Description and Operation

The petrol injection equipment fitted to the 2,9 litre V6 12V engine comprises a fuel rail, a fuel pressure regulator and four fuel injectors.

The fuel rail is a one-piece aluminium alloy die casting with machined holes for the fuel pressure regulator and fuel injectors. The fuel rail is retained by three bolts and sealed to the inlet manifold by means of a gasket.

The fuel pressure regulator is fitted directly into the fuel rail and retained by two bolts. Sealing is achieved by means of a single O-ring seal. The fuel pressure regulator is designed to maintain a the fuel pressure within the fuel rail at 3,0 bar with excess fuel being returned to the fuel tank. The fuel injectors are of the top-feed type. They are sealed into the inlet manifold and fuel rail by means of upper and lower O-ring seals.

The fuel injectors are activated by the powertrain control module which modifies fuelling by adjusting fuel injector opening times according to engine operating conditions.