provided by the Juice Module, Edge Products recommends that the Edge Products Evolution module be purchased to adjust transmission shifting for better shifting under the additional horsepower. Call you Edge Products (1-888-360-EDGE) or your Edge Products dealer to find out how the Evolution can add positive shifting to your Ford 7.3 Powerstroke®

Low boost fueling – Low boost fueling refers to the amount of fuel added to the combustion process while the turbo boost is low. Often adding additional fuel when the boost is low produces dark sooty smoke from the tail pipe, but many times doesn't produce a great amount of additional horsepower gain. Unless using your truck in a racing condition, it's recommend that the low boost fuel setting be placed where it produces the least amount of dark smoke. This adjustment can be made from a menu selection on the Attitude display.

Truck Diagram / Position orientation

<u>Orientation</u>: This is a top view of the vehicle (looking down from above the vehicle). References in the text to "looking down" means looking toward the ground. Looking up means looking towards the sky from below the vehicle. Front, rear, left and right are as noted below.

Drivers side of vehicle – Usually referred to as the left side Passenger side of vehicle – Usually referred to as the right side.

Rear of vehicle

Figure 2

Module and Sensor Locations

Figure 3 shows the location where the module will be installed as well as the location of the MAP, MAT and ICP sensors. Figure 4 shows access location for the CMP connection.



Figure 3



Figure 4



Figure 5

The Ford 7.3L Juice Module can rest to the side of the brake fluid reservoir located to the front of the driver's side firewall as shown in figure 5 on top of the fuse box.

Edge Module and Sensor Wire Installation

For trucks with fuse box in a different location, an alternate location for mounting will have to be found. One suggestion is to mount the Juice Module on the side of the air filter box.

- 1. It is strongly recommended when installing electrical devices that both batteries should be disconnected. Use a 13 mm or 8 mm wrench depending on battery style and remove the negative terminal cable end from each battery.
- **2.** Place the Juice module on top of the fuse box as shown in figure 5. After the installation is complete you will use the supplied Velcro® to secure the Juice module to the fuse box.
- **3.** Connect the MAP "Y" connector between the wire harness and the sensor as shown in Figure 6. This connection is located in front of the passenger side of the vehicle in the engine compartment.

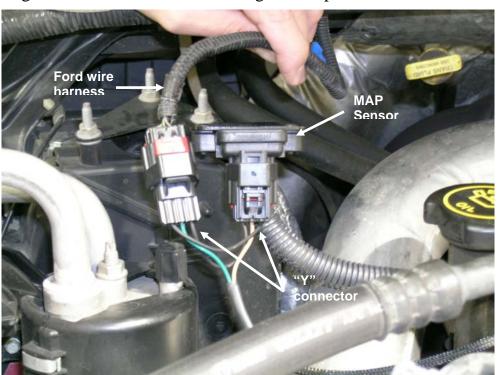


Figure 6

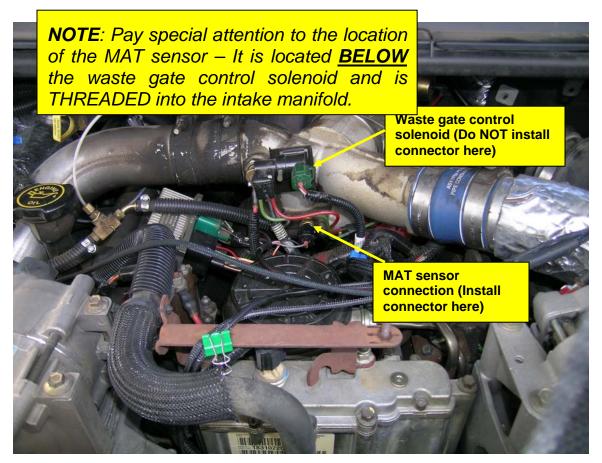


Figure 7

4. Connect the MAT "Y" connector between the wire harness and the sensor as located in Figure 7.

NOTE: Pay special attention to the location of the MAT sensor – It is located <u>BELOW</u> the waste gate control solenoid and is a sensor THREADED into the intake manifold.

5. Connect the ICP "Y" connector between the wire harness and the sensor as shown in Figure 8.





ICP sensor location in engine compartment



Figure 8

NOTE: The ICP connector is on the drivers side of the engine located close to the engine removal ring under the boost hose – Notice the BLUE gasket. The ICP connector is **NOT** on the front of the engine!

6. Routing the Cam Position Sensor (CMP)

There are many possible routes for the CMP cable. The preferred method is to remove the plastic "Powerstroke" cover and route the wire for the CMP sensor across the top of the engine as shown in Figure 9 along or close to the factory wiring. If you choose to route the CMP wire along the factory wiring; be aware that the support for the plastic cover is a convenient place to use a wire tie for the CMP connector wire.

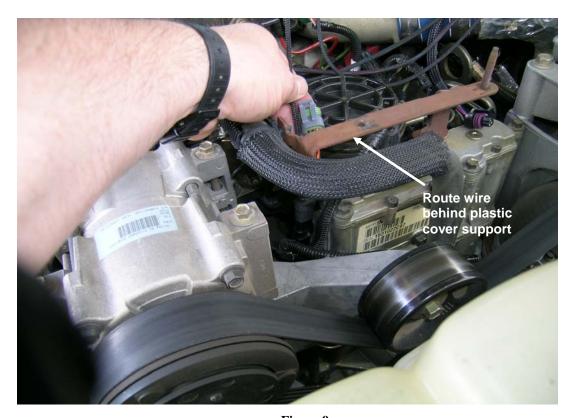


Figure 9

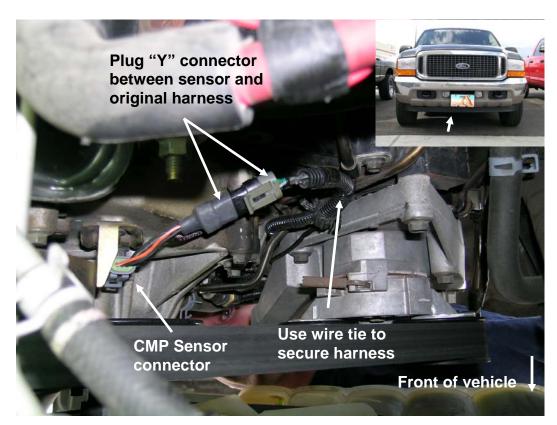


Figure 10

Looking up from under the vehicle

7. Cam Position Sensor (CMP) connection

Refer to inset of figure 11 for directions to access the CMP connector from below vehicle.

The cam position sensor is located on the front of the engine (viewing the engine from the radiator end or FRONT of the vehicle) above and to the left of the main pulley. Access to the CMP sensor is from underneath the front of the vehicle as shown in the picture inset of figure 11.

To access the CMP sensor: From the front of the vehicle while lying on your back with the top of your head towards the rear of the vehicle, on the left side of the engine (looking from the front of the engine) just above the main pulley, locate the CMP connector on the front of the engine as shown in Figure 11. Unplug the factory CMP connector and plug in the mating connector from the Juice module. Plug the factory wiring harness connector into the mating connector of the "Y" cable. Be sure to secure the wires away from the serpentine belt using the wire ties provided.



Figure 11

Model year 2001 to 2003 connection to "accelerator pedal" TPS wire harness

TPS – Throttle Position Sensor connector

8. While viewing the Juice module - Find the short single wire with the insulated female crimp connector coming from the wire harness. This crimp connector mates to the single wire on the TPS sensor harness. From the engine compartment run the short insulated female crimp connector wire through the firewall and into the cab of the truck.

Connect the Throttle Position Sensor (TPS) "Y" connector as shown in Figure 12 for 2001 to 2003 model year trucks. See inset for location of the TPS connector. See instruction number 9 and Figure 13 for 1999 and 2000 model year trucks.

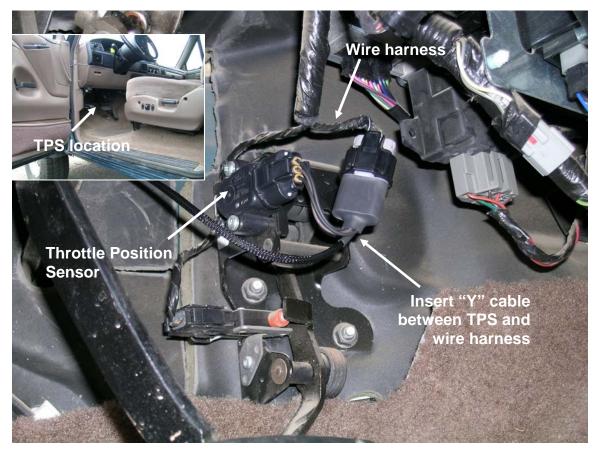


Figure 12

Model year 1999 and 2000 connection to "accelerator pedal" TPS wire harness

TPS - Throttle Position Sensor connector 1999 and 2000

9. 1999 and 2000 model year trucks use a similar connection to the Throttle Position Sensor with the exception that the earlier trucks separate the Idle Validation Switch (IVS) harness from the TPS sensor via different connectors. The 1999 and 2000 model year trucks use a three pin connector which is smaller than the five pin connector used on later trucks.

While viewing the Juice module find the short single wire with the insulated female crimp connector coming from the wire harness. This crimp connector mates to the single wire on the TPS sensor harness. From the engine compartment run the short insulated female crimp connector wire through the firewall and into the cab of the truck.

Connect the Throttle Position Sensor (TPS) "Y" connector as shown in Figure 13 for 1999 and 2000 model year trucks.

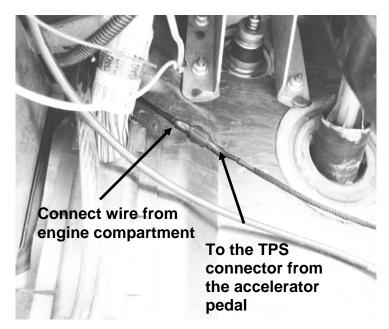


Figure 13 – Facing the brake pedal - Under dash slightly left of the steering column

- **10.** Connect the insulated terminals as in Figure 14.
- **11.** Route the power level selector switch wire or Attitude wire through the door jam or through the firewall then connect the green female connector on the switch or Attitude to the green male connector on the Ford 7.3L Juice Module
- **12.** If you have purchased the Attitude display, refer to the Attitude instruction manual (included in this manual) for instructions for setup and use of the Attitude Display
- **13.** If your installation uses a three position power level selector switch refer to Figure 14 for power level settings

Final Inspection

- **14.** Recheck all connections for a properly secure installation.
- 15. Using the supplied wire ties, secure the wiring harness from possible damage from moving parts under the hood <u>Pay special attention to the routing of the CMP connector wiring since the CMP wiring runs closer to moving parts than any other wire associated with the Edge Juice installation.</u>

- **16.** Use the supplied Velcro® to secure the Edge Juice Module to the fuse box.
- **17.** Start engine. Engine should start and run as it did prior to the installation.
- **18.** If engine does not start or run properly, re-check all connections. If conditions still exist, contact your dealer or Edge Products, LLC (1-888-360-EDGE). Before restarting, wait 10 seconds once key has been turned off.

Adjusting Power Levels

The Juice has five power levels if you use the Attitude display and three power levels if you use the three position switch. Figure 14 shows switch positions for the three power levels.

Level 1: 25 HP, 50 Torque Level 2: 45 HP, 100 Torque Level 3: 55 HP, 125 Torque

(The Attitude display module adds two additional horsepower settings)



Figure 14

Key Features and Operation

The Ford 7.3L Juice Module offers a large power increase over stock throughout the RPM range, but is most noticeable in the midrange. This greatly improves drivability and towing performance. Transmission downshifting is greatly reduced, especially while passing or towing up grades.

While 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. EGT rises significantly with RPM --especially above 2500. It is highly recommended that you install the supplied EGT probe in your exhaust manifold to gain the maximum benefits from the Power Edge Juice Module.

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

About the Attitude

Congratulations on purchasing the *Attitude* by Edge Products LLC, 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.

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

• EGT (exhaust gas temperature)

• RPM

• Percent back down due to high EGT

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.

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 bracket.



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.

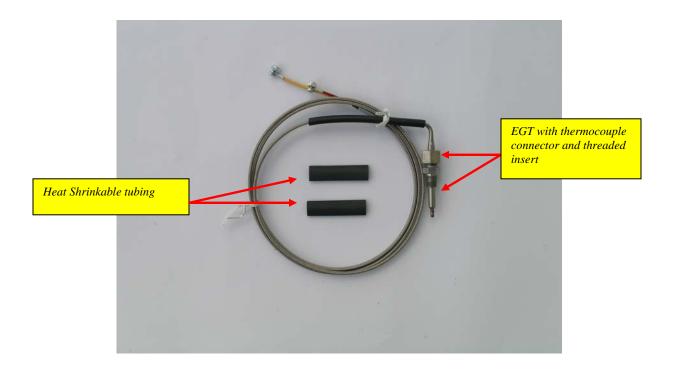
Figure 14



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

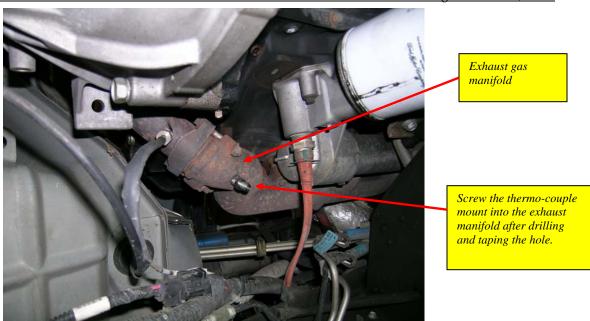
Figure 2

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. To install the EGT probe, first determine where you will drill your hole. The section of the exhaust manifold that requires tapping is located on the driver's side. (See picture below for suggested location. This photo shows the truck from the *ground up*.) The NPT fitting and the top of the probe will stick up between ½" to 1" above the mounting surface, so make sure you have clearance for these.

NOTE: One effective way to help avoid metal fragment contamination in your engine is to place grease in the threads of your drill bit/tap tool when drilling/tapping the hole in your manifold.

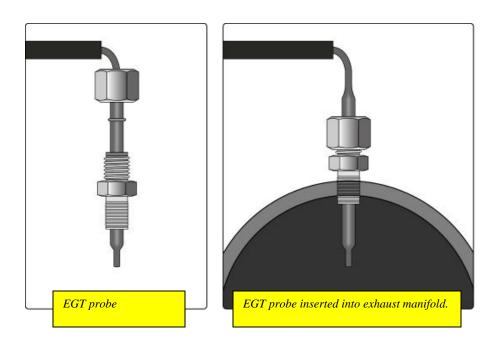


(Looking up at the exhaust manifold from under the vehicle – The rear of the vehicle is to the left of the picture and the front is to the right.)

5. Drill a 5/16" hole, and then use the pipe tap to cut the threads. Use a 1/8" NPT tapered pipe tap (available at your hardware store), and follow the instructions with the tap. 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. If you tap in too far, your fitting will have to be screwed in very deeply.

NOTE: The drilling and taping process will create metal shavings. Some of these shavings can remain in the exhaust manifold and can be blown through the turbo. It is advisable to use a small magnet and remove as many shavings as possible to prevent turbo damage.

6. Now that you have drilled and tapped your hole, install the engine side of the fitting by tightening the tapered thread end into the hole. Ideally the tip of the fitting would be flush with the inside of the exhaust flow path, and not much deeper. Tighten the fitting so that it is securely mounted. To install the probe in the fitting, slide the top part of the fitting over the probe with the threads facing outward, and hand screw the assembly into the bottom part of the fitting. Slide the probe into the brass fitting so that the tip is approximately centered in the exhaust gas stream. Tighten the top nut of the fitting tight enough to keep the probe firmly mounted.



Once the EGT probe is installed in the manifold, run the cables up and out of the way of any moving parts and away from the exhaust. Find a convenient place to wire tie any slack in the EGT probe cable. Be sure to put the heat shrinkable tubing on both probe leads and (if desired) over the metal braid wire BEFORE you attach the cables.

Use the screws provided to attach the EGT leads to the two Ford 7.3 Juice Module leads for the EGT probe input – Note that the short wire on the EGT lead mates to the long lead on the Ford 7.3L Juice Module and vise-versa.

Once the leads are connected correctly, use a heat source and shrink the tubing over each screw. If you have put another piece of heat shrink tubing over the wire braid and the two EGT leads, use the heat source and shrink it now.

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



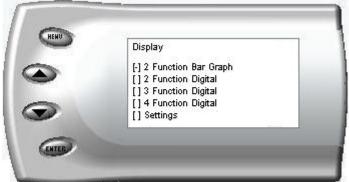
Changing the Display View

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:

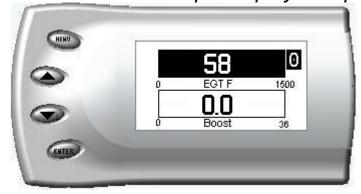


2. Select the Display option and press the [Enter] button. The following screen appears:

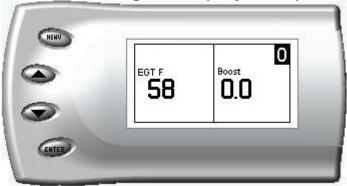


3. Select the desired viewing option by using the up and down arrows and pressing the [Enter] key. Below are examples of the display options:

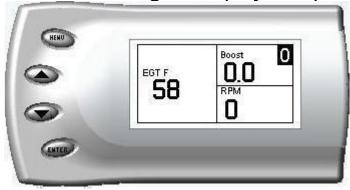
Two Function Bar Graph Display Sample



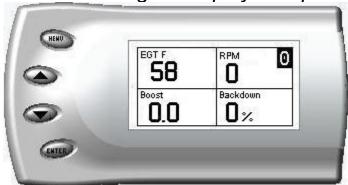
Two Function Digital Display Sample



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:



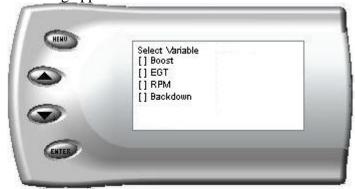
2. Select the Display option and press [Enter]. The following screen appears:



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:



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.



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:

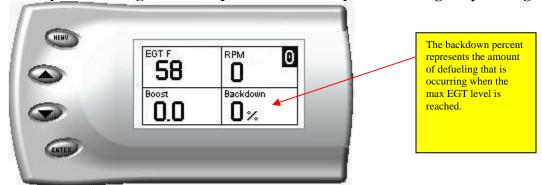


3. Select the desired option and press [Enter]. The following are descriptions of each of the Juice Configuration options available:

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: 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 high EGT temperatures that may cause damage to your engine.



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

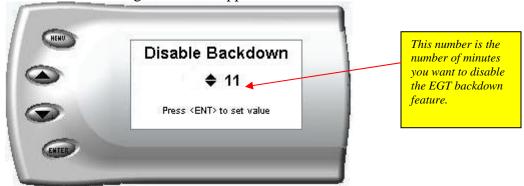
There are times you may want to disable the EGT backdown feature for a limited period such as in a competition setting. For whatever the reason you can disable the EGT backdown for a period of 1-30 minutes.

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

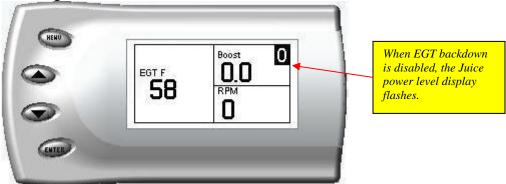
To remove the option that backs down the power at a set EGT point, perform the following steps:

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:

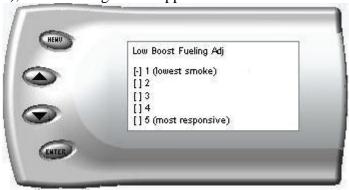


- 3. The number on this screen represents the number of minutes the EGT Backdown feature will be disabled. Press the up or down arrow keys to select the desired number of minutes you would like this feature disabled. (The number of minutes you do NOT want your power decreased because of high EGT levels.)
- 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

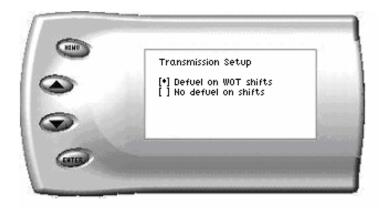
After selecting the *Low Boost Fueling Adj* option from the Juice Configuration screen (previous steps), the following screen appears:



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.

Transmission Setup

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



Defuel on WOT shifts

This option will decrease the amount of fuel delivered during wide open throttle shifting. This will cause less wear on the transmission—and result in overall improved drivability.

No defuel on shifts

This option will NOT decrease fueling at the shift points.

Alerts

The Attitude can actually alert you when certain engine parameter levels are met such as EGT, Boost. 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.

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 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 25] 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.

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 engine parameter 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. To clear an individual record, select that record and press [Enter]. To clear all the values, select *Clear All* and press [Enter].

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.



Power Level Adjustment

Power levels for the Juice module are adjusted using the up and down arrows of the Attitude monitor. The power levels can be changed anytime while driving however; it is advisable that the power levels not be adjusted during hard acceleration since doing so may adversely affect transmission shifting at the time of the power level change.

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	50
Level 2:	45 HP	100
Level 3:	55 HP	125
Level 4:	65 HP	150
Level 5:	75 HP	200

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.

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.