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SUBJECT:

Detailed Proper PHEV Engine Operation

OVERVIEW:

This bulletin is to communicate that when the combustion engine starts for the first time within a key-cycle (either when the vehicle is first operational at the key crank, or while driving), the propulsion system will generally operate in 'series-mode' for up to 60 seconds.

MODELS:

2021 (JL) Jeep Wrangler

NOTE: This bulletin applies to vehicles within the following markets/countries: North America, EMEA and APAC.

NOTE: This bulletin applies to vehicles equipped with the 2.0L I4 DOHC DI Turbo PHEV Engine (Sales Codes ECX).

DISCUSSION:

During 'series-mode' the combustion engine is mechanically disconnected from the transmission and driveline. Propulsion torque is provided by the P2 electric motor – like when operating in EV. The following also characterizes 'series-mode' at the first combustion engine start within a key-cycle:

- With the engine mechanically disconnected from the transmission and driveline, engine speed and torque are optimized to achieve efficiency and tailpipe emissions. The engine speed will be as high as 1600 rpm, with the engine producing torque – with sounds associated with being under load.
- The engine speed and torque are independent of vehicle speed and driver pedal request. As the vehicle accelerates and the transmission shifts, the engine speed will remain relatively constant – while in 'series-mode'.

No repair necessary - 1600 RPM during Catalyst Heat up (NiTi) is normal operations.

POLICY:

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