COOLING SYSTEM PARTIAL DRAINING, FILLING AND BLEEDING (G1580404)

GENERAL PROCEDURES

26.10.03	COOLANT - PARTIAL DRAIN AND VACUUM REFILL	ALL DERIVATIVES	0.4	USED WITHINS	
26.10.10	COOLANT - PARTIAL DRAINING, FILLING AND BLEEDING	ALL DERIVATIVES	0.5	USED WITHINS	

DRAINING

NOTE:

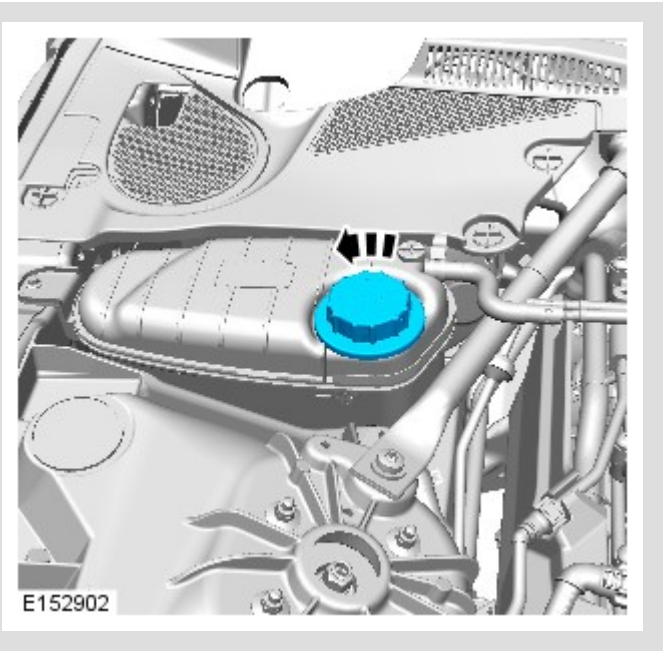
Some variation in the illustrations may occur, but the essential information is always correct.

1.

WARNINGS:

- Release the cooling system pressure by slowly turning the coolant expansion tank cap a quarter of a turn. Cover the expansion tank cap with a thick cloth to prevent the possibility of scalding. Failure to follow this instruction may result in personal injury.
- Be prepared to collect escaping fluid.
- Since injury such as scalding could be caused by escaping steam or coolant, make sure the vehicle

cooling system is cool prior to carrying out this procedure.



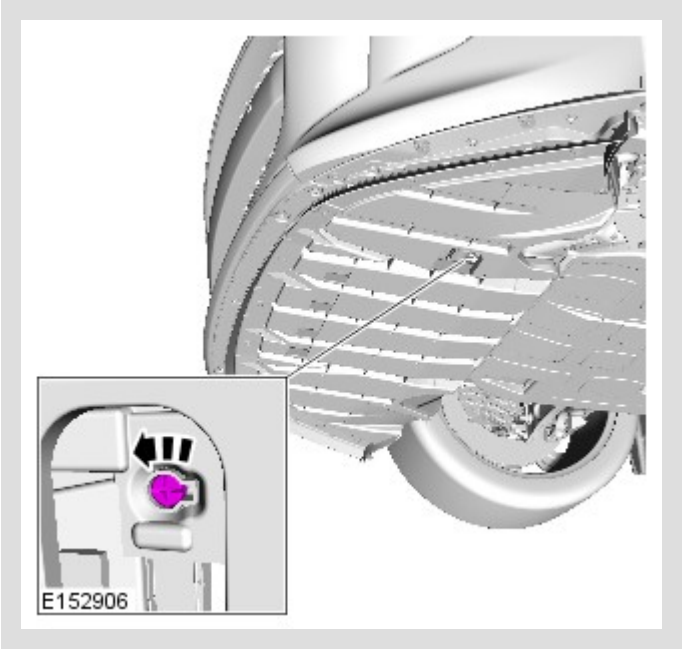
2. **WARNING:**

Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

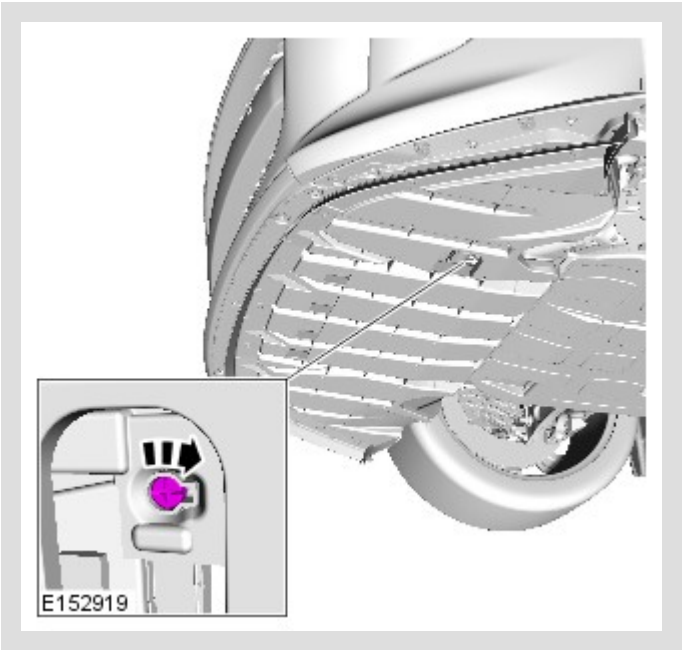
3. **CAUTION:**

Be prepared to collect escaping fluids.



FILLING

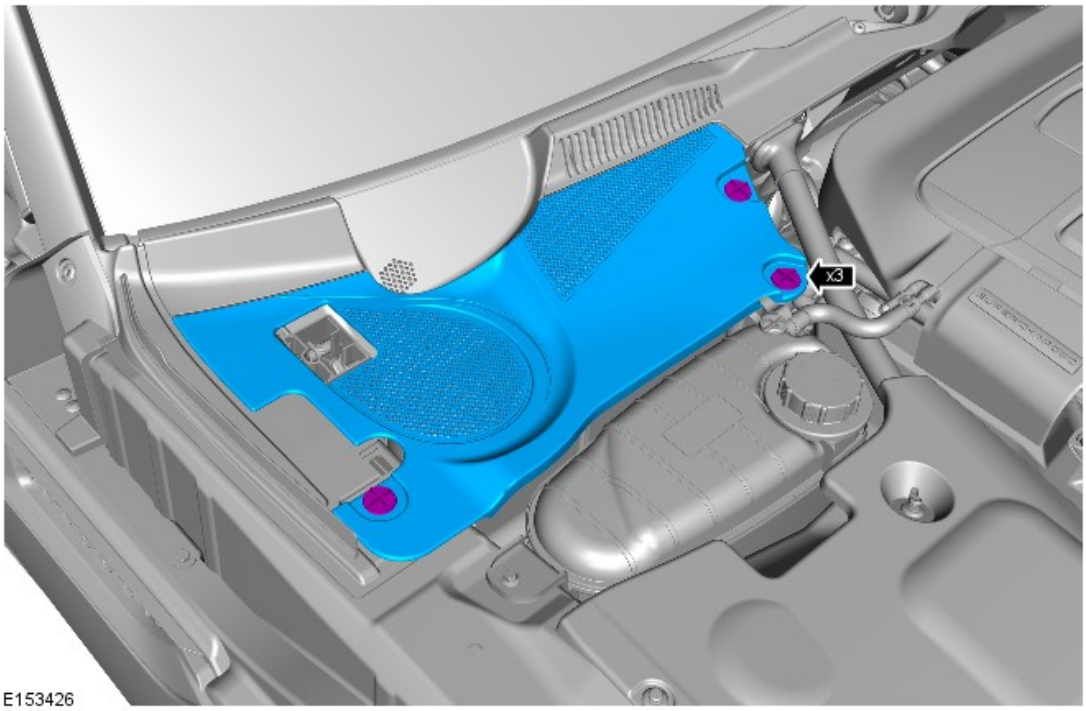
1.



Torque: **1.5 Nm**

2. Lower the vehicle.

3.



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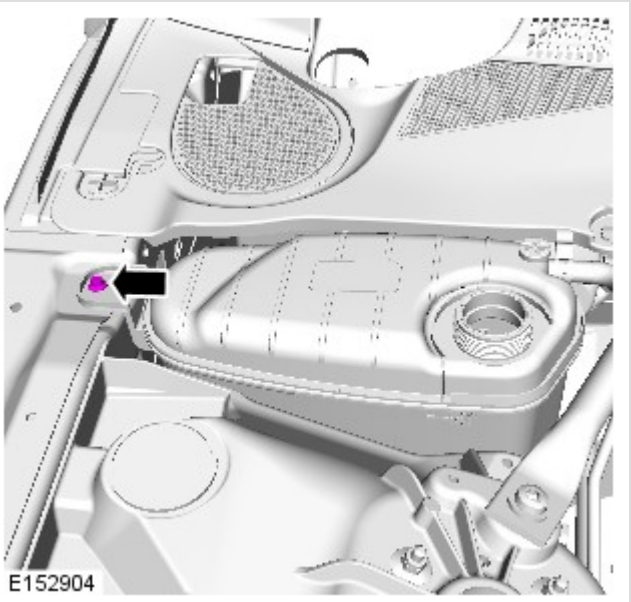

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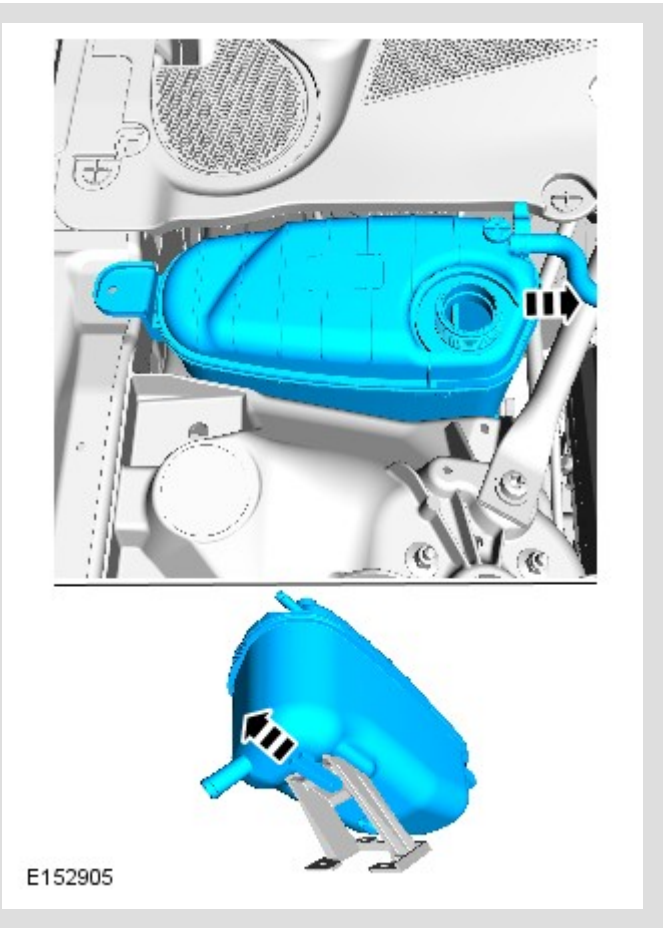
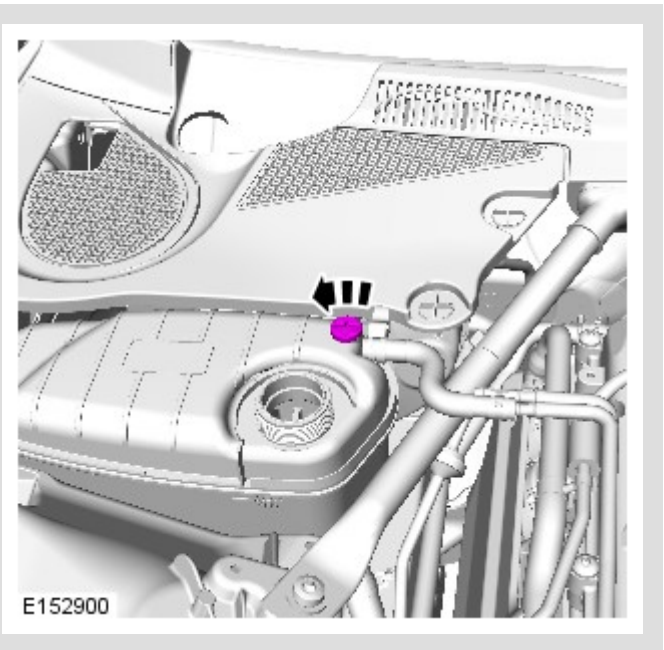


Raise the coolant expansion tank 50mm from its original position.

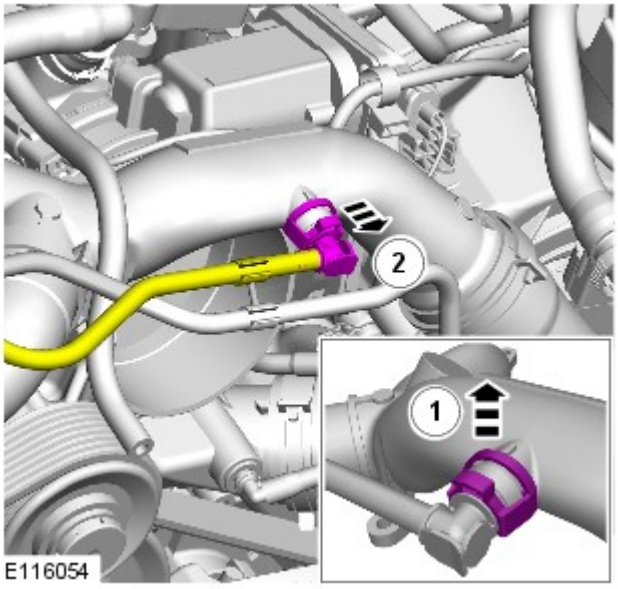
6.



7.

CAUTION:

Make sure that the clip from the connector remains with the connector.



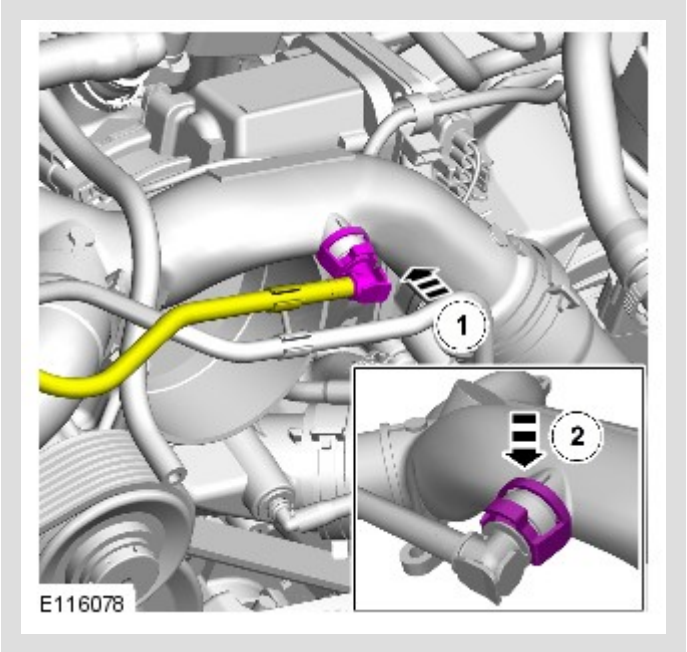
8.

CAUTION:

Be prepared to collect escaping fluids.

Fill the coolant expansion tank to the rim and continue until coolant is visible from the outlet.

9.



Once coolant is visible from the outlet, connect the pipe.

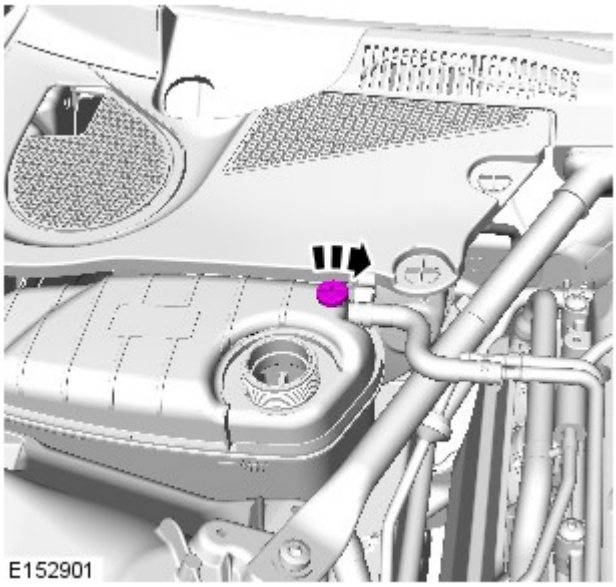
10.

NOTE:

This step may take approximately 10 minutes as the coolant level will drop slowly.

Continue to fill the coolant expansion tank to the rim until the coolant level stops dropping.

11.



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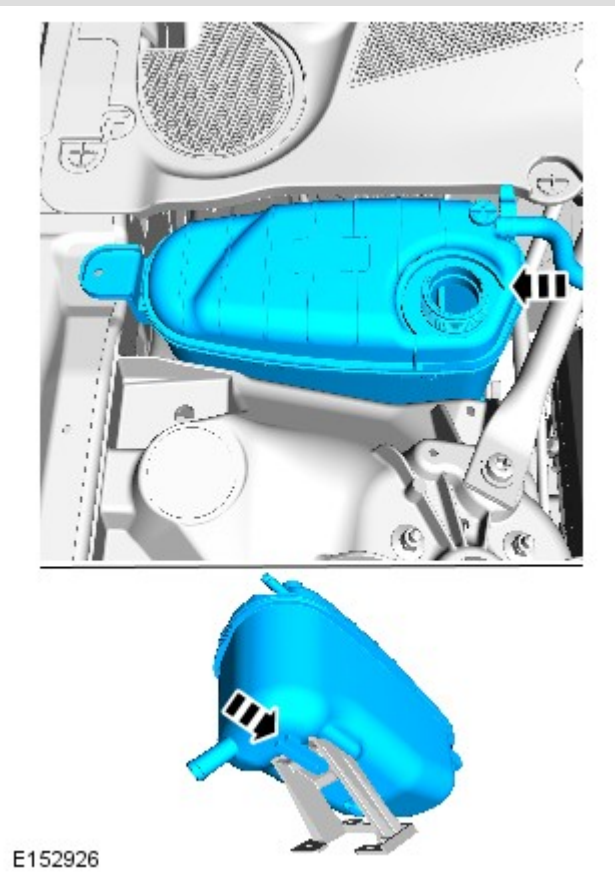

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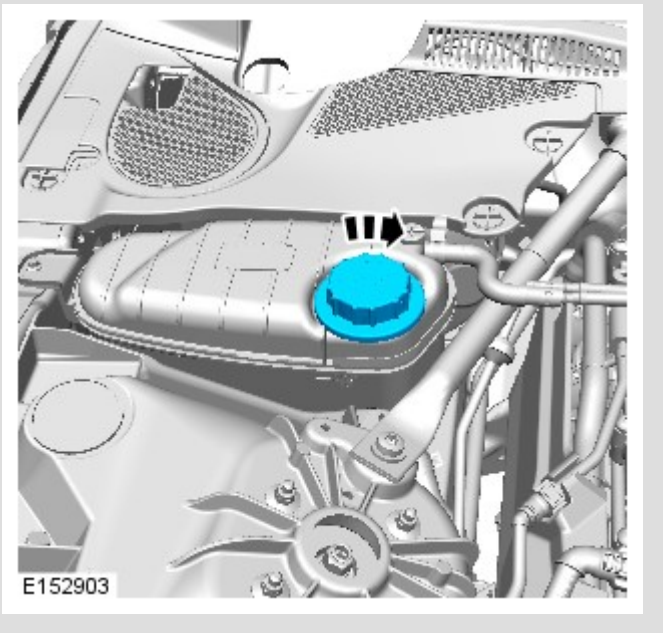

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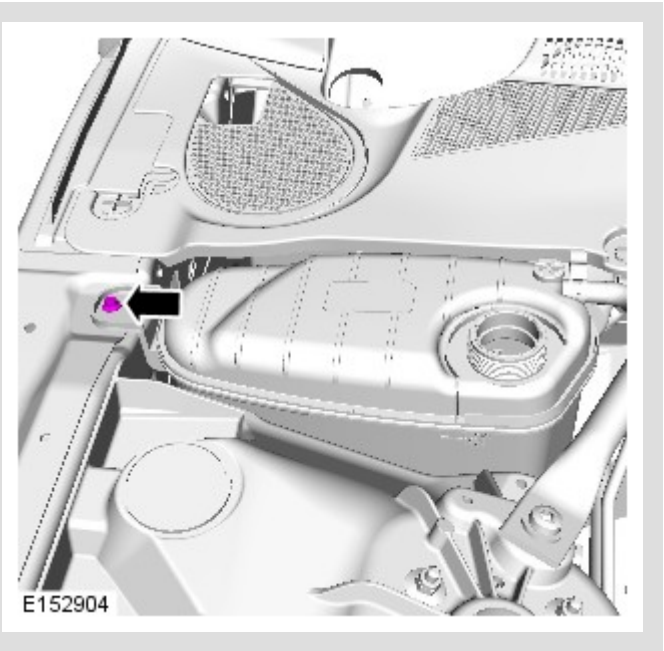
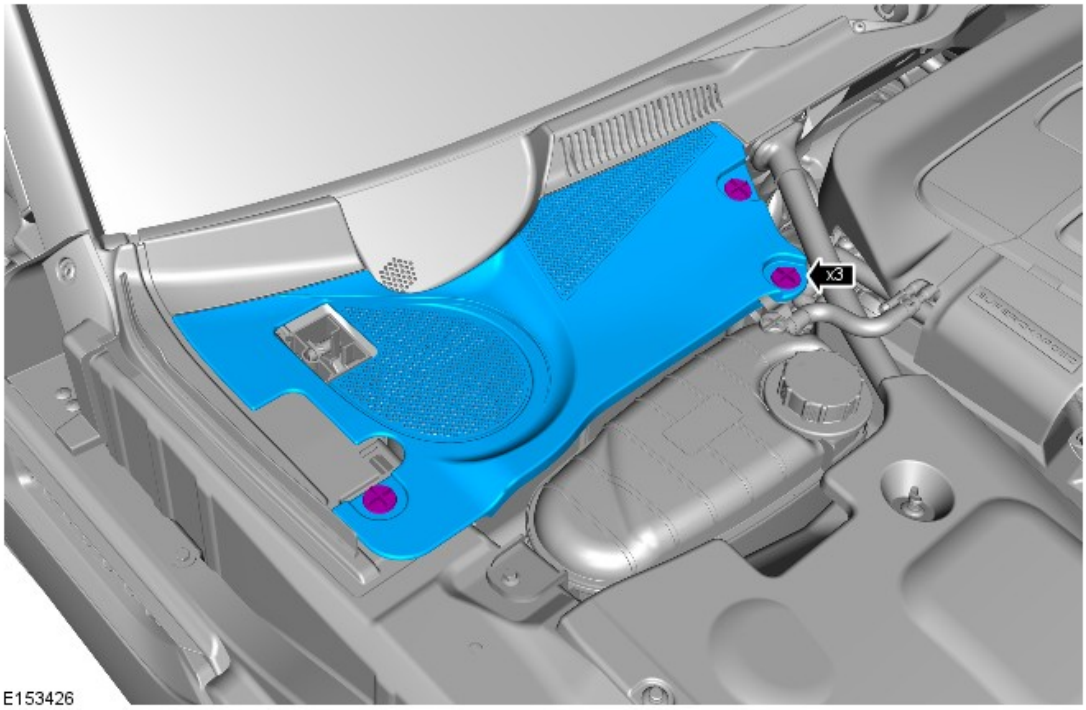
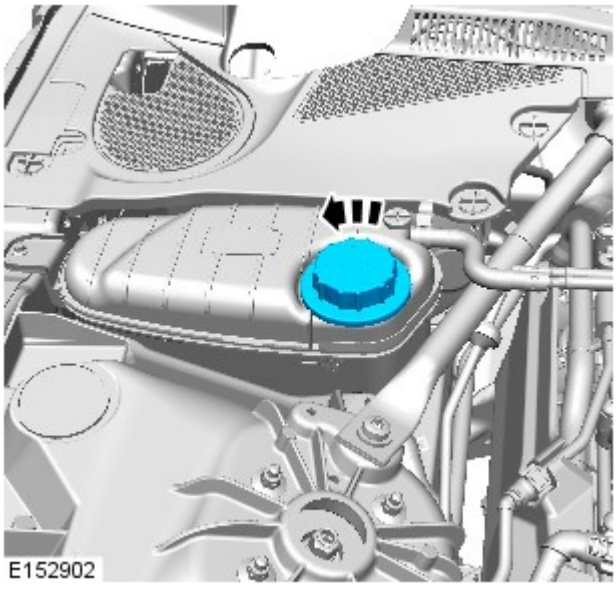


Torque: **9 Nm**

15.



16.



17. **WARNING:**

Be prepared to collect escaping fluid.

Check and top-up the coolant if required.

18. Set the heater controls to maximum.

19. Start the engine.

20. Continue to top-up with coolant with the engine at idle.

21. Increase the engine speed to 2000rpm for 2 minutes.

22.

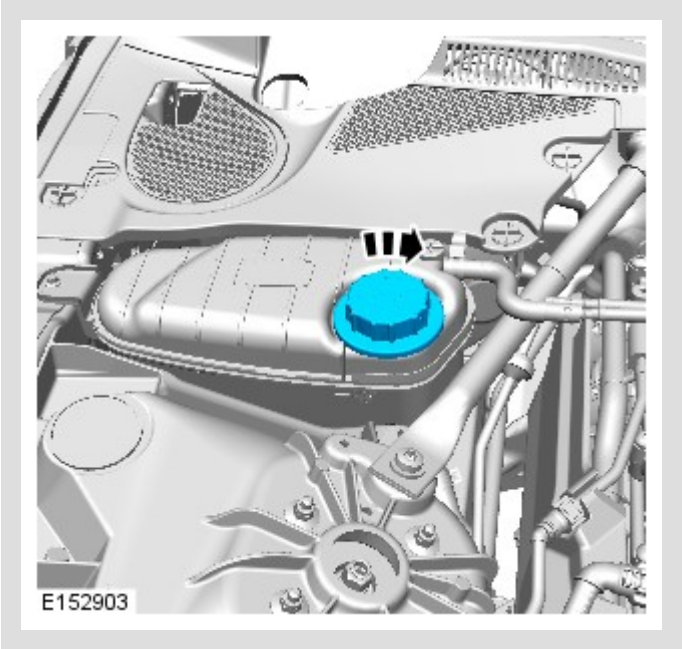
Continue to top-up with coolant with engine idling until hot air is emitted from face vents.

When hot air is emitted from the vents, switch the heater off. Go to Step 22.

23. If no hot air is emitted, turn the engine off for 10 seconds and the start the engine and return to Step 19.

24. **CAUTION:**

Correct installation of the coolant expansion tank cap can be obtained by tightening the cap until 3 audible clicks are heard.



Install the coolant expansion tank cap while the engine is at idle.

25. Switch the heater off.

26. Raise the engine speed to 2000 rpm for eight minutes.

27. **CAUTION:**

    Switch off the engine and allow the coolant temperature to go cold.

    Switch the engine off.

28. Visually check the engine and cooling system for signs of coolant leakage.

29. **WARNING:**

When releasing the cooling system pressure, cover the coolant expansion tank cap with a thick cloth.

CAUTIONS:

- Since injury such as scalding could be caused by escaping steam or coolant, make sure the vehicle cooling system is cool prior to carrying out this procedure.
- Make sure the coolant level remains above the "COLD FILL RANGE" lower level mark.

NOTE:

When the cooling system is warm, the coolant will be approximately 10mm above the upper level mark on the expansion tank with the cap removed.

Check and top-up the coolant if required.

2015.0 F-TYPE (X152), 307-01

AUTOMATIC TRANSMISSION/TRANSAXLE - V6 S/C 3.0L PETROL

DESCRIPTION AND OPERATION