



HEMI GEN 3 BILLET INTAKE MANIFOLD INSTALLATION INSTRUCTIONS

Parts supplied

- 1 x billet manifold
- 2 x fuel rails
- 1 x throttle body adaptor
- 1 x bag of assorted O-rings and bolts

Procedure

1. Place 8 x O-rings in grooves and attach runners to plenum
2. Tighten runners to plenum using **M6 x 12** bolts using a **Loctite-style** compound on the threads. All M6 bolts in this assembly should be tightened to 16ft/lb torque.
3. Place long O-ring in top of plenum, plus 4 x **M8 x 20mm dowel pins** for location. A thin layer of silicone is required on the top face of the plenum body between the top o-ring and the front o-ring.
4. Add plenum lid. The o-ring should be protruding out the front of the body approximately evenly on both sides.
5. Tighten lid to plenum using **M6 x 25** bolts using **Loctite-style** compound on the threads. Once the lid is tight, trim the leftover ends of the o-ring flush to the plenum body, and place a small dab of silicone to seal the o-ring.
6. Use 8 x O-rings around intake ports, and 2 x smaller o-rings around the oil fill holes, and attach manifold to engine. M6 x 25 cap head bolts and flat washers are supplied for fitment between the manifold and the engine if you wish to use them.
7. Screw the fuel rail mounting legs to the manifold. You will notice there is two different length legs. The short leg goes in the hole where the oil filler detail is, and the longer one straight onto the flange. Attach the fuel rail mounts to the legs using the **M8 x 20** bolts. The fuel rail legs are designed to suit full length 14mm injectors. Spacers can be trimmed down if required for shorter injectors.
8. Attach fuel rails to mounting legs using **M8 x 16** bolts and flat washers. The engraving on the fuel rails should be facing outwards. The threads in the end of the fuel rails are -8AN.
9. The oil filler hole is tapped to suit -10AN. Two blockoff plugs are supplied for these. Install the plugs until oil filling is required. A standard long nose plastic funnel will fit in this hole when filling oil.
10. Add the 4.25" x 0.103" oring, and the 2 x **8mm x 16mm dowel pins** to the front face of the manifold. Install the throttle body adaptor onto the dowels.
11. If running **OEM throttle body**, secure the adaptor to the plenum using the **4 x M6 x 16** bolts. Then add the **3.5" x 0.103" oring** to the front face of the adaptor. Secure the throttle body to the adaptor using the **M6 x 40 bolts** and flat washers. If running the **Plazmaman billet 102mm throttle body**, add the **4" x 0.103" oring** and use the **M6 x 55** bolts and spring washers to bolt through the throttle body and adaptor plate to secure it to the plenum.
12. Due to a vast range of different casting tolerances, we cannot guarantee an exact alignment between the intake manifold and the standard cast intake ports on the cylinder head. We have measured various sets of factory cylinder heads, and machined our ports to an average round size. We recommend port matching both items together to achieve maximum efficiency if required.
13. Vacuum ports are located on the rear and side of the plenum. They are tapped to 1/8NPT and 1/4NPT.