Cooling System Draining, Filling and Bleeding

All Vehicles

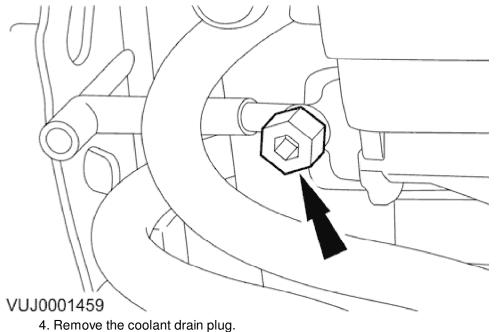
WARNING: WHEN RELEASING THE SYSTEM PRESSURE, COVER THE EXPANSION TANK CAP WITH A THICK CLOTH TO PREVENT THE POSSIBILITY OF COOLANT SCALDING. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.

Relieve the cooling system pressure.

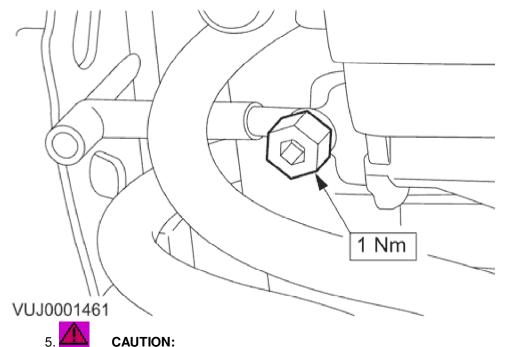
• Unscrew the cap slowly.

2. Remove the expansion tank cap.

3. Raise and support the vehicle. For additional information, refer to << 100-02>>



• Drain the coolant into a suitable container.



Do not over tighten the drain plug. Failure to follow this instruction may cause damage to the vehicle.

Install the drain plug when all coolant has drained.

- Remove the drain tray.
- 6. Lower the vehicle.

LHD 3.0L Vehicles Only

- 7. Open the engine air bleed located on the engine crossover pipe.
- 8. Open the heater air bleed located on the expansion tank.
- 9. Fill the expansion tank until the coolant flows from the engine air bleed screw and expansion tank is full.
- 10. Close the engine air bleed screw.
- 11. Install the expansion tank cap.
- 12. Leave heater air bleed open.
- 13. Start the engine and set the heater to 29 °C/90 °F temperature.
- 14. Close heater air bleed when a steady stream of coolant flows during engine idle.

15. Allow the engine to idle for 5 minutes, adding coolant to the expansion tank to maintain the COLD FILL MAX level.

16. Open the heater air bleed to release any trapped air, close the heater air bleed.

17. Increase the engine speed to 1500 rpm for between three and five minutes or until the heater is blowing hot air.

18. Return to idle and verify that heater is blowing hot air.

RHD 3.0L Vehicles Only

19. Open the engine air bleed located on the crossover pipe.

20. Fill the expansion tank until the coolant flows from the engine air bleed screw and expansion tank is full.

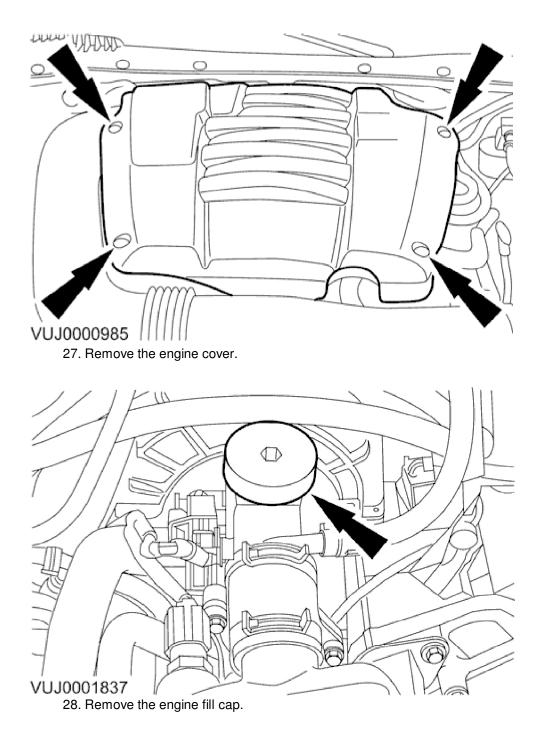
- 21. Close the engine air bleed screw.
- 22. Install the expansion tank cap.
- 23. Start the engine and set the heater to 29 ℃/90 °F.

24. Allow the engine to idle for 5 minutes, adding coolant to the expansion tank to maintain the COLD FILL MAX level.

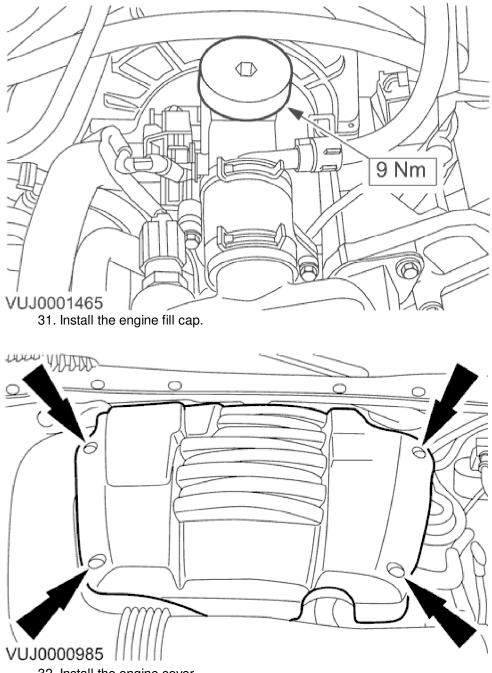
25. Increase the engine speed to 1500 rpm for between three and five minutes or until the heater is blowing hot air.

26. Return to idle and verify that heater is blowing hot air.

LHD 4.0L Vehicles Only



- 29. Open the heater air bleed located next to the expansion tank.
- 30. Fill the cooling system at the engine fill point.



32. Install the engine cover.

33. Leave heater air bleed open.

- 34. Start the engine and set the heater to $29 \,^{\circ}\text{C}/90 \,^{\circ}\text{F}$ temperature.
- 35. Close heater air bleed when a steady stream of coolant flows during engine idle.

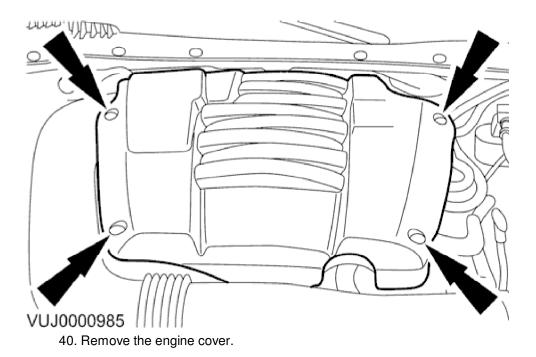
36. Allow the engine to idle for 5 minutes, adding coolant to the expansion tank to maintain the COLD FILL MAX level.

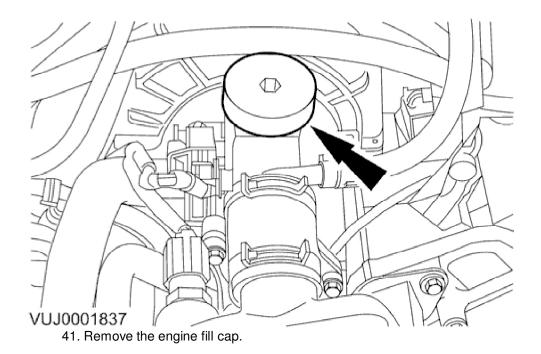
37. Open the heater air bleed to release any trapped air. Close the heater air bleed.

38. Increase the engine speed to 2000 rpm for between three and five minutes or until the heater is blowing hot air.

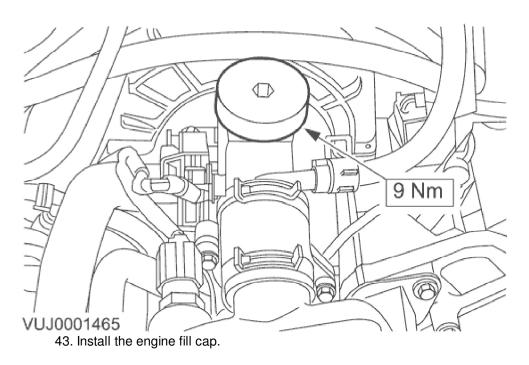
39. Return to idle and verify that heater is blowing hot air.

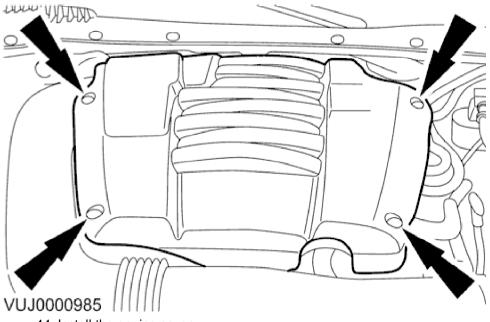
RHD 4.0L Vehicles Only





42. Fill the cooling system at the engine fill point.





44. Install the engine cover.

45. Start the engine and set the heater to 29 ℃/90 °F temperature.

46. Allow the engine to idle for 5 minutes, adding coolant to the expansion tank to maintain the COLD FILL MAX level.

47. Increase the engine speed to 2000 rpm for between three and five minutes or until the heater is blowing hot air.

48. Return to idle and verify that heater is blowing hot air.

All Vehicles

- 49. Switch off the engine and allow the vehicle to cool.
- 50. Correct the coolant level as necessary to the COLD FILL MAX level.