

Fuel Tank and Lines - Overview

Diesel Engines

The diesel fuel system contains:

- a fuel tank. There are 3 types available:
 - a midship fuel tank (mounted to the LH frame side rail).
 - an aft-of-axle fuel tank (mounted at the rear of the frame between the side rails).
 - a dual fuel tank setup with fuel tanks mounted midship and aft-of-axle, using a "draft" style fuel transfer system to draw fuel from the rear tank to the front tank as the level in the front tank reduces due to consumption.
- a fuel tank filler pipe without a restrictor plate.
- fuel tubes.
- a one-fourth turn fuel tank filler cap (green for ultra low sulfur diesel).
- a Fuel Pump (FP) which provides pressurized fuel to the engine and has:
 - a serviceable fuel sender.
 - a check valve which maintains system pressure after the FP is shut off.
 - a pressure relief valve for overpressure protection in the event of restricted flow.
- a fuel conditioning module that:
 - has a fuel filter and water separator to protect the fuel injectors.
 - is fuel tank mounted.
- a Fuel Pump Control Module.

The fuel tank stores the liquid fuel. The FP located in the front fuel tank is controlled by the PCM. The fuel supply tubes route fuel from the fuel tank to the engine and the fuel return tubes route unused fuel from the engine back to the fuel tank.

If equipped with dual fuel tanks, the fuel tank delivery system operates independently and automatically. The fuel pump in the front fuel tank delivers fuel to the engine. When the fuel level in the front fuel tank drops below three quarters full, fuel automatically transfers from the rear fuel tank to the front fuel tank. Whenever there is fuel in the rear fuel tank, the front fuel tank level remains between half and three quarters full.