

# **Cummins-98.5-2007 Dodge ®**



## ***Installation Instructions and Manual***

***P/N: 30400, 30403, 30404***



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*Manual Version 1*

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**The Mileage Max Module is a high performance product  
It is strongly recommended that EGT and boost gauges  
be installed when using this product. This product is not  
intended to be used to break any law including emissions  
standards.**

**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.**

## **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. Please keep in mind that towing in anything higher than level two and hard driving in level three is 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 and intakes. 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 box or chip 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 remove your module and monitor when you take your vehicle to a dealer for warranty work** in order not to interfere with Diagnostic equipment.

**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 Dodge Mileage Max*

### **Introduction**

Thank you for purchasing the *Edge Mileage Max* for the Dodge Cummins® 5.9L Diesel. The *Mileage Max* 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 *Mileage Max* is an add-on Engine Control Module (ECM) for the Cummins® 5.9L Engine that offers additional features not available on a stock engine. 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.
- The Mileage Max was developed and tested by Edge’s engineers using a Mustang dynamometer to duplicate typical driving conditions. Both input and return fuel lines from the test truck were run into a separate tank containing a known quantity of fuel placed on an extremely accurate digital scale. With the truck fully warmed, the cruise control was set to 70 MPH in overdrive and a constant load applied to simulate highway driving. The weight of the consumed fuel was then subtracted from the original weight and converted into MPG.
- Repeated test results showed the Mileage Max delivered up to 7% improvement in fuel economy (depending on year and model of the vehicle) and up to 35 more horsepower. In order to ensure accuracy several tests were performed and an average made with and without the Mileage Max using the same conditions on the same dyno. For a more detailed description of the procedure, go to [www.edgeproducts.com](http://www.edgeproducts.com).

The Mileage Max offers a power increase over stock throughout the RPM range, but the power is most noticeable in midrange RPM’s. This greatly improves drivability and towing performance. Transmission downshifting is greatly reduced, especially while passing or towing.

## *Dodge Cummins 5.9 Mileage Max Installation*

### **Supplied Items:**

1. Edge Mileage Max Module
2. Three Wire Ties
3. Two Velcro Strips

### **Tools Required:**

None

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

### **Module Installation**

The *Mileage Max* can mount on the flat black plastic fuse box cover located in the engine compartment on the driver's side fender. Attach the module to the truck using the supplied VELCRO® strips, allowing enough harness movement for removal of the cover.

**Harness Connector** – Your Mileage Max module will be equipped with a harness that can be disconnected at the module itself (See figure 1A). It is important to make sure that your Mileage Max 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.”



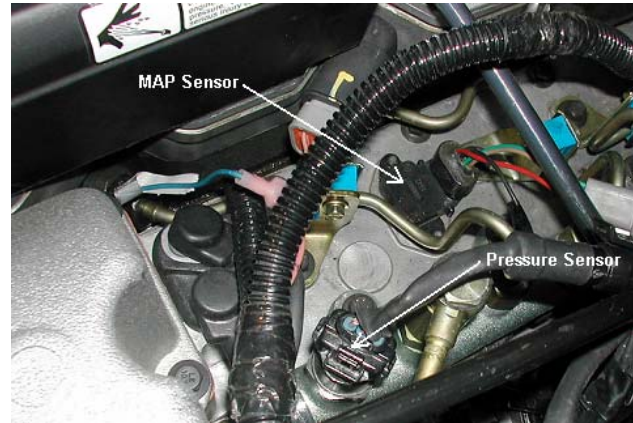
FIGURE 1A

## **03'-07' Installation Section**

*MAP (Manifold Absolute Pressure) Connection*







1. Connect the supplied MAP sensor wiring harness to the main wiring harness in the engine compartment. Disconnect the stock wiring harness at the MAP sensor located on top of the intake manifold. Plug the supplied MAP sensor connector into the stock engine MAP sensor and the stock engine wiring harness connector into the supplied MAP sensor connector.

### *Fuel Pressure Sensor Connection*

2. Disconnect the stock wiring harness at the sensor located on the main fuel rail on the driver's side towards the rear of the engine. Plug the supplied pressure sensor connector into the stock pressure sensor on the engine and the stock engine wiring harness connector into the supplied pressure sensor connector.

### *Final Inspection and Operation*

4. Recheck all connections, fittings and fasteners for a properly secure installation.
5. Using the supplied wire ties, secure the wiring harness from possible damage from moving engine parts.

## **98.5'-02 Installation Section**



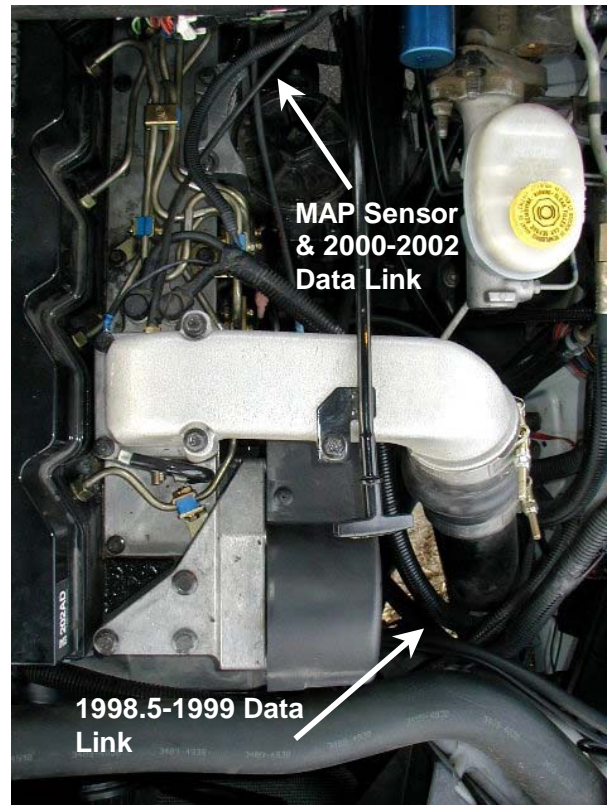
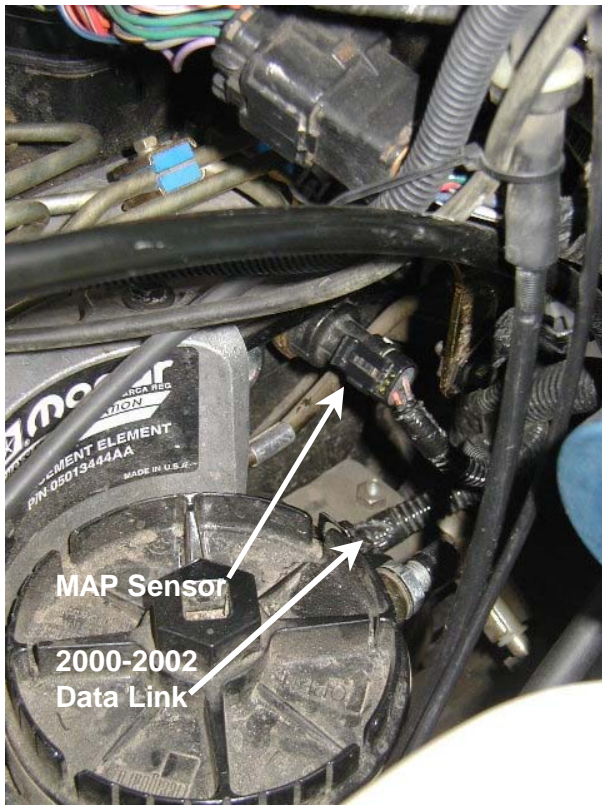
98.5'-00'



01'



02'



### Module Installation

1. The *Edge Mileage Max Module* can mount on the flat 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.

### Data Link Connection

2. The Data Link connector is located in different locations based on the year of the truck:

- 98.5-99 the triangle shaped connector is located on the drivers side of the engine in the wiring harness near the power steering pump
- 2000-2001 the three prong flat connector is located on top of the fuel lift pump that is located on the driver's side of the engine directly below the MAP sensor, note: on some 2001 truck's the connector is located on the drivers side of the engine in the wiring harness near the power steering pump
- A plug is installed in the data link connector on the truck to resist corrosion, remove this and install the supplied connector.

## MAP Connection

Connect the MAP sensor wiring harness to the stock main wiring harness in the engine compartment. Disconnect the stock wiring harness at the boost sensor located to the rear of the fuel filter housing near the top of the engine block. Plug the supplied MAP sensor connector into the stock engine boost sensor and the stock engine wiring harness connector into the supplied MAP sensor connector. The MAP sensor shown in the image is for a 2001, the 1998.5-2000 are a different sensor but in the same location.

***How to Use Your Edge Mileage Max***

## **Using your Edge Mileage Max Module**

This section is to help you use the Mileage Max module effectively and add enjoyment to your diesel truck experience.

The first thing you will probably notice especially if this is your first time driving a diesel truck with a performance module is that you will experience more power, quicker take-offs, better passing and acceleration and above all, better fuel economy.

### ***Towing***

What about towing? What can this do for you when you are towing? The great thing about the *Mileage Max* and all the other Edge® power modules is that they were created for towing. That is why Edge built them, and why we keep making them better. Let's assume that in a stock truck you would pull your 5,000lb load up the grades in 3<sup>rd</sup> gear. Your EGT (Exhaust Gas Temperature) may run at about 1200° F. With the Mileage Max module on, you have effectively increased the horsepower by 35, and the torque by 77 Foot-pounds. That is like adding a fifth horse to pull a four horse carriage. That is representative of how much your power has increased. That means you will be running at a lower rpm and your EGT has decreased. And best of all you are going faster and the truck may have already shifted into 4<sup>th</sup>

### ***Exhaust Gas Temperature***

EGTs readings tell you how hot the exhaust gases are in the exhaust manifold coming from the engine. This is important because you shouldn't let them run for long periods above 1350 F. If you do see them this high you may notice that the instant you let out of the throttle, the EGTs will immediately start to decrease. So this means that if you are getting up to or exceeding this limit you may need to ease up off the throttle a bit to bring those temps down and keep them in a safe operating range.

## Edge Products Technical Support

1-888-360-3343

To expedite your support call, please have part number (i.e., EZD1000D), version number, and Date of Manufacture ready prior to calling support