

Le **circuit** de retour

Sur les **injecteurs** des systèmes d'injection directe **Diesel** et essence modernes, une partie du carburant est utilisée pour commander hydrauliquement la levée de l'aiguille. Lors de l'ouverture de l'**injecteur**, un débit de commande est donc créé, lequel est évacué dans le **circuit** de retour.

1. Construction

The fuel system consists mainly of an injection pump, injection pipe, and an injection nozzle, plus a fuel tank, feed pump, fuel filter and other associated parts. The injection pump is driven by a fuel cam mounted on one end of the camshaft and is controlled by a governor. Fuel stored in the fuel tank is fed to the fuel filter through the feed pump. (The feed pump is indispensable when the fuel tank is installed lower than the injection pump.)

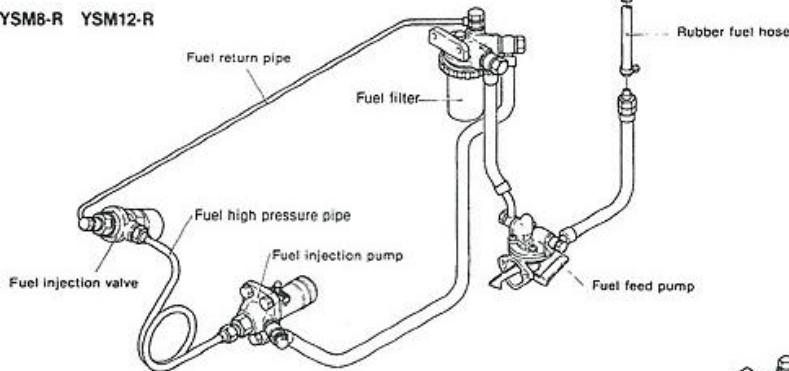
Dirt and other impurities in the fuel are removed by the filter and the clean fuel is sent to the injection pump, which applies the necessary pressure for injection to the fuel and atomizes the fuel by passing it through the injection nozzle. The injection pump also controls the amount of fuel injected and the injection timing depending on the engine load and speed by means of a governor.

The injection pump feeds the fuel to the injection nozzle through a high pressure pipe. The pressurized fuel is atomized and injected by the injection nozzle into the precombustion chamber.

Fuel that overflows the injection nozzle is returned to the fuel filter through the fuel return pipe. The quality of the equipment and parts comprising the fuel injection system directly affects combustion performance and has a considerable effect on engine performance. Therefore, this system must be inspected and serviced regularly to ensure top performance.

1-1 Fuel system diagram

YSM8-R YSM12-R



YSM8-Y YSM12-Y

