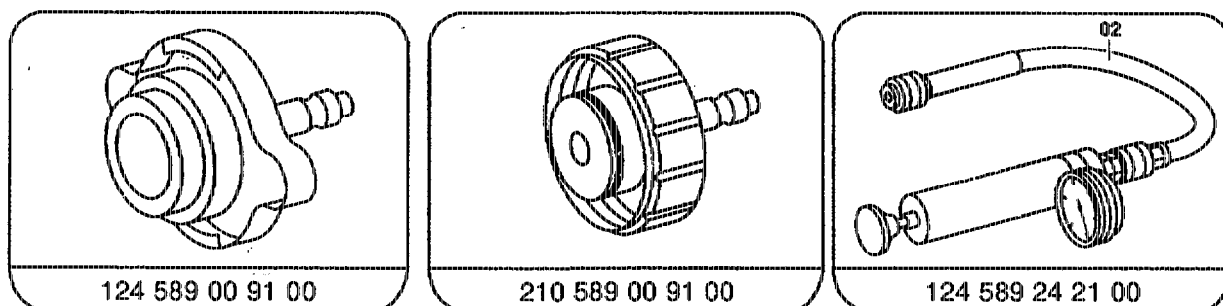


20-0170 Testing cooling system for leaks

Operation no. of operation texts and work units or standard texts
and flat rates
20-1010

Special tools



Commercially available tools and testers

Designation	e.g.	Make, order No.
7 mm socket wrench hexagon on a flexible shaft for hose clips with worm drive		Hazet, 42853 Remscheid Order no. 426-7



A newly installed cylinder head gasket is not watertight until the engine has reached its normal operating temperature, in other words until swelling has occurred. For this reason, do not pressure-test the cooling system when performing repairs until after the engine has reached its operating temperature.

Checking for leaks



The cap of the cooling system must not be opened unless the coolant temperature is below 90 °C.

A 2-stage cap is fitted to model 210; see note.

1 Turn cap (detent lock) to the 1st detent to release the pressure, then turn on to the 2nd detent.

Open 2-stage cap (screw lock) half a turn to release pressure, then unscrew.

2 Take off system cap.

3 Check coolant level and adjust to correct level if necessary.

Note

Model 124: pour in coolant up to the marking on the expansion reservoir.

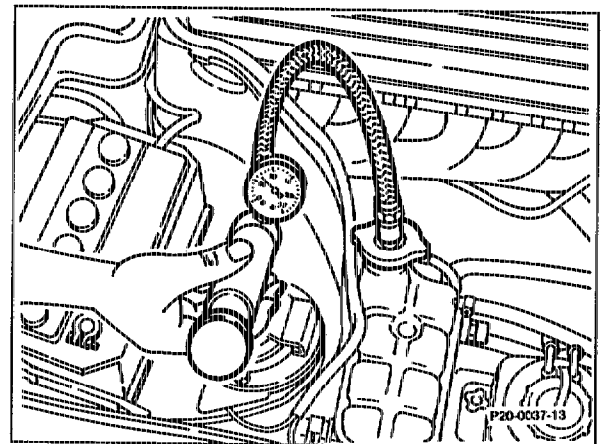
Models 129, 140: pour in coolant up to the separation line between top part of expansion reservoir (black) and bottom part of reservoir (transparent).

Model 210: pour in coolant up to the marking (cast lug) on the bottom of the expansion reservoir.

4 Use the test cap and the tester to pressurize cooling system to about 1.4 bar.

5 Inspect all the cooling and heating water hoses and the connection points for loss of coolant.

6 Inspect the condition of the coolant hoses and hose clips; replace or re-tighten if necessary.



Note

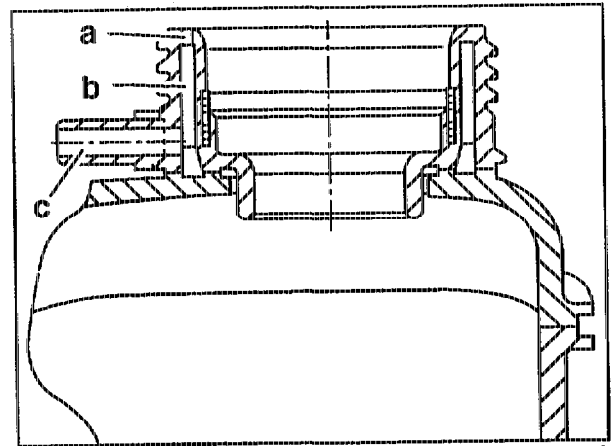
A 2-stage cap is fitted to the expansion reservoir of model 210.

The 2-stage cap eliminates the need for the overflow reservoir.

During the engine off heating phase, the pressure in the cooling system may rise.

The first stage in the coolant cap opens at 1.4 bar, the cooling system itself remains closed.

Only once the 2nd stage in the coolant cap opens (at 2 bar) does coolant flow through several vent drillings (a), the annular gallery (b) into the outlet connection (c) through a hose extension to atmosphere.



P20-5407-13