

PUBLISHED: 19-SEP-2019
2020.0 DEFENDER (LE), 303-03C

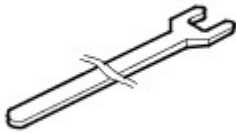
ENGINE COOLING – INGENIUM I6 3.0L PETROL

VISCOUS COOLING FAN (G2423670)

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SPECIAL TOOL(S)

303-114



E46076

303-1142

Viscous Coupling Wrench



E241320

JLR-303-1667

Holding Tool, Cooling Fan Pulley

REMOVAL

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.

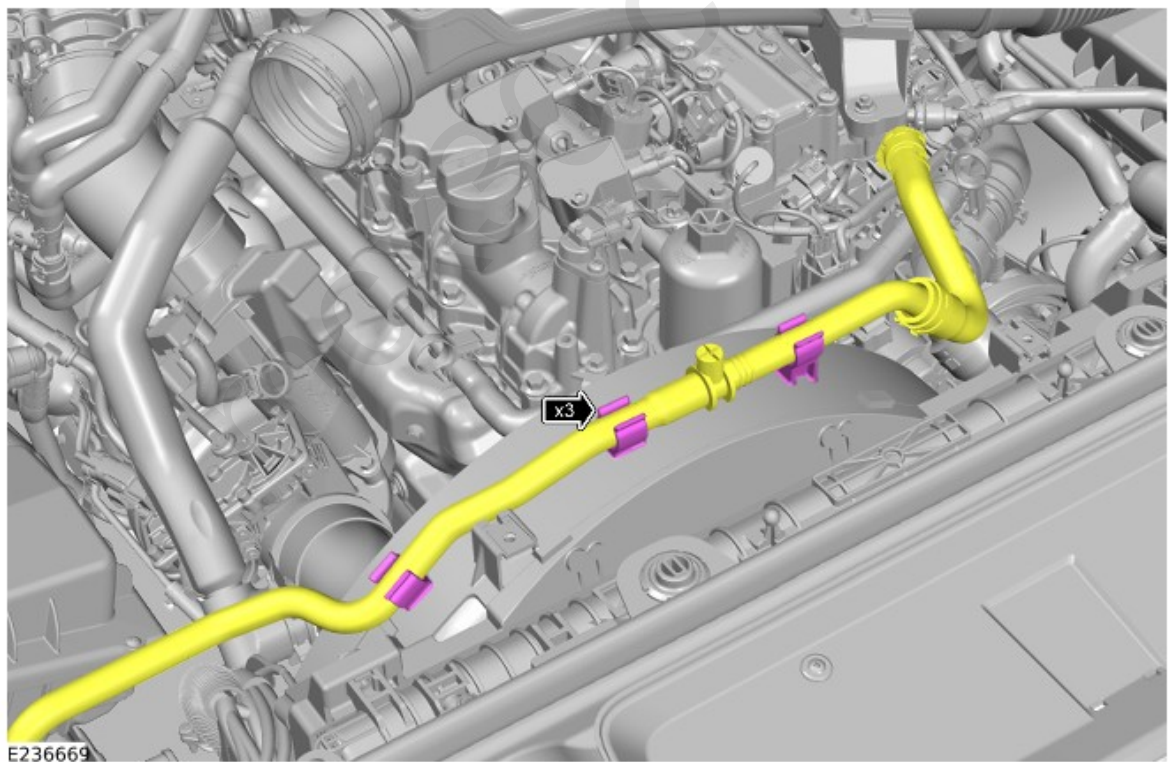
1. Disconnect the startup battery ground cable.

Refer to: [Startup Battery Disconnect and Connect](#) (414-00 Battery and Charging System - General Information, General Procedures).

2. Remove the clean air duct.

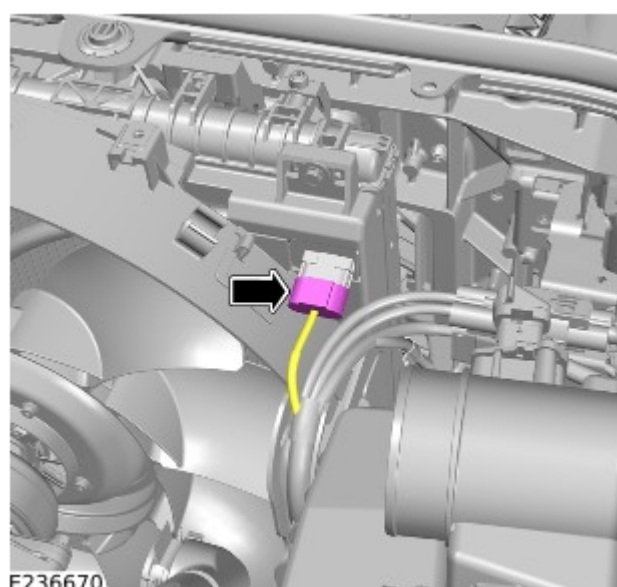
Refer to: [Air Filter Outlet Pipe](#) (303-12C Intake Air Distribution and Filtering - INGENIUM I6 3.0L Petrol, Removal and Installation).

- 3.



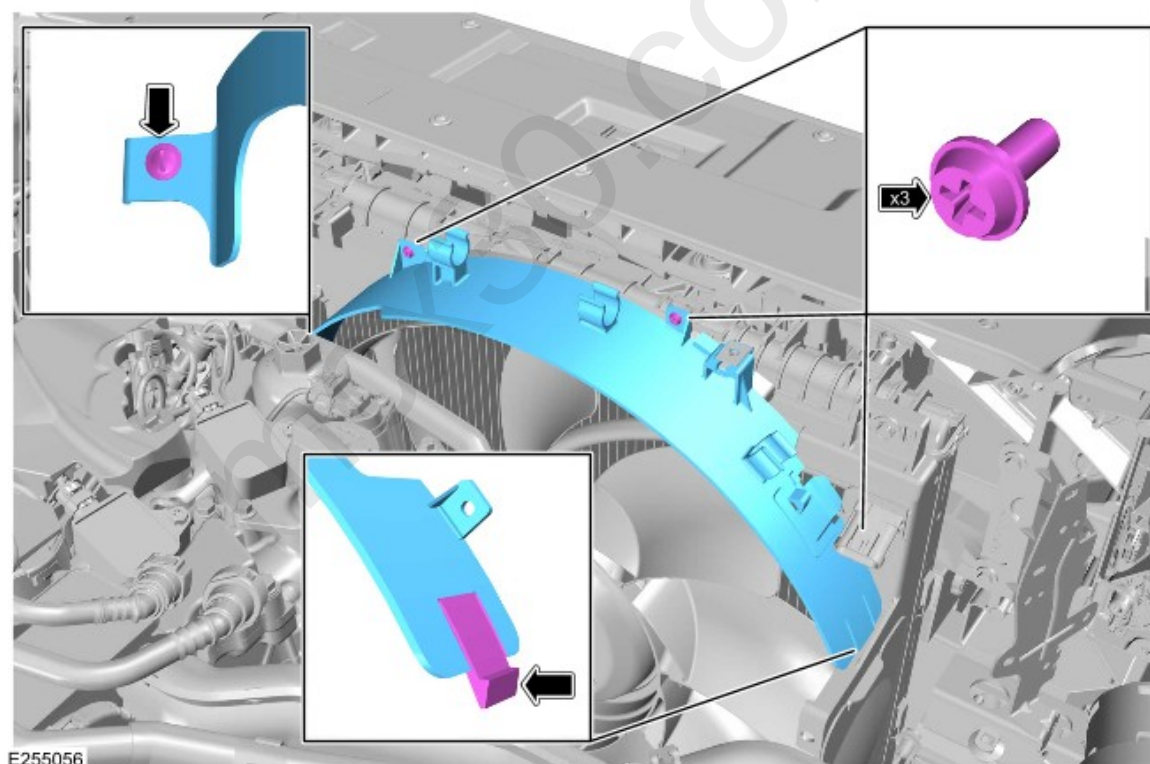
Release the coolant hose from the cooling fan shroud.

4.



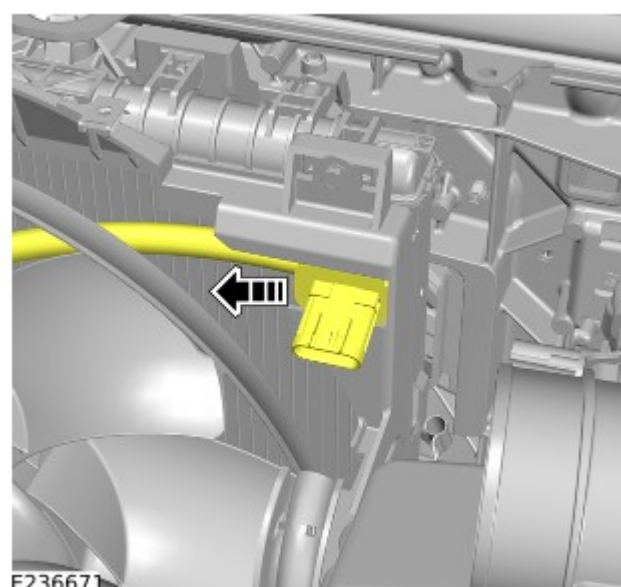
Disconnect the electrical connector.

5.



- Remove the 3 bolts.
- Remove the screw.
- Release the clip.
- Remove the viscous cooling fan upper shroud.

6.



Release the cooling fan electrical connector.

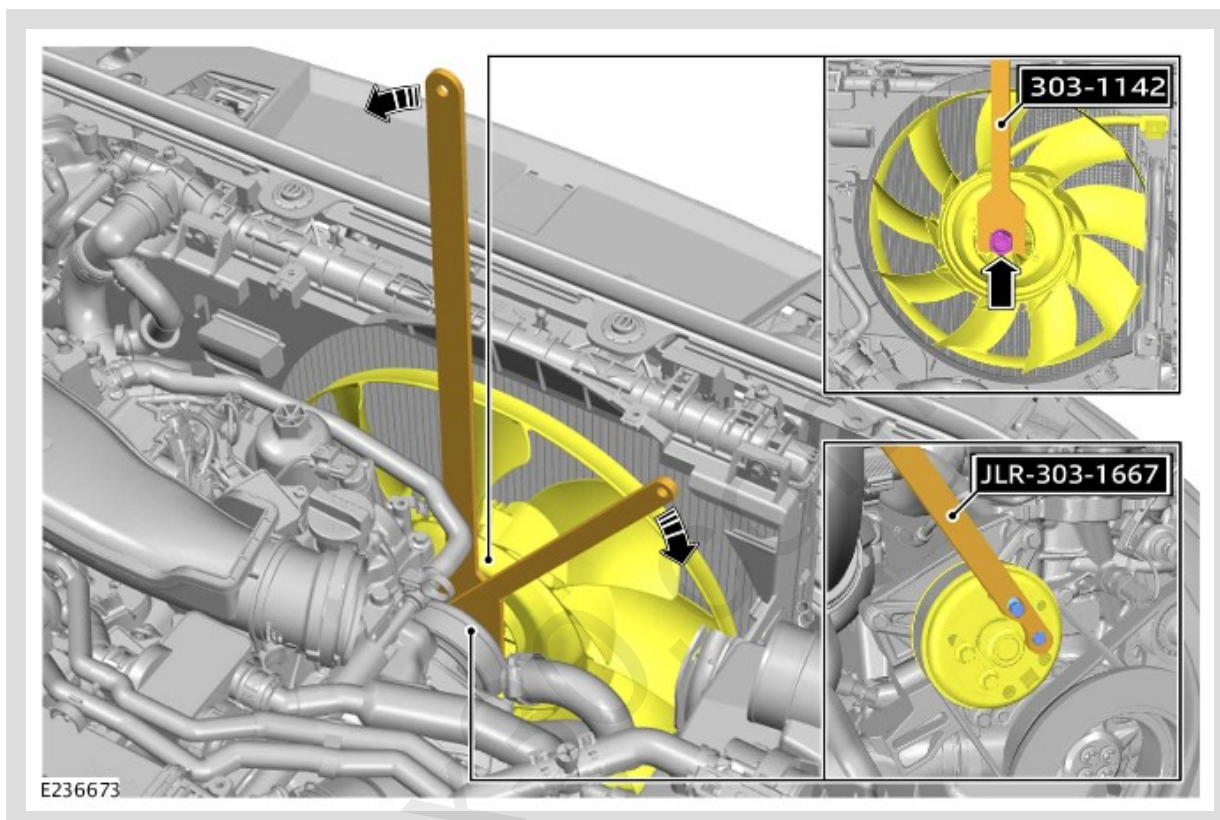
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⚠ CAUTION:

Take extra care not to damage the surrounding components.

△ NOTE:

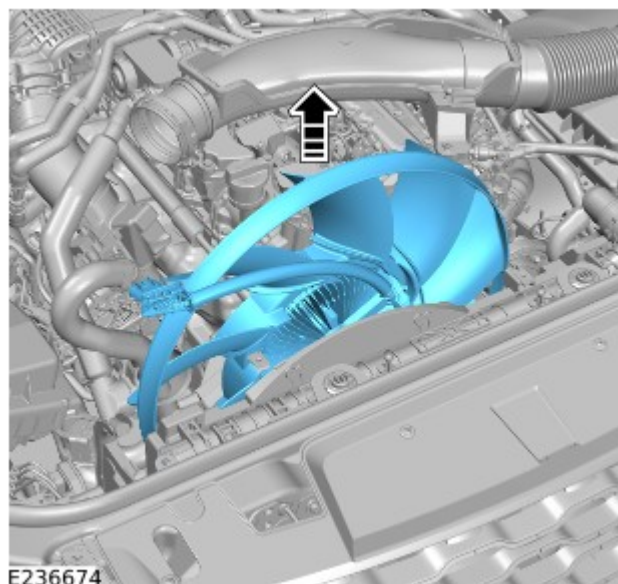
The thread is right handed.



Use the special tools to remove the viscous cooling fan.

Special Tool(s): [303-1142](#), [JLR-303-1667](#)

8.



Remove the viscous cooling fan.

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INSTALLATION

1.



- Rotate the outer viscous cooling fan by hand in both directions.
- Visually check the inner viscous cooling fan for distortion or impact marks.
- If damaged, the viscous cooling fan assembly must be replaced.

2. Install the viscous cooling fan.

3.

⚠ CAUTION:

Take extra care not to damage the surrounding components.

⚠ NOTE:

The thread is right handed.

Use the special tools to install the cooling fan.

Special Tool(s): [303-1142](#), [JLR-303-1667](#)

Torque: **65Nm**

4. Install the cooling fan electrical connector to the cooling fan upper shroud.

5.

- Install the cooling fan upper shroud.
- install and tighten the screw.
Torque: 4Nm
- Install and tighten the 3 bolts.
Torque: 7Nm

6.

Connect the electrical connector.

7.

Install the coolant hose to the cooling fan shroud.

8.

Install the clean air duct.

Refer to: [Air Filter Outlet Pipe](#) (303-12C Intake Air Distribution and Filtering - INGENIUM I6 3.0L Petrol, Removal and Installation).

9.

Connect the startup battery ground cable.

Refer to: [Startup Battery Disconnect and Connect](#) (414-00 Battery and Charging System - General Information, General Procedures).