# DIESEL OBD II Overview

## **COMPONENT LOCATIONS**

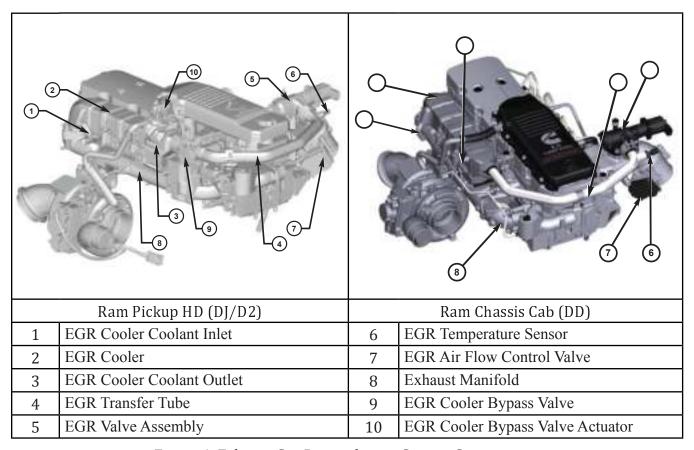


Figure 4 Exhaust Gas Recirculation System Components

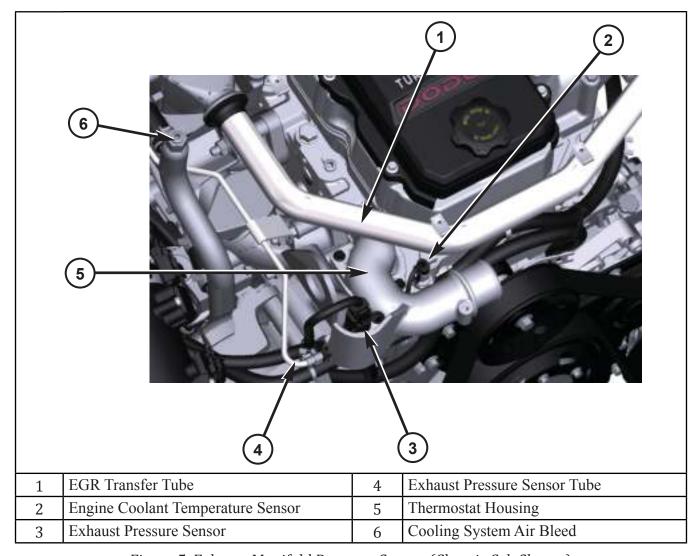
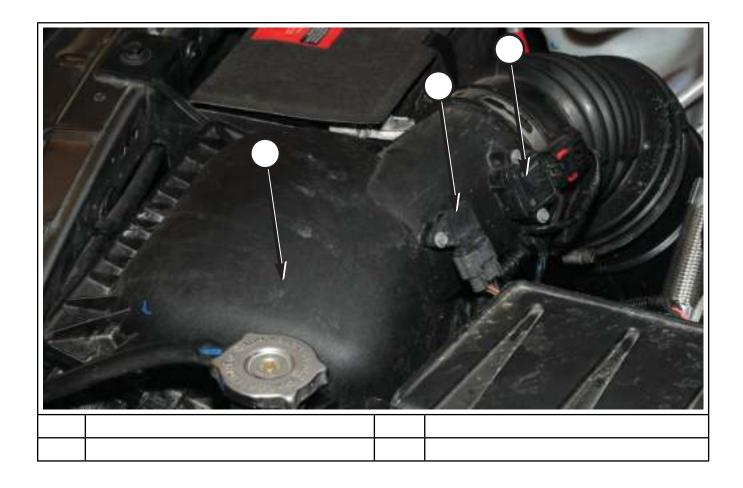


Figure 5 Exhaust Manifold Pressure Sensor (Chassis Cab Shown)

# DIESEL OBD II Overview



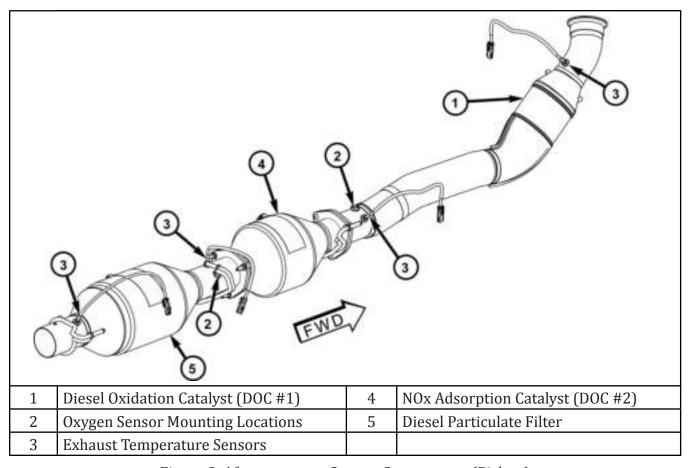


Figure 8 Aftertreatment System Components (Pickup)

#### AFTERTREATMENT SYSTEM COMPONENTS - CHASSIS CAB

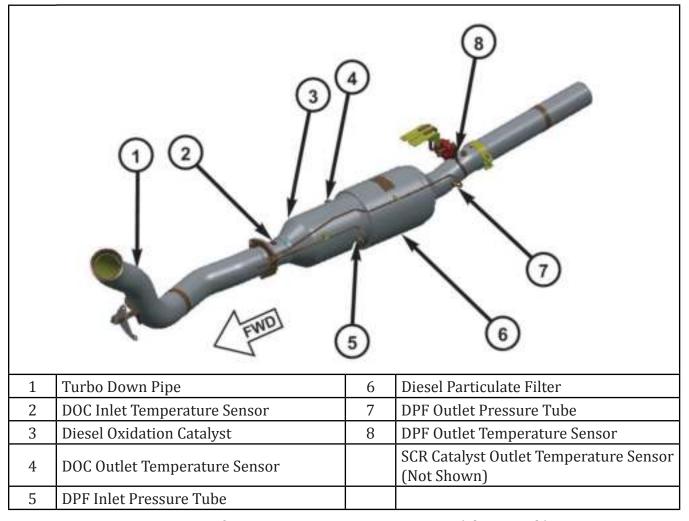


Figure 19 Aftertreatment System Components (Chassis Cab)

The aftertreatment system includes a DOC, a DPF used to remove particulate matter from the exhaust gas, and sensors to monitor temperatures and pressures. Exhaust heat is used to "burn off" the PM collected in the DPF through a process called regeneration. Note that

The soot collected in the filter must be converted to ash on a regular basis to avoid an increase in exhaust gas backpressure and a corresponding drop in vehicle performance.

Note: The new DD/DP chassis cabs have the addition of a fourth exhaust temperature sensor located at the SCR catalyst outlet.

### **EXHAUST TEMPERATURE SENSORS - PICKUP TRUCK**

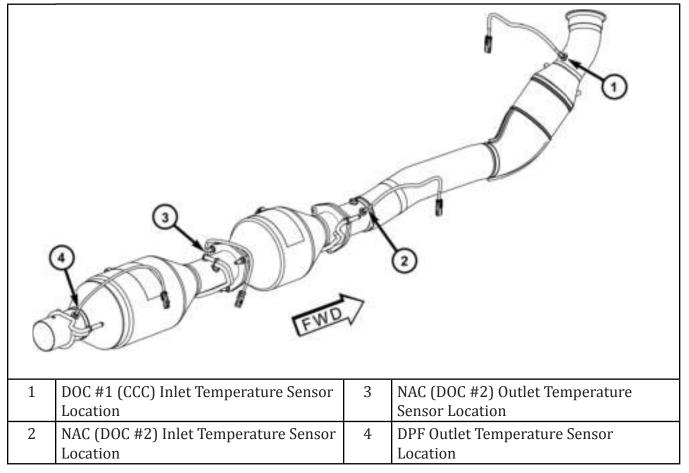


Figure 28 Exhaust Temperature Sensor Locations (Pickup Truck)

The pickup truck aftertreatment system also has sensors to measure the temperature of the exhaust gases as they move through the system, however they are in slightly different locations compared to the chassis cab. The temperature sensors on the pickup truck are located at the DOC #1 inlet, NAC Outlet, and DPF Outlet.

Note: On a pickup truck, the terms DOC #2 (diesel oxidation catalyst #2) and NAC (NOx adsorption catalyst) are used interchangeably in the service information and refer to the same component.

Note: In addition, the terms DOC #1 (diesel oxidation catalyst #1) and CCC (close coupled catalyst) are used interchangeably in the service information and refer to the same component.

# Diesel Exhaust Fluid System

### **DEF SYSTEM COMPONENTS**

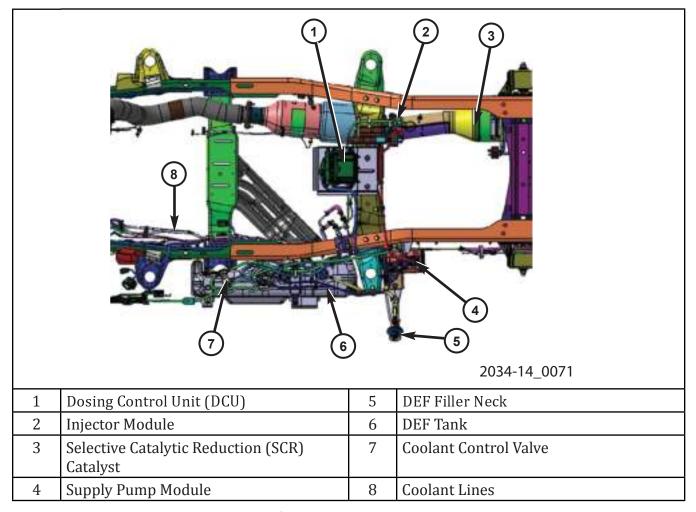


Figure 54 DEF System Components

The system consists of the DEF tank, heat exchanger, a coolant control valve, DEF pump supply module, injector module, DCU, two NOx modules, and the SCR.