



## ASNU R35 GTR Twin Fuel Rail Fitting Instructions



The ASNU performance rail is designed with uprated performance in mind and as such is manufactured to work with a -8AN feed line and a -8AN return line to the fuel pressure regulator.

The internal bore of the rail is 17mm and this maximises flow to the rail, prevents pressure drops within the rail; equalising the fuel supply to each individual injector and minimises restrictions to the regulator assembly.

The factory fuel lines are 3/8th and 8/16th bore respectively - effectively -6 and -5 and as such would limit the flow to and from the rail. We therefore advise that the supply fuel lines are up-rated to the 1/2 inch bore used by the fuel rails and that the return line is up-rated to at least 9/16<sup>th</sup>.

If you are unsure of your ability to fit this kit we advise that you consult ourselves or a trained mechanic before you start.

- Before you commence any work, isolate the vehicle electrics by disconnecting the battery.
- Please ensure that this work is carried out in a well ventilated area away from any possible point of ignition as fuel or fuel vapour will be present and could be a fire hazard
- We advise the use of appropriate clothing and safety glasses
- Also ensure that a fuel extinguisher of the appropriate type is available.



### Rail Kit Contents:

- Bank one rail
- Bank two rail with damper mount
- Transfer hose
- Damper retaining plate
- Bolt kit





To gain access to the fuel rails, several other components such as the intake plenum will need to be removed. Label connectors and pipes as to their location or function to allow easy reassembly. Cover the central intake manifold lower valley, to ensure any components or dirt that may become detached or dropped cannot enter the engine intake system.

- Remove the stock plenum, fuel rails etc in accordance with the instruction manual.



- Before removal of the injectors from the stock fuel rail we advise that a clean dry area is prepared for the injectors once they are removed from the rail.



Caution: the fuel retained inside the fuel rail may be pressurised; take extreme care when performing this procedure.

- Ensure the injectors are refitted in the same cylinder location. Due to changes in cylinder fuel trims, this will minimise any relearning from the ecu.
- Before refitting the injectors into the ASNU fuel rail we advise that the injector o-rings and the injector cups are lubricated thoroughly with clean non-silicone engine oil - this prevents damage to the o-ring upon installation.
- Place injector into the ASNU fuel rail bank one (without the pressure damper)



- Loosely attach the transfer hose at the front of the rail making sure the hose is free to rotate.
- Now fit bank one rail using bolts provided to cylinder head ensuring that the injectors are guided into the injector ports correctly. Press rail fully home by hand, gently tightening the mounting bolts equally and torque to the factory settings.
- Fit injectors to rail two and connect loosely to the transfer pipe now repeat the fitting procedure for rail two.



- Evenly distribute the excess of the transfer hose in a downwards loop and tighten the hose fitting whilst holding the fitting in the rail stationary - failure to lock the rail fitting may result in the fitting becoming loose in the rail.



- The damper should now be removed from the factory rail by removing the retaining plate and bolts, taking care not to damage the o-ring.
- Lubricate the damper o-rings liberally with clean non silicone engine oil and refit the damper to the ASNU fuel rail (insert by hand until the flange on the damper is level with the recess in the fuel rail).
- Fit the new damper retaining plate and tighten the retaining bolts to the OE torque settings.

**PLEASE NOTE: The supply hose to and from the fuel rail is not included in this installation and is expected to be provided by the customer.**

#### Optional Extras

Bulkhead factory fittings are SAE male quick connect 3/8th for both feed and return fuel lines.



We can supply the correct fittings to go from 3/8th to -8 for the required hose connections if the OE under body fuel lines are to be retained (which we do not recommend for high HP applications).



Additional components can be provided by ASNU to allow these fuel rails to be fitted to the standard fuel system when retaining the stock regulator.

Please contact us for further details and assistance.