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GMS FUEL RAILS INSTALLATION INSTRUCTIONS

APPLICATIONS:

- 1996-2007 Ford Mustang GT/Cobra Intake
- Return or Return Less Style with Fuel Pressure Sensor fitting
- Included in GMS Package
 - 1 Driver side rail (99-07 rail may have sensor fitting)
 - 1 Passenger side rail
 - 1 GMS stock fuel line to -8N fitting (supply)
 - 1 GMS stock fuel line to -8N fitting (return, use on return style setup only)
 - 1 Accessory Pack GMS #1401500 (Return Style 96-98 or
 - 1 Accessory Pack GMS #1401600 (Return less style 99+)

WARNING

We recommend a certified auto technician for installation. You should have the following – a fire extinguisher, eye goggles and fuel resistant gloves

Do not over tighten mounting –an fittings! Doing so will void your warranty as this will overstress the mounting tabs, therefore causing the weld to weaken and/or break.

The OEM Fuel System is under pressure. This can cause serious injury if care is not taken to properly relieve it. You may open the gas cap to relieve the pressure. Some systems require additional steps using the Schrader valve. Another method is to let the vehicle sit overnight, as this allows ample time for the system to bleed down. Please refer to the service manual for more information.

Disconnect the negative battery cable to prevent accidental sparks with the fuel vapors that will occur with an open fuel system. Make sure the vehicle is well supported and the location is well ventilated with no open flames nearby like gas furnaces.

REMOVAL INSTRUCTIONS:

 Remove the air inlet tube from the MAF sensor to the throttle body. Loosen the bolts holding the MAF housing on the fender, unplug the MAF sensor, IAT sensor and remove the idle air bypass tube. Remove the entire MAF housing, sensor and rubber tubing all in one piece. 2. Unplug the fuel pressure sensor (99+ vehicles). Unplug all injectors from the factory wiring harness. Carefully move the harnesses to the side, out of the way of the fuel rails. Make sure you can clearly see the fuel rails, mounting tabs and the 8mm bolts holding the rails on, and rear crossover tubes. If the EGR bypass and/or shield are in the way (96 – 98 cobras), you may have to loosen or remove it. Make sure there is a clear path to remove the OEM rails by pulling straight up towards the hood.

3. Remove the stock fuel line(s) connected to the rails (99+up has only one feed line, no return). You will need the fuel spring clip adapters. These are available at any auto parts store. You may use A/C line service tools as they are of the same design. Remove the fuel pressure sensor (if equipped) at this time.

4. Remove the 4 bolts holding the rails to the intake. Carefully and slowly, pull upwards on the fuel rail. This may require some additional force, be careful not to move farther than ½" at a time. The o-rings on the injectors, inserted in both the rail and intake are a very tight fit. Be careful not to tear the o-rings on removal by rubbing against anything. One the rails have been removed, some injectors may be stuck in the rail and some may be stuck in the intake. Remove all injectors and keep in order.

INSTALLING THE NEW GMS RACING RAILS:

Do not tighten –an fittings if rails are installed on intake.

5. Carefully inspect all of the injector's o-rings for any tears or hardness. If any as suspect, replace immediately as a fuel leak may occur. Apply Vaseline to each o-ring (top and bottom) to coat the o-rings so they will not tear during reinstallation.

6. Test fit the new rails before installing any injectors. Do NOT torque down on any part of the rail. Check for proper clearance of the coil packs and water tubes. Some filing of the coil packs may be required. Some supercharged vehicles will have taller water tubes that came with the supercharger kit and may interfere with the -8an fittings. Contact GMS if this happens at (248) 398-2397.

7. Remove GMS rails from Step 6 above and install your OEM fuel pressure sensor that you removed in Step 3, onto your new GMS rails. Install injectors into new GMS rails (connector angles upwards). Position the rails with the logos facing forward of the motor and outward of the intake for proper orientation.

8. Install the -8N fillings included in the kit with the o-rings and any –AN fittings for the rest of your fuel system at this time. Be careful and use a thin piece of cloth on the rail. Then use a 1" open-ended wrench to hold the rail as you tighten the o-ring fittings. DO NOT INSTALL THE – AN FITTINGS IF RAILS ARE INSTALLED!

9. Install the fuel rails by carefully lining up each injector for proper placement into the intake. Once lined up, press down on front and rear of the rail to ensure proper injector alignment. After sealed, try to twist the injectors. They should be a little snug, but easily movable. If not, remove the rail and injectors and reseal. Any binding could be an indication of a pinched o-ring. Remove and inspect and replace o-rings as needed. 10. Tighten down the Allen head mounting bolts for the rails. Continue to tighten down all other connectors and fittings. DO NOT INSTALL THE –AN FITTINGS IF RAILS ARE INSTALLED! If you must, use the 1" wrench with a piece of cloth to hold the rail in place. The welded tabs for the rails will not withstand the pressure of tightening the -8N fittings on the rails. Use extreme caution as this could void your warranty.

11. Use your -8N fittings and braided lines to complete the installation. Reconnect all wiring connectors and reinstall the air inlet tube and sensor connections.

Before starting the vehicle, cycle the key on and off several times (at least 6 - 12 times) to build fuel pressure. Check for leaks under the rails and on top of the injectors. Check for leaks at each fitting. Once starting the car, check for leaks again.

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, <u>www.GranatelliMotorSports.com/magnusonmoss.htm</u> (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 <u>www.epa.gov</u>. If federal warranty protection is denied, contact the FTC at (202) 326-3128 or <u>www.ftc.gov</u>. 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 <u>www.GranatelliMotorSports.com</u>. 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 brand, etc.