

17. Fuel System

The fuel system supplies fuel to the engine. It also has the functions to remove trash or dust and to regulate the volume of fuel supply.

1. Fuel tank

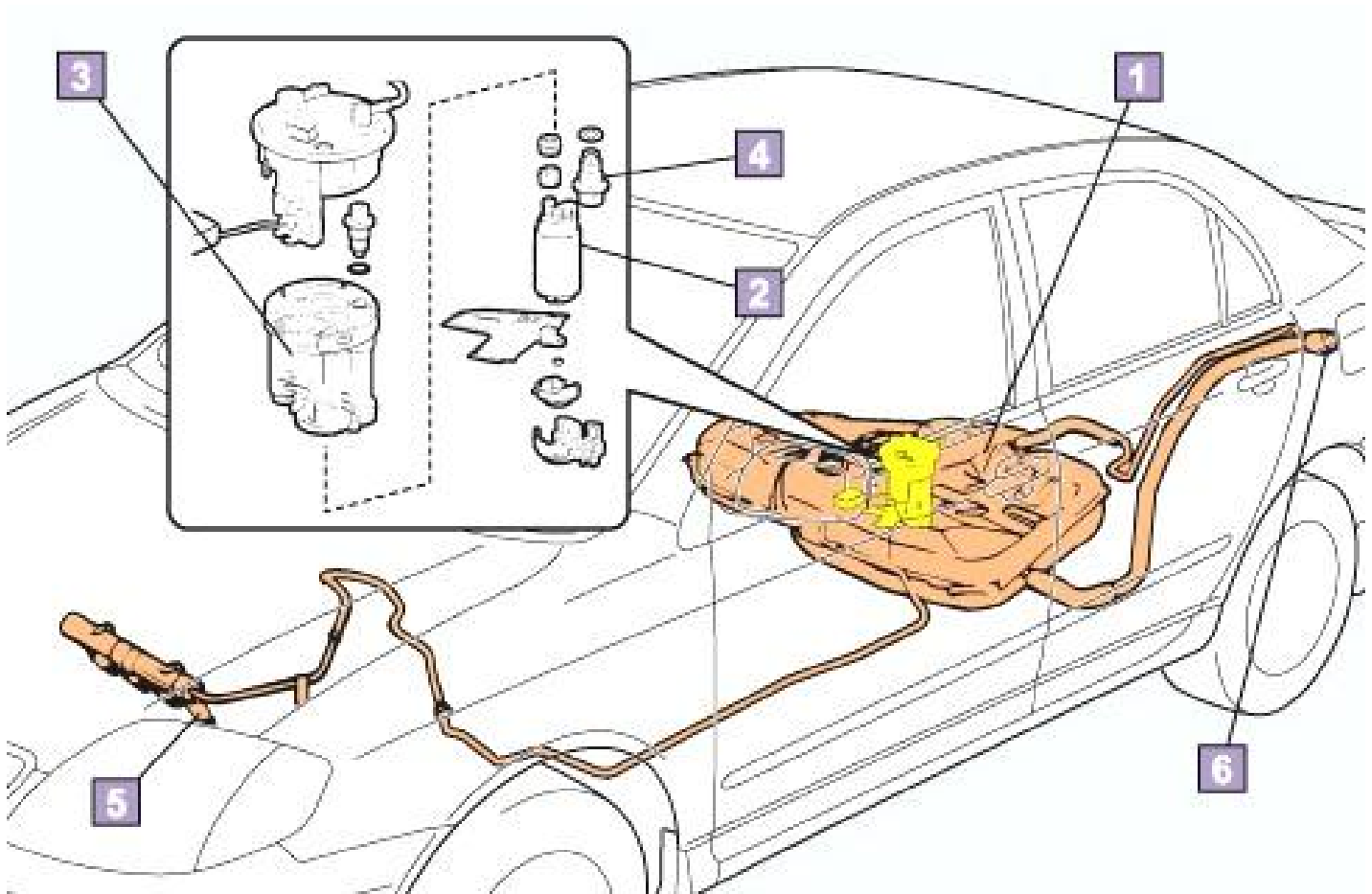
2. Fuel pump

3. Fuel filter

4. Pressure regulator

5. Injector

6. Fuel tank cap



Fuel Injector-

. In response to signals from the ECU (Electronic Control Unit), the coil pulls on the plunger and opens the valve to inject the fuel. Fuel that is injected from the fuel injector mixes with air, and the mixture is sent to the cylinder.

To achieve an optimal air-fuel mixture ratio, the ECU (Electronic Control Unit) regulates the injection timing and injection volume.

The injection volume is regulated by the duration of injection.

Fuel injector System

Injector

Grommet

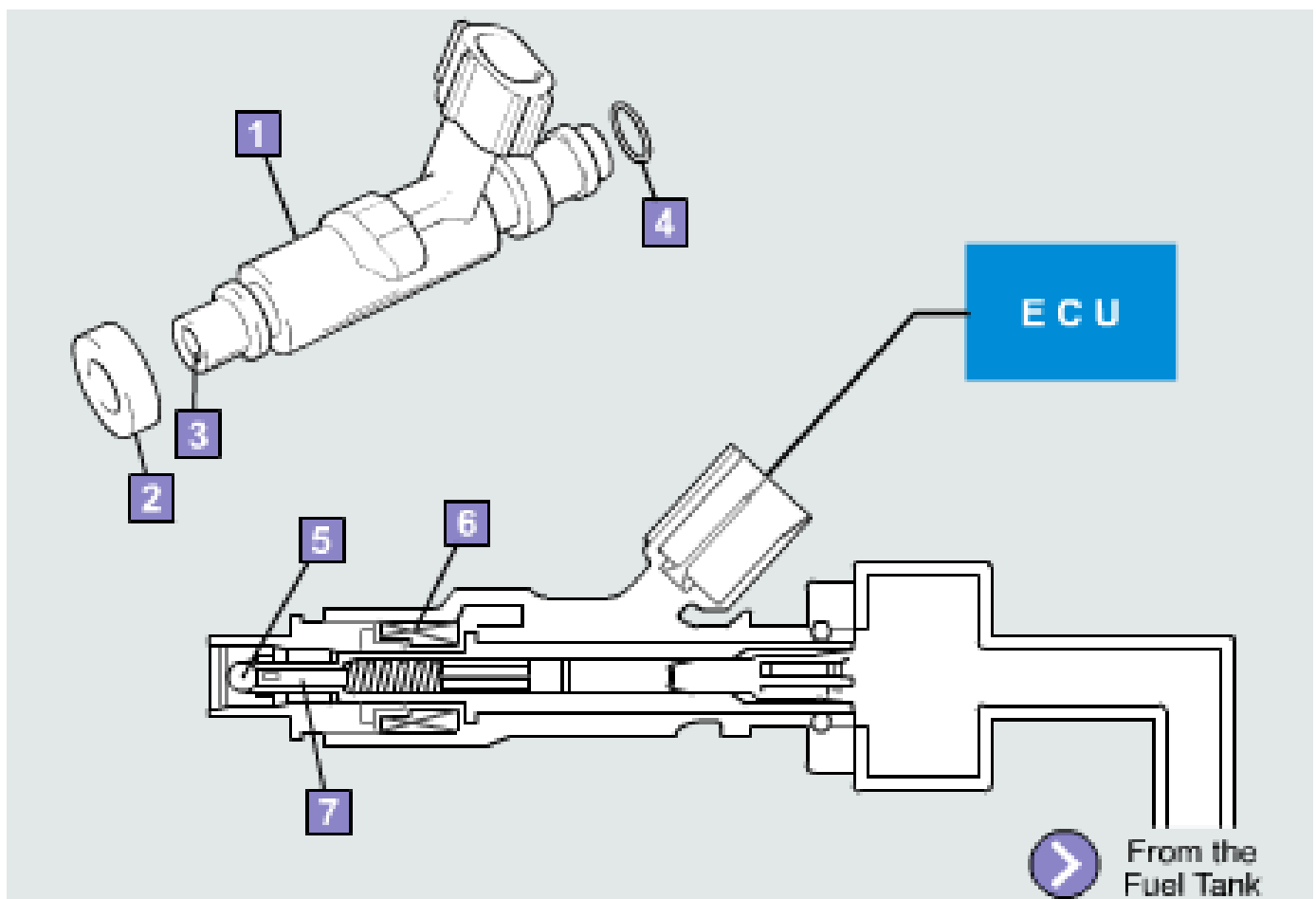
Nozzle

O-ring

Valve

Coil

Plunger



Fuel Injector

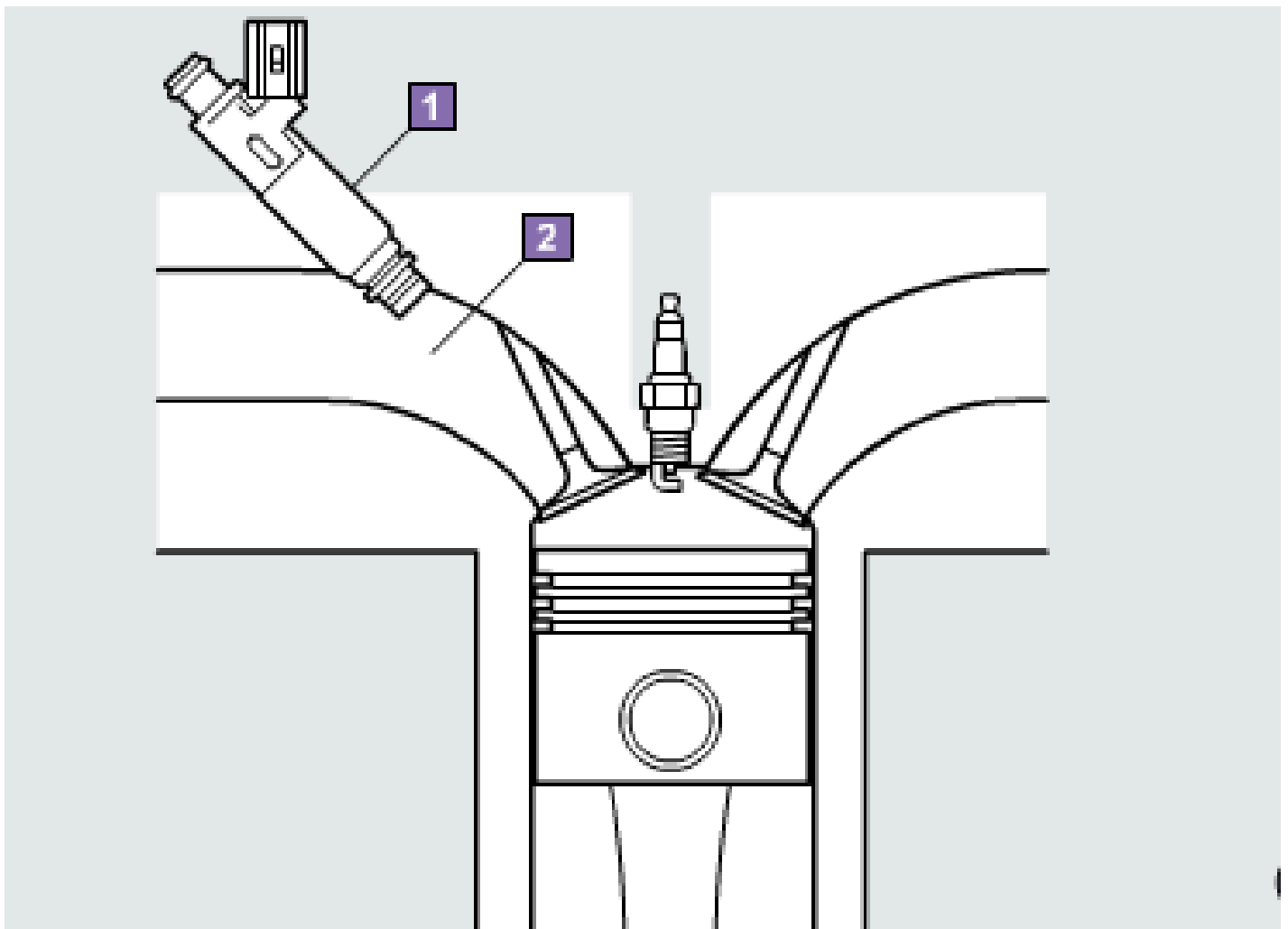
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1. Injector

2. Intak Port



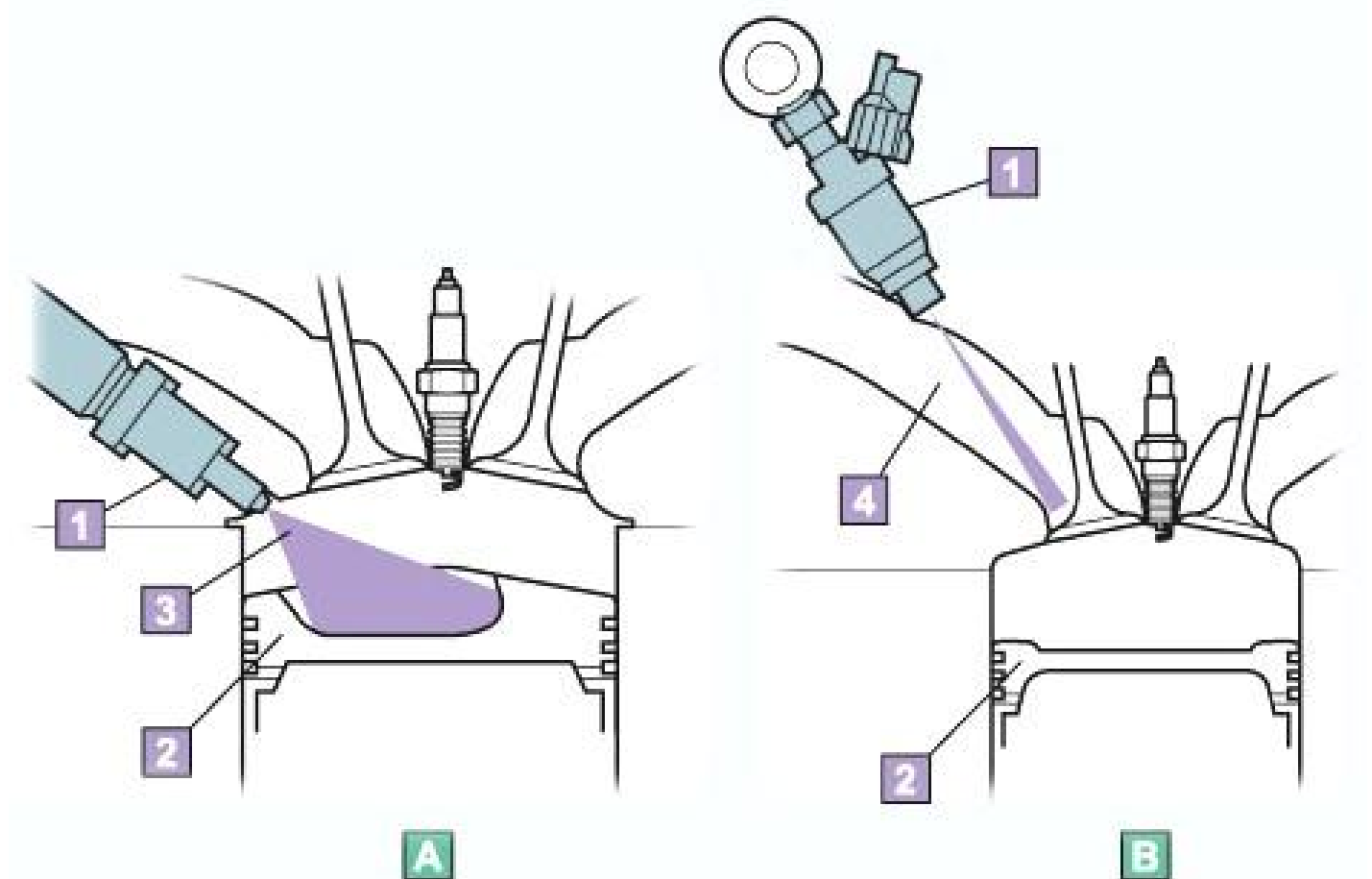
D-4 (Direct Injection 4-Stroke Gasoline Engine)

In a D-4, fuel is not injected into the manifold as in the port injection type, it is injected directly into the combustion chamber. Therefore, this system can regulate the timing and volume of fuel injection precisely. The piston head has been designed in a special shape to facilitate the mixing of air and fuel in the combustion chamber.

Types of Direct Injection

- 1.D-4 type
2. Port injection type

1. Injector
2. Piston
3. Fuel
4. Intake Port

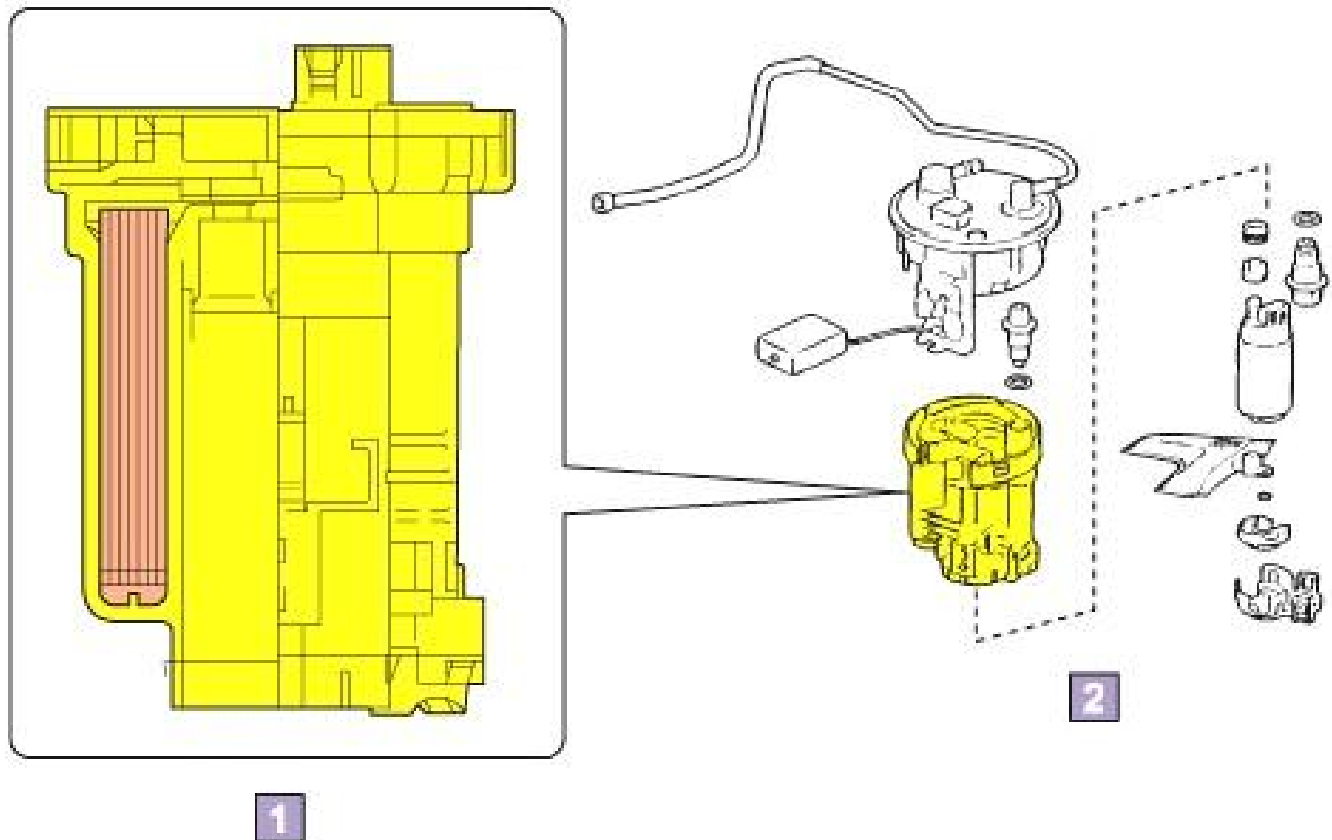


Fuel Filter-

Removes contamination from the fuel. To prevent them from being pumped into the injectors, a filter paper is used to remove contamination. The fuel filter assembly must be replaced at regular intervals.

1. Fuel Fitter (case integrated type)

2. Fuel pump assembly



Pressure Regulator-

- . Regulates the fuel to a set pressure, so there is always a stable fuel supply.

Parts of Pressure Regulator

1. Pressure regulator
2. Fuel pump assembly

