

## 36.4 Description and Operation of the EPA10 Diesel Exhaust Fluid Heating

Diesel Exhaust Fluid (DEF) is fluid that can freeze and must be heated in cold ambient conditions. The DEF tank (1) and supply unit (2) use coolant from the engine to heat the DEF. Coolant flows from the coolant collector on the engine through the coolant hose (3) to the supply unit. It flows through the supply unit and to the coolant valve (4). From the coolant valve, the coolant flows through the DEF tank header into the tank. Coolant then flows out of the tank and returns back to the engine (5). The DEF is heated by engine coolant. A solenoid valve, activated by the ACM2, is located in the coolant supply line between the engine and the pump. The ACM2 controls the solenoid valve that regulates coolant flow to thaw and maintain DEF temperature above the DEF freezing point of  $-11^{\circ}\text{C}$  ( $12^{\circ}\text{F}$ ).

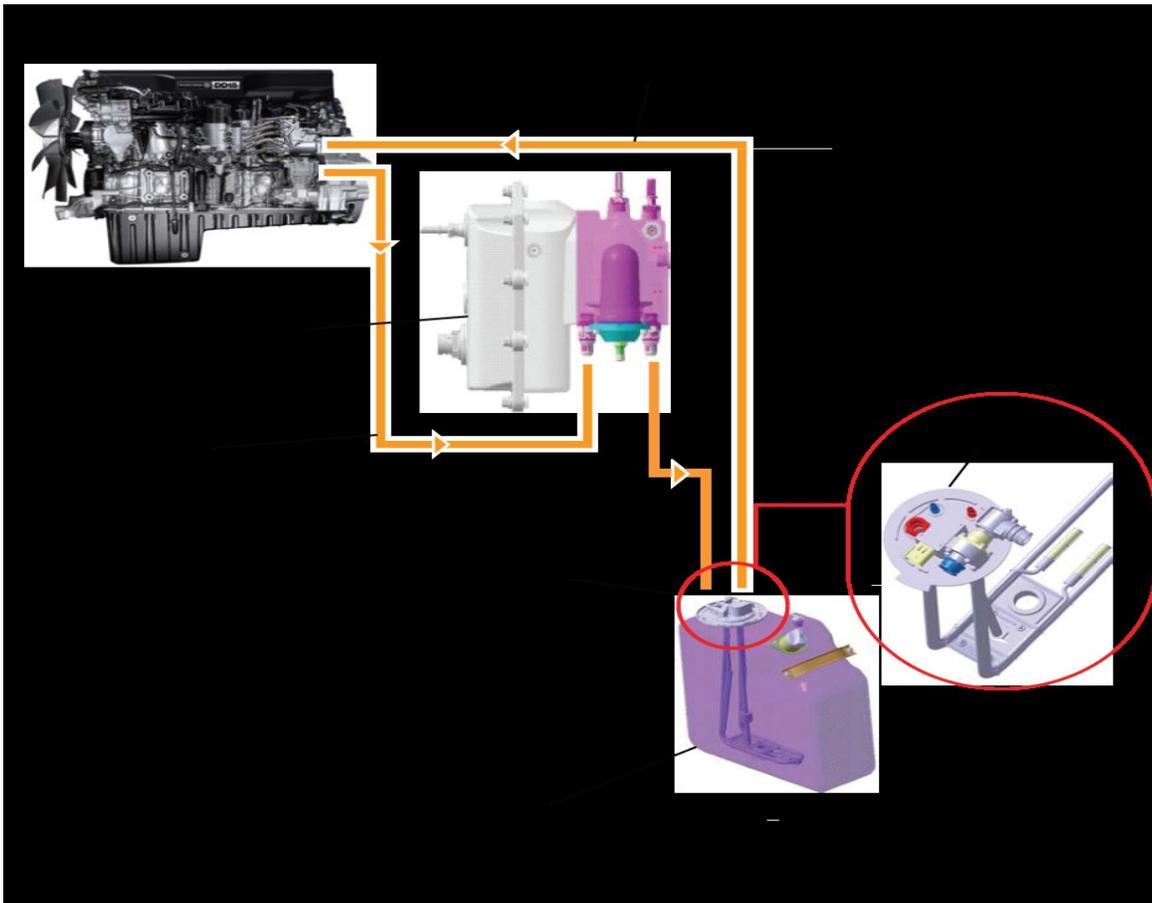


Figure 1. EPA10 Diesel Exhaust Fluid Heating