Reference	SSM75869
Models	Defender / L663
	Discovery / L462
	New Range Rover / L460
	New Range Rover Sport / L461
	Range Rover / L405
	Range Rover Sport / L494
	Range Rover Velar / L560
Title	`Coolant Low` Warning Message Displayed On The Instrument Panel Cluster
Category	Engine
Last modified	12-Sep-2023 00:00:00
Symptom	402000 Cooling System Concerns
Content	Model / Model Year / Derivative
	DEFENDER / 20MY onwards / INGENIUM I6 3.0L Diesel/Petrol only
	DISCOVERY / 21MY onwards / INGENIUM I6 3.0L Diesel/Petrol only
	RANGE ROVER (L405) / 21MY onwards / INGENIUM I6 3.0L Diesel/Petrol only
	RANGE ROVER (L460) / 22MY onwards / INGENIUM I6 3.0L Diesel/Petrol and V8 4.4L Petrol only
	RANGE ROVER SPORT (L494) / 21MY onwards / INGENIUM I6 3.0L Diesel/Petrol only
	RANGE ROVER SPORT (L461) / 23MY onwards / INGENIUM I6 3.0L Diesel/Petrol and V8 4.4L Petrol only
	RANGE ROVER VELAR / 21MY onwards / INGENIUM I6 3.0L Diesel/Petrol only
	Situation:
	JLR Engineering investigations have found a 'Coolant Low' warning message displayed on the Instrument Panel Cluster.
	<u>Cause:</u>
	Multiple potential engine coolant leak paths.

## Action:

Follow the instruction(s) below.

## **SERVICE INFORMATION:**

Vehicles must be returned to the customer with the engine coolant at the required maximum level and the correct concentration level.

## **SERVICE INSTRUCTION:**

NOTE: Make sure the outside surface of the coolant expansion tank is dry before completing the coolant pressure test. Residual engine coolant from a previous top-up may still be present on the outside surface of the coolant expansion tank.

Pressure test the engine cooling system as detailed in the TOPIx Workshop Manual, (see TOPIx Workshop Manual section 303-03: Engine Cooling - Diagnosis and Testing - Cooling System Pressure Test).

Make sure the following components are inspected as part of the cooling system pressure testing diagnosis:

- 1. Coolant expansion tank/coolant expansion tank filler cap
- 2. Coolant expansion tank bleed screw If leaking then a new coolant expansion tank must be installed
- 3. Turbocharger coolant inlet/outlet hoses
- 4. Thermostat housing and hose connections
- 5. Auxiliary water pump connections
- 6. Radiators and coolers
- 7. Charge air coolers external and internal (remove the charge air cooler intake pipe to inspect for internal leaks)
- 8. Electric supercharger bypass valve body
- 9. For Range Rover (L460) and Range Rover Sport (L461) inspect battery cooling system bleed pipe connections and ensure pipe clips create a tight seal.

Complete a coolant concentration (see TOPIx Workshop Manual section 303-03C: Engine Cooling – General Procedures – Cooling System Concentration Check).

Vehicles must be returned to the customer with the engine coolant at the required maximum level and the correct concentration level.

(Ref 000363102, 000375446, 000368746, 000375470)