



Granatelli Motor Sports, Inc. • 1000 Yarnell Place • Oxnard, CA 93033-2454
 805-486-6644 (Phone) • 805-486-6684 (Fax) • Hours: M-F 8AM-5PM (PST)
www.GranatelliMotorSports.com/techsupport.htm
TechSupport@GranatelliMotorSports.com

GM 4.3L S-10 Truck/SUV MAF Sensor Installation Instructions (Read Carefully Before Starting Project)



Introduction:

This product is the first of its kind. It is an inexpensive replacement mass airflow sensor to improve the performance potential of 1995 through current General Motors vehicles without sacrificing driveability. With the gain in horsepower from performance camshafts, high flow cylinder heads and tuned exhaust systems, production mass airflow sensors become too restrictive. This led to the Granatelli Mass Airflow Sensor. This unit is sure to enhance the effectiveness of other performance equipment already installed or of future installations.

Overview:

The mass airflow system measures airflow directly with an electronic sensor. A sensing element in the airstream of the intake provides an output voltage reading that is proportional to the mass air flowing into the engine. The mass air flow system reduces the calculations required to control fuel flow and ignition spark advance. It reacts quickly and accurately to the changes in airflow, while improving overall vehicle performance. The smooth design of the inlet tube improves the airflow to the intake system in the most economical way.

System Features:

<ul style="list-style-type: none"> • Improved Airflow 	<ul style="list-style-type: none"> • No electrical modifications
<ul style="list-style-type: none"> • Simple bolt-in design 	<ul style="list-style-type: none"> • Expanded dynamic range with high measurement accuracy
<ul style="list-style-type: none"> • Less pressure drop than production models 	<ul style="list-style-type: none"> • Real calibration of elements for proper emissions and performance

Installation Steps

1. Disconnect Battery (negative side first).
2. Using a flatblade screwdriver or an 8mm (5/16) socket, loosen the hose clamps that attached the existing mass air meter to the air inlet tube and throttle body. Remove the air inlet tube from the mass air meter by grasping the meter in one hand and the tube in the other. Using a twist pull motion, separate the two parts.
 Note: Do not use a screwdriver to pry the hose off the mass air meter. Damage to the stock meter or personal injury may result.

3. Disconnect the wiring harness connector to the mass air meter. This can be done easily by grasping the connector and pulling while holding the bottom tab away from the connector.
Note: The connector may stick to the meter connections. If this occurs, carefully pry away the connection with a small flat blade screwdriver.
4. The Granatelli Meter for the 4.3 is .25" larger in diameter than the factory unit. For this reason we have supplied an adapter sleeve that will allow you to easily attach the GMS unit to the factory air box. Note: If you are using an aftermarket cold air kit in conjunction with the GMS meter, this sleeve may not be needed and in fact may not work.
5. The factory bellow connector will reattach from the throttle body to the GMS meter. If you have trouble expanding this over the new meter, we suggest you heat the bellow with a blow dryer or heat gun. This will make the part more pliable.
6. Now simply reverse steps 1 through 3 for installation of new Mass Airflow Sensor.

LIMITED WARRANTY:

Granatelli Motor Sports warrants that all products shall be free from defects in materials and/or workmanship for ninety days from the date of purchase (except in-tank and in-line fuel pumps purchased at dealer or wd prices as these items have no warranty and roller rocker arms which have a 12-month limited warranty). The following requirements and exclusions apply: (1) You must be the original purchaser and must complete the warranty registration form (located at www.GranatelliMotorSports.com/warranty.asp) and return the defective product within 10 days after the expiration of the product warranty. Failure to do so voids all warranty, either express or implied set forth herein. (2) You must reside in the United States or Canada and use the product as described in the warranty registration. (3) The product must not have been altered, disassembled, modified, or converted for any other use than intended by Granatelli Motor Sports. (4) The product, or any part thereof, is not used in accordance with the operating parameters specified by Granatelli Motor Sports (5) The product or any part thereof is damaged or rendered unserviceable due to negligence, vandalism, theft, fire, debris, flood, Act of God, or other peril, malfunction of equipment, or by any cause within the Customer's control. (6) The serial number (if applicable) must not have been altered or removed. The extent of Granatelli Motor Sports' liability under this warranty shall be limited to the prompt correction or replacement, at Granatelli Motor Sports' option and at no cost to the customer other than return shipment, of any defective part of the product determined to be necessary by Granatelli Motor Sports. This only applies if written Granatelli Motor Sports received notice of the claimed defect prior to expiration of the warranty period. All warranties of merchantability and fitness for a particular purpose are expressly excluded. The duration of any and all implied warranties is limited to the duration of this express warranty. All incidental and consequential damages including but not limited to loss profits even if it has been advised of the possibility of such damages are hereby excluded. Regardless of the form of the claim, Granatelli Motor Sports liability for any damages to the customer for such product is limited to the guidelines herein. This stated, expressed warranty is in lieu of all liabilities or obligations of Granatelli Motor Sports for damages arising out of or in connection with delivery, use or performance of the product. This warranty cannot be amended or changed by any Granatelli Motor Sports representative, employee, or agent and any promises inconsistent with this warranty are void and unenforceable against Granatelli Motor Sports. Some states do not allow limitations of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights that vary from state to state. Your sole remedy for the above warranties is the repair or replacement of the defective product only, at Granatelli Motor Sports' sole discretion.

RETURN POLICY:

Before you return a product for a warranty claim, contact our service department M-F 8AM-5PM (PST) at 805-486-6644 or techsupport@GranatelliMotorSports.com for an RGA number. No returns are accepted without a pre-approved RGA (return goods authorization). No returns on special orders, electrical items or after 90 days from date of original shipment. All returns must be safety packaged in original packaging (if available) and clearly marked with your RGA number on the top and two sides of the box. Please insure your shipment for full replacement value as lost, stolen or items damaged in shipment are not covered by our limited warranty. We recommend using FedEx (www.FedEx.com) or UPS (www.UPS.com) for shipping. Lost, stolen or damaged items claims must be made by the customer and resolved by the freight company and not Granatelli Motor Sports. All returns may be subject to a restocking fee of up to 25%. The balance will be returned in the form of a company check or may be applied as credit towards another purchase.

PERFORMANCE CONSUMER'S BILL OF RIGHTS:

Legally, a vehicle manufacturer cannot void the warranty on a vehicle due to an aftermarket part unless they can prove that the aftermarket part caused or contributed to the failure in the vehicle (per the Magnuson Moss Warranty Act, www.GranatelliMotorSports.com/magnusonmoss.htm (15 U.S.C. 2302(C))). For best results, consider working with performance-oriented dealerships with a proven history of working with customers. If your vehicle manufacturer fails to honor emission/warranty claims, contact EPA at (202) 260-2080 or www.epa.gov. If federal warranty protection is denied, contact the FTC at (202) 326-3128 or www.ftc.gov. For additional information, check out www.GranatelliMotorSports.com/TechSupport.htm.

Disclaimer:

Actual products may vary from photographs shown. For latest information, please call 805-486-6644 first. You can also check out our web site at www.GranatelliMotorSports.com. However, it may have not been updated at the time you actually view it. Therefore, we cannot guarantee the accuracy of the information on our web site. Granatelli Motor Sports is not responsible for any unintentional omissions or typographical errors and reserves the right to make changes to packages, services, operating procedures, colors, materials, features, specifications, part numbers, pricing and to discontinue any products and/or components at any time without prior notice. Some items shown are sold for off-road use only and/or racing use (not street legal) and not intended for use on public highways, customer assumes costs and liability for installation and use. Performance figures shown can vary considerably due to a variety of factors including but not limited to altitude, humidity, barometric pressure, outside temperature, vehicle age, state of vehicle tune, vehicle manufacturer engine tolerances, vehicle modifications, chassis and engine dyno calibration, chassis and engine dyno brand, etc.