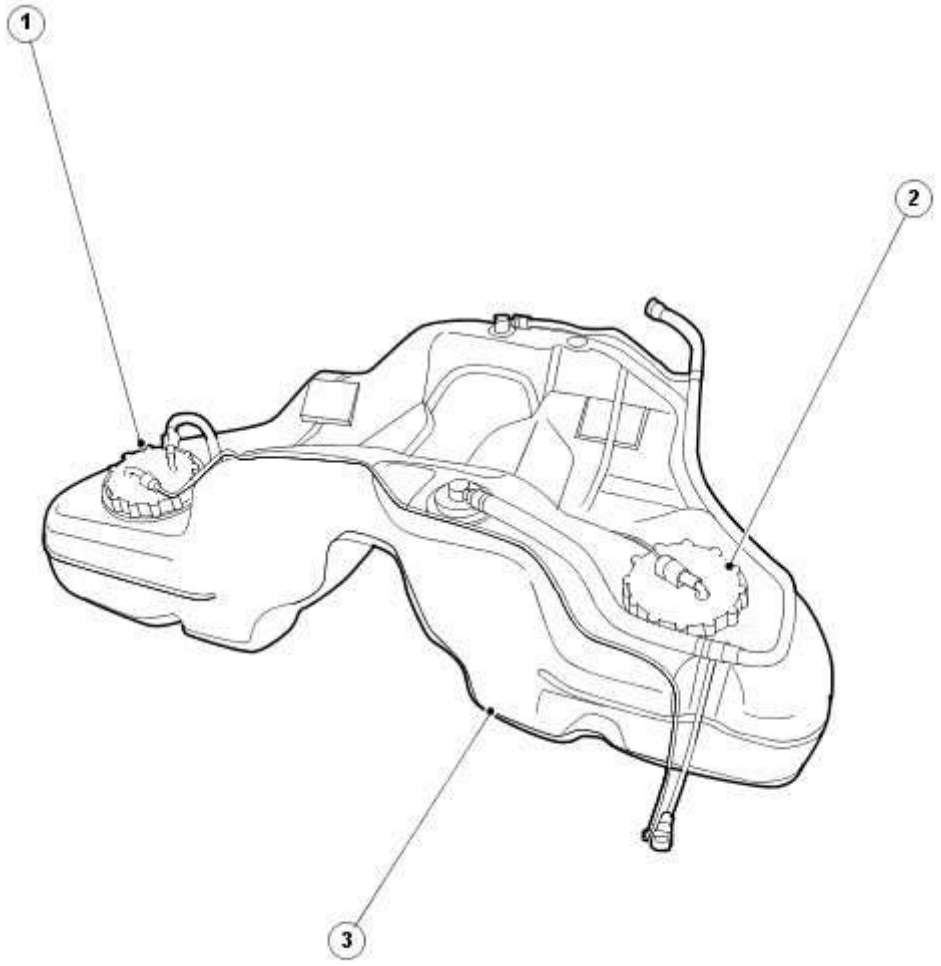
Description and operation

Fuel Tank and Lines - VIN Range: G00442->G45703

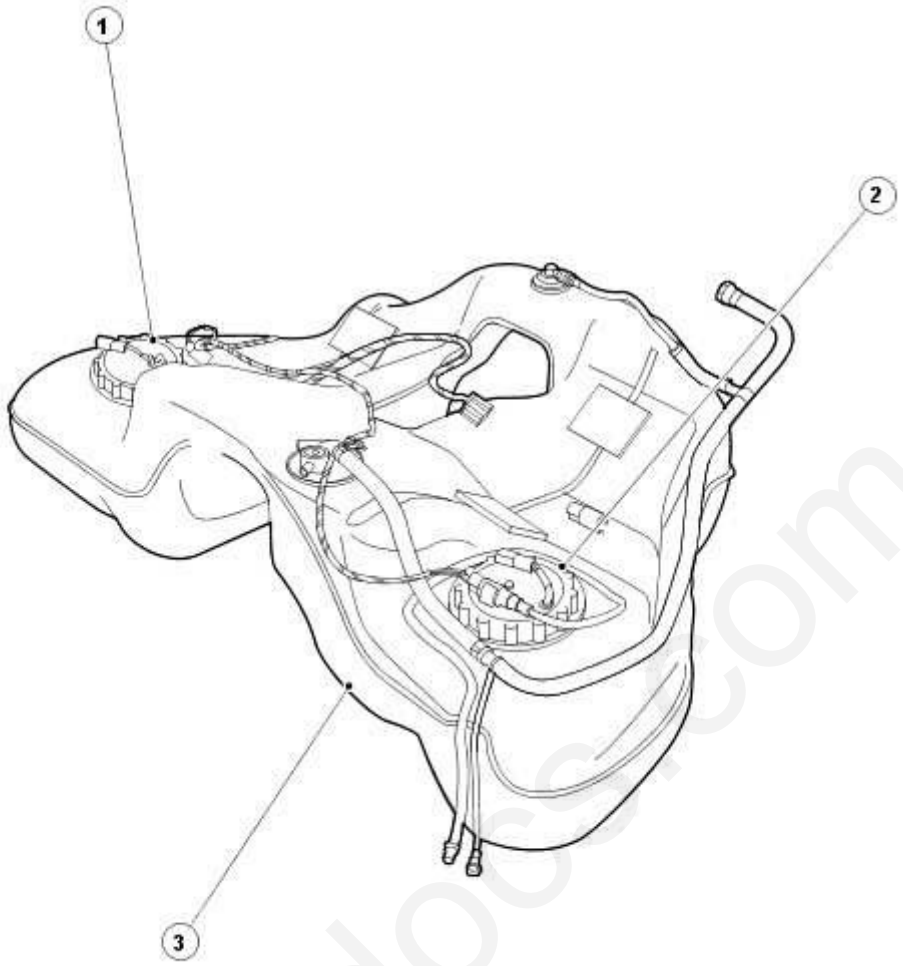
Vehicles without supercharger



E37161

Item	Part Number	Description
1		Fuel pump module
2		Fuel transfer pump
3		Fuel tank

Vehicles with supercharger



E37162

Item	Part Number	Description
1	—	Right-hand fuel pump module
2	—	Left-hand fuel pump module
3	—	Fuel tank

Fuel Tank

The fuel tank is of a plastic construction and is retained to the vehicle by means of two steel support straps. The fuel tank support straps are mounted onto the underside of the vehicle chassis towards the front of the fuel tank and bolt to the vehicle towards the rear of the fuel tank. Fuel tank ventilation is achieved through a fuel tank roll-over valve into an evaporative emission canister which absorbs fuel tank vapor. The fuel tank roll-over valve is integral to the fuel tank and will prevent fuel loss from the fuel tank if the vehicle becomes inverted.

Fuel Filter

The fuel filter is of a conventional construction being that of a paper element sealed within a steel canister. The fuel filter is located on the left-hand front longitudinal member, under the left-hand splash shield.

Fuel Tank Filler Pipe

The fuel tank filler pipe is of steel construction and is retained to the vehicle by means of two lower retaining bolts and one upper retaining nut. The fuel tank filler pipe is fitted with a twist-fit filler cap, which seals the system.

Inertia Fuel Shutoff (IFS) Switch

The inertia fuel shutoff (IFS) switch is designed to cut power to the fuel pump in the event of an accident. It is located behind the left-hand cowl side trim panel.

Fuel Pumps

The fuel pumps are electric turbine type pumps and are located inside the fuel tank, one on the left-hand side and one on the right-hand side on supercharged vehicles. They both feature an integral fuel tank sender unit and each is retained to the fuel tank by means of a locking ring.

Vehicles without supercharger

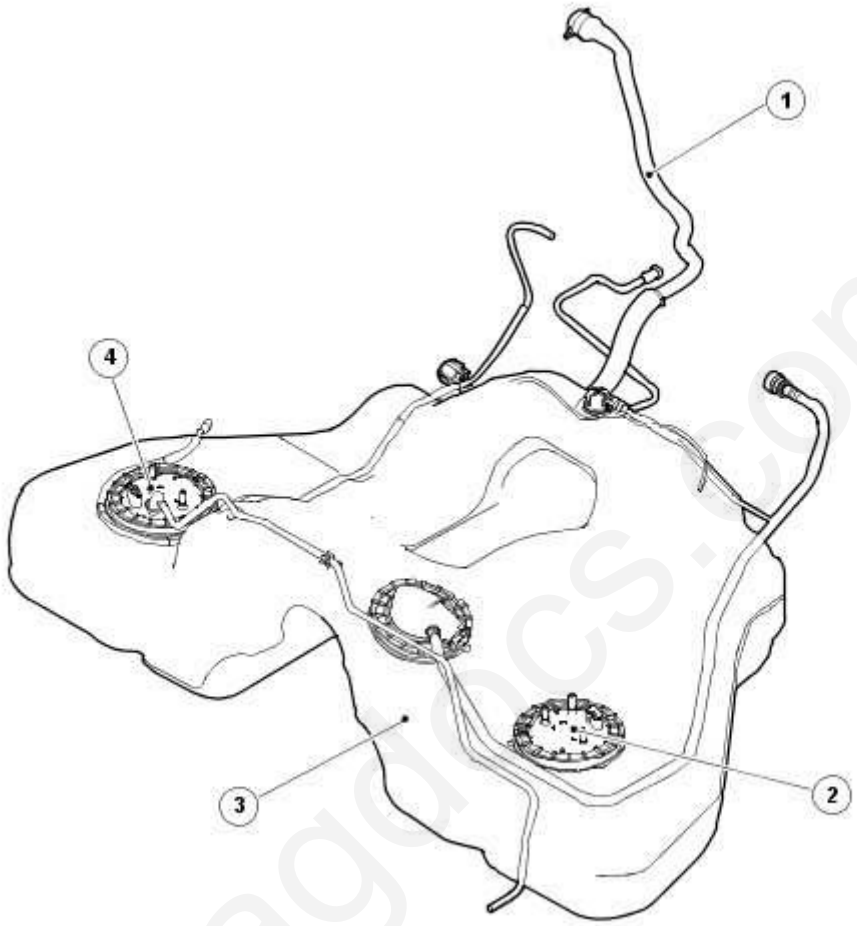
As the fuel tank is of a saddle design, a fuel pump module and a fuel transfer pump are incorporated. The fuel pump module located in the right-hand side of the fuel tank transfers fuel to the left-hand side of the fuel tank. The fuel transfer pump located in the left-hand side of the fuel tank transfers fuel to the fuel pump module and then the engine.

Vehicles with supercharger

Both pumps continually transfer fuel from one side of the tank to the other, whilst also providing a fuel supply to the engine.

Fuel Tank and Lines - VIN Range: G45704->G99999

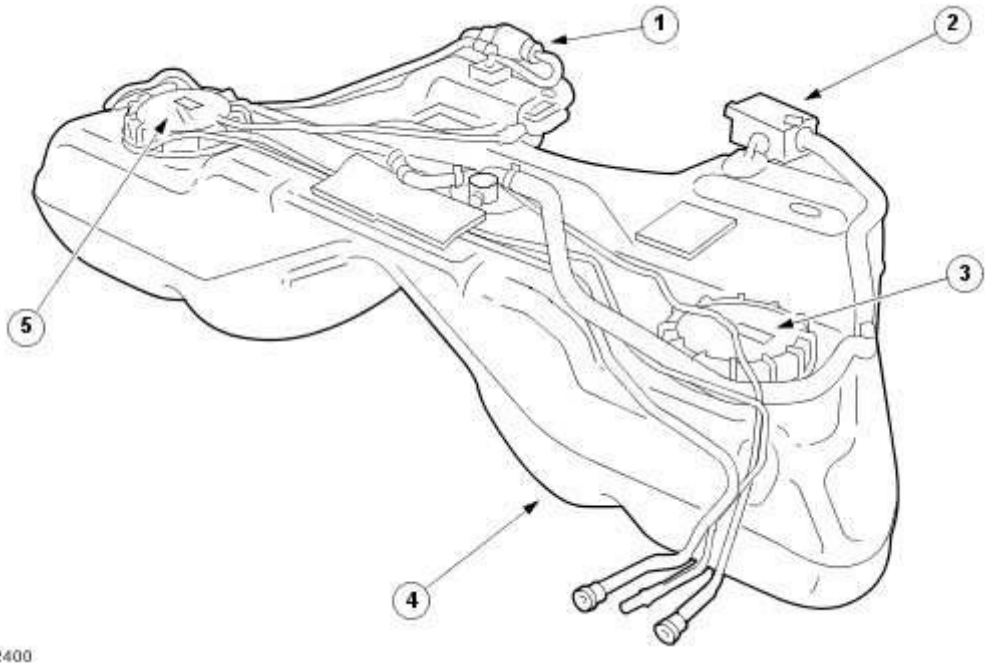
Vehicles without Diesel Engine



E64139

Item	Part Number	Description
1		Fuel tank filler pipe
2		Fuel transfer module
3		Fuel tank
4		Fuel pump module

Vehicles with Diesel Engine



E52400

Item	Part Number	Description
1		Auxiliary heater fuel supply pump
2		Fuel tank ventilation filter
3		Left-hand fuel level sensor module
4		Fuel tank
5		Right-hand fuel pump module

Fuel Tank

Vehicles without Diesel Engine

The fuel tank is of a plastic construction and is retained to the vehicle by means of two steel support straps. The fuel tank support straps are mounted onto the underside of the vehicle chassis towards the front of the fuel tank and bolt to the vehicle towards the rear of the fuel tank. Fuel tank ventilation is achieved through a fuel tank roll-over valve into an evaporative emission canister which absorbs fuel tank vapor. The fuel tank roll-over valve is integral to the fuel tank and will prevent fuel loss from the fuel tank if the vehicle becomes inverted.

Vehicles with Diesel Engine

The fuel tank is of a plastic construction and is retained to the vehicle by means of two steel support straps. The fuel tank support straps are mounted onto the underside of the vehicle chassis towards

the front of the fuel tank and bolt to the vehicle towards the rear of the fuel tank. Fuel tank ventilation is achieved through a fuel tank roll-over valve into a ventilation filter. The fuel tank roll-over valve is integral to the fuel tank and will prevent fuel loss from the fuel tank if the vehicle becomes inverted.

Fuel Filter

Vehicles without Diesel Engine

The fuel filter is of a conventional construction being that of a paper element sealed within a steel canister. The fuel filter is located behind the left-hand front fender splash shield.

Vehicles with Diesel Engine

The diesel fuel filter is located in the engine compartment. Incorporated in to the fuel filter housing is a bimetallic valve which will start to close at 30°C (86°F) and will fully close at 50°C (122°F).

When the bimetallic valve is open, fuel is only allowed to pass through the fuel cooler in the engine vee, which aids warm up of the fuel at low temperatures. When the fuel temperature increases, the bimetallic valve closes, diverting fuel through the under-floor fuel cooler which then lowers the fuel temperature before returning the fuel back to the fuel filter.

The fuel filter has an air bleed return to the fuel tank which returns excess air and fuel back to the fuel tank.

Fuel Tank Filler Pipe

The fuel tank filler pipe is of stainless steel construction and is retained to the vehicle by means of one lower retaining bolt, one lower retaining nut and one upper retaining nut. The fuel tank filler pipe is fitted with a twist-fit filler cap, which seals the system.

Inertia Fuel Shutoff (IFS) Switch

The inertia fuel shutoff (IFS) switch is designed to cut power to the fuel pump in the event of an accident. It is located behind the left-hand cowl side trim panel.

Fuel Modules

Vehicles without Diesel Engine

As the fuel tank is of a saddle design, a fuel pump module and a fuel transfer module are incorporated.

The fuel pump module is an electric turbine type pump and is located inside the fuel tank, on the right-hand side. Both the fuel pump and fuel transfer module feature an integral fuel tank sender unit and each is retained to the fuel tank by means of a locking ring.

Vehicles with Diesel Engine

The fuel pump is an electric turbine type and is located in the right-hand side of the fuel tank. The fuel pump supplies fuel to the fuel injection pump and also circulates fuel from the left-hand side of the fuel tank by means of fuel transfer pipes incorporated in the fuel pump module.

The fuel tank incorporates two fuel level sensors, one in the right-hand fuel pump module and one in the left-hand fuel tank level sensor. Both the fuel pump and fuel tank level sensor modules are retained to the fuel tank by means of a locking ring.

Fuel cooler

Vehicles with Diesel Engine

Two fuel coolers are fitted to the vehicle. One is located in the vee of the engine block, which has a coolant connection to aid heat transfer. The second cooler is located in the fuel return line and is located under the vehicle on the left-hand side. Fuel flow through the underfloor cooler is controlled by the fuel filter.