

PUBLISHED: 18-FEB-2020
2020.0 DEFENDER (LE), 303-01C

ENGINE – INGENIUM I6 3.0L PETROL

ENGINE OIL VACUUM DRAINING AND FILLING (G2320438)

GENERAL PROCEDURES

12.60.99	ENGINE OIL VACUUM DRAIN / REFILL INCLUDING OIL FILTER – RENEW	2000 CC, INGENIUM DIESEL	0.30	USED WITHINS	
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SPECIAL TOOL(S)



E129630

JLR-303-1644

Oil Extraction Kit

PART(S)

STEP	PART NAME	QUANTITY
Filling Step 2	Oil filter O-ring seal(s)	1
Filling Step 2	Oil filter	1

DRAINING



WARNINGS:

- The spilling of hot oil is unavoidable during this procedure, care must be taken to prevent scalding.
- Be prepared to collect escaping oil.



CAUTION:

Before disconnecting any components, make sure the area is clean and free from foreign material. When disconnected all openings must be sealed.



NOTES:

- This procedure contains some variation in the illustrations depending on the vehicle specification, but the essential information is always correct.
- This procedure contains illustrations showing certain components removed to provide extra clarity.
- Engine oil vacuum draining and filling is the recommended procedure for engine oil change during a scheduled service. Scheduled service labour times are calculated using this method.

1.



CAUTION:

Make sure the engine is warm.

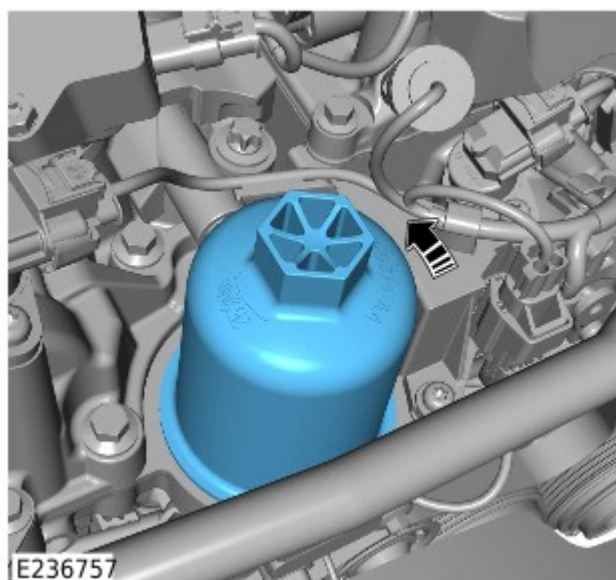
- Start and run the engine at idle until the normal operating temperature is reached.
- Stop the engine.

2.

Remove the engine cover.

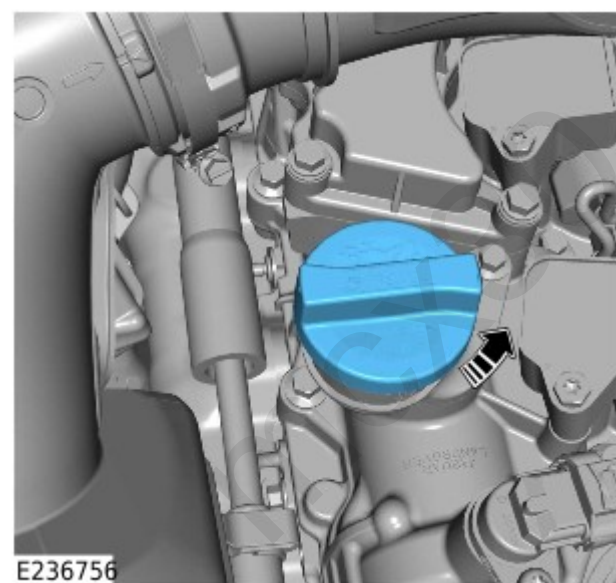
Refer to: [Engine Cover - INGENIUM I6 3.0L Petrol](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).

3.



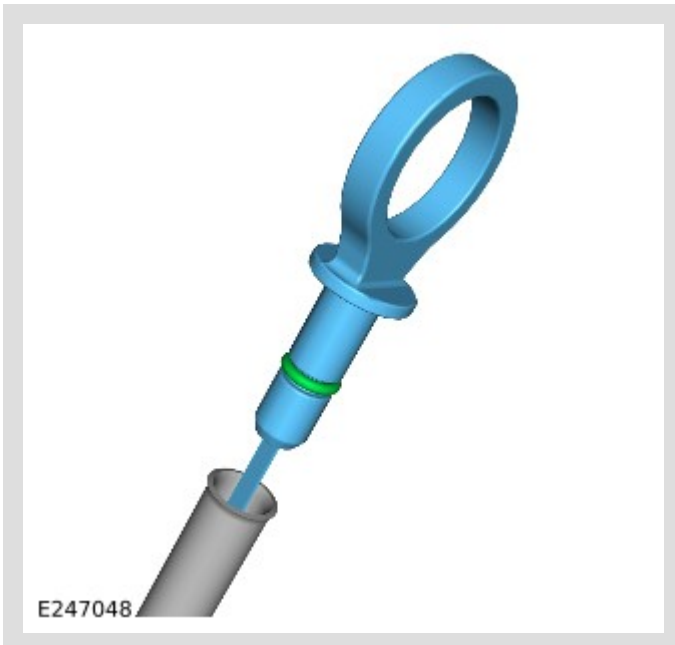
Loosen the oil filter element cap 4 complete turns.

4.



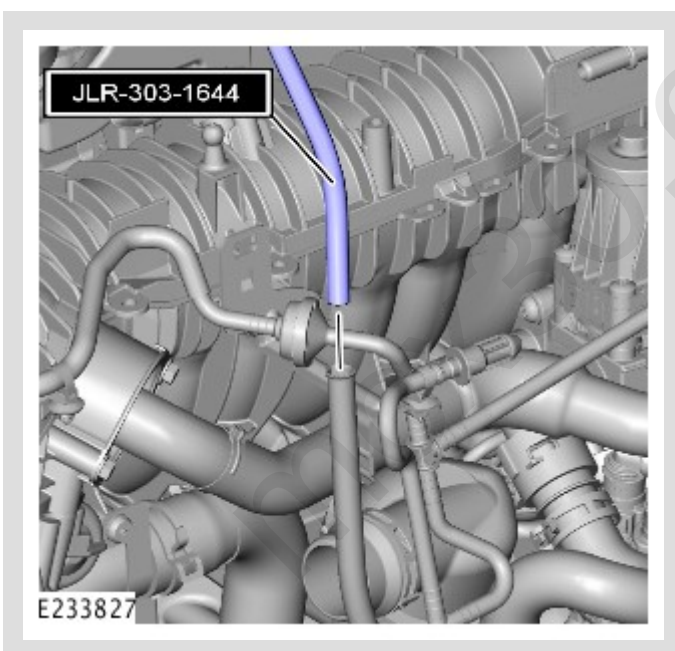
Remove the oil filler cap.

5.



Remove the oil level gauge.

6.



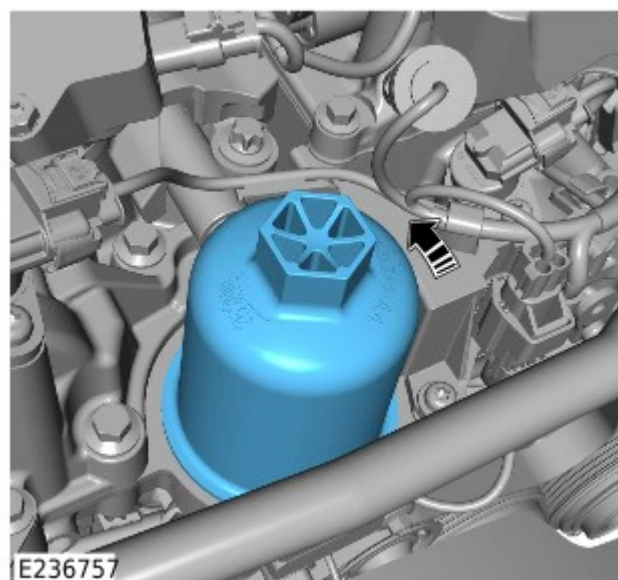
- Install the special tool.
Special Tool(s): [JLR-303-1644](#)
- Use the special tool to drain the oil.

7.

Remove the special tool.

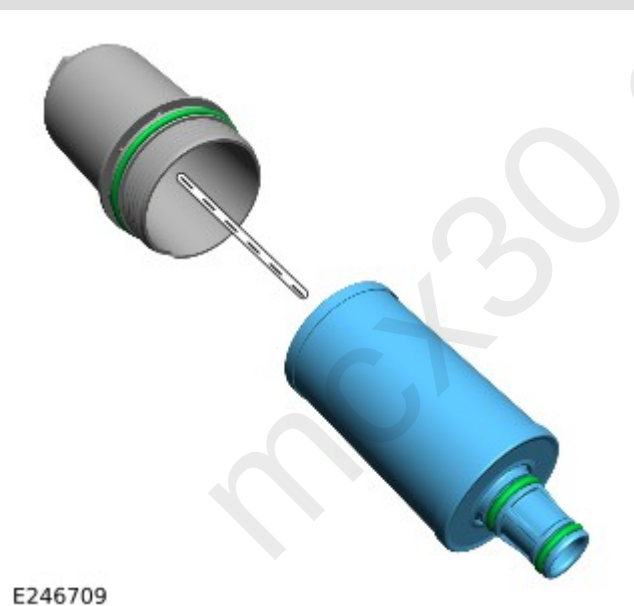
Special Tool(s): [JLR-303-1644](#)

8.



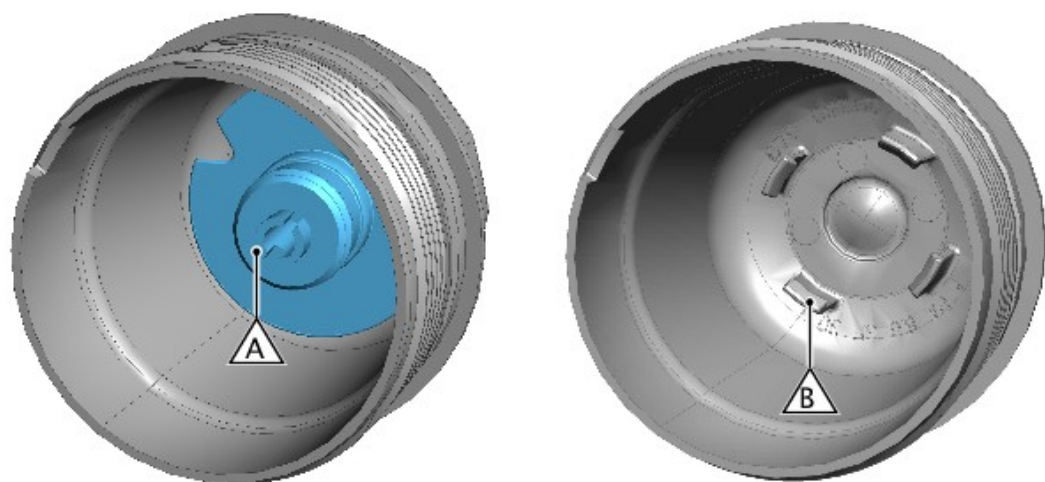
Remove the oil filter element cap.

9.



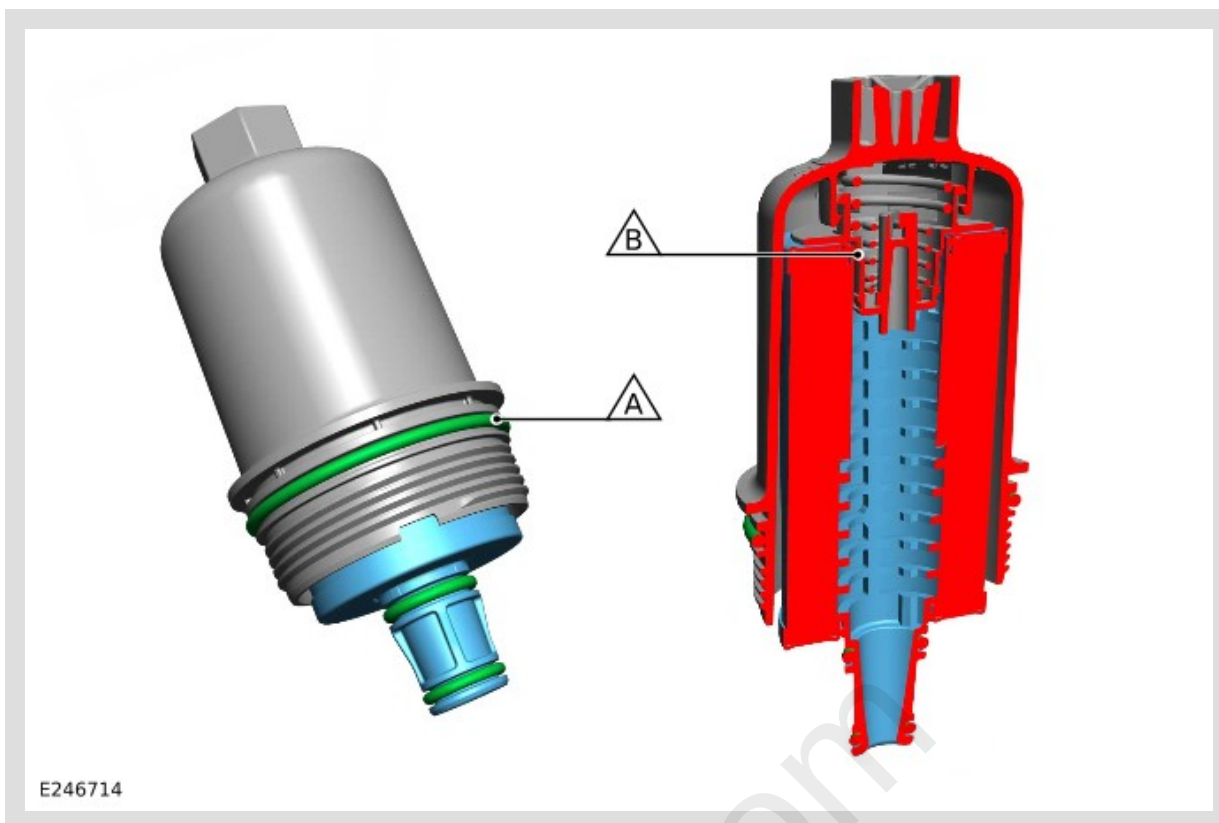
- Remove and discard the oil filter element.
- Remove and discard the O-ring seal.

FILLING



Before installing the oil filter element and cap, check the bypass valve (A) is installed and correctly attached to the locating tabs (B).

2.



- Install a new O-ring seal.

Renew Part: [Oil filter O-ring seal\(s\)](#) *Quantity:* [1](#).

- Lubricate the oil filter O-ring seal (A) with clean oil and install the oil filter element into the cap. Make sure the oil filter element is pushed correctly on to the bypass valve inside the oil filter element cap (B).

Refer to: [Specifications](#) (303-01C Engine - INGENIUM I6 3.0L Petrol, Specifications).

Renew Part: [Oil filter](#) *Quantity:* [1](#).

3. Install and tighten the oil filter element cap.

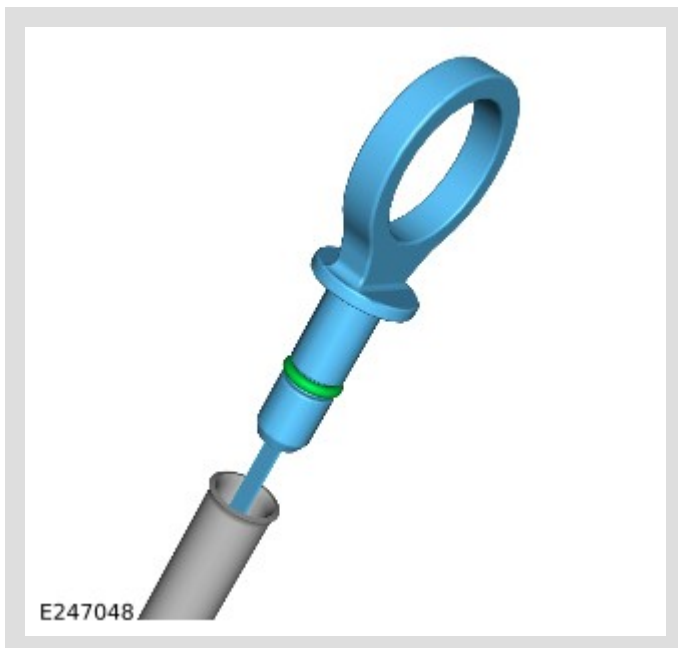
Torque: **25Nm**

4. Fill the engine with the recommended oil to the correct level.

Refer to: [Specifications](#) (303-01C Engine - INGENIUM I6 3.0L Petrol, Specifications).

5. Install the oil filler cap.

6.

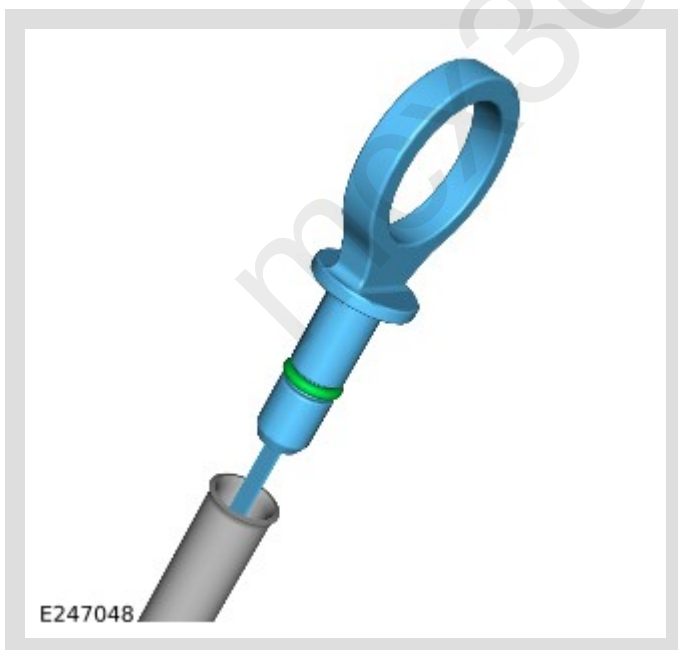


Check the engine oil level.

7.

- Start the engine and allow to idle for 2 minutes.
- Check for leaks.
- Stop the engine.

8.



Check and top up the engine with oil.

Refer to: [Specifications](#) (303-01C Engine - INGENIUM I6 3.0L Petrol, Specifications).

9.

Install the engine cover.

Refer to: [Engine Cover - INGENIUM I6 3.0L Petrol](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).

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