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INSTALLATION MANUAL

AEROFLOW PERFORMANCE

GM LSA FUEL RAIL

Item list included in this kit:

- 2x Billet Fuel Rail to suit GM LSA supercharged engines
- 4x Billet mounting brackets
- 16x button head allen key screws for mounting brackets
- 4x socket cap allen key screws
- 8x -4AN orb male port plugs

Additional items required that does not come with kit:

- Hose fittings or barb fittings to connect to your current fuel line (rubber or braid)
- Fuel hose for feed line and return line
- Aftermarket fuel regulator
- AF919-06-08 low profile -8 ORB to -6AN male adapter or AF919-08 low profile -8 ORB to -8AN

WARNING!

BEFORE PROCEEDING WITH INSTALLATION PLEASE READ INSTRUCTIONS CAREFULLY. THIS PRODUCT REQUIRES DETAILED KNOWLEDGE OF AUTOMOTIVE SYSTEMS. WE RECOMMEND THAT THIS INSTALLATION BE CARRIED OUT BY A QUALIFIED AUTOMOTIVE TECHNICIAN.

THE INSTALLATION OF THIS PRODUCT REQUIRES THE HANDLING OF FUEL. WE RECOMMEND TO WORK IN A WELL VENTILATED AND WEAR APPROPRIATE SAFTEY WEAR FOR PROTECTION.

KEEP ALL IGNITION SOURCES AND OPEN FLAMES AWAY FROM VEHICLE AT ALL TIMES WHILE INSTALLING THIS PRODUCT.

THESE FUEL RAILS UTILIZE O-RING SEALED AN STYLE PORTS AND DO NOT REQUIRE THREAD SEALANT ONLY AN APPROPRIATE LUBRICATE SHOULD BE USED

INTRODUCTION

Congratulations on your purchase of Aeroflow Performance billet LSA fuel rail. Aeroflow Performance Products cannot and will not be responsible for any damage, or other conditions resulting from misapplication of the parts described herein. However, it is our intention to provide the best possible products for our customer, products that perform properly and satisfy your expectations. Should you have any questions, please call technical support at +61 2 8825 1900 and have the product part number on hand when calling. This product suits GM LSA supercharged engines only. It suits the factory LSA injectors or any aftermarket ¾ length (48.65mm) injectors.

STEP 1: REMOVAL

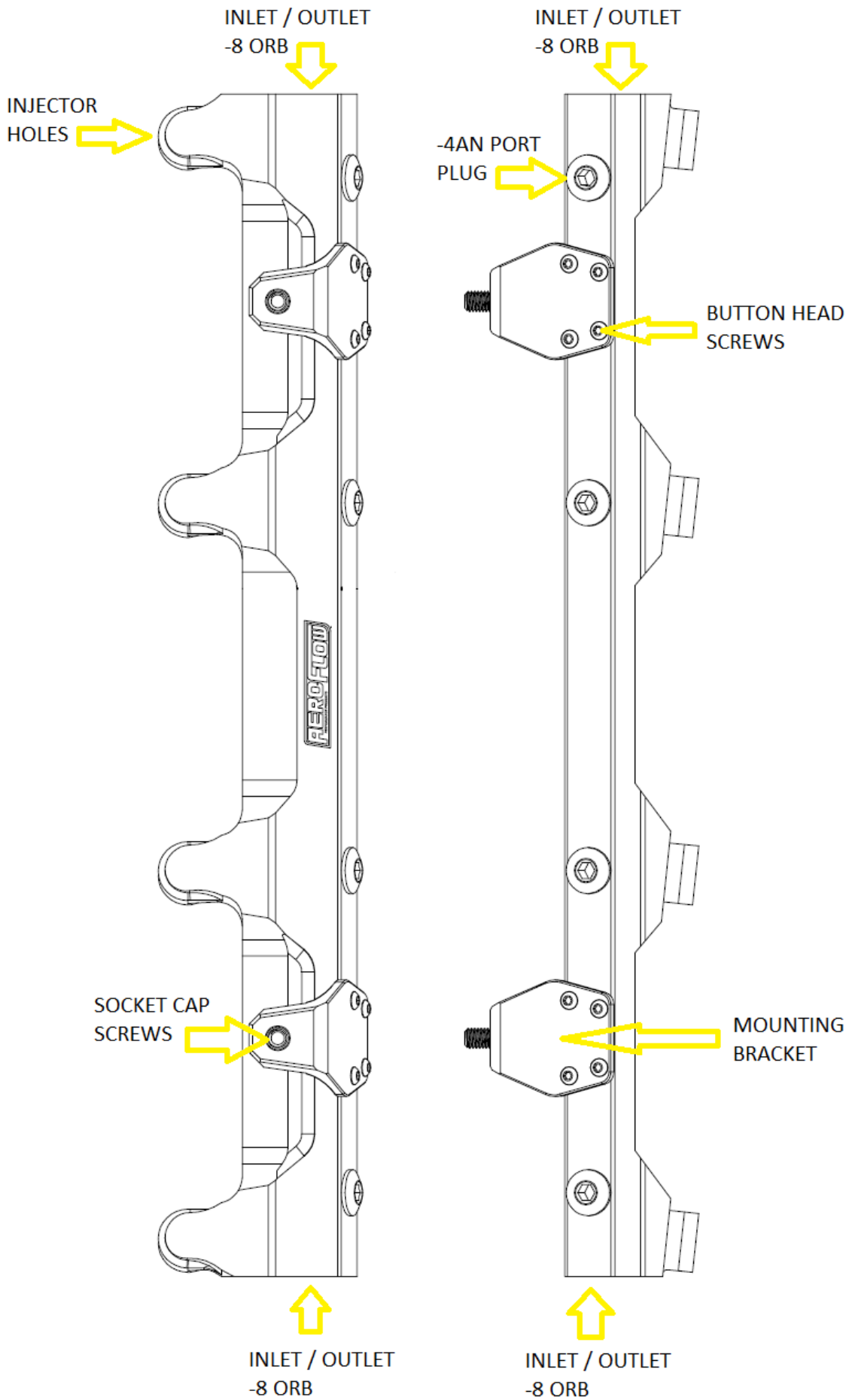
1. Please refer to the factory service manual of the vehicle for the correct removal of the factory fuel rail.
2. Disconnect the negative terminal on the battery.
3. Clean the area around the fuel rail to prevent dirt getting into injector holes and blocking them.
4. Remove the fuel cap to relieve all pressure from fuel system
5. Disassemble the factory fuel rail from the vehicle, keep all fuel rail spacers and bolts as these may need to be reused.
6. Remove the factory injector clips and pull-out injectors. If re using the factory injectors it is recommended to replace injector O-rings if old and perished.

STEP 2: ASSEMBLY

1. Install the front and rear adaptor fittings (sold separately) into both fuel rails. We recommend the 90-degree low profile ORB to AN adapter. AF909-06-08 for -6AN fuel lines or AF909-08 for -8AN fuel lines. Be careful not to damage the thread when doing so.
2. Next install the 8 -4AN port plugs that have been supplied in the kit into both fuel rails ensuring they each have the O-ring attached and it has appropriate lubrication to prevent damage to O-rings when installing.
3. Install both mounting brackets onto both fuel rails with button head allen key bolts supplied into kit.
4. Install factory or aftermarket injectors into the fuel rail, ensure O-rings are not pinched when installing injectors. Always use appropriate lubrication on fuel injector O-rings.
 - I. If the length of the injectors is not 48.65mm than an appropriate length adapter must be purchased separately and installed.
 - II. We recommend the use of new injector O-rings if re-using the standard injectors

STEP 3: INSTALLATION

1. Install fuel rail and injectors onto intake manifold with bolts provided in the kit or reuse the factory studs if you wish to reuse the factory engine covers. Do not fully tighten fuel rail to manifold until all injectors are correctly seated into the injector bosses.
2. Tighten all mounting bolts to correct factory torque specs. Do not overtighten this may cause damage to fuel rail and injectors.
3. Install the fuel pressure regulator.
 - I. If an aftermarket fuel pressure regulator is required, please consult a professional or our sales team to provide options.
4. Install fuel feed lines and return lines to correct positions depending on the setup that is required for the vehicle. Ensure enough slack is left in the line as to not put pressure on the fuel rail with engine running.
5. Reconnect wiring harness and all connectors as per factory service manual. If using non factory injectors wiring plugs may require replacement or adaptors must be purchased separately.
6. Reconnect negative terminal on battery.
7. Turn the ignition the switch to the accessories position only at this point, wait two the three seconds and turn ignition back to off position. DO NOT ATTEMPT TO START ENGINE.
 - I. Repeat the above step and cycle the ignition three times.
 - II. Check all fittings, injector adaptors, fuel fittings for any signs of fuel leakage.
 - III. If there are any signs of leakage they must be corrected before proceeding on to the next step.
 - IV. If aftermarket injectors and/or fuel regulators have been installed ensure vehicle ECU has been adjusted to suit before attempting to start the engine.
8. If no signs of leakage have been found, then start the engine and be sure to check for any signs of leakage while engine is running. If no leakage is found on the final inspection, then the installation is complete.



For more information or technical enquires

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