

COOLING SYSTEM DRAINING, FILLING AND BLEEDING (G311170)

GENERAL PROCEDURES

26.10.01	COOLANT - DRAIN, FLUSH AND REFILL	4400 CC	0.60	USED WITHINS
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WARNING:

Since injury such as scalding could be caused by escaping steam or coolant, do not remove the filler cap from the coolant expansion tank while the system is hot.

1. Position the vehicle on a lift.

2. Set the heater controls to maximum.

3. Disconnect the battery ground cable. For additional information, refer to: Specifications (414-00, Specifications).

4. Remove the engine cover. For additional information, refer to: Engine Cover - V8 N/A 4.4L Petrol (501-05, Removal and Installation).

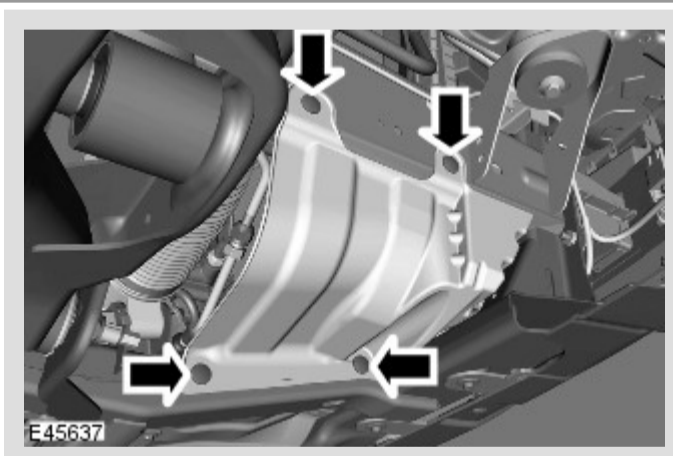
5.

WARNING:

Since injury such as scalding could be caused by escaping steam or coolant, do not remove the filler cap from the coolant expansion tank while the system is hot.

Remove the coolant expansion tank cap.

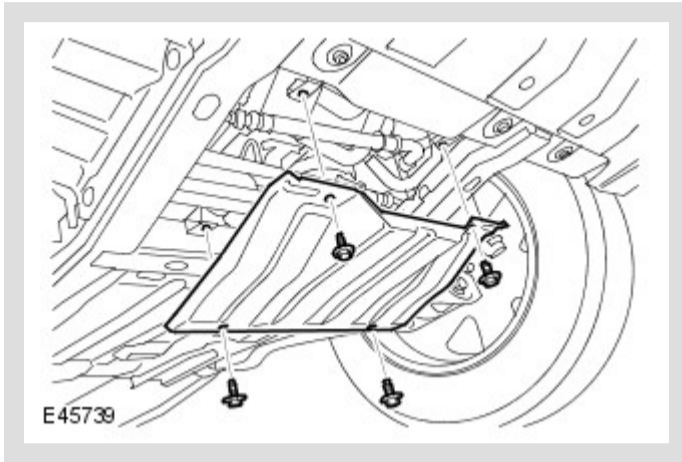
6.



Remove the front LH splash shield.

Remove the 4 clips.

7.



Remove the radiator access panel.

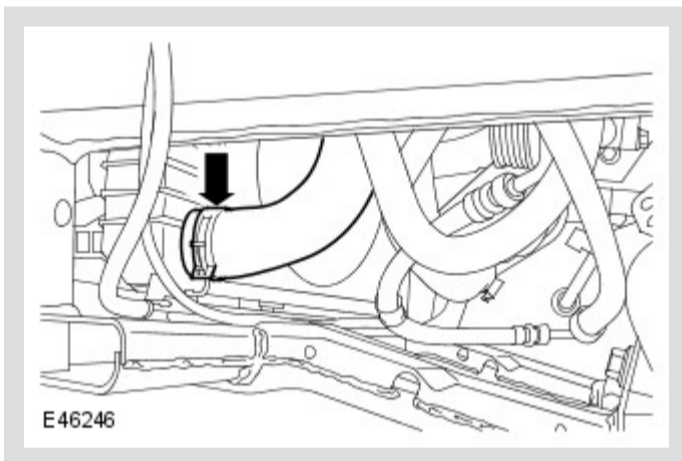
Remove the 4 bolts.

8. Position a container to collect the fluid.

9.

⚠ CAUTION:

Engine coolant will damage the paint finished surfaces. If spilt, immediately remove the coolant and clean the area with water.



Release the clip and disconnect the radiator lower hose, allow the coolant to drain.

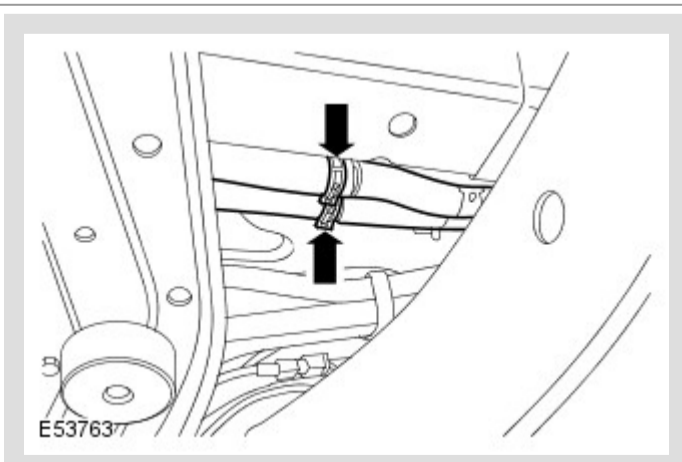
10. Remove the spare wheel and tire.

Remove the tool kit.

Access the winch.

11. Position a container to collect the fluid.

12.



Disconnect the rear heater coolant hoses.

Release the 2 clips.

Allow the coolant to drain.

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13. Connect the rear heater coolant hoses.

Secure the clips.

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14. Install the spare wheel and tire.

Stow the tool kit.

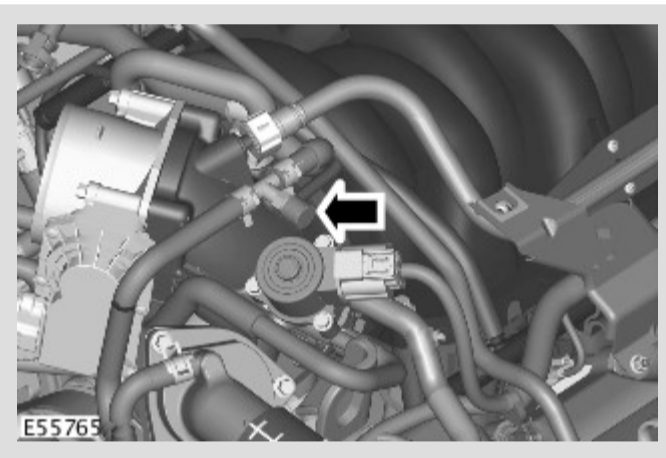
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15. Connect and secure the radiator lower hose.

Secure with the clip.

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16. Connect the battery ground cable. For additional information, refer to: Specifications (414-00, Specifications).

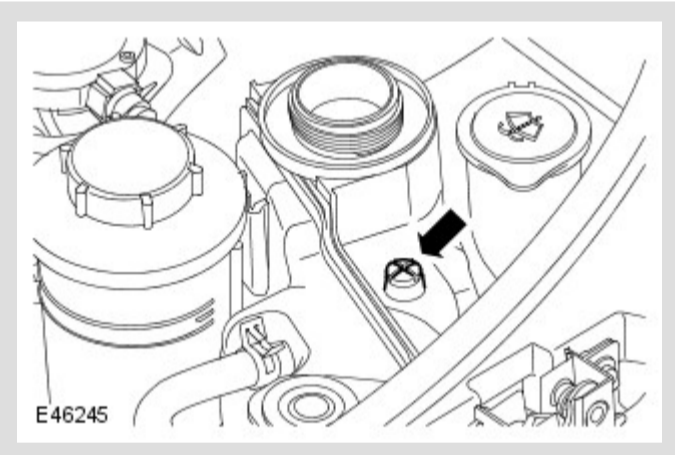
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17. Connect exhaust extraction hoses to the tail pipes.

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- 18.



Loosen the coolant hose bleed screw.

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- 19.



Loosen the coolant expansion tank bleed screw.

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20. Fill the cooling system to the upper level mark of the expansion tank.

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21. Start and run the engine.

Hold the engine speed at 2,500 RPM for 30 seconds.

Return the engine to idle for 30 seconds.

Repeat the above procedure a further four times.

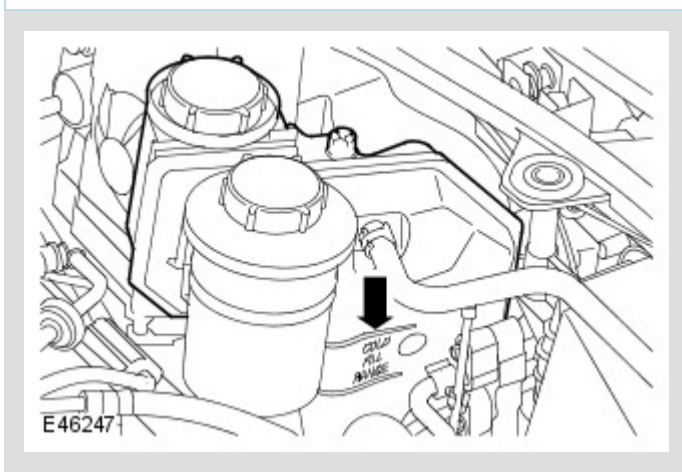
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22. When a steady stream of coolant is running from the bleed point, close the coolant hose bleed screw.

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23. Fill the cooling system, keeping coolant to the upper level mark of the expansion tank until a steady stream of coolant is seen returning to the expansion tank. Tighten the expansion tank bleed screw.

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- 24.

 **NOTE:**

When the coolant bleed is complete and prior to installing the expansion tank cap, top-up the expansion tank to 30mm above the maximum level.



Install the coolant expansion tank cap.

25. Run the engine until the thermostat opens.

26. Switch the engine off and allow to cool.

27. Install the engine cover. For additional information, refer to: Engine Cover - V8 N/A 4.4L Petrol (501-05, Removal and Installation).

28. Clean any spilt coolant from the vehicle.

29. Install the radiator access panel.

Tighten the 4 bolts to 10 Nm (7 lb.ft).

30. Install the front LH splash shield.

31. Check and top-up the coolant if required.