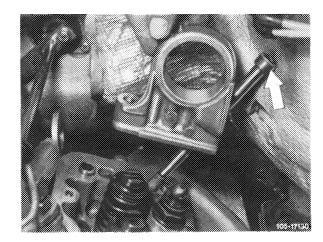
10 Lift camshaft including camshaft bearings and pull camshaft out of rear camshaft bearing.

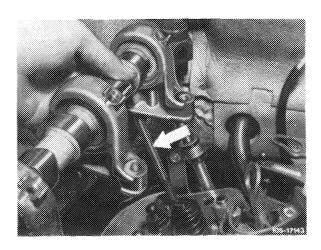


## Installation

11 Lubricate camshaft bearings and slide camshaft into camshaft bearings.

## Caution!

Introduce cylinder head bolts M  $10 \times 165$  mm (arrow) at the rear camshaft bearing left and right before mounting the camshaft bearing.



- 12 Lubricate cylinder head bolt threads and head contact area.
- 13 Mount camshafts with camshaft bearings.

- 14 Tighten cylinder head bolts M 10  $\times$  165 for camshaft bearings from inside out first to 30 Nm initial torque and then to 60 Nm final torque.
- 15 Tighten fastening bolts M 8 to 50 Nm.

#### Caution!

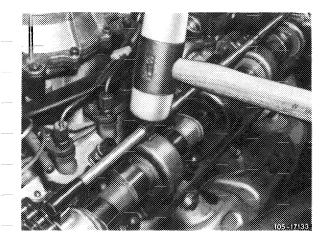
The camshaft should turn easily by hand.

16 When mounting the oil pipes, move connections into assembly position and check the three inside connections for unobstructed passage of oil bores prior to tapping them onto the camshaft bearings.

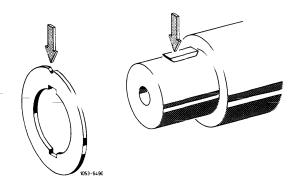
Replace oil pipe if oil bores are covered up.

## Caution!

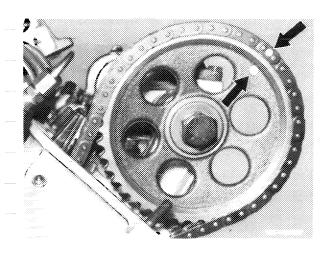
Replace connections each time following removal from camshaft bearings since otherwise the oil pressure in the oil pipe is not assured.



17 Mount compensating washer in such a manner that the groove below the notch engages with the Woodruff key of the camshaft (see arrows).

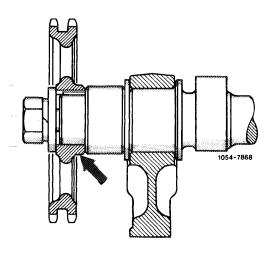


18 Mount camshaft sprocket while paying attention to the color coding (arrows)......

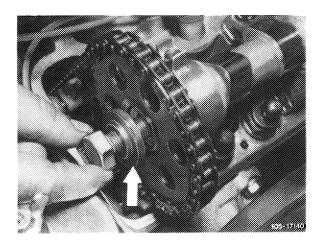


# Caution!

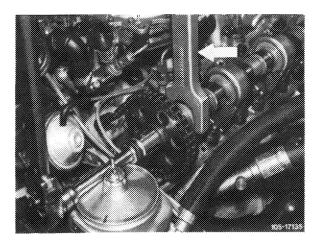
The wide collar on the camshaft sprocket (arrow) should face to the camshaft.



19 Mount bolt with washer and spring washer (arrow).



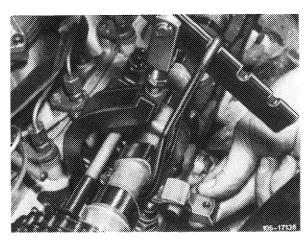
20 Tighten bolt to 100 Nm while holding the camshafts in place with the retaining wrench.



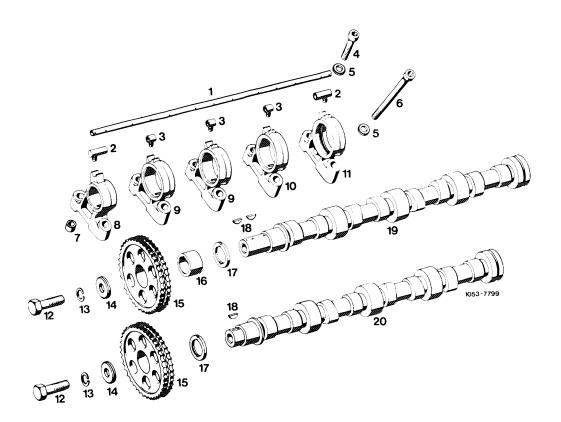
21 Install rocker arm in the same position as before.

## Caution!

If the rocker arms or the camshaft have been replaced, check basic position of hydraulic valve clearance compensating elements (05–213).



22 Complete the engine.



- Oil pipe End connection Center connection Cylinder head bolt M 10 x 50
- 1234567 Washer Cylinder head bolt M 10 x 165 Dowel sleeve

- 8 9
- Camshaft bearing sprocket end Camshaft bearing 2 and 3 Camshaft bearing 5 Camshaft bearing flywheel side
  12 Bolt M 14 x 1.5 x 40
  13 Spring washer

- 14 Washer
  15 Camshaft sprocket
  16 Spacer ring right
  17 Compensating washer
  18 Woodruff key
  19 Camshaft right
  20 Camshaft left