

Cooling, draining and filling procedures:

1. Remove splash shield from under the engine. Unscrew fasteners (8 screws) and lower rear of cover and pull out of bumper cover.
2. Remove cap from radiator expansion tank.
3. Place 5-gallon pail underneath radiator.
4. Loosen drain plug on peacock at bottom of radiator and allow coolant to drain.
5. Place 5-gallon pail underneath engine block coolant drain plug.
6. Remove engine block coolant drain plug and drain coolant. The engine drain plug is located on right side of engine block near cylinder 2 (If you are sitting in the driver seat and looking at the windshield, cylinder 1 is at the front of the engine). See page 120-2 of the Bentley Service Manual.

Before refilling radiator:

1. Switch ignition on. Do not start engine.
2. Set temperature controls to full warm.
3. Set blower control to low.

Using a coolant mixture of 50% antifreeze and 50% distilled water, fill expansion tank "slowly". Continue until coolant emerges from bleed screw. For the N52 engine with automatic transmission, the capacity is 2.6417 gallons (10 liters).

Cooling System, bleeding (N52 engine) procedures: Whenever the coolant is drained and filled, bleed the cooling system.

Close cap on coolant expansion tank and perform the following steps:

1. Connect vehicle to power supply (I guess this procedure prevents the battery from draining when the car engine is not running for 12 minutes during the process).
2. Switch ignition on.
3. Set heater to MAX temperature and turn on fan to lowest speed.
4. Press accelerator pedal to floor for 10 seconds.
5. Bleeding procedure begins when accelerator pedal is pressed and takes approximately 12 minutes. (Electrical coolant pump turns ON and OFF automatically after approximately 12 minutes).
6. CAUTION: Do not open expansion tank cap while electrical coolant pump is ON.
7. Fill coolant expansion tank 100 ml above MAX (dimension A).
8. Check coolant system for leaks.
9. If leaks are found, remove ignition key and wait approximately 3 minutes before repeating cooling bleeding procedure.
10. When bleeding procedure is complete, close coolant expansion tank cap until marks on cap and tank line up.

