Power Edge Comp 1998-2002 Dodge Cummins®



Manual Version 011305

#### <u>WARNING</u>: The Power Edge Comp Module is a high performance product. USE AT YOUR OWN RISK!

#### IT IS HIGHLY RECOMMENDED THAT BOOST AND EGT GAUGES BE USED WITH THIS PRODUCT

<u>IMPORTANT:</u> Read all Disclaimer, Warranty, and Installation Instructions before installing 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.

Supplied Items:

- 1. Power Edge Comp Module
- Main Wiring Harness
  To Engine Compartment- Black to Ground; Gray to Fuel Injection Pump; Map Sensor Connection; Data Link Connection.
   Inside Cab - Red to Fuse Box 12V Power
- 3. Fuel Injection Pump Connector
- 4. Four Wire Ties
- 5. Two Velcro Strips
- 6. One Hose Clamp
- 7. One 90° Brass Fitting
- 8. One Male Spade Fuse Connector

Items Required: Knife 2-3 ft. of wire (fishing) Pliers (needle nose) Phillips Screwdriver Flat tip Screwdriver 3/8" Drive Torque Wrench 1/2" Wrench

3/8" Drive Ratchet & Sockets 1/4" Socket 5/16" Socket 7/16" Deep Well Socket and Ratchet 10 mm Socket 13 mm Socket

Warranty: 2 years Limited Warranty

Money Back Guarantee: If you are not completely satisfied with this product within the first 60 days of purchase, your money will be refunded.

# AFTERMARKET PRODUCTS AND YOUR VEHICLE'S WARRANTY

Many of our customers ask "will your product void my vehicle 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 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 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.

# Power Edge Comp Installation Instructions

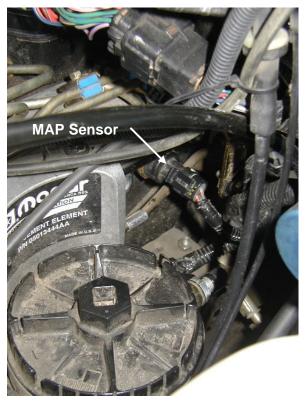
Please read these instructions and disclaimer through completely and thoroughly understand each step prior to installation.

## In Cab Installation

- 1. Determine a good 12 volt circuit for use as a power source. Verify this circuit has power while starting and running and no power with the ignition off. NOTE: A good circuit is the number 17 fuse (10 AMP Cluster A) inside the fuse panel located on the left side of the instrument panel. Remove the fuse panel cover, the number 17 fuse and attach the supplied male space fuse connector onto the fuse. Reinstall the stock fuse with connector back into the fuse panel (this is a very tight fit).
- Using the ½" wrench, loosen both negative battery cable clamp fasteners, remove cables from the battery posts and set each to the side. NOTE: DO NOT reconnect until installation is complete. Connecting power may cause fault code in the ECM, which only an authorized dealer can remove.
- 3. Using the Phillips screwdriver, remove the three screws from the bottom of the knee bolster. Pull the bottom back towards you until it pops loose, remove it and set aside. This gives better firewall access.
- 4. Routing the Supplied Main Wiring Harness. Cut a ¾" slit in the grommet. <u>Automatics-</u> easy access is the clutch hole grommet located to the left of the firewall brake hole. <u>Manuals or Automatics</u>- Use the large vehicle wiring harness grommet in the firewall. Fish the supplied harness through the slit from inside the cab out into the engine compartment. Leave about 18" of the supplied wiring harness inside of the cab (white 6-wire connector end plus the red wire.)
- 5. Route the supplied red wire up into the fuse panel. Connect the female spade to the made space fuse connector and reinstall the fuse panel cover.
- Reinstall the knee bolster. Align clips on bolster to holes in lower panel and push. Insert and tighten the three screws in the bottom of the bolster.
- Mount the Power Edge Comp to your preference. A good location is on the knee bolster – either side of the steering column. Use the two supplied Velcro strips.

## **MAP Connection**

8. Connect the supplied MAP sensor wiring harness to the supplied 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 and on the engine block.



Edge Products Inc.

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.

## Injection Pump Wire Connection

- Using the 13 mm socket, remove the three bolts securing the throttle bracket assembly on top of the Fuel Injection pump. Move it towards the driver's side battery.
- 10. Using the 10 mm socket, remove the four bolts securing the air intake and the bolt securing the oil dipstick tube. Using the 7/16" socket, loosen the clamp and rotate the air intake assembly counterclockwise to expose the Fuel Injection Pump stock wiring harness.
- 11. The stock wiring harness is located by following it from the center of the six fuel supply tubes up to the top rear of the pump. The upper two wires- slide the protective covering downward to expose these wires. Install the supplied pin connector lower half with trough onto the wire closest to the engine block, this is the top inner wire. Hold the wire in this trough while installing the upper

half of the pin connector onto the lower half. Using the pliers, squeeze the two halves together fully. NOTE: Important-while the connector halves are being seated together the wire is not to be rotated. The stock wiring harness that plugs into the injection pump may be removed for better access to the wire. Connect the supplied gray wire to the supplied pin connector wire.

- <image>
- 12. Reinstall the air intake

assembly onto the intake manifold using the four bolts. Install the ring connector on the supplied black ground wire onto one of these bolts – preferably the bolt with the large ground wire already attached to it. Using the torque wrench and 10mm socket, torque these bolts to 18 lb./ft. Install and tighten the oil dipstick tube retaining bolt and tighten.

13. Reinstall the throttle bracket onto the fuel injection pump using the three bolts. Using the torque wrench and 13mm socket, torque these bolts to 18 lb./ft.

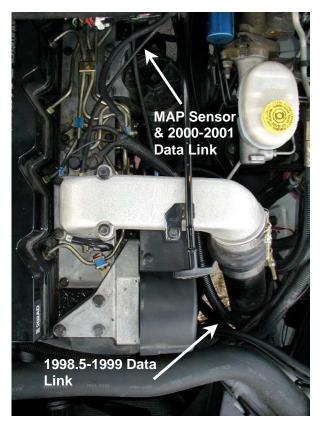
#### Data Link Connection

14. 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

15. A plug is installed in the data link connector on the truck to resist corrosion, remove this and install the supplied connector.



#### **Boost Elbow Installation**

- 16. Using the 5/16" socket, loosen the two clamps securing the air induction hose to the air filter housing and the turbo inlet. Remove the hose and set it aside.
- 17. Using the pliers, remove the crimp style clamp from the hose on the brass fitting located on the now exposed lower front side of the turbocharger. Remove the hose from the brass fitting and dispose of the crimp style clamp.
- 18. Using the 7/16" wrench, unscrew the stock brass fitting out of the turbocharger housing. Using the 7/16" wrench, install the supplied brass fitting, tighten-be careful not to over-tighten. Slip the supplied hose clamp onto the stock hose, install the stock hose onto the supplied brass fitting and tighten the hose clamp with the ¼" socket. Reinstall the stock air hose onto the air filter housing and turbocharger inlet. Using the 5/16" socket, tighten both clamps securely.

## Final Inspection and Operation

- 19. Recheck all connections, fittings and fasteners for a properly secure installation.
- 20. Using the supplied wire ties, secure the wiring harness from possible damage.
- 21. Reconnect both negative battery cables onto the battery posts. Using the ½" wrench, tighten both fasteners securing the cable clamps to the battery posts.

- 22. Turn the ignition key on. DO NOT START THE ENGINE! The LED on the Power Edge Comp should light when powered up.
- 23. With the ignition key on, check for the LED on the module. If the LED is not on, push the gray round button to turn the module on. If the LED is still not on, check for proper connections – ground and 12 volt power. Do not proceed if the LED does not work as desirable. If the check engine light appears, proper connections have not been made to the MAP sensor.
- 24. If module does not function as described in Step 23 turn ignition key to the off position and disconnect both battery ground cables. Check all connections pull apart and inspect for bent or broken male. Inspect all stock and supplied connectors thoroughly. If all connectors are good, reconnect insuring each seats tightly. Reconnect battery cables to the battery posts. Repeat steps 22 and 23. If the problem still exists please call the dealer where purchased for technical assistance.
- 25. To adjust power levels 1-5 on the Power Edge Module push the corresponding arrow buttons, left arrow will decrease level and right arrow will increase power level. The levels can be adjusted while the engine is running.
- 26. Each power level on the Power Edge Comp has a submenu that allows the user to tune in the low boost fueling to eliminate excess smoke. To access the submenu:
  - a. Be in the power level that you what to adjust the low boost fueling for
  - b. Press and hold the round gray button (power button) for about 2 seconds, release button
  - c. The LED's will be flashing when in the submenu
  - d. Use the left and right arrows to adjust the levels 1-5
  - e. When 1 LED is lit this results in the least responsive setting or lowest smoke, all 5 LED's lit is the most responsive
  - f. Each power level can store a unique submenu setting
  - g. When accessing the submenu for the first time the LED's may appear erratically lit, use the right arrow key to light all LED's then set to desired level.
- 27. If the Power Edge Comp does not function as described above, please call the dealer where purchased.

## 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 1:	40	150
Level 2:	60	200
Level 3:	80	250
Level 4:	100	300
Level 5:	120	350

## 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 distributors, jobbers, and dealers (hereafter **SELLER**) shall in no way be responsible for the product's proper use and service. <u>THE **BUYER** HEREBY WAIVES ALL LIABILITY CLAIMS.</u>

The **BUYER** acknowledges that he/she is not relying on the **SELLER's** skill or judgement 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 **BUYER** is responsible to fully understand the capability and limitations of his/her vehicle according to manufacturer specifications and agrees to hold the **SELLER** harmless from any damage resulting from failure to adhere to such specifications

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 **BUYER** is responsible to obey all applicable federal, state, and local laws, statutes, and ordinances when operating his/her vehicle, and the **BUYER** agrees to hold **SELLER** harmless from any violation thereof.

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.

The **SELLER** recommends that the **BUYER** temporarily remove this product from his/her vehicle when having the vehicle serviced by a dealership or other service facility. Failure to do so may cause erroneous diagnostic readings or misdiagnosis of vehicle problems. The **SELLER** assumes no liability for failure to do so.

## 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.

#### **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.