20-010 Draining and filling-in of coolant - anti-freeze table

Tightening torques		Nm
Drain plug radiator		6–10
Mixing ratio of anti-freeze ¹) and water ²)		
Anti-freeze up to	Anti-freeze/water in liters on types	
	107.023	107.024
	107.043	107.044
	116.028	116.032
	116.029	116.033
−30 ° C	6.25 /7.75	6.75 /8.25
−40 °C	7.25 /6.75	7.75 /7.25
Total capacity in liters	14	15

Conventional tool

Anti-freeze tester Prestone VU-Check (Union Carbide) e.g. Philipp Gather, D-4020 Mettmann 2



R-4789

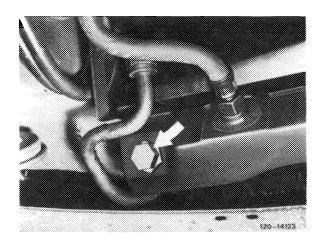
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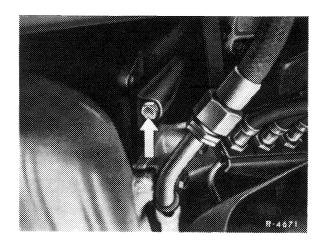
To prevent corrosion, concentration of anti-freeze should not drop below $-20\,^{\circ}\text{C}$ (30 % by volume).

If no anti-freeze is available and only water is filledin be sure to add 1 % treating compound (anticorrosion oil, 10 cc/1 I water).

Draining

- 1 Open cap on expansion tank or radiator in steps (only below 90 $^{\circ}$ C).
- 2 Unscrew drain plugs on radiator as well as on both sides of cylinder crankcase.



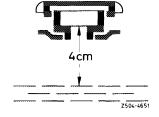


Filling-in

- 3 Set both heater levers to position "warm".
- 4 Fill-in coolant slowly.

On vehicles with expansion tank made of brass up to approx. 4 cm below sealing surface on radiator cap.

On vehicles with expansion tank made of transparent plastics up to mark shown on tank.



On vehicles without expansion tank to recess in upper radiator tank.

- 5 Run engine warm under **pulsating acceleration** and with radiator cap **closed** starting at **60** $^{\circ}$ C until thermostat opens.
- 6 Check coolant level and top up until specified level is attained.

Attention!

Open radiator cap only below 90 °C coolant temperature

