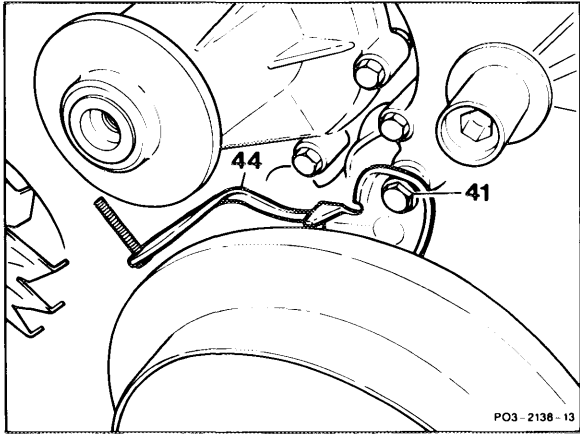
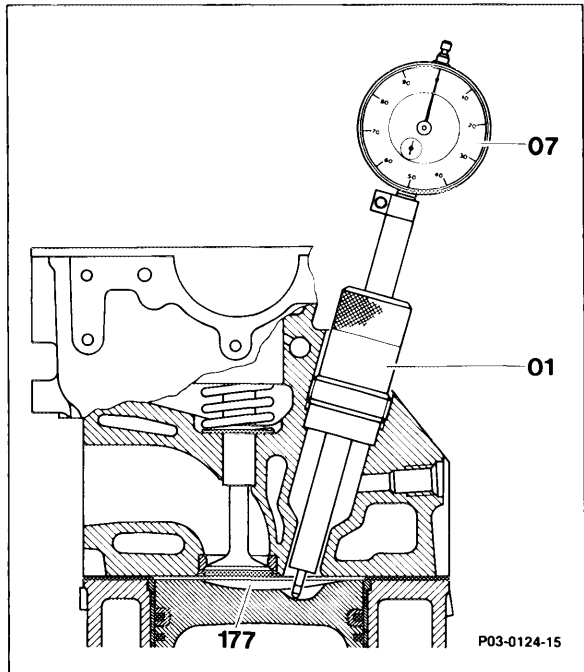


03-345 Checking and correcting adjustment of TDC sensor



Holder for TDC sensor, engines 602 and 603 from start of production

Cylinder 1 turn to approx. 10° BTDC, ignition stroke (item 1).

Gauge (01) bolt into preignition chamber bore and set dial gauge (07) on gauge to 5 mm pretension (item 2).

Note

If cylinder head is removed, position gauge pin of dial gauge directly on piston crown (177). Use dial gauge holder 363 589 02 21 00.

Engine turn in running direction until dial gauge pointer stops moving (TDC position), set dial gauge scale to zero (item 3).

Engine turn until dial gauge moves back 3.22 mm on engines 602 and 603 or until dial gauge moves back 3.65 mm on engines 601.921, 603.97 (item 4).

Note

Corresponds to crankshaft position of 20° ATDC.

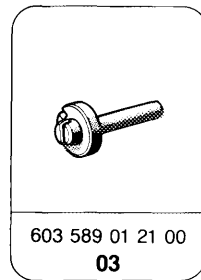
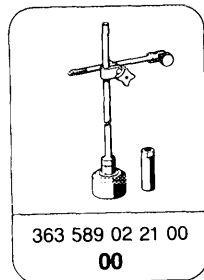
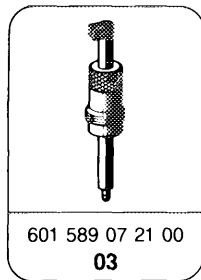
Holder for TDC sensor (42) or (44) install locating device 603 589 01 21 00 (item 5).

Note

The pin on the crankshaft pulley or on the vibration damper must catch in the groove on the locating device, if not, correct position of holder.

Holder for TDC sensor (42) or (44) correct by loosening bolt (41), move holder for TDC sensor until pin on crankshaft pulley or vibration damper catches in locating device 603 589 01 21 00 and tighten bolt (41) (items 6 - 8).

Special tools



Commercially available tool

Dial gauge A 1 DIN 878

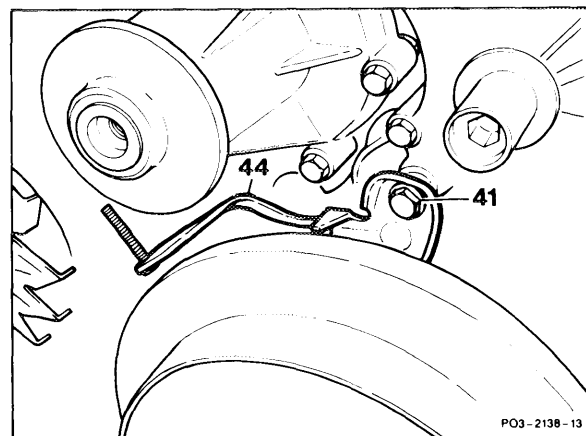
e.g. Mahr,
D-7300 Esslingen
Order No. 810

Testing

Note

The holder for the TDC sensor is fastened to the timing case cover.

- 44 Holder TDC sensor, engines 602 and 603 from start of production

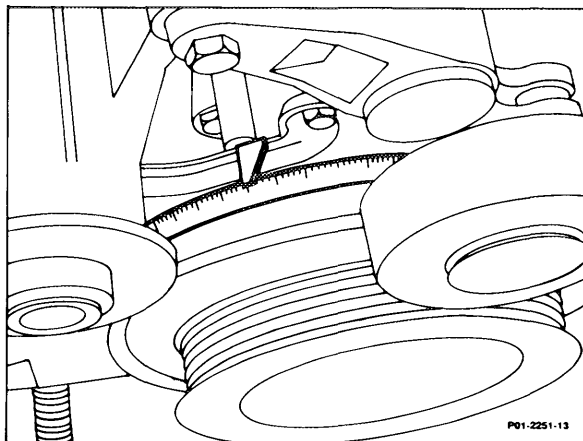


Check adjustment of holder and correct, if required:

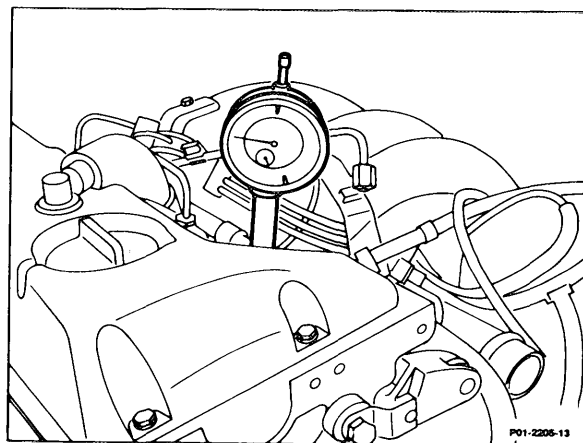
- When holder is replaced.
- When crankshaft and hub, vibration damper and crankshaft pulley are replaced.
- When timing case cover is removed, installed or replaced.

1 Position piston in cylinder 1 to approx. 10° BTDC, ignition stroke.

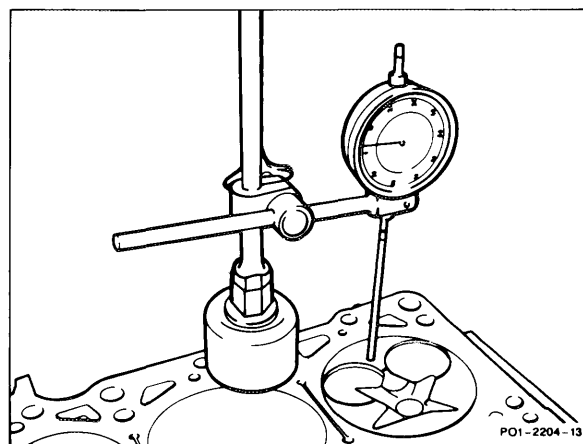
Holder for TDC sensor, engines 602 and 603 from start of production



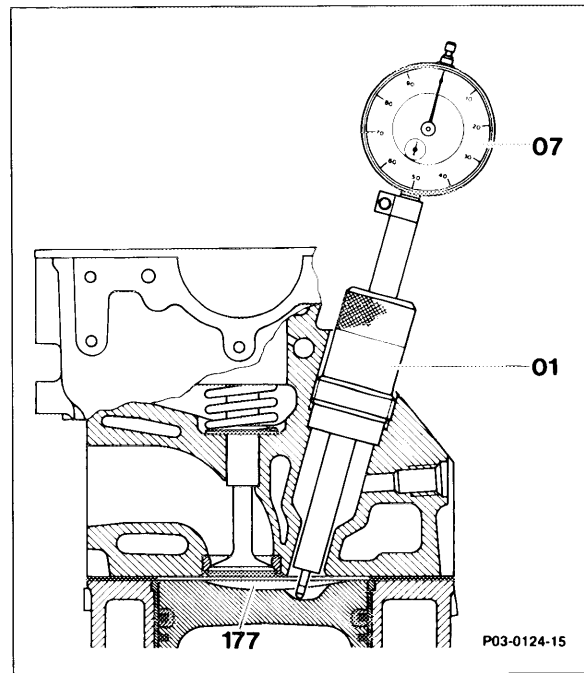
2 Bolt gauge 601 589 07 21 00 up to precombustion chamber bore and attach dial gauge to gauge with 5 mm pretension (small pointer on dial gauge).



If the cylinder head is removed, the measuring pin on the dial gauge can be positioned directly on the piston crown. Set dial gauge holder 363 589 02 21 00 on crankcase mating surface.



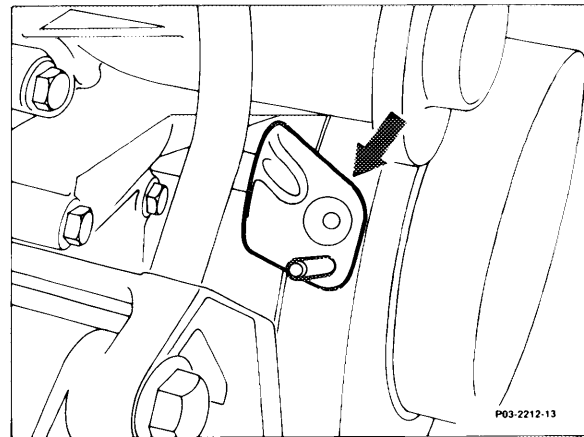
3 Turn crankshaft slowly in normal direction of rotation until large pointer on dial gauge (07) stops (TDC position). Turn dial gauge scale until large pointer points to zero.



4 Turn crankshaft in normal direction of rotation slowly until the gauge moves back 3.22 mm on engines 602 and 603 or 3.65 mm on engine 603.97.

Note

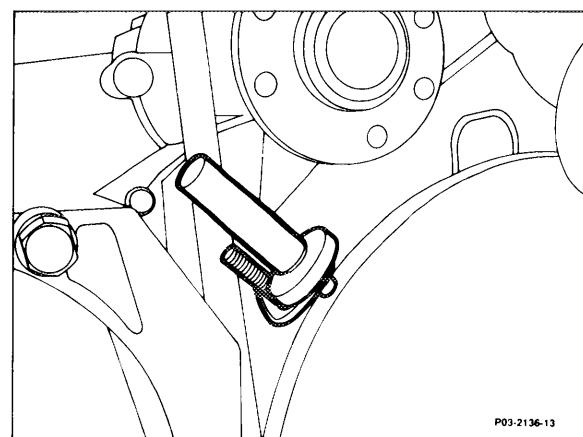
After the dial gauge has moved back (crankshaft position 20° ATDC) the pin in the crankshaft pulley or in the vibration damper should be located exactly below the TDC sensor (arrow).



5 Position locating device 603 589 01 21 00 in holder for TDC sensor.

The pin on the crankshaft pulley or on the vibration damper must catch in the groove in the locating device.

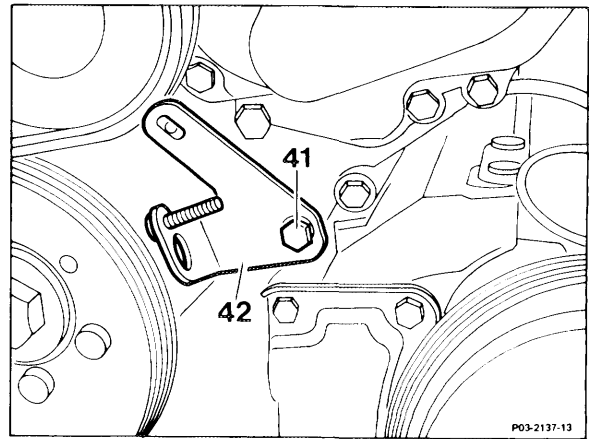
If the pin on the crankshaft pulley or on the vibration damper does not catch, correct position of holder for TDC sensor.



Correcting

6 Loosen holder (42 or 44) with screw (41) and move until pin on crankshaft pulley or on vibration damper catches in the groove in the locating device 603 589 01 21 00.

42 Holder for TDC sensor, engine 601.921



7 Screw holder for TDC sensor down tight.

8 Remove dial gauge and gauge 601 589 07 21 00 and locating device 603 589 01 21 00.

44 Holder for TDC sensor, engines 602, 603 from start of production

