

# ROUSH®

THE ART OF PERFORMANCE ENGINEERING

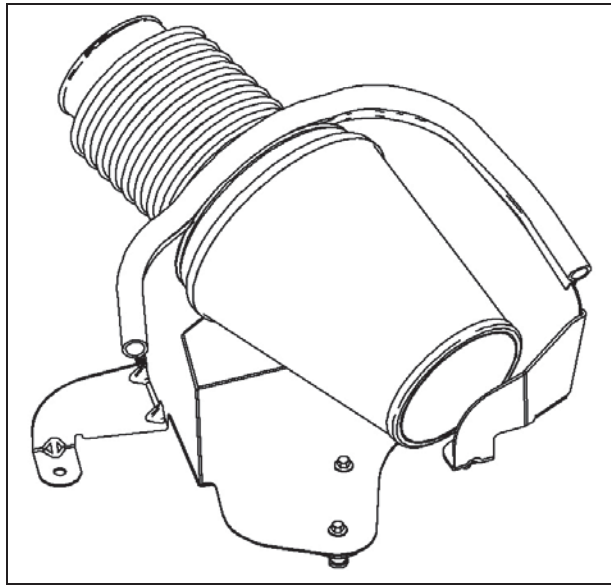
OFF ROAD USE ONLY – NOT FOR USE ON POLLUTION CONTROLLED VEHICLES

2005 – 2009 Mustang ROUSHcharger Cold Air Kit

P/N: R07130030-13-AA

**\*\*\*NOT FOR USE ON POLLUTION CONTROLLED VEHICLES\*\*\***

## Installation Instructions



### Applications:

2005-09 Ford Mustang GT with 3 Valve 4.6L engine equipped with ROUSH M90 ROUSHcharger Kit. This includes all Stage 3, Black Jack 427R, 428R and 429R models. This also includes vehicles upfitted with a Retail ROUSHCharger Kit.

### Important Notes:

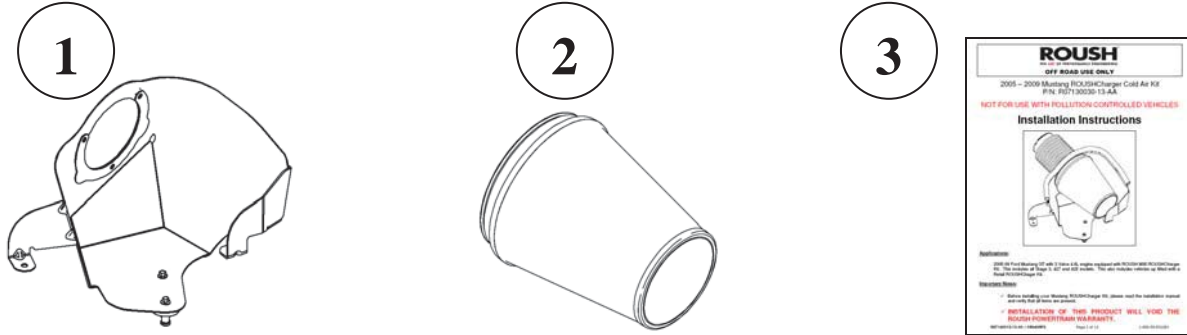
- ✓ Before installing your Mustang ROUSHCharger Kit, please read the installation manual in it's entirety and verify that all items are present.
- ✓ **INSTALLATION OF THIS PRODUCT WILL VOID THE 3 yr/36000mi ROUSH LIMITED POWERTRAIN WARRANTY.**
- ✓ The air filter element is protected from direct exposure to water and debris. Care should be taken to avoid deep water. WATER INGESTION IS THE DRIVERS RESPONSIBILITY. The Premium Air Filter Element in this kit is reusable and should be cleaned periodically using a generic Air Filter Cleaner and Recharging Kit available at most performance auto parts stores.

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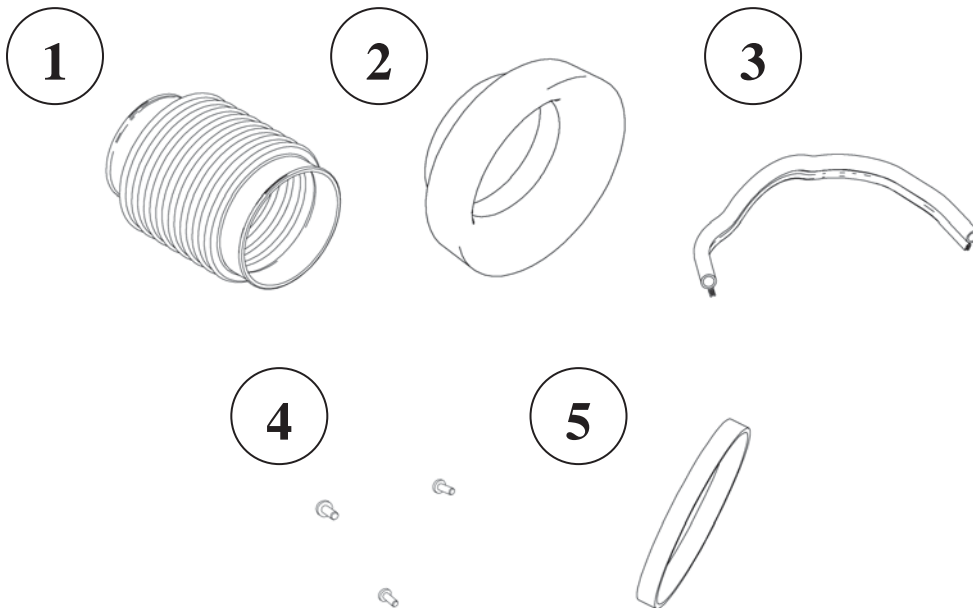
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## PACKAGING LIST



Part Ref	Description	RPP Part Number	Qty
	<b>Main</b>	---	<b>1</b>
1	Air Box Assembly	R07130032	1
2	Air Filter with Clamp	R07060131	1
3	Installation Instructions	R07140013	1
N/A	PCM Return Box (Not Shown Above)	R07100032	1



Part Ref	Description	RPP Part Number	Qty
	<b>Hardware Kit – Cold Air Kit</b>	<b>R07130042</b>	<b>1</b>
1	Coupler	R07130018	1
2	Bellmouth	R07130019	1
3	Seal – Air Box to Hood	R07130026	1
4	Button Head Screw – ¼" – 20 x ½"	R18020056	3
5	Worm Drive Clamp – 3" – 5" Long x ½" Wide	R07130028	1



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## **EQUIPMENT AND SUPPLIES REQUIRED**

- 1/4" and 3/8" Drive Ratchets with Extensions
- Metric and Standard Socket Sets (deep recommended)
- 3/8" Drive Torque Wrench (7-35 ft-lb range)
- Short Phillips-head Screwdriver
- Fender Cover (2)
- Standard Hex Key Set – 5/32 needed

## **LIMIT OF LIABILITY STATEMENT**

The information contained in this publication was accurate and in effect at the time the publication was approved for printing and is subject to change without notice or liability. ROUSH Performance Products (RPP) reserves the right to revise the information presented herein or to discontinue the production of parts described at any time.

## **SAFETY PRECAUTIONS**

**STOP! CAREFULLY READ THE IMPORTANT SAFETY PRECAUTIONS AND WARNINGS BEFORE PROCEEDING WITH THE INSTALLATION!**

Appropriate disassembly, assembly methods and procedures are essential to ensure the personal safety of the individual performing the kit installation. Improper installation due to the failure to correctly follow these instructions could cause personal injury or death. Read each step of the installation manual carefully before starting the installation.

- ! Always wear safety glasses for eye protection.
- ! Place the ignition switch in the OFF position.
- ! Always apply the parking brake when working on the vehicle.
- ! Block the front and rear tire surfaces to prevent unexpected vehicle movement.
- ! Operate the engine only in well-ventilated areas to avoid exposure to carbon monoxide.
- ! Do not smoke or use flammable items near or around the fuel system.
- ! Use chemicals and cleaners only in well-ventilated areas.
- ! Batteries can produce explosive hydrogen gas which can cause personal injury. Do not allow flames, sparks or flammable sources to come near the battery.
- ! Keep hands and any other objects away from the radiator fan blades.
- ! Keep yourself and your clothing away from moving parts when the engine is running.
- ! Do not wear loose clothing or jewelry that can be caught in rotating or moving parts.
- ! Allow the engine, brakes, and exhaust systems to cool before working on a vehicle.

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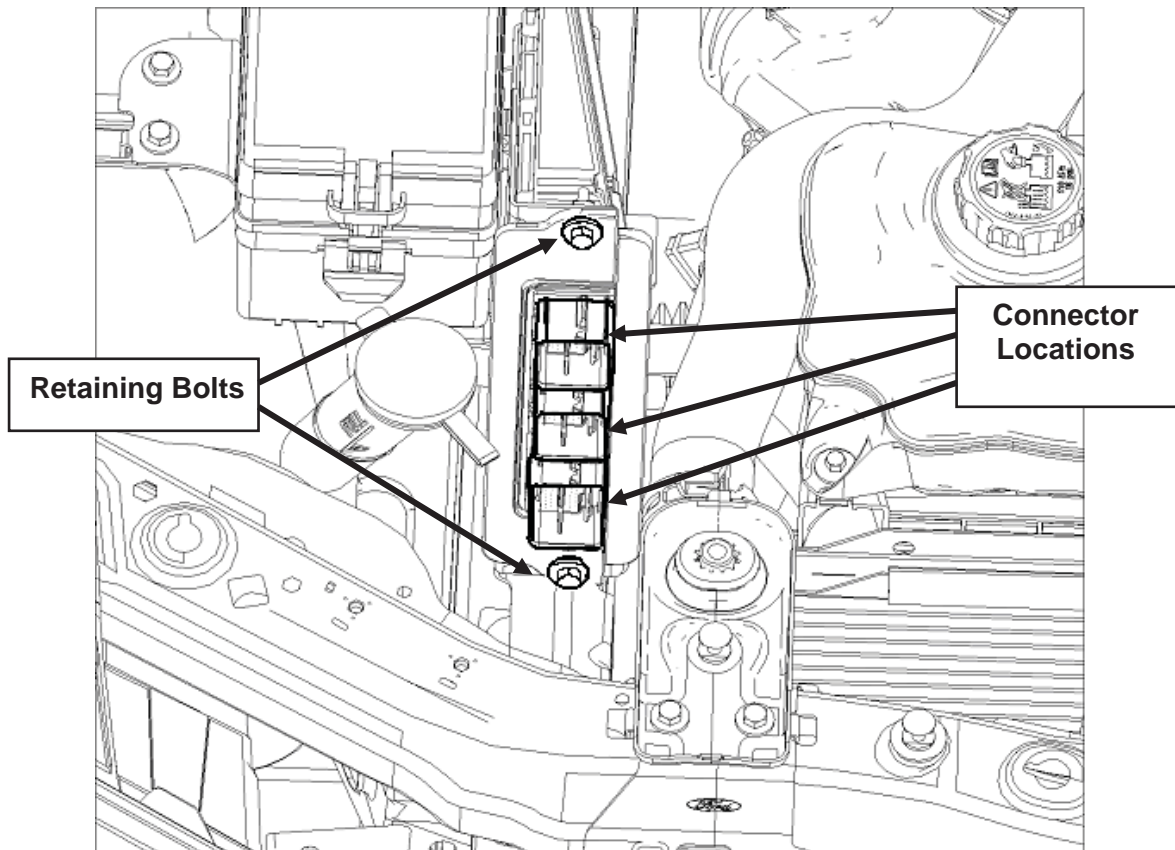
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## SECTION A - DISASSEMBLY

The following section will guide you through the disassembly of the stock components.

1. Cover both fenders with fender covers to protect the vehicle finish.
2. Using an 8mm wrench, disconnect the (-) negative & (+) positive connections to the battery.
3. Disconnect the 3 PCM (Powertrain Control Module) connectors by lifting the grey levers over the connector back shell and lifting the connectors from their sockets. Remove the PCM by removing two 10mm bolts and pulling the PCM forward and lifting out of the engine compartment. Follow the instructions on the next page as soon as possible to help minimize the amount of time you are without a PCM.



**Important:** Be sure to write your VIN number and phone number (in case we need to contact you for additional vehicle information) on the PCM using a permanent marker.



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**INSTRUCTIONS FOR RETURNING THE PCM TO ROUSH FOR CALIBRATION**

Outlined below are the instructions for returning your stock Powertrain Control Module (PCM) to ROUSH Performance Products so we can install our calibration to make the engine run properly with the new components. The prepaid shipping box is set-up for next day delivery to us. Once we receive your PCM, we will reprogram and return it back to you the same day for next-day delivery. **Installing this kit and operating your engine without our calibration may result in engine damage or failure.**

**Note: It is important to reinstall the PCM in the vehicle it came from to prevent setting a trouble code and having to relearn the anti-theft code which can only be performed using specialized Ford Service Bay tools.**

- If you haven't already done so, **write your Vehicle Identification Number (VIN) and phone number on the PCM** using a permanent marker.
- Remove the bubble wrap from outside the supplied FedEx shipping box and wrap it around the PCM to help prevent it from being damaged during shipping.
- **Fill in the required information on the bottom of this sheet. Cut it off on the dotted line and return it with the PCM in the FedEx Box.**
- Place the wrapped PCM in the FedEx shipping box and follow the instructions on the FedEx box for sealing the box shut.
- Fill in your name and address in the **FROM** area on the FedEx shipping label that is applied to the outside of the FedEx box.
- Save the left side tear-off shipping label for your records.
- Schedule a FEDEX **Package Pick-up** by calling **1-800-463-3339** and select **OPTION 0** to speak directly to an agent. **DO NOT** use the automated option to schedule a pick up.
- Inform the agent you have a **Prepaid FEDEX Billable Stamp Package** and you need a pick-up.



\*\*\*If you have any questions call ROUSH Customer Service at 1-800-59-ROUSH.

**ROUSHCHARGER COLD AIR UPGRADE KIT**

Customer Name: \_\_\_\_\_

VIN: \_\_\_\_\_

Model Year: \_\_\_\_\_

Model (circle one):    **Stage 3 / Black Jack**                      **427R / 428R / 429R**                      **Retail Kit**

**I understand that the installation of this Cold Air Kit on my ROUSH vehicle will VOID my ROUSHcharger "3yr/36k" Powertrain Warranty:**

Signature \_\_\_\_\_ Date \_\_\_\_\_

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## Supplemental Instructions

### ROUSH Stage 3 Mustang with the ROUSH Stage 3 Mustang Cold Air Kit

Valued Customer,

If you purchased both the ROUSH Stage 3 ROUSHCharger Kit and the ROUSH Stage 3 Cold Air Kit, you will find that each kit has a FedEx shipping box for you to send your PCM to ROUSH for recalibration. In order to receive the correct calibration for your Mustang, you **MUST** send your PCM in the FedEx shipping box included in the **ROUSH Stage 3 Cold Air Kit**. That box will have a sticker on it saying “ROUSH Performance Stage 3 Cold Air Kit - PCM”.

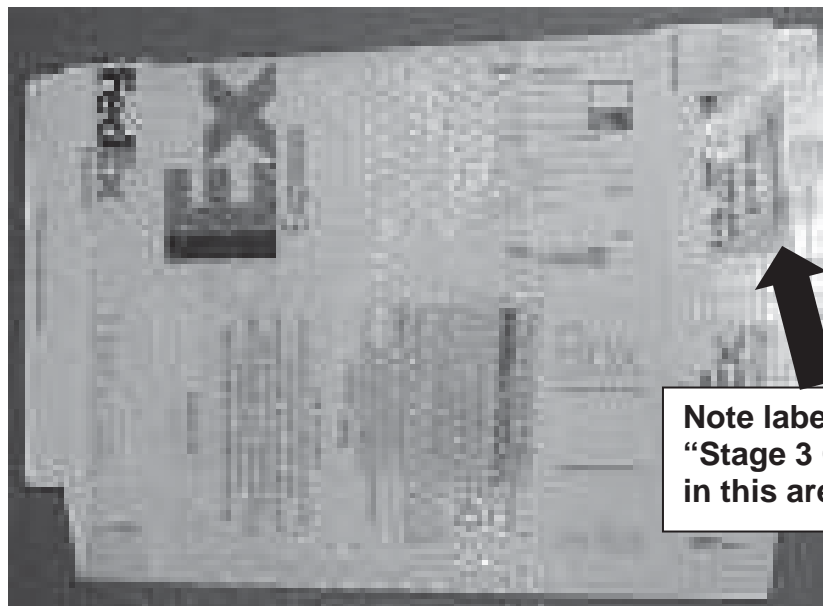
2005 – 2006 Mustang ROUSHCharger Kit – **Black** # 403309

Or

2005 – 2006 Mustang ROUSHCharger Kit – **Polished** # 403310

&

2005 – 2009 ROUSH Mustang Stage 3 Cold Air Kit # 403913



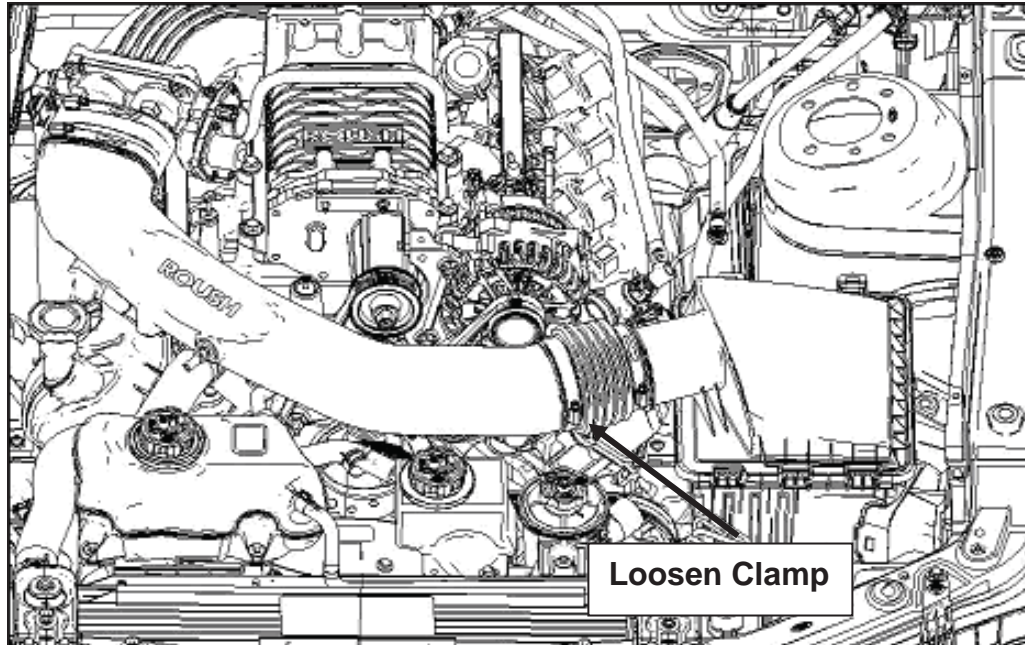
FedEx Box from the Cold Air Kit

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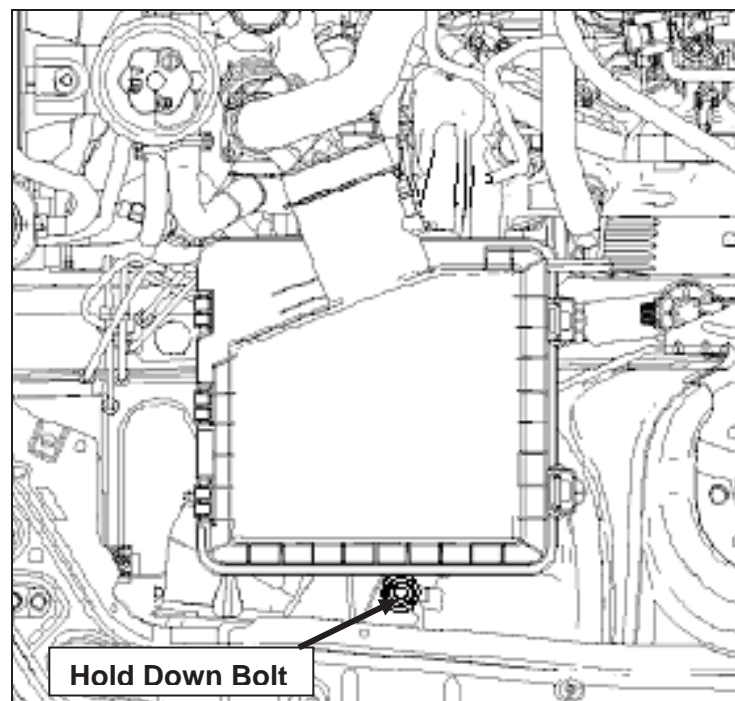
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4. Loosen the clamp that connects the stock coupler to the clean air tube.



5. With a 10mm socket wrench, remove the airbox hold down bolt and set aside. This bolt will be re-used later. Firmly grasp the airbox and pull up to remove it from the vehicle. Remove the two grommets from the bottom of the airbox. These will be re-used.

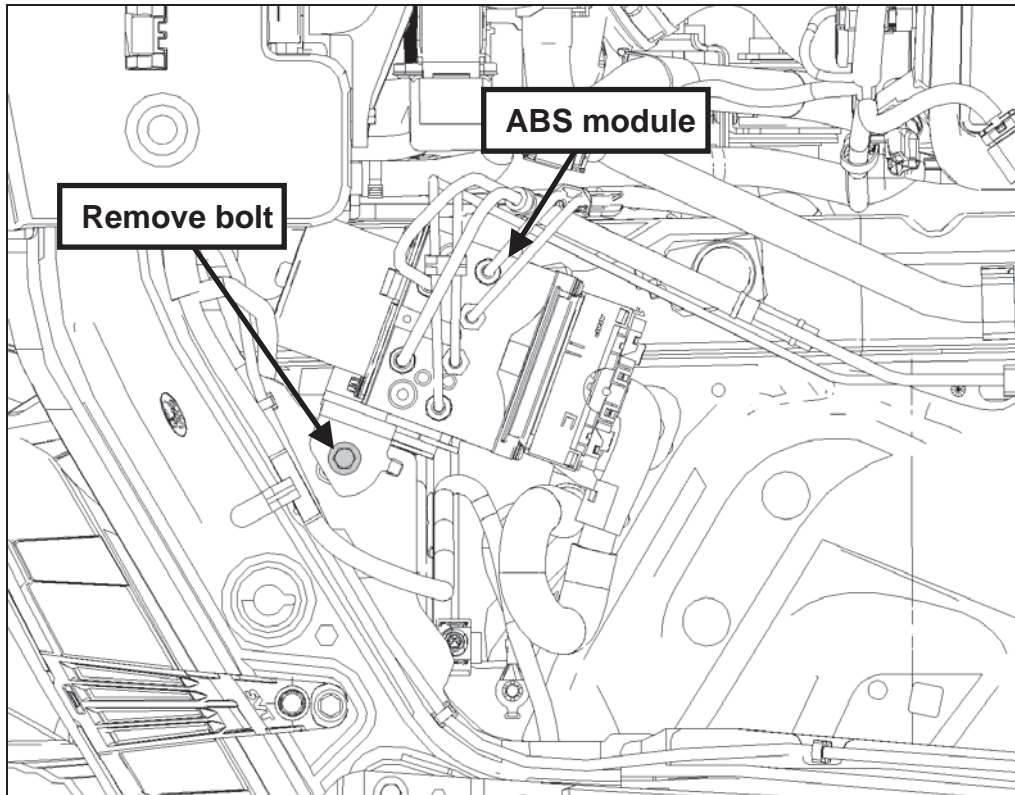


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6. Locate the ABS module bracket and remove the bolt shown below. This bolt will be re-used later.





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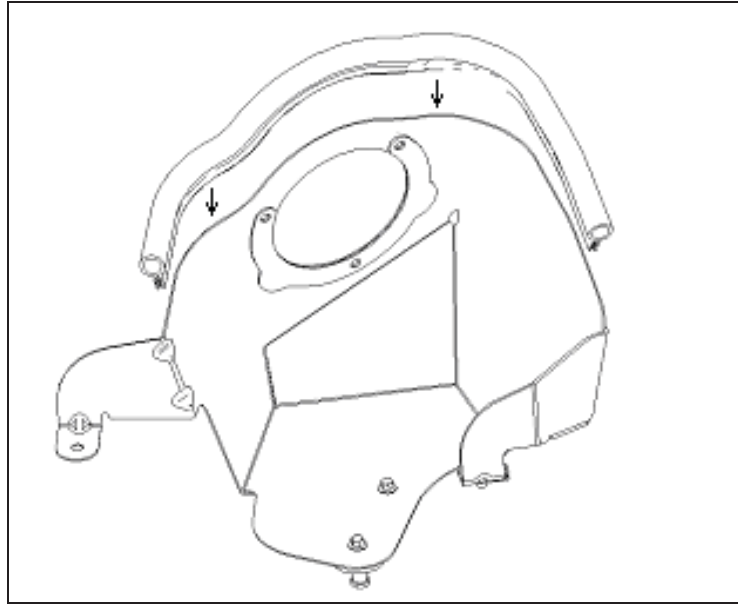
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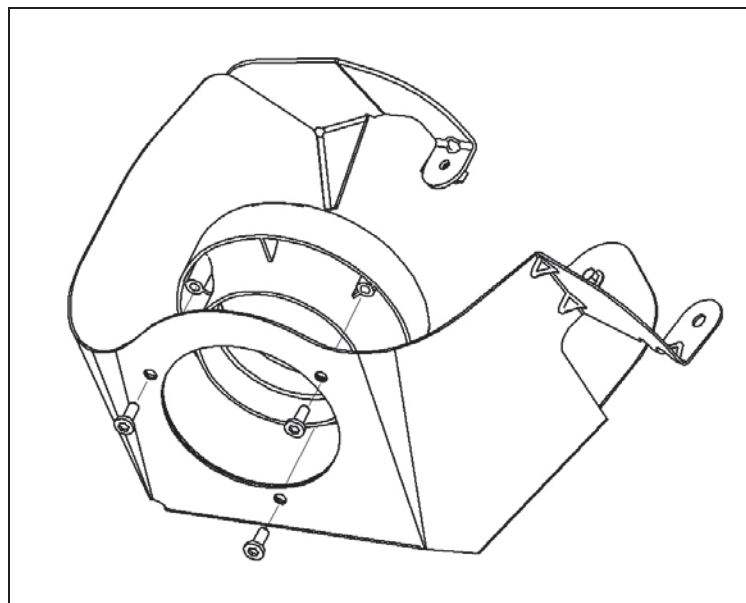
## SECTION B - ASSEMBLY

The following section will guide you through the final installation of the kit into the vehicle.

1. Install the Seal (R07130026) onto the Airbox Assembly (R07130032). Make sure the Seal is fully seated.

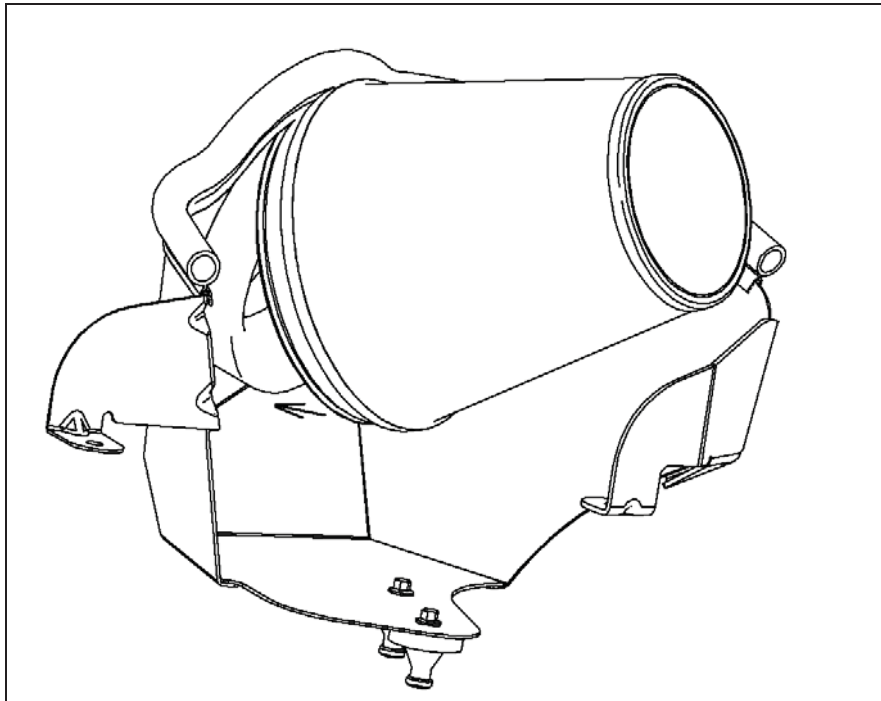


2. Install the Bellmouth (R07130019) onto the Airbox Assembly using the (3) ¼-20 x 1/2" Button Head Screws (R18020056). Torque screws to 8 Nm. The Bellmouth should face the inside of the Airbox Assembly.

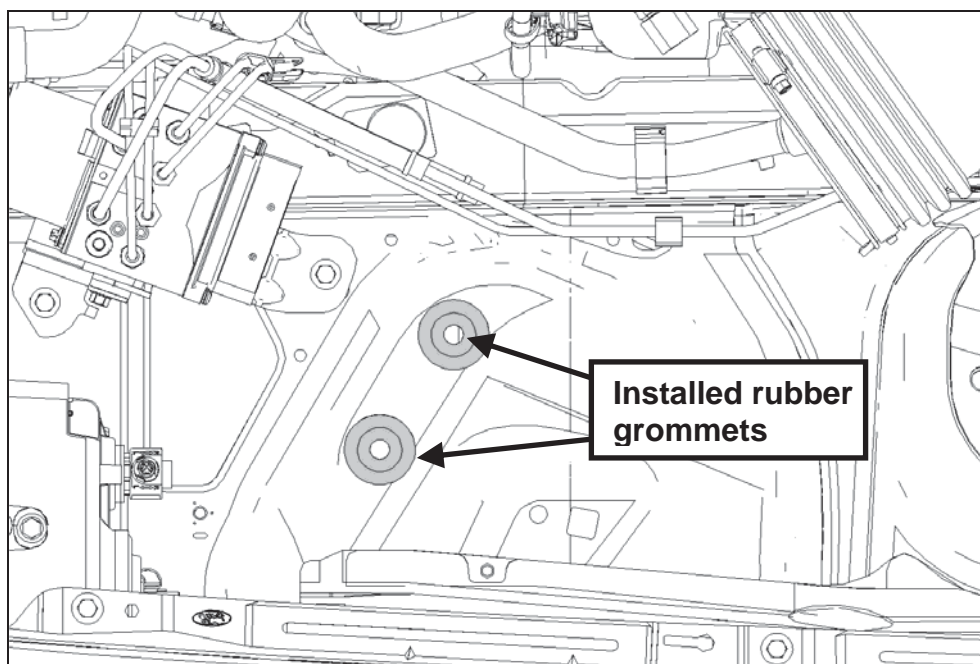


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3. Install the Air Filter with Clamp (R07060131) onto the Bellmouth. Hook the Air Filter Flange on the top of the Bellmouth and push down. Torque the Worm Drive Clamp to 3 Nm. Note: The Air Filter is pre-oiled and does not need to be oiled at this time.



4. Install the Rubber Grommets (previously removed from the factory airbox) into the holes located beneath the Airbox, rearward of the ABS module in the inner fender well.

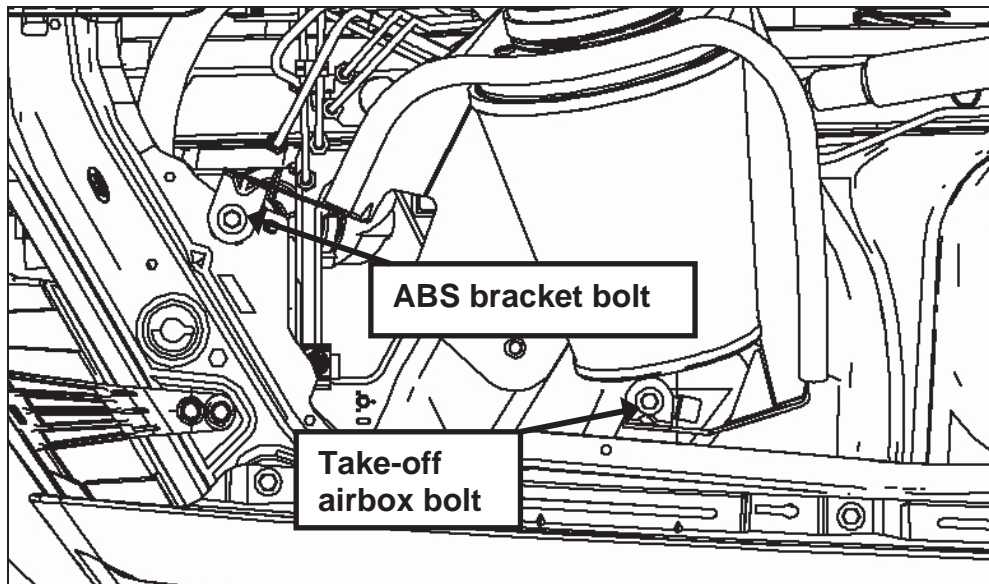


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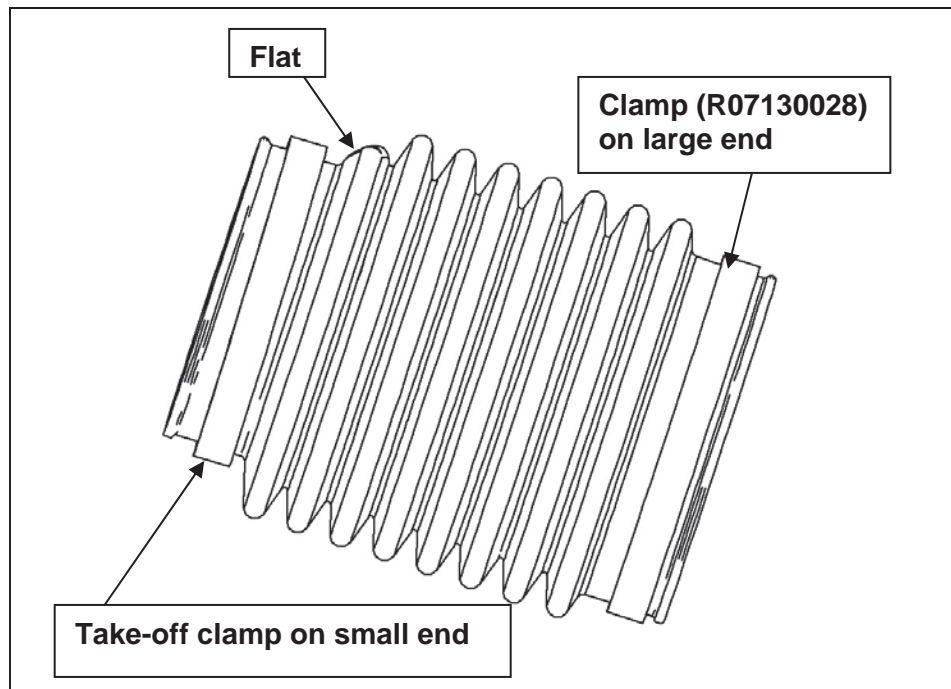
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5. Lower the complete Airbox Assembly into the vehicle using the two pegs as guides into the Rubber Grommets. Push down on the Airbox Assembly to seat the bottom pegs into the Rubber Grommets. Use the take-off Airbox bolt and ABS bracket bolt to secure the Airbox in the vehicle. Torque the (Airbox) M6 Bolt to 10 Nm, and the (ABS) M8 Bolt to 25 Nm.



6. Loosely re-install the stock worm drive clamp (previously removed from the take-off coupler) onto the small end (with the flat) of the new Coupler (R07130018). Loosely install the new Worm Drive Clamp (R07130028) onto the large end of new Coupler.

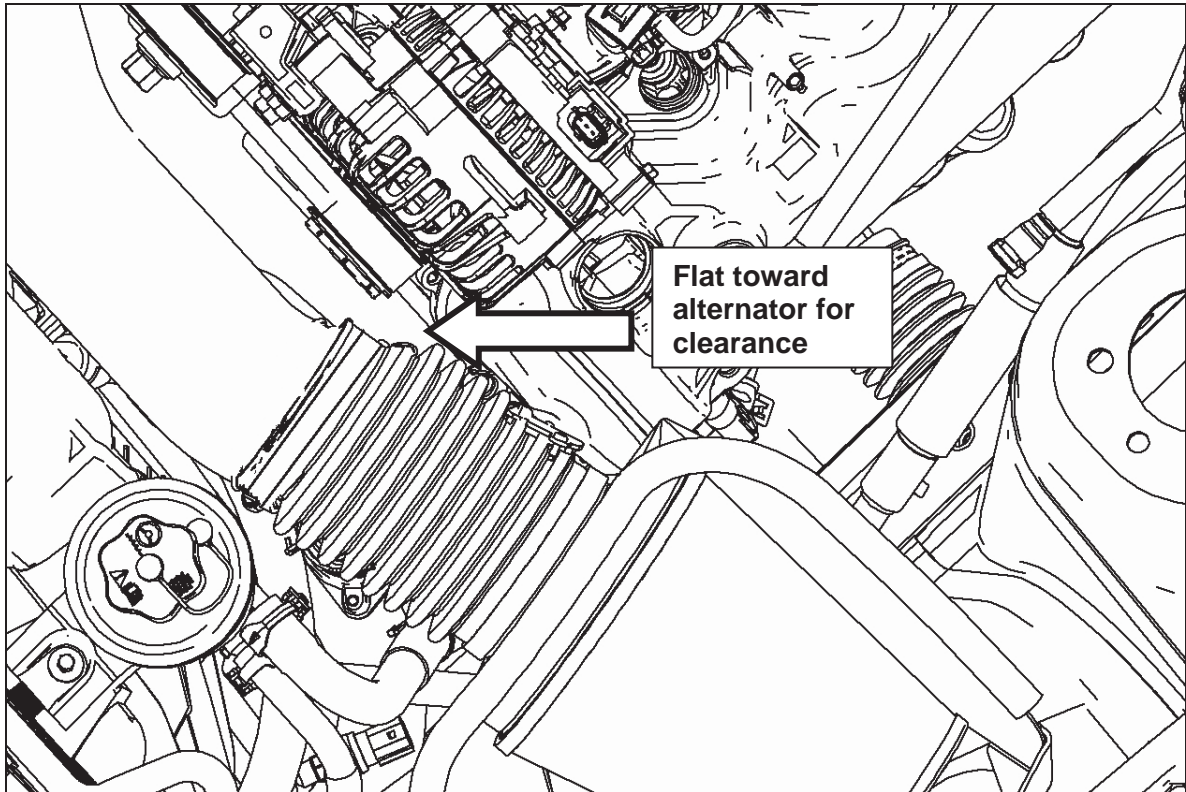


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7. Install the small end of the coupler over the clean air tube. Make sure the flat section of the coupler is facing toward the alternator for maximum clearance to alternator pulley.



8. Install the large end of the coupler over the bellmouth. Rotate clamps so that they have clearance to the alternator and other components. Torque both Worm Drive Clamps to 3 Nm.
9. Re-install the re-programmed PCM.
10. Reinstall the battery connections by first connecting the positive cable then the negative cable to the battery.
11. Close the hood gently and check for clearance to the Cold Air Kit Seal. If installed properly the Airbox Seal should begin to touch the hood blanket as the hood is closed. If a lot of force is required to close the hood, verify that the Airbox is seated properly in the Grommets and at the fastener locations.

**Congratulations!!!** You have completed the installation of the ROUSH Performance Products, Stage 3 Cold Air Induction Kit. It is recommended that you save all parts removed from your vehicle during the installation of this kit.



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## Warranty

All retail parts carry a 90-day warranty from the date of purchase. This warranty covers defects in materials or workmanship, and does not include (i) normal wear and tear, environmental conditions, improper installation; (ii) road hazards, misuse, abuse, neglect, accidents, collision, fire, theft, freezing, vandalism, riot, explosion, or objects striking the vehicle; (iii) misusing the vehicle, such as driving over curbs, overloading, racing, or using the vehicle as a stationary power source; (iv) altering, disassembling or modifying the parts; (v) defects caused or induced by failures, breakdowns, or damage by other parts, components or the vehicle; (vi) subjecting the parts to excessive moisture or water or any motor vehicle fluids (e.g.: oil, anti-freeze, battery acid, brake fluid, etc.); (vii) acts of God, natural disasters and other similar causes beyond the reasonable control of Roush; or (viii) application of chemicals that affect the parts. This Limited Warranty does not cover surface deterioration of paint, trim, and appearance items that result from use and/or exposure to the elements, such as stone chips, scratches, bird droppings, lightning, hail, windstorm, dings, dents, earthquake, road salt, tree sap, water or flood.

ROUSH SHALL NOT BE LIABLE TO REIMBURSE CUSTOMER/DEALER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE INSTALLATION OR USE OF ANY PRODUCT SOLD THROUGH THIS CATALOG OR ARISING OUT OF ANY BREACH OF WARRANTY. EXCEPT AS MAY BE STATED IN THIS CATALOG, ROUSH DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL ROUSH'S LIABILITY EXCEED THE PRICE PAID BY CUSTOMER/DEALER FOR PRODUCTS SOLD REGARDLESS IF ROUSH HAS BEEN ADVISED IN ADVANCE OF ANY POTENTIAL PROBLEM OR IF A CLAIM IS BASED ON CONTRACT, TORT, STRICT LIABILITY, PRODUCT LIABILITY OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF IMPLIED WARRANTIES OR THEIR DURATION, OR LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSIONS OR LIMITATIONS MAY NOT APPLY.

This ROUSH Supercharger kit is designed and tested to function properly only on vehicles as they are equipped from the factory (completely stock powertrain). The use of aftermarket parts and equipment such as: cams, headers, nitrous oxide systems, other bolt-on performance parts, or any other performance parts not sold by, manufactured by, or approved of in writing by ROUSH, will result in powertrain and supercharger kit damage and will not be the responsibility of ROUSH in any way.