

## GTR BILLET INTAKE PLENUM INSTALLATION INSTRUCTIONS

## **DIRECT TO HEAD STYLE**

## **Parts supplied**

- 1 x Billet intake manifold
- 1 x Fuel rail (or 2 x fuel rails if running 12 injectors)

6 x O-rings

1 x Assorted bolts & fittings

## **Installation Procedure**

- 1. Remove the factory inlet plenum and 6 throttle assembly.
- 2. Make sure cylinder head surface is clean and smooth.
- 3. Attach the water rail to the base of the intake manifold runners. Place supplied x3 rubber O-rings onto the 3 machined posts on under side of intake manifold. Apply some grease or similar to the rubber o-rings. Fit the supplied water rail over the 3 o-ring posts. There are also 3x 8mm spacers that sit between the rail and intake runners, push down carefully so not to damage the rubber.
- 4. Place O-rings into grooves on face of intake manifold. The large O-rings go around the intake ports, and the smaller O-rings go around the 3 centre water ports.
- 5. Sealing compound is required around the front water port, due to lack of space we cannot fit an O-ring. However, it is highly recommended that sealing compound be used around all water ports on the cylinder head as well as the supplied O-rings.
- 6. Install plenum to cylinder head. A M8 x 20 bolt and flat washer are supplied for fitment of the front top bolt (the slotted area on the manifold) into the head. All other bolts are not supplied for fitment between cylinder head and intake manifold.
- 7. Install fuel rail stands into manifold, and tighten. Stands are designed to suit a full length injector. Stands may need to be shortened, or an extension used on your injectors to suit otherwise.
- Install fuel rail and injector assembly onto manifold using M10 x 20 bolts to secure the rail to the stands. (If running a 12-injector style, install the supplied round spacer between the two rails, and use the M10 x 75 bolts to secure both rails to the manifold.)
- 9. The 1/8 NPT threads on the top face of the manifold are to be plumbed into a header tank or the top tank of the radiator. These are essential for bleeding air out of the coolant system.
- 10. The -12AN thread on the water rail must be plumbed into the -12AN thread on the front neck of the manifold. See attached plumbing diagram for full details.
- 11. The threads in the front water neck are tapped M12 x 1.25, and M12 x 1.5, to suit factory Nissan temperature sensors.