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FUEL SUPPLY SYSTEM



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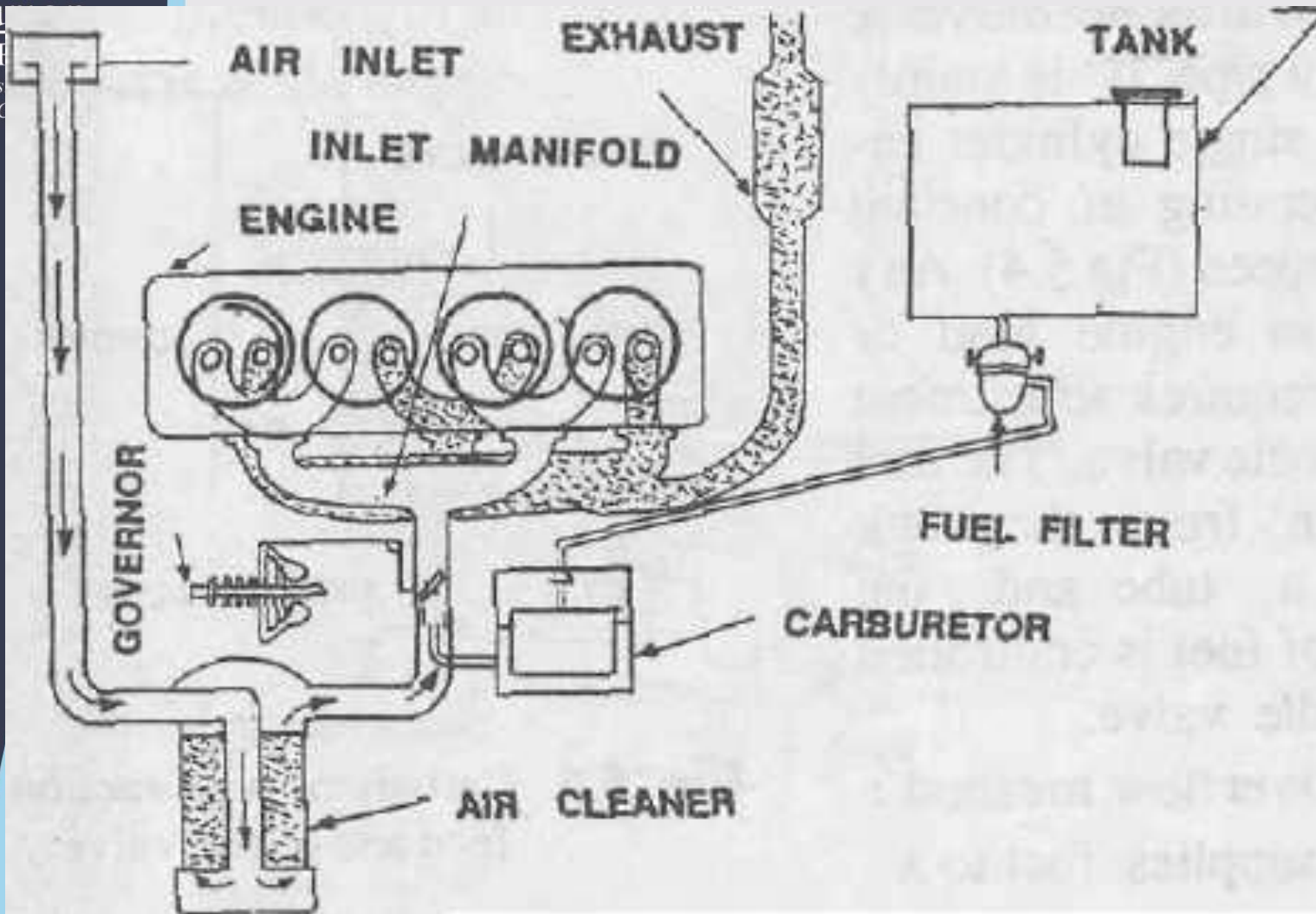
FUEL SUPPLY SYSTEM IN SPARK IGNITION ENGINE

The fuel supply system of spark ignition engine consists of:

- (i) Fuel tank
- (ii) Fuel filter
- (iii) Sediment bowl
- (iv) Fuel lift pump
- (v) Carburettor
- (vi) Fuel pipes
- (vii) Inlet manifold



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Function of Carburettor: The main functions of the carburettor are:

- (i) To mix the air and fuel thoroughly**
- (ii) To atomise the fuel**
- (iii) To regulate the air-fuel ratio at different speeds and loads and**
- (iv) To supply correct amount of mixture at different speeds and loads**



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FUEL SYSTEM OF DIESEL ENGINE

During engine operation, the fuel is supplied by gravity from fuel tank to the primary filter where coarse impurities are removed.

From the primary filter, the fuel is drawn by fuel transfer pump and is delivered to fuel injection pump through second fuel filter.

The fuel injection pump supplies fuel under high pressure to the injectors through high pressure pipes.



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The injectors atomise the fuel and inject it into the combustion chamber of the engine.

The fuel injection pump is fed with fuel in abundance.

The excess fuel is by-passed to the intake side of the fuel transfer pump through a relief valve.



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The main components of the fuel system in diesel engine are:

- (1) fuel filter
- (2) fuel lift pump
- (3) fuel injection pump
- (4) atomisers and
- (5) high pressure pipe.

