

REP-REP-RAE6311N52-1131505 Adjusting camshaft timing (N52)

Č. XXXXXXXX Vozidlo: 3'/E90/SEDAN/325i/N52/AUTO/EUR/LL/2005/02
podvozku:

Verze 3.49.20.13946 Datová R3.49.20.13946
systému: verze:

11 31 505

Adjusting camshaft
timing (N52)



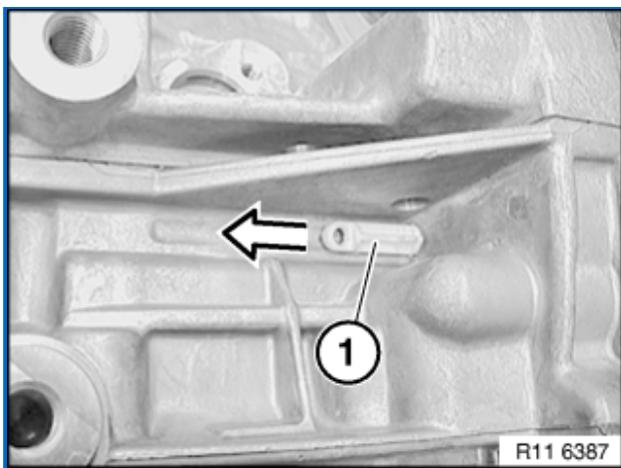
Special tools required:

- [00 9 120](#)
- [00 9 250](#)
- [11 0 300](#)
- [11 4 281](#)
- [11 4 282](#)
- [11 4 283](#)
- [11 4 290](#)
- [11 9 340](#)



Necessary preliminary tasks:

- Remove [cylinder head cover](#).

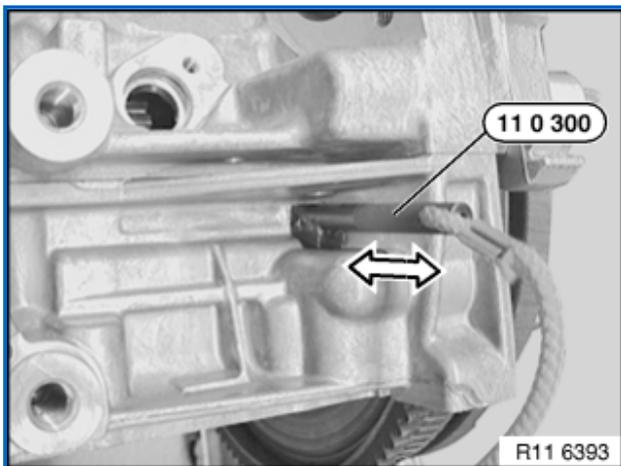


Remove fastener (1) in direction of arrow.

Installation:

Install fastener (1) with bore facing
outwards.

Rotate crankshaft at central bolt into TDC



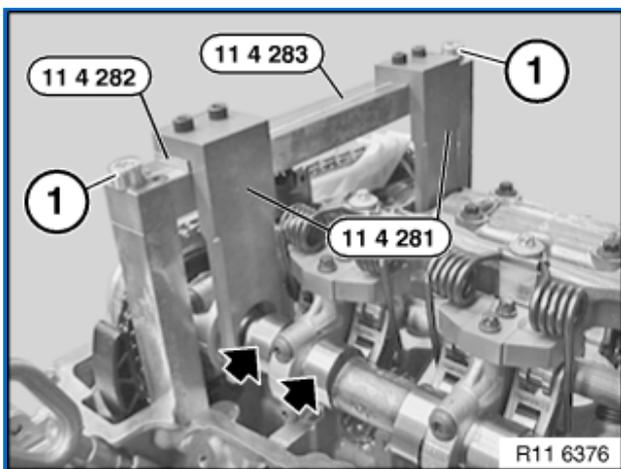
position.

Slide in special tool [11 0 300](#) in direction of arrow and block crankshaft.

Important!

On engines with automatic transmissions, there is shortly before the special tool bore for the TDC position a large bore which can be confused with the special tool bore.

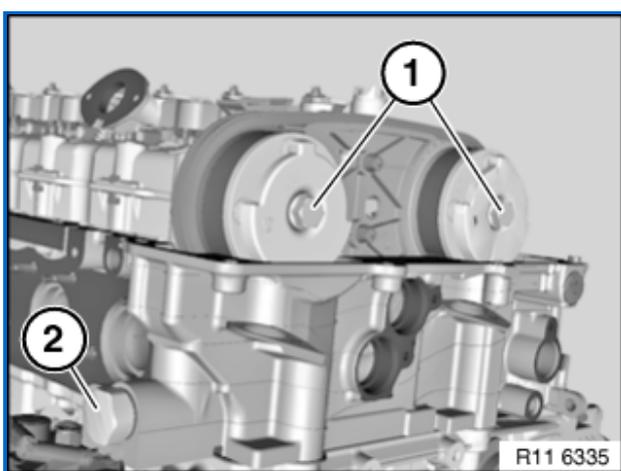
If the flywheel is secured in the correct bore with special tool [11 0 300](#), the engine can no longer be moved at the central bolt.



Important!

Risk of damage!

To open central bolt, mount special tools [11 4 283](#) [11 4 281](#) and [11 4 282](#) on camshaft.



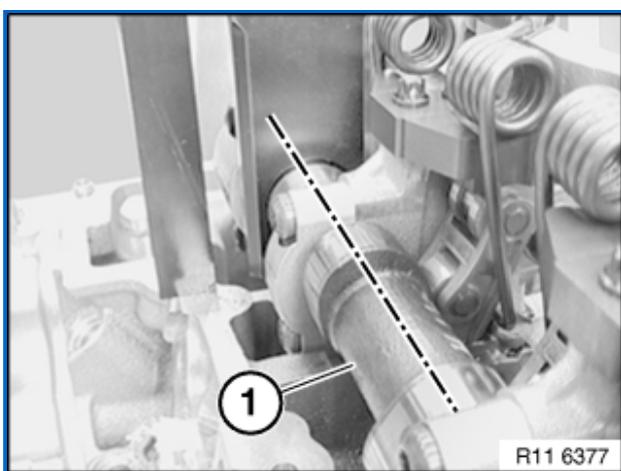
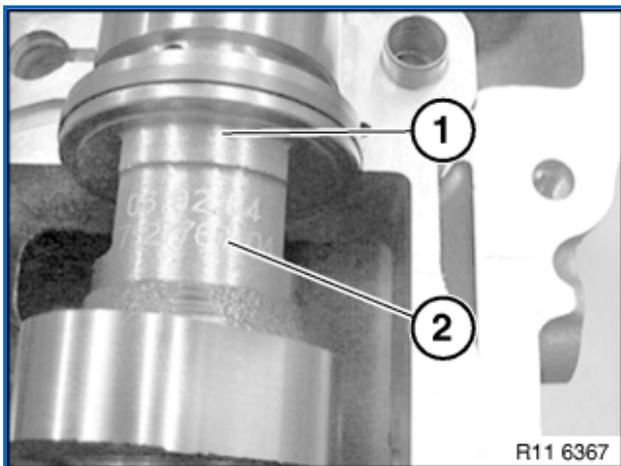
To release central bolts (1), grip camshaft at hexagon head at rear.

Release chain tensioner (2) (have a cleaning cloth ready).

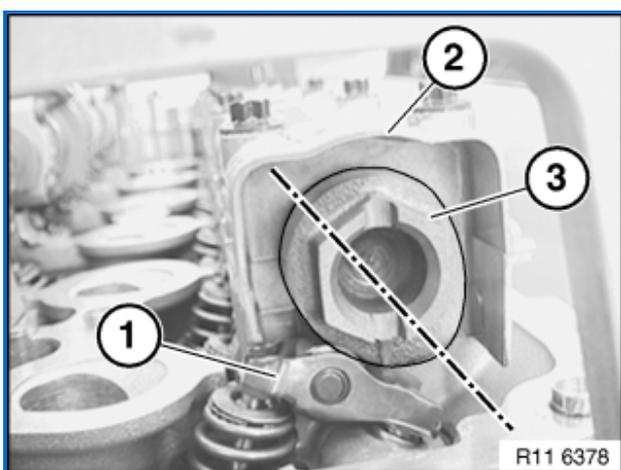
Note:

Illustrations in CAD do not show special tools.

Part numbers (2) on twin surface of inlet and exhaust camshafts (1) point upwards.



With 1st cylinder in firing TDC position, cams of inlet camshaft (1) point upwards at an angle.

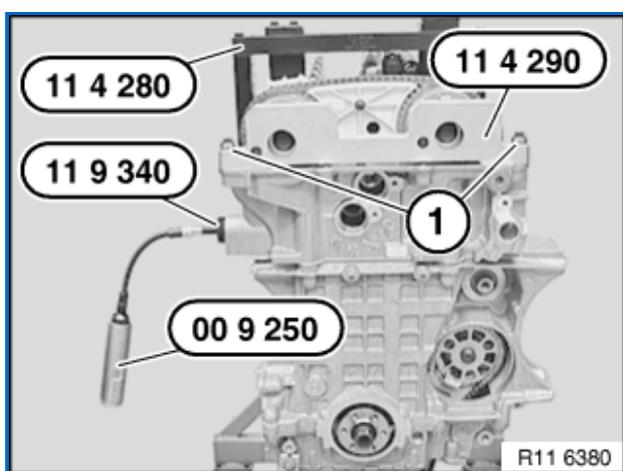
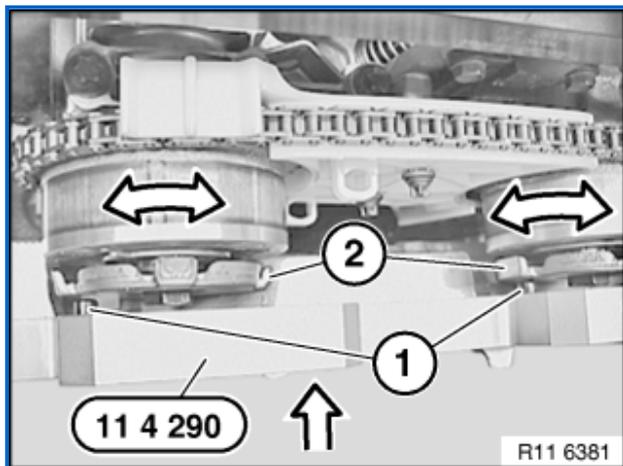


With 1st cylinder in firing TDC position, cams of exhaust camshaft (3) at 6th cylinder point downwards at an angle.

Note:
If the timing is checked while the engine is installed, the position of the camshaft can only be checked with a mirror.

Turn sensor gears (2) in direction of arrow until locating pins (1) on special tool [11 4 290](#) match up.

Slide on special tool [11 4 290](#) in direction of arrow.



Secure special tool [11 4 290](#) with old cylinder head cover bolts (1).

Screw special tool [11 9 340](#) into cylinder head.

Pretension timing chain with special tool [00 9 250](#) to **0.6 Nm**.

Tighten both central bolts of camshaft adjustment units with special tool [00 9 120](#). Tightening torque: [11 36 1AZ](#).



Assemble engine.