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## **GM 1994-04 Cars/Trucks/SUVs/RVs Mass Airflow Sensor-Installation Instructions P/N's 350111, 350112, 350113, 350114, 350115, 350117, 350118, 350119, 350120**

### **Tools Required**

8mm or 5/16" socket, flat head screwdriver

### **Introduction**

This product is the first of its kind. It is an inexpensive replacement mass airflow sensor to improve the performance potential of 1994 through 2003. General Motors vehicles without sacrificing drivability. 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 air stream of the intake provides an output voltage reading that is proportional to the mass air flowing into the engine. The mass airflow 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**

|   |   |
|---|---|
| Improved Airflow  | No electrical modifications                           |
| Less pressure drop than production models                         | Expanded dynamic range with high measurement accuracy |
| Real calibration of elements for Proper emissions and performance | Simple bolt-in design                                 |

### **Installation Steps**

1. Disconnect Battery (negative side first).
2. Using a flat blade screwdriver or an 8mm (5/16) socket, loosen the hose clamps that attached the existing mass air sensor to the air inlet tube and throttle body. Remove the air inlet tube from the mass air sensor by grasping the sensor 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 SENSOR. DAMAGE TO THE STOCK SENSOR OR PERSONAL INJURY MAY RESULT.**

3. Disconnect the wiring harness connector to the mass air sensor. 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 SENSOR CONNECTIONS. IF THIS OCCURS, CAREFULLY PRY AWAY THE CONNECTION WITH A SMALL FLAT HEAD SCREWDRIVER.**

4. Reverse steps 1 through 3 for installation of new Mass Airflow Sensor.

## **LIMITED WARRANTY & LIABILITY AGREEMENT**

Granatelli Motor Sports warrants that all mass airflow sensors shall be free from defects in materials and/or workmanship for one year from the date of purchase. All other component 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). 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](http://www.GranatelliMotorSports.com/warranty.asp)) and return the defective product within 10 days of your original purchase. 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 notice of the claimed defect was received by Granatelli Motor Sports 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:**

NOTE: No returns accepted without pre-approved RGA (return goods authorization) number clearly marked on the outside of the box. No returns accepted on special orders or after 90 days from date of original shipment. All returns are subject to a 25% restocking fee. Before you return this product, contact our service department M-F 8AM-5PM (PST) at 805-486-6644, Ext. 23 or [techsupport@GranatelliMotorSports.com](mailto:techsupport@GranatelliMotorSports.com) for an RGA number. Returns made without prior authorization will be refused. All returns must be made within 30 days from date of original shipment, safety packaged in original packaging (if available as in-transit damage is not covered by our limited warranty), have the RGA number clearly marked on the top and two sides of the box and be insured for full replacement value. We recommend using UPS or Fed Ex for shipping. All returns are subject to a restocking fee up to 25%. The balance will be returned in the form of a check or may be applied as credit towards another purchase. Special orders and electrical components are not eligible for returns. For warranty registration, go to: [www.GranatelliMotorSports.com/warranty.asp](http://www.GranatelliMotorSports.com/warranty.asp).

### **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](http://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](http://www.epa.gov). If federal warranty protection is denied, contact the FTC at (202) 326-3128 or [www.ftc.gov](http://www.ftc.gov). For additional information, check out the following links:  
[Consumers Bill of Rights](http://www.enjoythedrive.com/content/?id=8123) - <http://www.enjoythedrive.com/content/?id=8123>  
[What You Can Do If Your Warranty Is Denied](http://www.enjoythedrive.com/content/?ID=8124) - <http://www.enjoythedrive.com/content/?ID=8124>  
[Federal Warranty Laws](http://www.enjoythedrive.com/content/?id=8128) - <http://www.enjoythedrive.com/content/?id=8128>  
[Vehicle Manufacturer Warranty Contact Phone Numbers](http://www.enjoythedrive.com/content/?id=8129) - <http://www.enjoythedrive.com/content/?id=8129>