Description and Operation

The petrol injection equipment fitted to the Ford Scorpio '95 DOHC 16V engine consists of a die cast alloy fuel rail, into which is fitted a fuel pressure regulator and four fuel injectors.

The fuel injectors are of the side-feed type. They are surrounded by fuel when mounted in the fuel rail; this has the advantage of reducing fuel injector temperatures. Sealing is achieved by O-ring seals fitted to the top and bottom of the fuel injectors. The fuel injectors are activated in sequence by the powertrain control module (PCM) normal operating conditions.

The fuel pressure regulator controls the fuel pressure in the fuel rail with excess fuel being returned to the fuel tank. The fuel pressure regulator is retained by two bolts and sealed by means of an O-ring seal.

The fuel rail is a one-piece die casting with machined holes for the fuel injectors and fuel pressure regulator. It is fixed to the engine by two bolts. Rubber hoses supply and return fuel to and from the fuel rail.