

## 01–015 Checking cylinders for leaks

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### Data

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

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### Special tools

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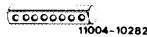
Socket insert 27 mm, 1/2" drive for rotating the engine



001 589 65 09 00

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1/2" drive, 80 mm long for rotating the engine



617 589 00 16 00

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### Conventional tool

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Cylinder leak tester

e.g. Bosch, EFAW 210 A  
Sun, CLT 228–1

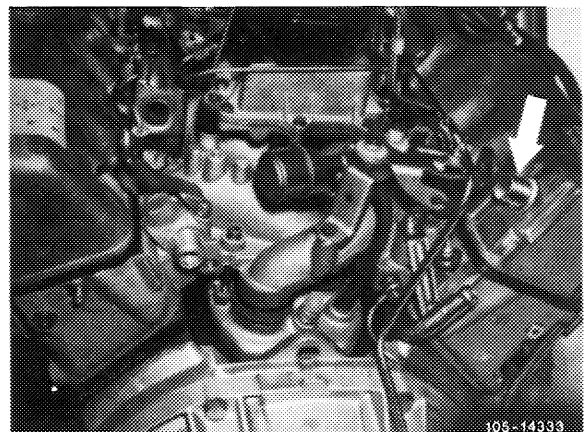
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### Checking

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- 1 Run engine up to operating temperature.
- 2 Remove air cleaner.
- 3 Set throttle valve into fully open position.
- 4 Unscrew spark plugs.
  
- 5 Pull off breather hose on the cylinder head cover (arrow).
- 6 Top up coolant, leaving cap off.
- 7 Connect cylinder leak tester with hose to a compressed air system.

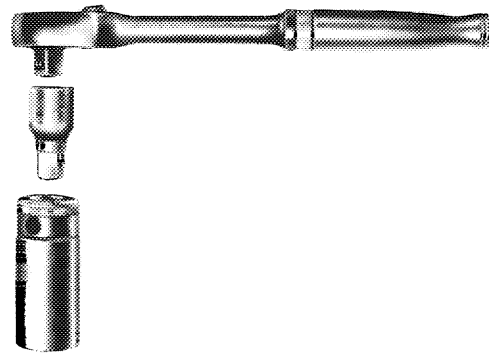
Calibrate tester.



105-14333

8 Set the piston of the cylinder to be checked at ignition TDC. To do so, rotate engine at the crankshaft using the tool combination.

For rotating the engine of model 107, remove the radiator cowl and the fan.

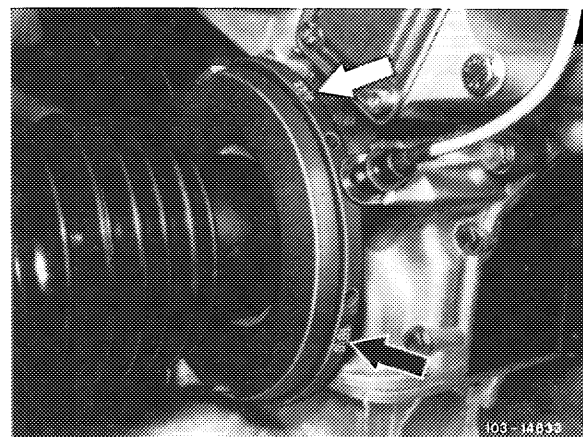


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**Note:** The vibration damper is marked with the figures 0, 90, 180 and 270 (arrows).

The respective pistons are in TDC position when the marks on the vibration damper are adjacent to the indicator:

Mark	Pistons at TDC
0	1 and 6
90	5 and 3
180	4 and 7
270	8 and 2



9 Screw connection hose into spark plug bore and connect to leak tester hose.

Ensure that the crankshaft does not move.

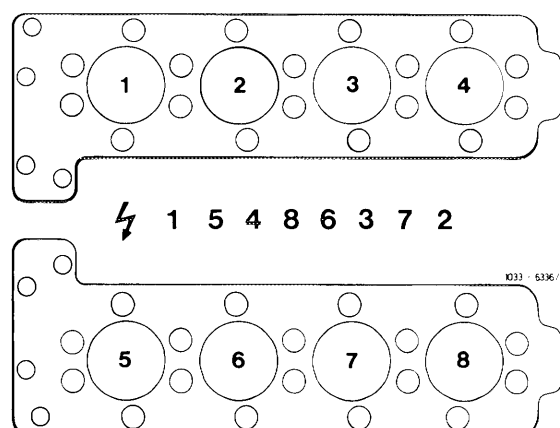
10 Note the pressure loss on the cylinder leak tester.

11 By listening, determine if pressure escapes through the intake manifold, exhaust, engine breathing system, spark plug bore of the neighboring cylinder or coolant filler opening.

12 Check all cylinders in the sequence of the firing order.

**Note:** There is a possibility that the piston ring gaps of individual pistons are directly one above the other, so that the test result will be misrepresented.

When in doubt, continue running the vehicle and recheck cylinders for leaks at a later date.



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