



**2001-2004 GM Duramax 6.6L LB7
Power Edge LB7 EZ
Installation Instructions and Manual**

OLD P/N: EZC1000

NEW P/N: 20200



Table of Contents

<i>DISCLAIMER OF LIABILITY</i> _____	3
<i>LIMITATION OF WARRANTY</i> _____	3
<i>About the Edge LB7 EZ</i> _____	5
<i>Power Edge LB7 EZ Getting Connected</i> _____	7
<i>Using the Power Edge LB7 EZ</i> _____	9
<i>Power Gains</i> _____	10
<i>Making Sense of it All</i> _____	11
<i>Transmission Relearning</i> _____	13
<i>Technical Support</i> _____	13
<i>Index</i> _____	14

© 2007, Edge Products
All rights reserved.

Edge Products
1080 South Depot Dr.
Ogden, UT 84404
888-360-3343
www.edgeproducts.com

Manual Version 5

The EZ Module is a high performance product
It is strongly recommended that EGT and boost gauges
be installed when using this product.
USE THIS PRODUCT 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, LLC

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.

IMPORTANT INFORMATION ABOUT YOUR VEHICLE'S WARRANTY — PLEASE READ!

Many of our customers ask, "Will your product void my vehicle's manufacturer's warranty?" While the answer is straightforward from a legal standpoint, it's important to educate our customers (and all 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 vehicle and you take it in for warranty repair, the dealer must honor your warranty unless whatever modifications you have added to your vehicle actually caused the problem in question.

Edge is committed to providing quality products that are safe to use. Our products do not cause damage to a vehicle when used as intended. Please keep in mind that towing in anything higher than level two and hard driving in levels four and five are not recommended. However, the reality is that many dealerships have been known to void warranties on vehicles that use aftermarket products as a matter of policy. This applies in particular to those aftermarket products that produce horsepower, such as performance enhancement "chips," modified intake manifolds, or aftermarket exhaust systems, regardless of product brand. Any aftermarket company that does not acknowledge this is misleading you.

Although you have strong legal protection as a consumer in regard to your vehicle's warranty, the practical reality is that taking legal action against a dealer or manufacturer to fight a voided warranty is a costly and time-intensive process. For this reason, Edge strongly recommends **you always disconnect and remove your module/programmer and monitor when you take your vehicle to a dealer for warranty work.** It is also for this reason that Edge focuses the bulk of their product development efforts on producing modules and digital monitors that can be easily removed. Even if you remove your unit, you should note that dealers can detect the use of ANY programmer — Evolution or otherwise — even if the unit has been removed.

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).

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

About the Edge LB7 EZ

Thank you for purchasing the Power Edge LB7 EZ Module for the Chevy/GMC Duramax® Diesel LB7. The EZ 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 (1-888-360-3343).

The EZ Module is an add-on Engine Control Module (ECM) for the Duramax® 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 EZ module as engine reaches operating temperature
- Three selectable power level settings that can be changed on the fly
- Smart power control during torque converter lockup to allow a smooth, easy torque converter clutch lock-up

The EZ 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 EZ also regulates power delivery based on engine temperature. This means that while the engine temperature is below 140° F no additional fueling is delivered. At 140° F the module begins delivering fuel at 25% of the calculated additional fuel, and the percentage increases as the engine temperature increases, until at full engine temperature (174° F) the EZ delivers 100% of the calculated additional fuel.

Warning: Do not stack the Edge LB7 EZ with the Edge LB7 Juice. It can cause severe damage to the engine.

Power Edge LB7 EZ Getting Connected

Supplied Items:

1. Power Edge *EZ* Module
2. Three Wire Ties
3. Two Velcro Strips
4. Power Adjustment Switch

Required Tools:

None

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

The Power Edge LB7 EZ Module

This picture shows the Power Edge LB7 *EZ* Module with the harness cable.

*These two connectors are EGT thermocouple connections. The EZ does not utilize these two wires—they are for the **Juice** product only.*

This cable is where the toggle switch that changes power levels gets connected.

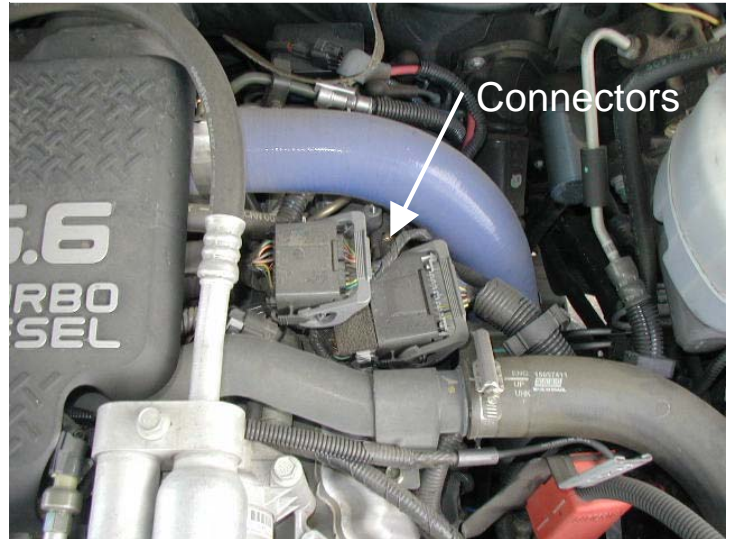


Installing the EZ Module

1. The Power Edge LB7 EZ Module can mount on top of or to the side of the black plastic fuse box cover located on the driver's side fender. Adhere the module using the supplied Velcro, allowing enough harness movement for removal of the cover.

Connecting The Harness

2. Disconnect both stock connectors by squeezing the ears on the backside of the connector and pulling the gray lever.
3. Gently insert the EZ connectors and lock in place with the gray levers, and then gently connect the stock connectors to the other end of the EZ connectors.



Notice: Use caution when inserting connector bodies. If the connector does not slide smoothly, remove the connector, inspect the pins, and retry installation.

Final Inspection

4. Recheck all connections for a properly secure installation. Using the supplied wire ties, secure the wiring harness to prevent possible damage.
5. Start the engine. The engine should start and run like a stock truck. If the engine does not start or run properly, turn off the motor, remove the keys from the ignition, then remove the EZ module and inspect the pins inside both connectors. Straighten pins or clear foreign material from the pins and connector surfaces, then re-install the connectors. If failure conditions still exist, contact your dealer or Edge Products, LLC. When trying to restart, make sure that the key has been turned off for at least 10 seconds before cranking the engine.

Using the Power Edge LB7 EZ

Adjusting Power Levels

The *EZ* has three power levels. The *EZ* module was designed to allow the user to select any of the three power levels on the fly with the supplied three position switch. Level 3 is with the switch towards the tab.

Power Level Confirmation

To confirm the power level that you have selected with your switch, you can do the following procedure:

1. Place gear selector in Park with your foot off of the accelerator while engine is idling
2. Set the Parking Brake
3. Place gear selector to reverse, neutral, reverse, then back to park. P-R-N-R-P
4. The engine will rev to coincide with the power level selected, revving 3 times for level 3 and so on

Towing

It is recommended that you use the Tow/Haul transmission mode while towing. This provides torque converter lockup in gears 2-5, which reduces transmission heat and also raises the shift rpm threshold to keep the rpm's higher. It is recommended that you maintain engine rpm above 1800 while towing.

While towing, the *EZ* 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 Power Edge *EZ*.

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

	Horsepower	Torque
Level 1:	30	120
Level 2:	50	150
Level 3:	65	180

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

Warning: Do not stack the Edge LB7 *EZ* with the Edge LB7 Juice. It can cause severe damage to the engine.

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 possible 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 EZ 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 1 or level 2 for towing applications. Only use level two if you are towing a light load. Level 3 should never be used while towing. Level 3 is a great overall driving level. When driven responsibly, and used with an EGT gauge, level 3 will not stress the stock engine or transmission as long as you are not towing.

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. Just so you know, 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.

In our experience 1350 degrees 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. A brief spike to 1400 that lasts a second is not that big a deal. Pulling up a hill for several minutes at 1400 is far worse.

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 EZ 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 ***Transmission Lock-up***. If the motor produces too much power, this mechanical lock-up can start to slip. When this slippage occurs, the *EZ* module reduces the power output to allow the transmission to function properly. This is a great feature that provides an extra level of protection for your vehicle.

Transmission Relearning

The Allison transmission is a “Smart” transmission. That means that it pays attention to how smoothly the transmission is changing gears, and modifies the shifting to improve drivability. When the motor delivers more power (by adding the *EZ* module), the transmission has to ‘re-learn’ how to shift. After first installing the *EZ* module, you may notice rough shifting. The best way to re-teach the transmission is to set the truck in the power level you will be using most of the time. Then set out to drive, some city, some highway, varying the driving and the speed. Make sure that you shift through each gear 20 to 30 times. A good rule of thumb would be 100 to 200 miles. Remember that the truck must go through each gear 20 to 30 times. You will notice the shifting becoming better, and your truck responding better to the additional power as you go through the learning cycle.

Technical Support

Edge Products takes a great deal of pride in the quality of our customer service. If you have any questions or concerns about your *EZ* module, please feel free to call us at 888-360-3343.

Please have the Part Number, the Version Number and Manufacture Date prior to calling Tech Support. This will help ensure quick and accurate support.

Index

About the Juice _____	6	Juice picture _____	7
Connecting the harness _____	8	Juice Power Level Confirmation	9
Disclaimer _____	4	Making Sense of it all _____	11
Horsepower gains _____	10	Mounting the Juice _____	8
Juice Adjusting Power Levels __	9	Torque gains _____	10
Juice features _____	6	Towing Recommendations ____	9
Juice final inspection _____	8	Using the Juice _____	9
Juice getting connected _____	7		

© 2007, Edge Products
All rights reserved.

Edge Products
1080 South Depot Dr.
Ogden, UT 84404
888-360-3343

www.edgeproducts.com

Manual Version 4