

## STAR ONLINE PUBLICATION

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**Case Number:** S1725000002

**Release Date:** 9/24/2020

**Symptom/Vehicle Issue: (Revision A):** P2463-00-DIESEL PARTICULATE FILTER - SOOT ACCUMLATION

**Discussion:** This DTC can be caused by a customer's driving habits. If this vehicle is not driven long enough at highway speeds to actively regenerate the DPF on its own, excessive soot buildup will be built up in the exhaust system.

The system will look to initiate a regeneration cycle when the calculated soot reaches around 67%. At this level, the customer will not see any messages and will not know regeneration is taking place. If the vehicle is not being driven to promote regeneration, the soot percentage will continue to climb until it hits around 80%. At 80%, the message will be displayed on the dash prompting the customer to drive on the highway. **When the message is present the customer or technician will need to drive the vehicle for approx. 30 minutes at steady speeds above 60mph (95 kph).**

### Theory of Operation

The engine Aftertreatment system monitor is used to determine the soot load in the Aftertreatment Diesel Particulate Filter. Under normal operating conditions the Aftertreatment Diesel Particulate Filter is self-cleaning, where soot is converted to ash. The soot load in the Aftertreatment Diesel Particulate Filter is estimated using the Differential Pressure Sensor and the calculated soot output of the engine. This fault code can be triggered if the application is not operating at a duty cycle high enough to actively regenerate the Aftertreatment Diesel Particulate Filter. It may be necessary to increase the duty cycle of the application in order to prevent excessive soot accumulation and plugging of the Aftertreatment Diesel Particulate Filter. The Powertrain Control Module (PCM) will set this fault if it detects that the Aftertreatment Diesel Particulate Filter is plugged or that the differential pressure across the Diesel Particulate Filter is above the calibrated moderately severe threshold limit. The PCM will illuminate the MIL lamp when the monitor runs and fails in three driving cycles.

**When Monitored:** The diagnostic runs continuously when the engine is running.

This document does not authorize warranty repairs. This communication documents a record of past experiences. STAR Online does not provide any conclusions about what is wrong with the vehicle. Rather, it captures all previous cases known that appear to be similar or related to the vehicle symptom / condition. You are the expert, and you are responsible for deciding on the appropriate course of action.

**Contact STAR Center, or your Technical Assistance Center Via TechCONNECT or eCONTACT ticket if no solution is found**