

98.5-02
DODGE CUMMINS

ADRENALINE

ENGINE CONTROL SYSTEM

98.5 - 02 DODGE CUMMINS INSTALLATION

Thanks for your purchase of a Quadzilla product. We know you'll be more than satisfied with the increased performance our product provides. Be sure to tell your fellow diesel truck owners about Quadzilla.

This is a high performance product and we suggest that you also install Exhaust Gas Temperature (EGT) and boost gauges with all Quadzilla products. This product may alter the technician's ability to use diagnostic equipment

Please remove the Quadzilla product when taking your truck into a service facility.

The Installation of this product indicates the BUYER has read and understands this agreement and the 'Disclaimer of liability' agreement contained at the end of this manual and accepts its terms and conditions.



THIS IS A HIGH PERFORMANCE PRODUCT. USE AT YOUR OWN RISK.
Be sure to read the disclaimer before beginning any installations of this product.

TABLE OF CONTENTS:

Installation Instructions	4
Warranty	14
Disclaimer	15

Supplied Items:

- Care kit
- Wire ties
- 1 Adrenaline module
- 1 Wiring harness
- 1 Digital controlPOD
- 1 Transmission temperature sending unit
- 1 Fuel pressure sending unit
- 1 Tapped banjo bolt
- 2 Banjo bolt washers
- 1 USB cable
- 1 MAP sensor adaptor
- 1 Exhaust Gas Temperature (EGT) probe

Required Tools:

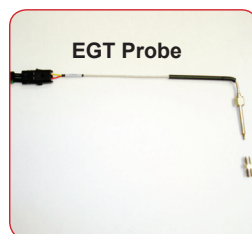
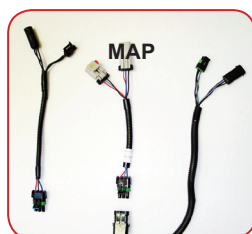
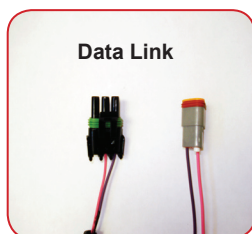
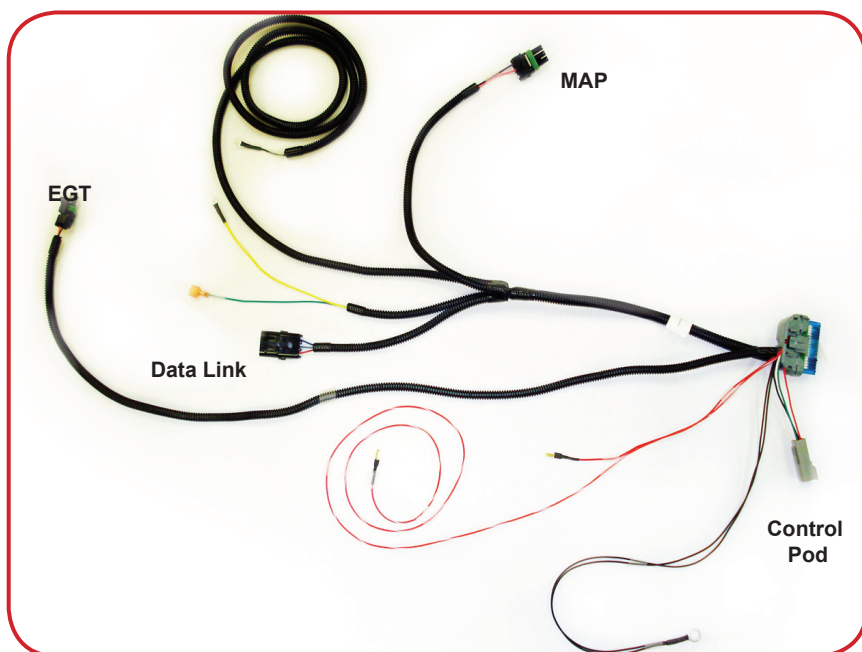
- Drill
- 21/64" drill bit
- 1/8"-27 npt tap
- 17mm wrench or socket
- 13mm wrench or socket
- 11mm wrench or socket
- 3/4" wrench
- 1/2" wrench or deep socket
- 9/16" wrench
- 5/8" wrench
- 3/8" wrench
- Razor knife

INSTALLATION

To begin the installation of your new Adrenaline box, first make sure the ignition is in the off position and key is removed from the ignition. We also recommend disconnecting your batteries for extra safety.

* When routing wires pay special attention to avoid any moving, sharp, or hot engine components!

- 1** Now choose a suitable mounting location for the Adrenaline module itself. We have found that the under hood, fuse box cover, located on the driver side of the engine bay, provides a good flat area for the module to be secured to.
- 2** Next lay out the main wiring harness. The following leads will go to their respective locations:



CONTINUE: INSTALLATION

Exhaust Gas Temperature (EGT): The orange and black wires with a two-pin male connector will go to the EGT thermocouple that will be installed on the passenger side of the engine in the exhaust manifold.

Trans or Engine Oil Temperature:

The brown wire with a ring terminal will go to the Oil Temperature sensor that will later be installed in the oil filter housing also located on the passenger side of the truck, or in the transmission test port on the passenger side of the transmission.

Lift Pump Fuel PSI: This is a yellow wire with a ring terminal attached. This will go to the fuel pressure sending unit to be installed into the injection pump feed line.

Pump Wire: The green wire will go to the VP44 injection pump wire.

Data Link: The purple and pink wires with a black three-pin connector will be used for the data link connection. The connector for these two wires will vary depending on what year model your truck is: three-pin flat connector for 01-02 trucks and a gray triangle connector for 98-00 trucks. No matter what year the truck is, there will only be two wires used for this three-pin connector.

MAP: There is also a MAP sensor connection that will have to be completed. The style of MAP sensor plug will also vary depending on year model. For 98-00 trucks the MAP sensor will be a round connector with the three-pins arranged in a pyramid. The 01 trucks will use a flat, black three-pin connector. And the 02 trucks will use a larger, gray three-pin connector with a red locking slide. All three styles of plugs will have three wires.

Ground: The two black wires, which are attached together with a single ring terminal, will need to be routed to the negative terminal of the battery.

Power: You will also notice two red wires coming out of the main Adrenaline harness connector. One of the two should be a short, solid red wire, while the other will be a longer, red wire with a white tracer on it. The shortest (solid red) of these two wires will go to the under hood fuse box. The longer of the two (red w/ white tracer) will go to the fuse panel in the cab of the truck.

Control Pod: Off of the Adrenaline main harness, you will notice a gray, four-pin connector with red, green, black, and white wires going into it. This is to connect the Control POD to the Adrenaline module.

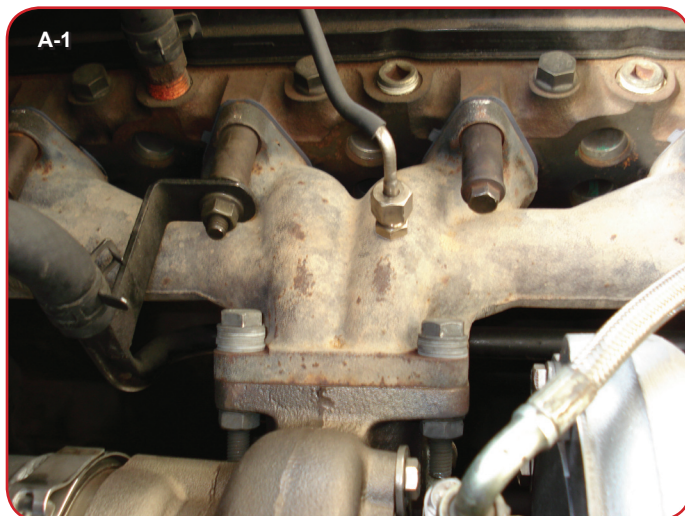
CONTINUE: INSTALLATION

98.5 - 02 DODGE CUMMINS

3 Begin by installing the thermocouple probe into the exhaust manifold. The best location to install the thermocouple is directly in the exhaust manifold itself between the 3rd and 4th cylinders if counting from the front of the motor rearward. Using a good, sharp 21/64" drill bit, and with the engine running, drill your hole slowly and carefully.

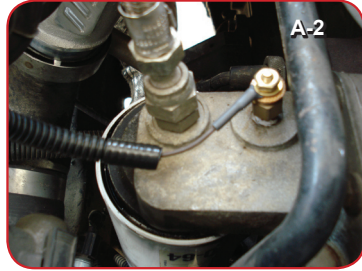
*Tip: Greasing the flutes on the drill bit will act as an extra precautionary measure to help catch metal removed while drilling.

4 Next, using a 1/8 – 27 NPT tap, tap the hole you just drilled in the exhaust manifold. The engine does not need to be running for this procedure. Make sure that when starting your tap, it is parallel in all planes with the hole you drilled. Not getting the hole tapped straight could result in an exhaust leak. Do not run the tap in all the way! This is a tapered tap and running it in all the way could result in a hole too large to seal correctly. We recommend to running the tap in about half way and then test fit the thermocouple bushing. If the tapped hole is not large enough to start threading the bushing in, reinstall the tap and tap the hole a little more until the bushing threads in about 3/4 to 7/8 of its length. Using a 9/16" wrench tighten the bushing, it only needs to be snug; over tightening may cause the exhaust manifold to crack. Following the bushing installation, install the thermocouple probe in the bushing and tighten using a 5/8" wrench. (Image A-1) Route the black and orange lead wires with the black two-pin male connector, from the Adrenaline main harness, to the thermocouple lead wires (yellow and red with a black two-pin female connector) and connect.

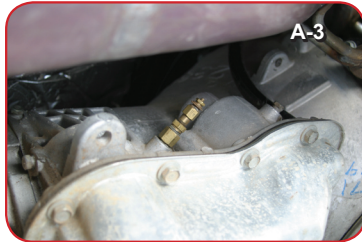


CONTINUE: INSTALLATION

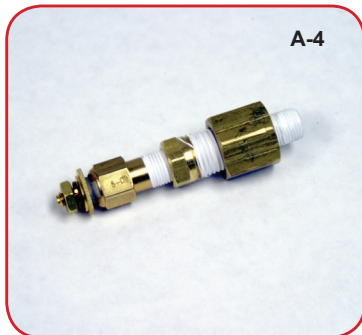
5 Route the brown wire with the ring terminal to the oil filter housing (if you choose to monitor oil temp) located to the front of the motor on the passenger side, just rearward of the alternator. Using a 11 mm wrench or socket, remove the test port fitting and install the temperature probe provided in its place. Using a 1/2" wrench or deep socket, tighten until snug, taking caution not to over tighten. You may also use a SMALL amount of Teflon tape; excess amounts can cause the sensor to not get a good ground connection and could result in inaccurate readings. If your oil temperature readings seem inaccurate, and you used some kind of pipe sealant on the sensor, we recommend removing the sensor and cleaning the threads before reinstalling. Connect the brown wire to the oil temperature sensor making sure that the insulating wafer is sitting under the ring terminal and tighten with a 3/8" wrench or socket, do not over tighten. (Image A-2)



For transmission temperature, route the brown wire with the ring terminal down between the fire wall and the rear of the motor, over the top of the transmission to the passenger side of the truck. Locate and remove the test port plug on the passenger side of the transmission.



The test port will be located just above the transmission pan mounting bolts, between the second and third bolt if counting from the front rearward, and will be protruding at an angle toward the passenger front tire out of the transmission. (Image A-3) Assemble the probe and brass fittings using a 1/2", 9/16" and 3/4" wrench, and install in the transmission. Tighten using a 3/4" wrench. Connect the brown wire making sure the insulating wafer is installed before the ring terminal and tighten. (Image A-4)



CONTINUE: INSTALLATION

6 Moving to the pump wire, it will be most easily installed by removing the throttle position sensor (TPS) housing. (Image A-5) The TPS is located on the driver side of the motor, just forward of the air intake horn. Remove the 3 bolts securing the TPS with a 13mm socket or wrench and move the TPS to the side. You should now have a pretty good view of the injection pump. Looking down on the injection pump from the front of the truck, look for a set of two black wires. (Image A-6) They will be inside of a protective sleeve and will be located on the side of the injection pump that is closest to the engine block. There are actually two sets of two black wires, one set is arranged just above the other; this is the set that contains the wire to be tapped. Using a small razor knife, cut the protective sleeve back about 1-1.5" to gain access to the wires inside. From the front of the truck looking down on the uppermost set of two black wires, you will want to securely place the blue supplied t-tap on the wire that is on the left hand side, or closest to the engine block, with a pair of pliers. (Image A-7) Do not rotate the t-tap after it is installed on the wire to ensure a good connection. Attach the green wire with the male shielded connector to the t-tap at this time. (Image A-8) Reinstall the TPS and its three mounting bolts.



WARNING: If you connect the tap and the wire to the VP44 pump while there is power to the pump it could cause pump damage. As stated earlier in the instructions make sure that the key is in the OFF position and the batteries are disconnected.

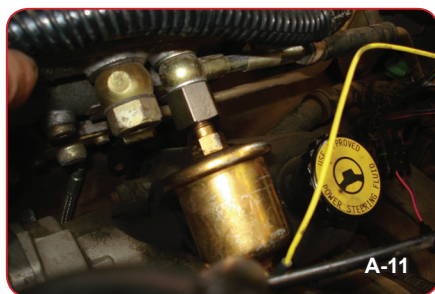
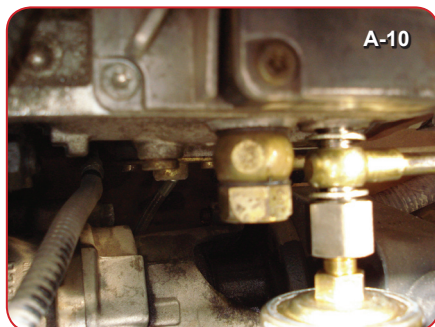
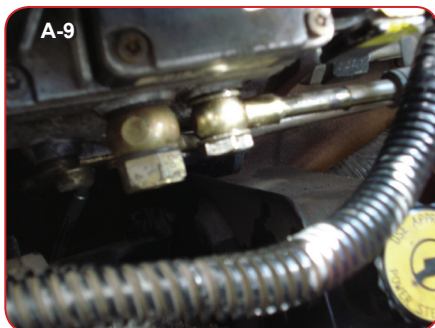
CONTINUE: INSTALLATION

7 Fuel pressure sending unit: Install the sending unit into the banjo prior to installing the banjo bolt in the injection pump. You may use Teflon tape if you choose. However, as with the oil temperature sensor, make sure not to use too much, as it will cause a poor ground connection and could cause inaccurate or erratic readings. If erratic fuel pressure readings are observed, remove any thread sealing compound and reinstall.

8 Locate the injection pump feed line banjo bolt, on the injection pump itself. It is most easily viewed from standing on the driver side of the truck, just forward of the front axle centerline, and looking at the side of the injection pump right below the TPS. There are actually two banjo fittings, one larger and one smaller; the larger being toward the front of the truck from the smaller one. Using a 17mm wrench or socket, you will want to remove the factory banjo bolt from the smaller, most rearward, of the two fittings. (Image A-9)

**Tip: If unsure of what line to be removing the bolt from, trace the gold feed line from the fuel filter housing to the injection pump. This is the line to remove the bolt from.*

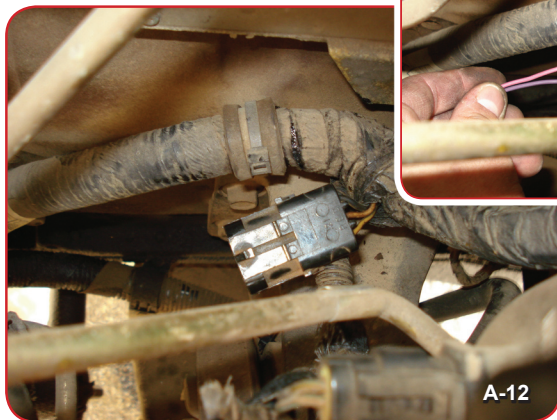
Once the bolt is removed, install the supplied replacement banjo bolt and sending unit assembly in its place, making sure to install the supplied Cummins gasket washers between the gold banjo fitting and the replacement banjo bolt, and the banjo fitting and the pump body. **DO NOT USE TEFLON TAPE ON THIS FITTING** (Image A-10) Tighten using a $\frac{3}{4}$ " wrench. Connect the yellow wire with the ring terminal to the sending unit, making sure that the insulation wafer is installed before the ring terminal, and tighten using a $\frac{3}{8}$ " wrench or socket, do not over tighten. (Image A-11)



CONTINUE: INSTALLATION

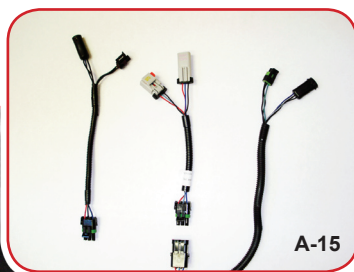
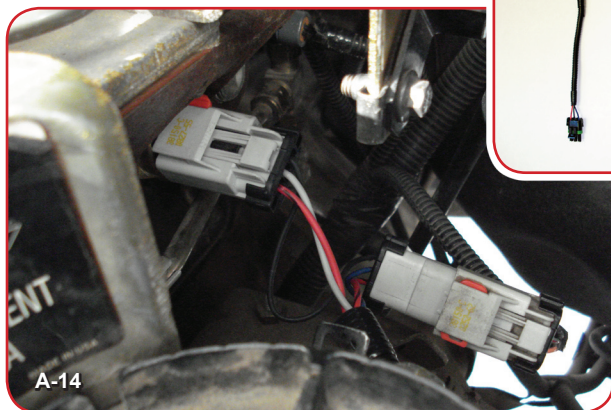
98.5 - 02 DODGE CUMMINS

- 9** Locate the truck's data link connector. This will be a male, black, three-pin, flat connector on 01-02 trucks, or a gray, three-pin triangle connector on 98-00 trucks. This connector will be located on the driver side of the engine. The exact location will vary some from truck to truck but it should generally be located around the driver's side motor mount. (Image A-12) It may be located further toward the front of the motor on some trucks. This plug can sometimes be difficult to locate as it can be hidden amongst the factory wiring harnesses; you may have to move some of the factory wiring harnesses to locate it. There will also be a dummy plug connected to the data link. Once located, remove the dummy plug and connect your respective style data link plug (purple and pink wires) from the Adrenaline harness. (Image A-13)



CONTINUE: INSTALLATION

10 Next is the MAP sensor. The three wire manifold absolute pressure sensor (MAP) is located on the driver side of the truck about three inches rearward of the fuel filter housing. It will be at about the same height as the fuel filter housing cap, and plugs into the driver side of the engine. This plug style will vary depending on what year model your truck is. For 98-00 trucks, the MAP sensor will be a round connector with the three pins arranged in a pyramid. The 01 trucks will use a flat, black three-pin connector, and 02 trucks will use a larger, gray three-pin connector with a red locking slide on it. Move the red locking slide to the side using a small pocket screwdriver and then press the locking tab down to remove the connector. Once you have unplugged the factory connector from the MAP sensor, connect the male Adrenaline MAP sensor plug to the sensor. Then connect the factory male plug that you removed from the sensor to the female Adrenaline MAP sensor plug. (Image A-14) You will notice that this MAP sensor wiring assembly has another black, three-pin male connector on it nearly identical to the data link plug. This connector must be connected to the respective female connector on the Adrenaline harness. (Image A-15) The plug on the Adrenaline harness will have dark blue, light blue, and red wires going into it. Make sure the connections are secure and fully connected; failure to do so could cause a CEL and erratic operation.



CONTINUE: INSTALLATION

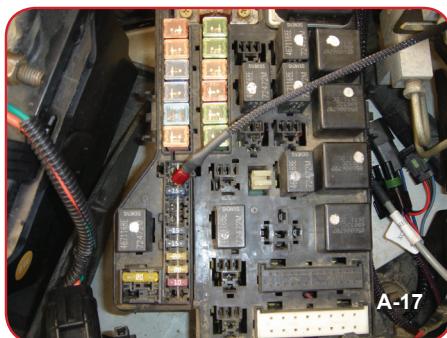
11 Now you should determine where the best place is to mount your digital Control POD. We have found the steering column to be a suitable location for easy viewing, but you can mount it anywhere you desire. Begin by cleaning the mounting area of the Control POD and the mounting area of the truck with the supplied alcohol wipe; this will ensure the best possible contact with the Dual-lock. Now attach the control pod to the mounting location using the supplied 3M Duallock. Route the wiring in to the dash and through the firewall. You will need to find a suitable location to get through the firewall. On automatic transmission trucks, you will find a black plastic cover sealing a port on the firewall (where the clutch master cylinder would go on a standard transmission truck) just below the brake master cylinder and towards the outside of the truck; this makes for a very easy way to gain access through the firewall. On standard transmission trucks, we recommend cutting a slit in the factory wiring harness rubber grommet, which is also located right below the brake master cylinder.

**Tip: Use caution when routing the plug through the firewall. Be careful not to force the plug through the firewall as damage or breakage to the plug could occur and will not be covered under warranty.*

12 Now to make a ground, take the two black wires with the single ring terminal and route them to the negative terminal of the driver's side battery. Remove the factory ½" nut and reinstall with the ground ring terminal. (Image A-16)



13 Finally for power, begin by routing the short, solid red wire to the engine compartment fuse box, and attach the fuse tap to the #15 mini fuse (this is also a 15amp fuse). Pull the fuse out and attach the leg of the fuse tap on one of the fuse legs. (Image A-17)



14 Now route the longer, red with a white tracer, power wire to the interior fuse panel. You may go through the same hole or slit you made to route the Control POD plug and wiring to the Adrenaline module for this power wire. Finally, attach the fuse tap to the leg of the #9 mini fuse (this is a 10 amp fuse) (Image A-18)



15 Start the truck and check for any leaks. You may also have a check engine light after first starting your truck, this is normal and will clear after a few drive cycles.

16 Control functions: Use the far right button to toggle between parameters being monitored. Use the up or down buttons to change the power level. *note: you can change power levels from any screen by simply pressing the up or down buttons*

17 Go to www.quadzillapower.com and check under the product updates link from our homepage for a variety of different tuning files. Simply download the file you wish to try and follow the on screen instructions. *Note, do not plug your Adrenaline module into your computers USB port until the installation wizard prompts you to do so, plugging the module into the computer prematurely may cause the software drivers to be installed in the incorrect location and will cause file uploading issues.*

WARRANTY:

All QUADZILLA Performance Modules/Tuners Diesel Performance Enhancement Software- as specified below - is warranted against defective materials or workmanship for one million miles or ten years from date of purchase, whichever comes first. The Performance Modules/Tuners hardware units are covered by a one year unlimited mileage warranty.

WHAT IS WARRANTED:

Any Performance Modules/Tuners Diesel Performance Enhancement Software specified for and Cummins, Powerstroke, and, Duramax diesel engines, except those units sold exclusively for racing and/or off-road use.

WHO IS COVERED BY WARRANTY:

The original purchaser of a Performance Modules/Tuners who has completed the required warranty registration and provided proper proof of the original retail purchase and all other required information.

WHAT IS NOT WARRANTED:

Any Performance Modules/Tuners used for any type of racing or competition, any off-road use, custom or modified applications, any non-legal or industrial applications. (These units are covered by a one year unlimited mileage warranty for both Software and Hardware.)

WHAT VOIDS THE WARRANTY:

Incorrect Installation: The Performance Modules/Tuners must be installed following Quadzilla installation procedure as outlined in the product literature that accompanies the Performance Modules/Tuners. **Physical damage** to the unit due to improper care in installation or removal will not be covered under this warranty. **No Registration:** Failure to register your product within 90 days of purchase will void the one year unlimited mileage warranty. **No Proof of Purchase:** At time of warranty claim, buyer must provide proof of purchase (original receipt or invoice). **Incorrect Use:** Any damaged, abused or modified Performance Modules/Tuners will not be warranted.

EXTENT OF WARRANTY:

Any defective Performance Modules/Tuners properly returned to QUADZILLA will be replaced or repaired by QUADZILLA. QUADZILLA will not be responsible for any other expenses incurred by the customer under the terms of this warranty, nor shall it be responsible for any damages consequential, special, contingent, or otherwise; or expenses or injury arising directly or indirectly from the use of the Performance Modules/Tuners unit or software. Any Performance Modules/Tuners returned to QUADZILLA must be sent at the customer's expense along with proof of purchase. QUADZILLA reserves the right to determine whether the terms of the warranty, set out above, have been properly complied with. In the event that the terms are not complied with, QUADZILLA shall be under no obligation to honor this warranty.

SHORTAGES AND DAMAGED GOODS:

It is the responsibility of the customer to inspect and count products upon receipt. Any shortages or errors must be reported to Quadzilla immediately. Claims for shortages or damaged goods must be received within 3 days of receipt of the product. All merchandise is inspected before packing. Any damaged goods should be reported to the freight carrier immediately. All packaging of damaged goods must be kept for inspection by the freight carrier.

RETURNS AND EXCHANGES:

An RMA (return merchandise authorization) must accompany all returns and exchanges. Returns must include a copy of the original invoice. Returns and exchanges must be shipped pre-paid or they will be refused.

Returned or exchanged products must be undamaged, or in "like new" condition. Damage occurred during freight due to improper packing is the responsibility of the customer. Unauthorized or refused merchandise are subject to a 10% restocking fee.

DISCLAIMER:

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 the terms and conditions.

DISCLAIMER OF LIABILITY

Quadzilla Performance Technologies, Inc. and its 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 sales of 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

Quadzilla Performance Technologies, 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 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 in, 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 Quadzilla Performance Technologies, 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 shall the SELLER be liable for any damages or expenses insured by reason of the use of 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 THIRTY (30) DAYS FROM THE 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.



QUADZILLA

PERFORMANCE

6032 Jacksboro Hwy. Fort Worth, TX. 76135

Toll Free: 1-888-842-6572

WWW.QUADZILLAPOWER.COM