NOTE: A Special Service Message is a formal communication issued by Land Rover and carries the same importance of a Technical Service Bulletin. An SSM is a quick method of communicating "Need To Know" information to the technical service community. SSM's may be issued in advance of a technical bulletin or may be the only communication on a given topic. All information contained in Land Rover technical communications are intended for use by trained, professional technicians with the knowledge, tools, and equipment required to complete the procedure correctly and safely. It informs the Technicians of conditions that may occur on some vehicles, or provides information that could assist in correct vehicle and diagnostic service.

SSM 74698 - AJ20D4 & TDV6 – Selective Catalyst Reduction (SCR) Diagnostic Flow / Application Release

Models: Defender/L663
  Discovery / L462
  Discovery Sport / L550
  Discovery Sport / L550 (Brazil 99J)
  Discovery Sport / L550 (China L2C)
  Evoque / L538
  Evoque / L538 (China L2C)
  Evoque / L551
  Evoque/L551 (China/L2C)
  Range Rover / L405
  Range Rover Sport / L494
  Range Rover Velar / L560

Engineer: Chris Davies
Date Last Updated: 15 JAN 2020 13:21:53

Issue:

- 17MY Onwards - Range Rover / Range Rover Sport / Discovery / Discovery Sport
- 18MY Onwards - Range Evoque / Range Rover Velar
- 20MY Onwards - Defender

A customer may experience one of the following warning messages on the Instrument Panel (IP):

- Diesel Exhaust Fluid (DEF) Level Low (Empty) or Refill Message Displayed on the (IP)
- Incorrect Diesel Exhaust Fluid (DEF) Quality Detected
- Diesel Exhaust Fluid (DEF) Dosing Malfunction

Cause:

- The vehicle is unable to detect the level of Diesel Exhaust Fluid (DEF) due to overfill

- Incorrect DEF quality due to:
  - Incorrect DEF fluid
  - NOx Sensor Malfunction
  - Intake / Exhaust System Malfunction
  - DPF and/or SCR Catalytic Converter Malfunction
  - DEF Injector Malfunction

- DEF Dosing Malfunction due to:
  - Mechanical Failure
  - Electrical Failure
  - Dosing Pump Failure
  - DEF lining Failure

Action:
This procedure requires a minimum of Pathfinder 266 installed or later.

Please run the “Diesel Exhaust Fluid” Guided flow by following these steps;

1. Connect the JLR approved battery support unit.

2. Connect the JLR approved diagnostic equipment to the vehicle and begin a new session.

The JLR approved diagnostic tool will read the correct VIN for the current vehicle and (if applicable, automatically take the vehicle out of ‘Transportation mode’ if required).

3. Follow the JLR approved diagnostic equipment prompts;

Select “Guided Diagnostics/Warnings/Messages” and run the guided flow by selecting “Diesel Exhaust Fluid”.

For low/empty DEF fluid issues select “Diesel Exhaust Fluid level Low or Refill Message Displayed”;
The application will guide the technician to diagnose and test the following:

- Diesel exhaust fluid level low
- Diesel exhaust fluid level overfilled
- Diesel exhaust fluid tank short circuit, open circuit, high resistance.

For DEF quality issues select “Incorrect Diesel Exhaust Fluid Quality Detected”
The application will guide the technician to diagnose and test the following:

- DEF fluid does not meet ISO 22241 and ISO 22241-1
- Faulty NOx Sensor due to internal failure, short or open load
- Faulty Intake/Exhaust system due to Structural Leak or Faulty Sensor
- Faulty DPF and/or SCR Catalytic Converted due to structural damage and/or insufficient chemical reaction (Poisoned DPF/Catalyst)
- Faulty DEF Injector due to short circuit, open circuit, high resistance or mechanical malfunction.

For Dosing Malfunction select “Diesel Exhaust Fluid Dosing Malfunction”;
The application will guide the technician to diagnose and test the following:

- Dosing Module Malfunctions based on the fault codes stored in the powertrain control module.

5. When the task is completed, exit the session.
6. Disconnect the JLR approved diagnostic equipment and the JLR approved battery support unit.