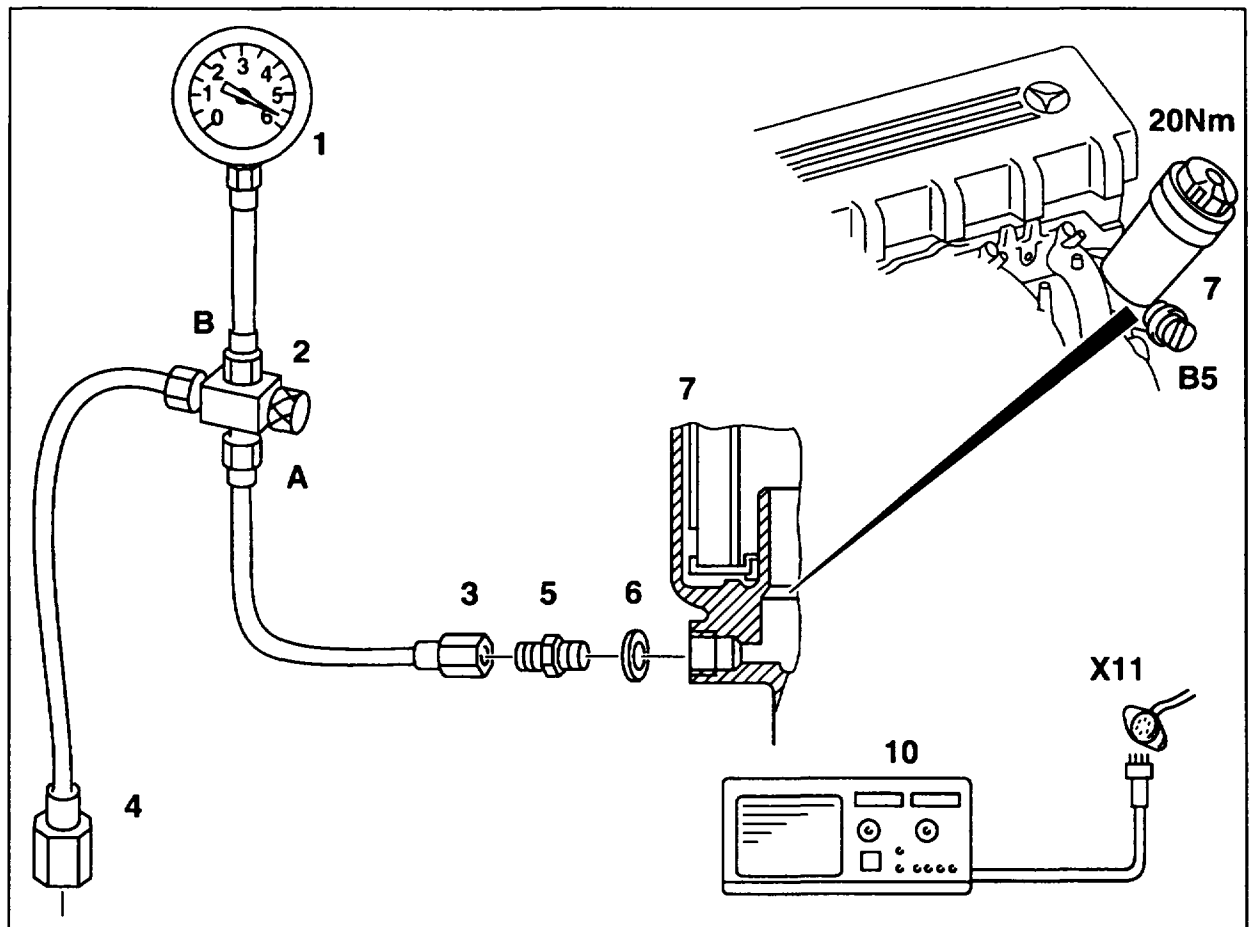


## 18-0070 Testing oil pressure



P18-5324-57

1	0 – 10 bar pressure gauge 103 589 00 21 01	6	Seal
2	T valve	B5	Oil pressure sensor
3	Pressure pipe A	7	Oil filter
4	Pressure pipe B	10	Rpm meter
5	M12 × 1.5 pipe fitting	X11	Diagnostic socket

Engine oil temperature .....	set to 90 °C
Oil level in engine .....	check, adjust to correct level (18-0020)
Oil pressure sensor (B5) .....	remove, install
Threaded pipe fitting (5) with seal (6) .....	screw on in place of oil pressure sensor (B5)
Pressure gauge (1) with pressure pipe (3) .....	connect

T valve (2) at pressure gauge (1) ..... close (turn to closed position)  
 Oil pressure at stated engine speed ..... measure and compare with figures in table

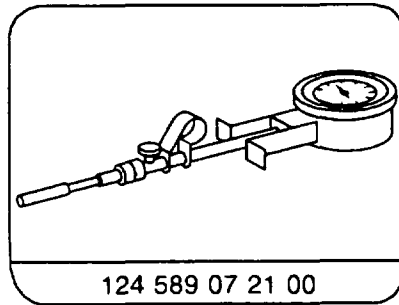
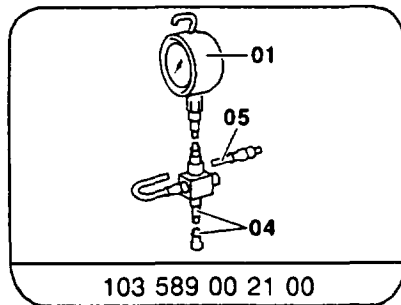
**Engine oil pressure (reference values) <sup>2)</sup>**

Engine speed in rpm	Engine oil pressure in bar	
	at 90 °C engine oil temperature	at 130 °C engine oil temp.
600 <sup>1)</sup>	0.7	0.6
750	0.9	0.9
1000	2.0	1.3
2000	4.3	3.5
3000	4.6	4.4
4000	4.8	4.6
5000	5.0	4.7

<sup>1)</sup> With drive position engaged

<sup>2)</sup> At operating temperature the oil pressure at idle speed must drop to 0.3 bar. When the throttle is depressed, the oil pressure must rise immediately and be at least 3 bar at an engine speed of 3000 rpm.

**Special tool**

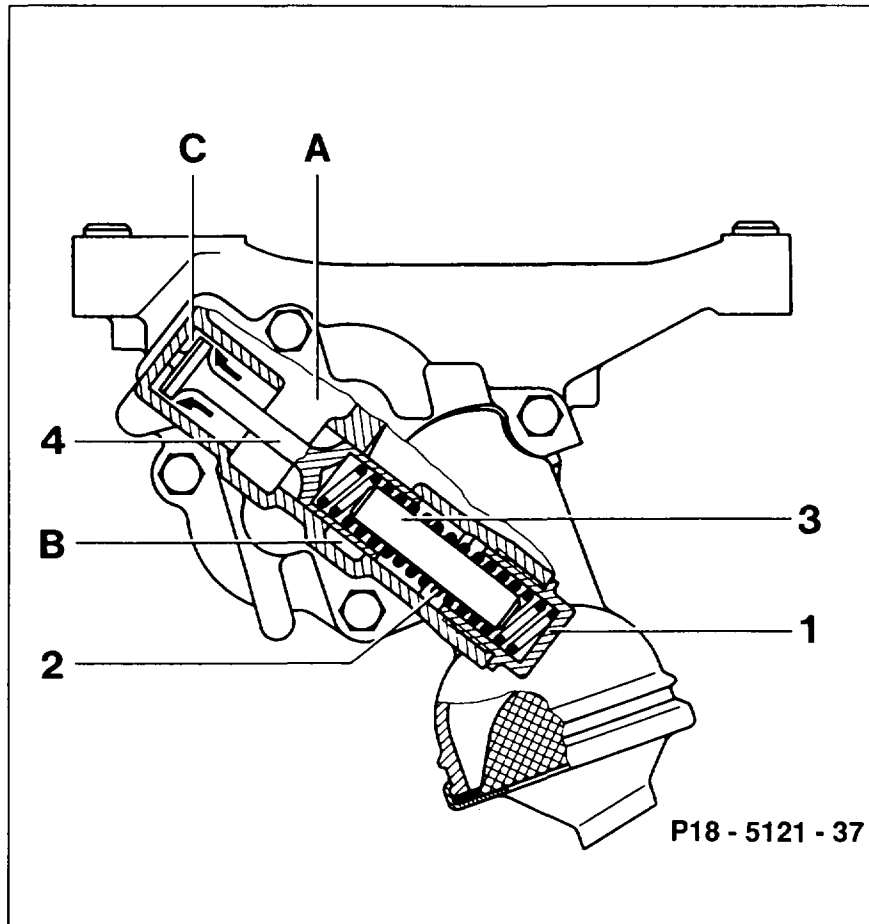


**Commercially available tools**

M12 × 1.5 pipe fitting (5)	915 006 004 002 (DIN)
Rpm meter (10)	eg. engine tester or multimeter

**Note re oil pressure relief valve**

The damped oil pressure relief valve with 2 flats (arrows) at the piston (4) is integrated in the oil pump and opens at a pressure of 5 bar.



- 1 Screw plug
- 2 Compression spring (102.9 mm long)
- 3 Guide pin (45 mm long)
- 4 Piston with 2 flats

- A Pressure chamber (feed)
- B Suction chamber (return)
- C Damping chamber