

T R A I L

JAMMER

PERFORMANCE KIT

***1997-2004 Jeep Wrangler & 1997-2002 Jeep
Cherokee 4.0L Inline six
Installation Instructions & Manual***

**OLD P/N's: ETJ4000 / ETJ4001 / ETJ4002 / ETJ4003 / ETJ4004
NEW P/N's: 30700 / 30600 / 30601 / 30701 / 30602**



TABLE OF CONTENTS

| | |
|---|----|
| <i>DISCLAIMER OF LIABILITY</i> _____ | 3 |
| <i>LIMITATION OF WARRANTY</i> _____ | 3 |
| <i>Getting Connected</i> _____ | 6 |
| Tools Required: _____ | 6 |
| Supplied Items: _____ | 6 |
| <i>Trail Jammer Throttle Body Installation Instructions</i> _____ | 7 |
| Final Adjustments _____ | 8 |
| <i>Trail Jammer Module Installation Instructions</i> _____ | 9 |
| Intake Air Temperature Connection _____ | 9 |
| MAP (Manifold Absolute Pressure) Connection _____ | 9 |
| Air Intake Conversion Harness _____ | 10 |
| Early 1997 Model Jeep Connectors Note: _____ | 11 |
| Final Inspection and Operation _____ | 12 |
| Power Gains _____ | 12 |

© 2007 Edge Products
All rights reserved.
Edge Products
1080 South Depot Dr.
Ogden, UT 84404
(801) 476-3343
www.edgeproducts.com

Manual version 6

The Trail Jammer Module is a high performance 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 incurred 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.

Getting Connected

Thank you for purchasing the Trail Jammer Module for the Inline 6 Jeep®. This module has been developed and produced using the highest quality to ensure the best performance for years to come. If you have any concerns or questions please contact us.

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

Note: This product excludes all Grand Cherokee models.

Tools Required:

10 and 11 MM Sockets
Regular screwdriver

Supplied Items:

1. #20 and #25 TORX Wrenches
2. Metric Allan wrench
3. 8 replacement IAC and TPS screws
4. *Trail Jammer* Module
5. AIR Intake and Filter Assembly
6. Trail Jammer Throttle Body
7. IAC and Throttle Body Gaskets
8. Velcro and Zip Tie
9. Harness Conversion Wires (97-03 Wranglers)

If your module is equipped with this cable, ignore it. This cable is used for internal (Edge) use only.



Intake Air Temp Sensor connectors (gray)

MAP sensor connectors (black)

Figure 1

Trail Jammer Throttle Body Installation Instructions

1. With a standard screwdriver, loosen the clamp attaching the air intake tube to the throttle body. Remove the air intake tube from the JEEP throttle body.
2. Using a 10mm socket or wrench, remove the (4) bolts attaching the JEEP throttle body to the intake manifold, set aside. These bolts will be used to attach the Trail Jammer 62mm throttle body to the intake manifold.
3. Set aside the JEEP throttle body gasket (gasket between the throttle body and the intake manifold).
4. Disconnect the electrical connectors that attach to the IAC (idle air control) and TPS (throttle position) sensors.

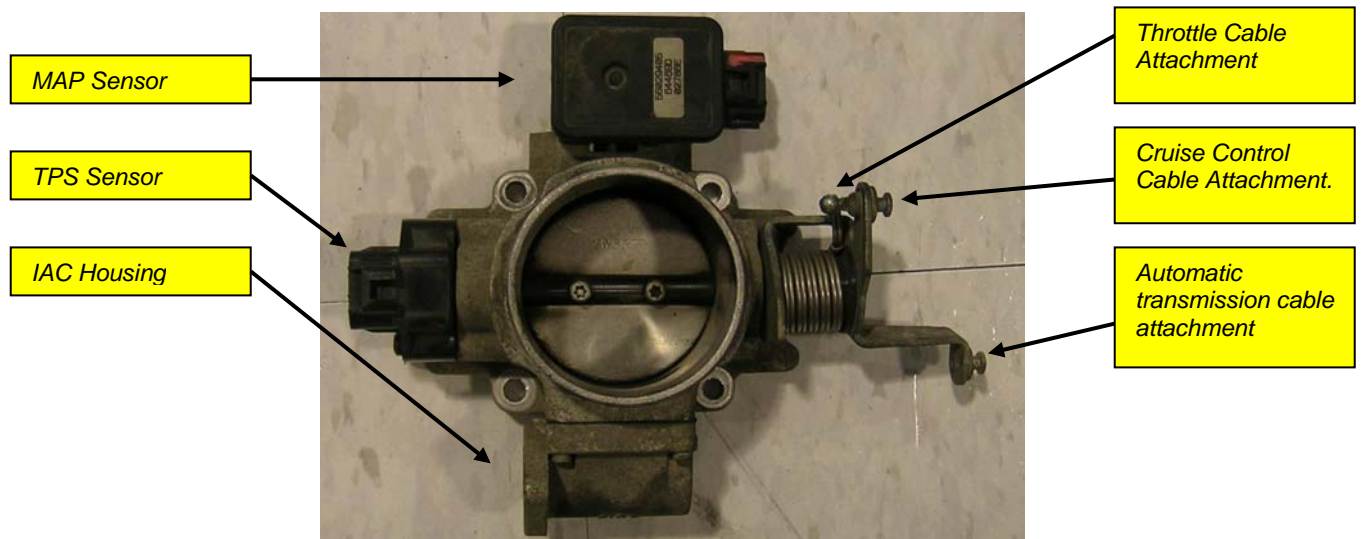


Figure 2

5. Disconnect the wire that is attached to the MAP (manifold absolute pressure) sensor.
6. Remove the throttle cable from the JEEP throttle body. If the vehicle is equipped with automatic transmission and cruise control, remove these cables from the throttle body.
7. Using the #20 torx wrench (included with the Trail Jammer throttle body) remove the IAC housing from the JEEP throttle body and set aside.

TIP: The torx screws can become corroded in your throttle body and difficult to remove. Tapping them lightly, directly in the center with a hammer may help loosen them.

8. Using the #25 torx wrench, remove the TPS from the JEEP throttle body, set aside.
9. Remove the MAP sensor using the #20 torx wrench.
10. Using the #20 torx wrench, attach the IAC housing and the new IAC gasket to the Trail Jammer throttle body.
11. Using the #25 torx wrench, attach the TPS and MAP sensors to the Trail Jammer throttle body.

Tip: When installing the TPS, position the TPS counterclockwise slightly before sliding over the shaft, then turn the TPS clockwise to line up the holes. Make sure the butterfly valve rotates smoothly before tightening the TPS bolts.

12. Using a 10mm socket or wrench, attach the Trail Jammer throttle body and the new throttle body gasket to the intake manifold.

**The recommended torque specs for the throttle body bolts are 90 inch lbs.*

13. Re-attach the electrical connectors to the IAC and TPS sensors.
14. Re-connect the MAP connector to this sensor.
15. Attach the throttle cable to the Trail Jammer throttle body. If equipped with an automatic transmission and or cruise control, attach these cables to their respective locations. Note: Automatic transmission cables may be difficult to connect, but pressing hard should accomplish the job.
16. Re-install the air intake tube, and tighten clamp. (Refer to the instructions with the Edge/AFE intake for installation instructions.)

Final Adjustments

Important: Be sure the throttle arm rotates freely through the full throttle range. Test this manually by rotating the butterfly valve arm (where the throttle cable attaches) to the extreme open position with your hand. It should **not** come into contact with any engine parts. If it does, bend the arm slightly away from the motor until there is no contact.

Before starting your vehicle, make sure all fasteners are tight and all electrical connectors are properly plugged in.

Upon initial startup of your vehicle, the idle will likely be much higher than normal. After approximately 60 seconds, your Jeep will automatically adjust the idle to the proper level.

Trail Jammer Module Installation Instructions

1. Depending on your model year, the *Trail Jammer Module* can mount on the flat black plastic fuse box cover located either on the driver's side fender, or on the passenger side near the fire wall. Adhere the module using the supplied velcro, allowing enough harness movement for removal of the cover.

Intake Air Temperature Connection

2. The Intake Air Temperature Sensor is a gray connector located on top of the engine block towards the front driver side. Remove the connector and plug the similar *Trail Jammer* module connector (see figure 1) in its place.

Note: *If your vehicle is a Cherokee, or a '03 JEEP Wrangler with a manufacture date between 12/02 and 2/03, refer to the **Air Intake Conversion Harness** section in this manual.*

3. Hook the removed connector to the other gray *Trail Jammer* connector.

MAP (Manifold Absolute Pressure) Connection

4. The MAP Sensor is a black connector located at the base of the engine block's intake.
5. Remove the connector and plug the similar *Trail Jammer* connector (see figure 1) in its place.
6. Hook the removed connector to the other black *Trail Jammer* connector.

Air Intake Conversion Harness

All Cherokee Models & 2003 Wrangler models with build dates between 11/02 & 02/03

If your vehicle is a Cherokee, or a '03 JEEP Wrangler with a manufacture date between 11/02 and 2/03, it is necessary to use the “conversion” harness (see figure 3) on both ends of the air intake (gray) harness section (see figure 4).



Figure 3

2 of these air intake conversion harnesses are supplied with your Trail Jammer kit.

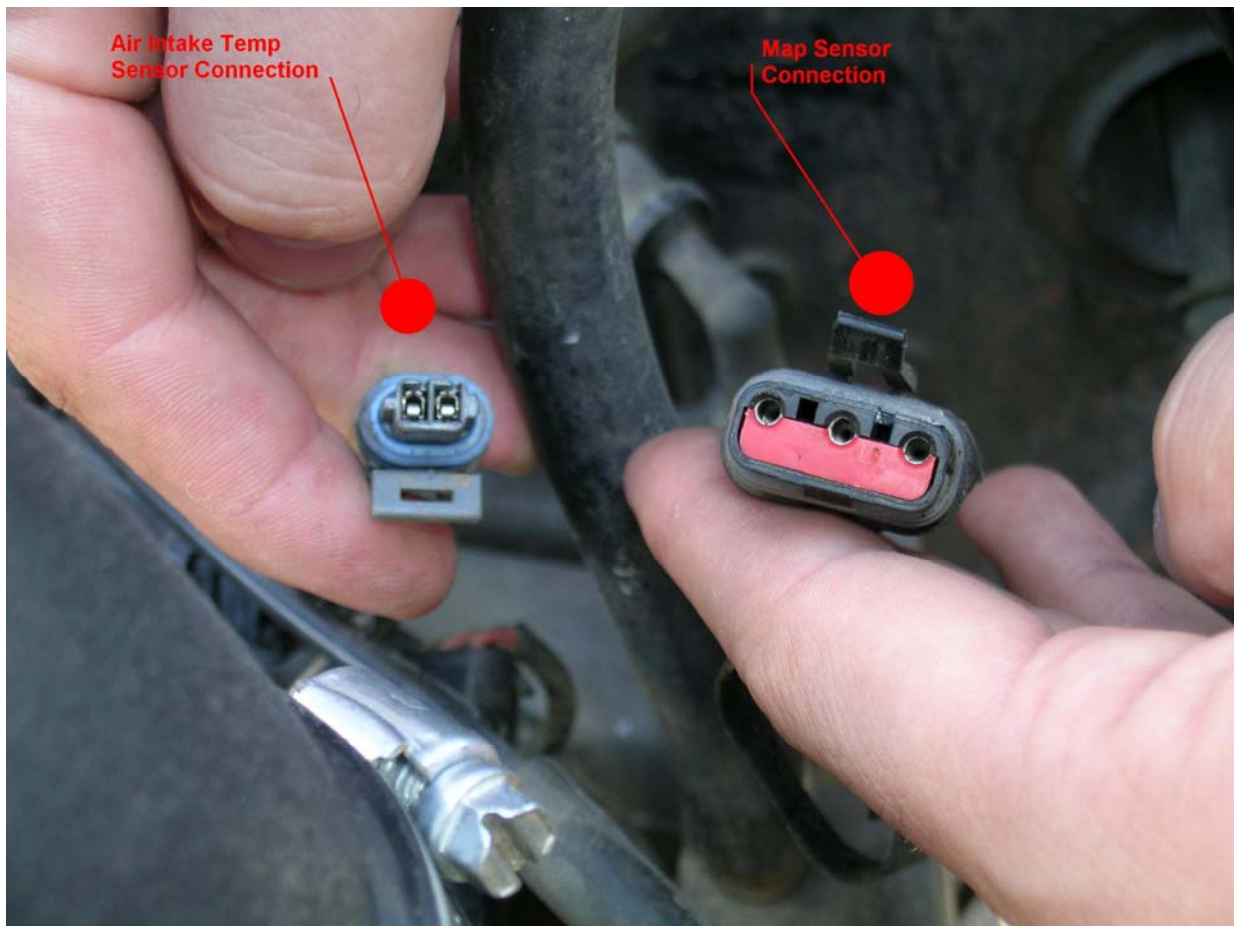


Figure 4

If your vehicle is a Cherokee or a JEEP Wrangler with a manufacture date between 12/02 and 2/03, it is necessary to use the “conversion” harness to plug into your Air Intake Sensor.

Early 1997 Model Jeep Connectors Note:

Some of the early production 1997 model Jeeps has a different wiring harness than the rest of the 1997-2004 models. If the Jeep model you are working on is an early 1997 model, and has the same connectors as shown in the following picture, the Trail Jammer kit will not work with this vehicle, and you will need to return the product to the dealer you purchased it from. If necessary, call Edge Products Technical Support at 888-360-3343 for a RMA # to authorize the return.



Trail Jammer AIR Intake Installation Instructions

See the instructions included with the AFE AIR Intake Assembly.

Final Inspection and Operation

1. Recheck all connections for a properly secure installation.
2. Using the supplied wire ties, secure the wiring harness from possible damage from moving engine parts.

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 (elevation) settings.

| | Horsepower | Torque |
|----------------------------------|------------|--------|
| Air Filter: | 10 | 12 |
| Air Filter/Throttle Body: | 15 | 19 |
| Air Filter/Throttle Body/Module: | 20 | 26 |

Technical Support 1-888-360-3343

To expedite your support call, please have part number (i.e.,30700), version number, and Date of Manufacture ready prior to calling support.