

# INSTALLATION GUIDE

T R A I L

# JAMMER

PERFORMANCE KIT

*for the 05-06 Jeep® Wrangler 4.0L Inline Six*



**Superchips**

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## SAFETY WARNING & CAUTION

Throughout this User Manual (Manual) you will see important messages regarding your safety or the protection of your vehicle. These messages are designated by the words **WARNING** and **CAUTION**.

**WARNING** indicates a condition that may cause serious injury or death to you, your passengers or others nearby. Pay careful attention to these Warning messages, and always comply with them. They could save a life.

**CAUTION** indicates a condition that could cause damage to your vehicle. It is important to install and operate your product in conformance with instructions in this Manual. Caution alerts you to particularly important things that will keep your vehicle operating properly.

The device you have purchased is a high-performance product. As such, it does present some risks of which you should be fully aware. **Do not use this product until you carefully read the following safety information and the Owner Agreement.**

## SAFETY

Always use your best judgment, and operate the vehicle in a safe manner. **Do not become distracted by the device while driving, and always be fully aware of all driving conditions.** Minimize the amount of time spent viewing the device screen while driving.

Do not operate the device while driving. Perform all adjustments or changes while stopped. Changing a setting while under way can interfere with your attention to roadway conditions.

**Do not exceed legal speed limits on public roadways.** Use any enhanced speed capabilities of this product only in closed circuit, legally sanctioned racing environments expressly for this purpose. Loss of control from speeding on a public road could seriously injure you, your passengers, or others on the roadway.

Always use and install the Superchips Trail Jammer in compliance with the instructions and manual provided.



### W A R N I N G

Misuse of this product could lead to injury or death. Obey all traffic laws. Read and comply with all instructions in the included User Guide.

## INSTALLATION & OPERATION WARNINGS

**\*Avoid cable routing that can interfere with pedal operation.**

**WARNING Misapplication or misuse of this product could lead to a serious or fatal accident. Comply with all safety information in this manual, and your vehicle owner's manual. Follow safety, installation and operating instructions in this User Manual to assure proper use.**

## PRODUCT HANDLING

Please observe all operating conditions relating to the Superchips Trail Jammer.

This product is designed for normal room temperatures or temperatures suitable for humans.

Please remove the product from the vehicle when not in use.

Do not leave the Flashpaq on the dashboard or windshield when not in use.

**If exposed to extreme temperature, the unit could become damaged. Remove the Flashpaq from the vehicle if it falls within the following scenarios:**

- (1) Vehicle interior is subjected to 140° F or higher.**
- (2) Vehicle interior is subjected to 32° F or lower.**

Do not “stack” Superchips Flashpaq tuning with other unauthorized tuning products. “Stacking” performance-enhancing devices or other improper installation can cause power train failure on the road. Other products may have features incompatible with your Flashpaq device. Follow all installation and operating instructions, and do not stack products.

Unit is sealed and is not to be serviced by user.

Unit can be damaged by violent impact.

## WARRANTY INFORMATION

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

### LIMITED 1 YEAR WARRANTY

Superchips (hereafter “SELLER”) gives Limited Warranty as to description, quality, merchantability, and fitness for any product's purpose, productiveness, or any other matter of SELLER's normal use\* of the 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 the SELLER.

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. This shall constitute the sole remedy of the purchaser and the sole liability of the SELLER. To the extent permitted by law, the foregoing is exclusive and in lieu of all warranty and merchantability or fitness. In no event shall SELLER or its suppliers be liable for special or consequential damages. 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 90 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.

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE BUYER HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.

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 DATE OF PURCHASE FOR A FULL REFUND.

**NOTE:** This warranty is void for any new products purchased through auction web sites, classified listings, or publications. Warranty is valid only for new products purchased through Authorized Dealers (proof of purchase required for all warranty claims).

**\*Intended normal use means this item is being used as originally intended and for the original application as sold by Superchips. Any modifications to this item, or if it is used on an application other than as marketed, will VOID the warranty. It is the sole responsibility of the customer to determine that this item will work on the application they intend. Powerteq will accept no liability for custom applications.**

## **SERVICE CENTER & COMPATIBILITY CAUTIONS**

**CAUTION: RETURN YOUR VEHICLE TO STOCK BEFORE TAKING IT TO A SERVICE CENTER.** All programmers are built to operate with OEM powertrain software. If you take your vehicle to a service center they may, by your request or otherwise, update your vehicle's calibrations. If this happens and your vehicle has not been returned to stock your device may no longer be capable of programming your vehicle. Therefore, it is important that you return your vehicle to stock before taking it in for service. Superchips 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 Superchips is not always made aware of calibration changes made by the OEM. In the case of discontinued products, Superchips 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.

**CAUTION:** If you have used another tuner/programmer on your vehicle, you will need to program the vehicle back to OEM stock and remove the device before using the programmer. Failure to return to stock may result in PCM failure or engine damage. Programming your vehicle may expose existing defects in the vehicle's PCM that could disable your vehicle. It is advised that you do not program your vehicle in remote locations in case of vehicle failure.

**CAUTION:** The programmer was developed on a stock vehicle with no aftermarket bolt-on parts; as such, the performance changes implemented by the programmer may not be compatible with certain aftermarket power add-ons. See below for a brief explanation of how the tuning may be affected by certain aftermarket devices.

### **MECHANICAL MODIFICATIONS**

Mechanical modifications such as headers, upgraded camshafts, displacement changes, cylinder head improvements, etc. will change the airflow characteristics of an internal combustion engine. The programmer is not tailored to take advantage of these modifications; for the best results we recommend vehicle-specific custom tuning.

### **CARB/EPA COMPLIANCE**

Superchips is at the forefront in bringing you up-to-date, street legal parts that comply with federal and state emissions regulations. Superchips is working vigorously to be street legal in all 50 states per established CARB (California Air Resources Board) and EPA (Environmental Protection Agency) regulations.

This E.O. number indicates the installation of this product meets the emissions compliance requirements of the California Air Resources Board and Federal Environmental Protection Agency and is legal for sale and use on pollution-controlled vehicles operated on public streets and highways. It must be installed and operated according to the instructions provided in this user's manual. Included with this product is a sticker like the one pictured below for you to retain with your vehicle. You can either apply it somewhere on the vehicle (e.g., the inside end of driver's door) or simply retain it in your glove box. The purpose of the sticker is to inform anyone who may have questions regarding the use of your Superchips product and how it affects emissions.



## REGISTERING YOUR PRODUCT

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Superchips recommends that you register your new product online through the Superchips website to start your warranty and make it easier to get support when needed. You can find the registration page under the “**Customer**” tab on [www.superchips.com](http://www.superchips.com).

### BENEFITS OF PRODUCT REGISTRATION

#### **Your Safety**

Registering your product allows us to know exactly which product you have and provide important product updates to you that improve the quality and/or safety of the product.

#### **Enhanced Features**

Almost all Superchips products are easily updated via the internet. We are constantly adding new features and improvements to our product that we know you will want to enjoy.

#### **Confirmation of Ownership**

Provides a record in case of product loss, theft, or required warranty work. If you call us for support, our team will already have much of the information they need to help you.

#### **Improved Product Development**

Helps us better understand you (our customers) and design products that meet your needs.

#### **Special Offers**

Allows us to inform you about special offers on accessories and/or new products that fit your vehicle and enhance your driving experience.

## USING THIS MANUAL

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Use this manual as a guide to install each of the components supplied in your kit. For more specific information on how to properly use the Flashpaq, please refer to the Flashpaq manual provided in the box.

For specific information regarding horsepower, torque, and other features available for this product, visit [www.superchips.com](http://www.superchips.com) for year/make/model/engine performance parameters.

## TOOLS REQUIRED

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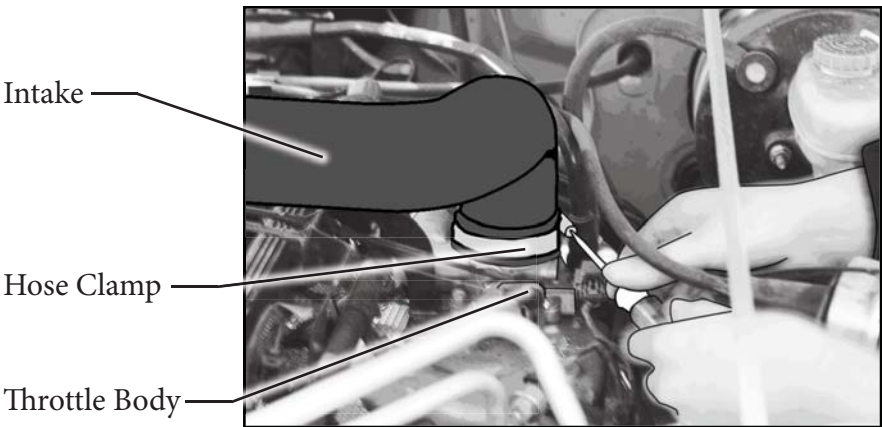
- Socket Wrench
- 10mm Socket
- 11mm Socket
- Flat Head Screw Driver

## WHAT'S IN THE BOX

- #20 TORX Wrench
- #25 TORX Wrench
- 4mm Allen Wrench
- 4 Replacement IAC, TPS, and MAP Sensor Screws
- Programmer
- Air Intake and Filter Assembly
- Throttle Body
- Throttle Body Gasket

## THROTTLE BODY INSTALLATION

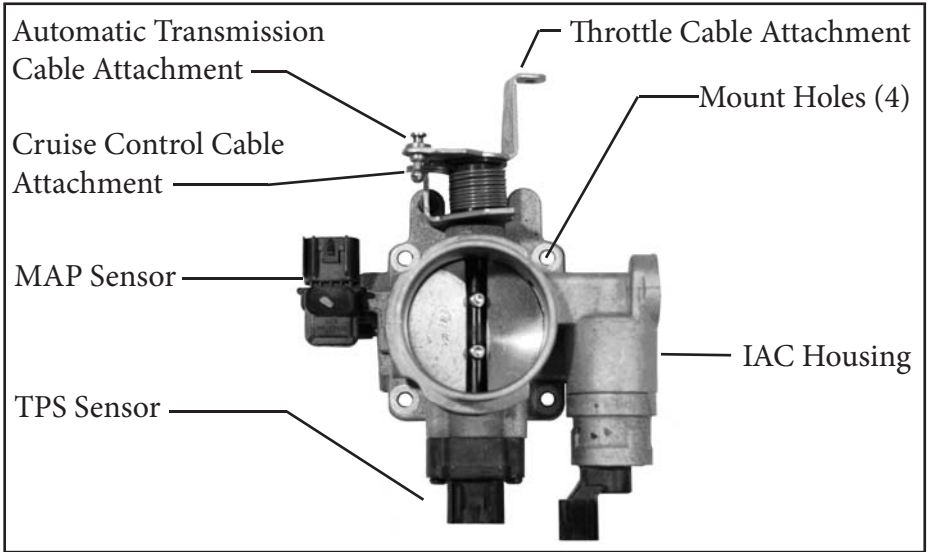
1. With a flat head screwdriver, loosen the hose clamp attaching the air intake tube to the throttle body.
2. Remove the air intake tube from the JEEP throttle body.



3. Using a 10mm socket or wrench, remove the (4) bolts attaching the JEEP throttle body to the intake manifold. (These bolts will be used to re-attach the Trail Jammer 62mm throttle body to the intake manifold.)



4. Remove the JEEP throttle body gasket (gasket between the throttle body and the intake manifold).
5. Disconnect the electrical connectors that attach to the IAC (idle air control) and TPS (throttle position) sensors.



6. Disconnect the wire that is attached to the MAP (manifold absolute pressure) sensor.
7. 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.
8. Using the #25 torx wrench (included with the Trail Jammer throttle body kit) remove the MAP sensor 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.***

9. Using the #20 torx wrench, remove the TPS, and IAC sensors from the JEEP throttle body, set aside.

10. Use the supplied 4mm Allen wrench, and the M5x16mm (roughly 5/8") Allen head bolt to re-attach the IAC sensor to the new Trail Jammer Throttle Body. (Also replace the existing O-rings with the new supplied O-rings when you re-attach the IAC sensor to the Trail Jammer Throttle Body.)

11. Use the two supplied M5x25mm bolts to re-attach the TPS and MAP sensors to the Trail Jammer throttle body.

***TIP: When installing the TPS, be sure orientation is the same as when removed. Position the TPS rotated slightly clockwise in position before sliding over the shaft, then turn the TPS counterclockwise to line up the holes. Make sure the butterfly valve closes and 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.

***CAUTION: The recommended torque specs for the throttle body bolts are 90 inch lbs. Do not over-tighten.***

13. Re-attach the electrical connectors to the IAC and TPS sensors.

14. Re-connect the MAP connector to it's 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.

## **AIR INTAKE INSTALLATION**

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For information on proper intake installations, refer to the information provided in the Air Intake Kit from AFE.

## FINAL INSPECTION

**CAUTION:** *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 fully seated.

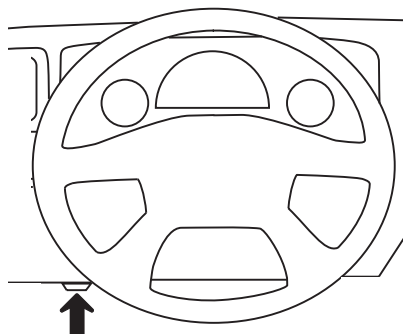
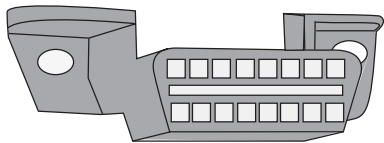
Recheck all connections for a properly secure installation.

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.

## PROGRAMMER INSTALLATION AND BASIC TUNING

Your Trail Jammer kit comes equipped with a Superchips Flashpaq programmer specifically calibrated for the Trail Jammer components.

1. Locate the vehicle's OBDII port.
2. Plug in the programmer. The device will power on automatically.



Follow these easy steps to get your vehicle tuned:

1. Select the TUNE VEHICLE option in the Main Menu.
2. Select the appropriate tuning level you want installed.
3. Select OPTIONS.
4. Adjust each of the OPTIONS that apply to your needs:
  - Speedometer corrections for tire and gear upgrades\*
  - Rev and Speed Limiter
  - Idle\*
  - Spark Advanced Set\*

*\*If vehicle equipped*

5. Agree to the settings you have chosen and then select Ok to tune the vehicle. (For more information, refer to the Flashpaq User Manual)

**CAUTION:** *Before the tuning process begins, please turn off all non-essential powered devices such as the fan control, radio, and anything plugged into the power adaptor ports or cigarette lighter. In order to function properly, the programmer needs a full 12 volts to successfully tune the vehicle. Also, during the tuning process we recommend that you do not leave your vehicle. Do not unplug the product in the middle of the tuning or the vehicle may become inoperable requiring the product to recover the vehicle.*

## **POWER GAINS**

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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.

	<u>Horsepower</u>	<u>Torque</u>
Air Filter	10	12 lb. /ft.
Air Filter/Throttle Body	15	19 lb. /ft.
Air Filter/Throttle Body/Programmer	20	26 lb. /ft.

## **TECH SUPPORT & SERVICE**

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If something goes wrong with your product, customer support is available to assist you. You can contact Customer service by phone at 1-888-227-2447 or by email at tech@superchips.com. Customer service hours of operation are Monday – Friday from 8 am to 5 pm Eastern standard time.

Most service issues can be resolved using our internet update software, but in the event the product needs to be returned to Superchips for service, please follow these important steps:

- 1) Contact Superchips customer service at 1-888-227-2447 within the hours of operation listed above. If the product needs to be returned your customer service rep will provide you with a Return Authorization number (RA#).
- 2) If the product is under warranty you will need to provide a copy of the original sales receipt. The Sales receipt must have the name and address of the business where you purchased the product from. Invoices, credit card statements, or sales receipts from an online payment service company will not be accepted.
- 3) Box up the product along with a copy of the original sales receipt, a brief description of the problem and your contact info.
- 4) Mark the outside of the shipping box in bold print with the RA# provided to you by the customer service agent.
- 5) Send the product postage paid to:

**POWERTEQ**  
**Attn: Warranty Claims RMA #**  
**1080 South Depot Drive**  
**Ogden, UT 84404**

We will inspect the product and either repair it or replace it with a new or rebuilt product. We reserve the right to use refurbished parts when making repairs.





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