



## STAR ONLINE PUBLICATION



**Case Number: S221800022**

**Release Date: December 2022**

**Symptom/Vehicle Issue:** Perceived Low Power/Acceleration Lag, And/Or Malfunction Indicator Lamp (MIL) Illumination, Diagnostic Trouble Codes (DTCs) P0299 Turbocharger Underboost And/Or P026D – Fuel Injection Quantity Higher Than Expected, Set.

**Customer Complaint:** Some customers may experience a perceived low power/acceleration lag condition. Some of these vehicles may also have a MIL illumination with DTCs P0299 and/or P026D setting in the Powertrain Control Module (PCM) memory. It may be noted by the customer that this concern was only noticed after a PCM calibration update was performed.

The root cause of this condition may be due to a dirty or contaminated Mass Air Flow (MAF) sensor that is reading lower than expected but is still within its operating range. The affect will be a perceived lack of power/acceleration lag. In extreme cases it may also lead to DTCs P0299 and/or P026D.

**NOTE: A dirty or contaminated MAF sensor cannot be cleaned without risking damage to the sensor.**

If a technician receives a vehicle in with the above condition, please perform the following steps to verify the cause is the MAF sensor.

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, eCONTACT or Service Library entry if no solution is found.**



## STAR ONLINE PUBLICATION



### Verification:

1. Start the vehicle and allow it to warm up until it has reached full operating temperature.
2. Using wiTECH, navigate to the PCM “Data Tab” and monitor the Mass Air Flow Rate (MAF) data parameter.
3. In a safe area, perform a Wide-Open Throttle (WOT) acceleration from 0-40 mph (0-64 kph) while recording the max Mass Air Flow Rate achieved. Did the Mass Air Flow Rate meet or exceed 1,100-1,200 mm<sup>3</sup>/inj?
  - a. Yes>>> The MAF sensor is operating normally. This document no longer applies. Please proceed with normal published diagnostics for the concern.
  - b. No>>> Replace the MAF sensor. For detailed replacement instructions, refer to Service Library Service Information Section 14 – Fuel System > Fuel Injection, Diesel > Sensor, Mass Airflow (MAF) > Removal and Installation. Proceed to (Step 4).
4. Using wiTECH, navigate to the PCM “Misc Functions” tab and perform the “Air Flow Meter” reset routine.
5. Test drive the vehicle to verify the repair.

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, eCONTACT or Service Library entry if no solution is found.**