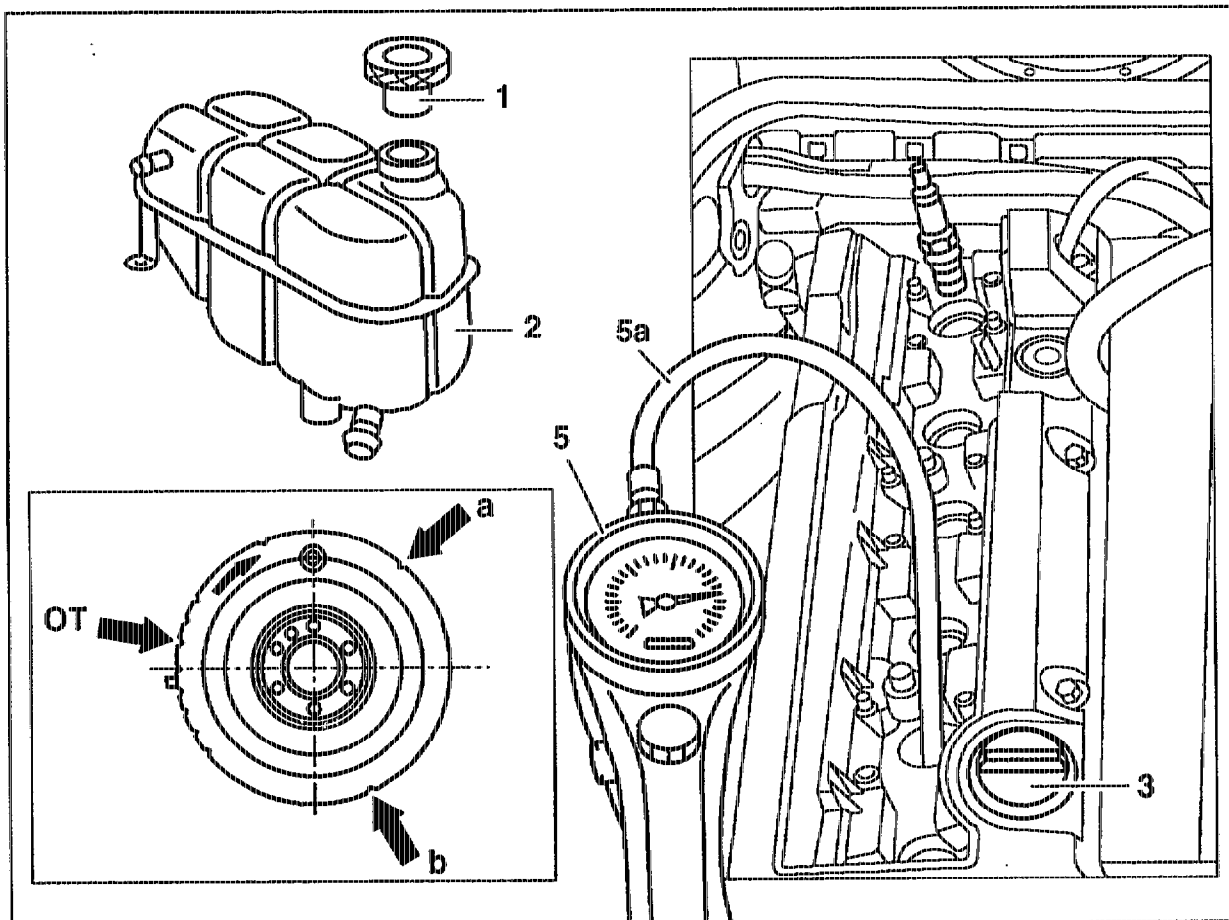


01-0150 Testing cylinders for leaks

Preceding work:
Warning instructions when hood open (01-0085).
Air cleaner removed (AR09.10-1050D)

Operation no. of operation texts and work units or standard texts
and flat rates:
01-1300



P01-5826-57

Engine	warm up to normal operating temperature.
Ground cable at battery	disconnect, connect, encode radio, model 140
Spark plugs	normalize power windows.
Cap (1) on expansion reservoir (2)	remove, install (AP15.00-1580CA).
Coolant level	open, leave open, close.
Oil filler cap (3)	adjust to correct level (20-0100).
Cylinder leak tester (5)	take off, fit on.
Tester (5)	connect to compressed air system.
Connection hose (5a)	calibrate.
Piston of cylinder to be tested	screw into first spark plug hole.
	rotate at crankshaft with setting device to
	ignition TDC (01-0120).

Note

See table for pistons in TDC.

Connection hose (5a) connect to tester (5).
 Compression chamber pressurize (approx. 5 bar).



When doing this, do not rotate the crankshaft; if necessary, lock crankshaft in position to prevent it turning (03-5000).

Throttle valve open by hand.

Pressure loss at tester (5) (in %) read off.

Determine whether the pressure escapes through intake manifold, exhaust, oil filler opening, spark plug hole of adjacent cylinder or through coolant opening.

All cylinders test in firing order (1-5-3-6-2-4).

Data

Total pressure loss	max. 25 %
At valves and cylinder head gasket	max. 10 %
At pistons and piston rings	max. 20 %

Piston at TDC with marking index on vibration damper

Marking	TDC	b = 120°	a = 240°
Piston at TDC of cylinder	1 and 6	2 and 4	3 and 5

Commercially available tool

Cylinder leak tester	e. g. Bosch, EFAW 210A Sun, CLT 228
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Note

After spraying oil onto the piston crown, it is possible to determine whether the leak exists at the piston rings or at the valves, or at the cylinder head gasket.