

Revision: Revised, measuring point on diesel engine changed.

General Notes:

Adjust valve clearance and check on cold or warm engine.

Observe layout of intake and exhaust valves (Fig. 00-3/1 and 2).

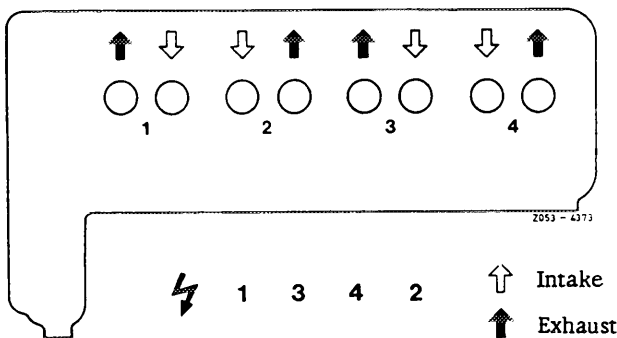


Fig. 00-3/1  
200 D/8, 220 D/8, 200/8, 220/8

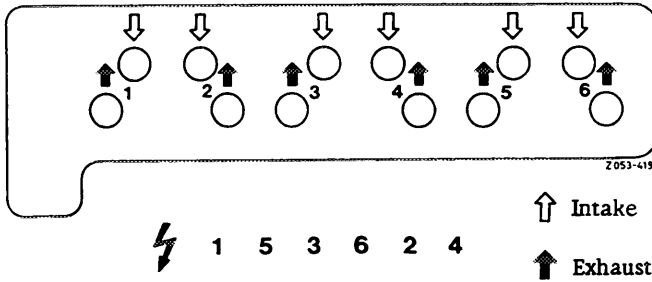


Fig. 00-3/2  
230/8, 250/8, 250 E/8

Adjusting

1 Measure valve clearance between slide surface of rocker arm and cam base circle of camshaft (Fig. 00-3/3 and 4). For this purpose, position camshaft in such a manner that tip of cam is vertical in relation to cam basic circle.

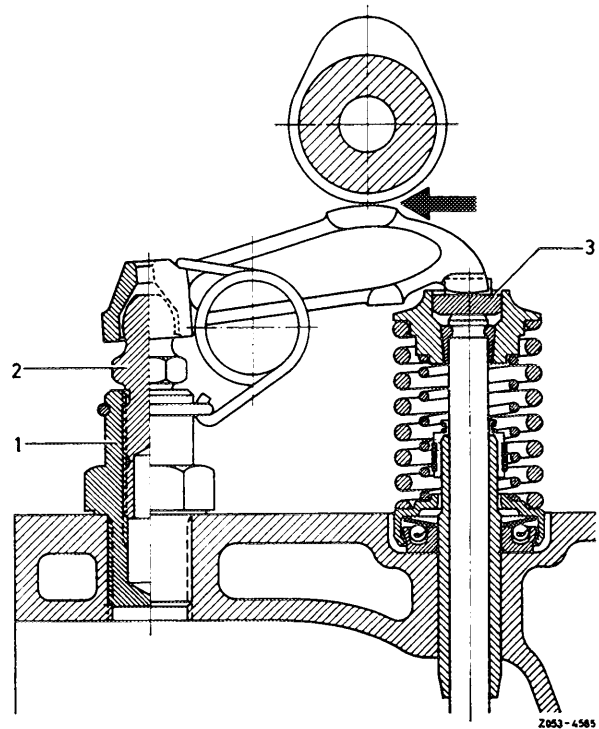


Fig. 00-3/3  
200/8, 220/8, 230/8, 250/8, 250 E/8

Renew thrust piece (3) on gasoline engines permitting insufficient adjustment. Available in various degrees of thickness (refer to Spare Parts Catalogue).

If torque of valve adjusting screw is below 2.0 kpm, renew adjusting screw (2) or adjusting screw (2) with threaded bushing (1) (Fig. 00-3/3).

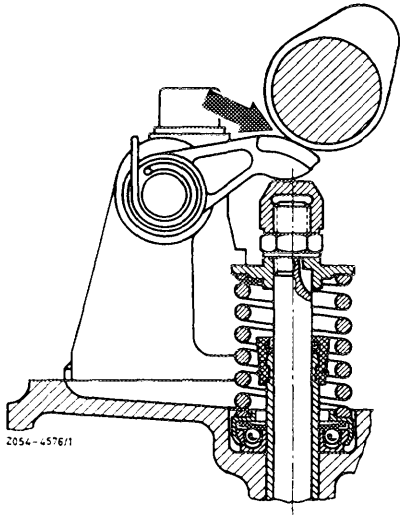


Fig. 00-3/4  
200 D/8, 220 D/8

2 The engine can be cranked as follows:

- a) With tool combination at hex. bolt for attaching balancing disc to crankshaft (Fig. 00-3/5).
- b) With starting motor. For this purpose, connect contact handle to + battery and terminal 50 (Fig. 00-3/6).

**Caution!** Do not crank engine on fastening bolt of camshaft gear.

Do not rotate crankshaft in reverse.

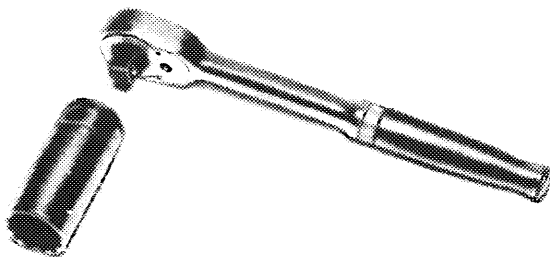


Fig. 00-3/5 R 100/6498

Socket wrench insert 001 589 65 09 00

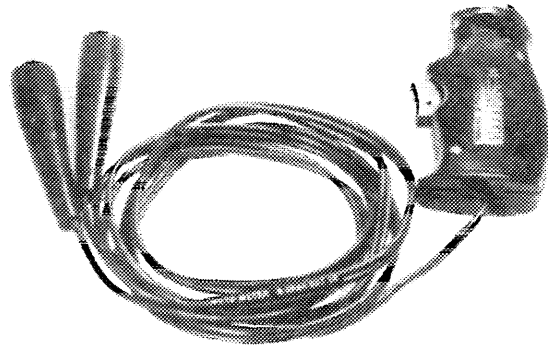


Fig. 00-3/6

Contact handle 001 589 46 21 08

3 On diesel engines, place holding wrench (17) on hexagon of valve spring retainer (Fig. 00-3/7).

Apply valve adjusting wrenches (14 and 16) to loosen cap nut (7) while applying counterhold to hex. nut (8) on valve.

Adjust valve clearance by turning cap nut. Upon adjustment, counterlock cap nut by tightening hex. nut.

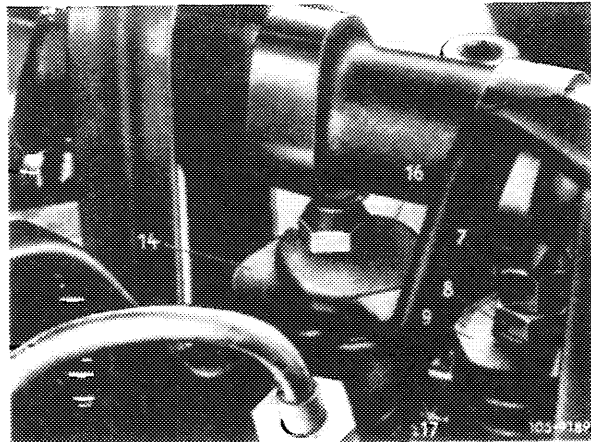


Fig. 00-3/7 105-9189

- |                               |                   |
|-------------------------------|-------------------|
| 7 Cap nut                     | 17 Holding wrench |
| 8 Hex. nut                    | part No.          |
| 9 Valve spring retainer       | 615 589 00 03 00  |
| 14, 16 Valve adjusting wrench | for models        |
| part No. 615 589 00 01 00     | 200 D/8, 220 D/8  |
| (2 each)                      |                   |

On gasoline engines, adjust by turning valve adjusting screw (2 in Fig. 00-3/3) with valve adjusting and torque wrench (Fig. 00-3/8, 00-3/9 and 00-3/10).

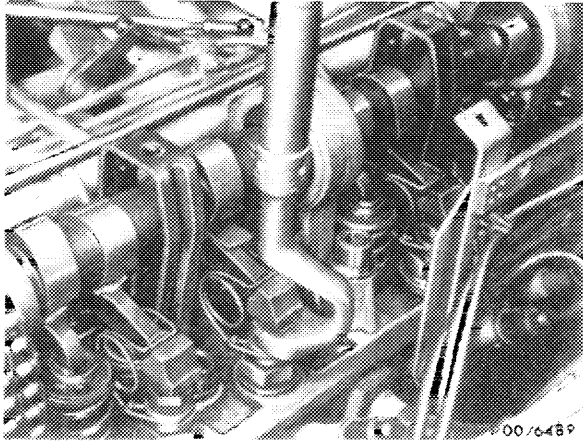


Fig. 00-3/8  
Valve adjusting wrench 110 589 00 01 00  
for models 200/8, 220/8 and 250/8

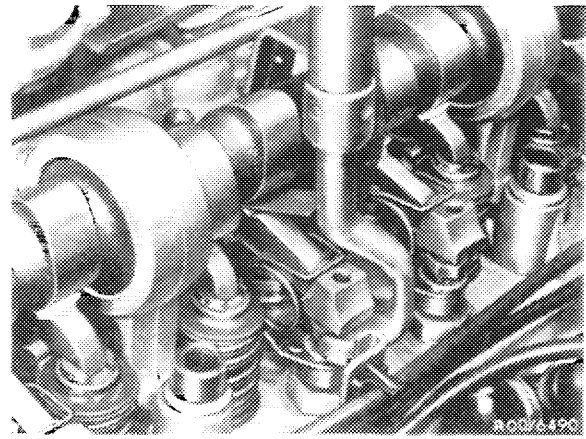


Fig. 00-3/10  
Valve adjusting wrench 000 589 39 07 00 for  
model 230/8

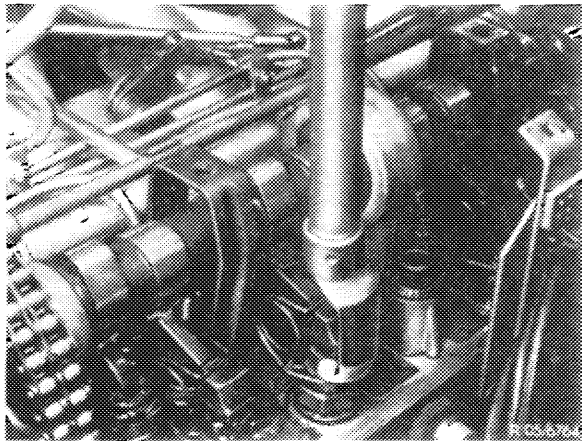


Fig. 00-3/9  
Valve adjusting wrench 000 589 32 07 00  
for model 250 E/8

4 Valve clearance is correctly adjusted when tolerance slip gauge can be pulled through at a tight fit.

5 Prior to mounting cylinder head cover, check gasket and renew in accordance with condition.