

11 41 010**Removing and installing or replacing chain module for oil pump/vacuum pump (N55)****Special tools required:**

- [00 9 140](#)
- [11 0 290](#)
- [11 0 300](#)
- [11 4 120](#)
- [11 4 280](#)
- [11 8 640](#)
- [11 8 650](#)
- [11 9 260](#)
- [2 303 793](#)

**Important!**

Aluminium screws/bolts must be replaced each time they are **released**.

Aluminium screws/bolts are permitted with and without colour coding (blue).

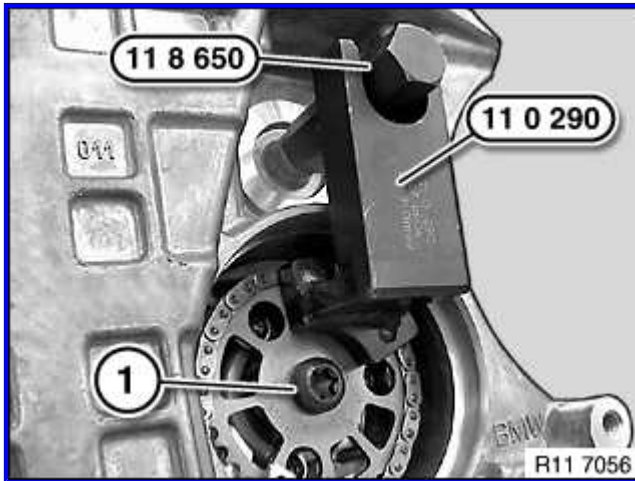
For reliable identification:

Aluminium screws/bolts are **not magnetic**.

Jointing torque and angle of rotation must be observed without fail (**risk of damage**).

*Necessary preliminary tasks:*

- Remove [cylinder head cover](#)
- Remove all [spark plugs](#).
- Remove [oil sump](#)
- Remove [drive belt](#)
- Remove drive belt [tensioning device](#)
- Remove [vibration damper](#)
- Remove [sealing cap](#) for vacuum pump
- Remove [sealing cap](#) of chain tensioner for oil pump.
- Remove [chain tensioner](#).



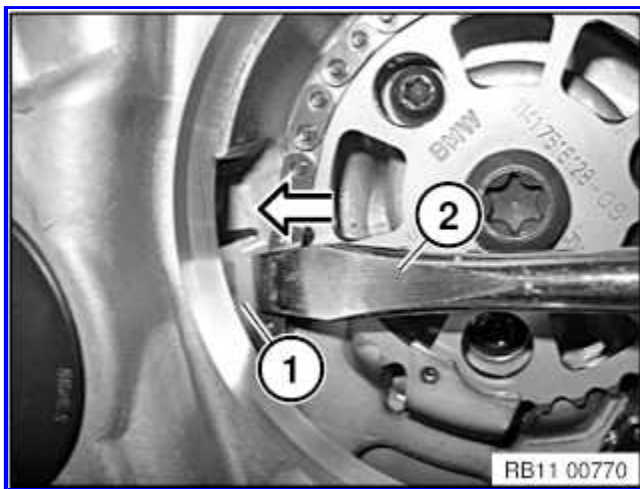
Screw in special tool [11 8 650](#) on belt tensioner screw connection on crankcase.

Turn camshaft sprocket with central bolt at crankshaft into position until special tool [11 0 290](#) can be secured.

Simultaneously secure special tool [11 0 290](#) to camshaft sprocket and special tool [11 8 650](#).

Release screw (1) for camshaft sprocket.

Tightening torque [11 66 2AZ](#).

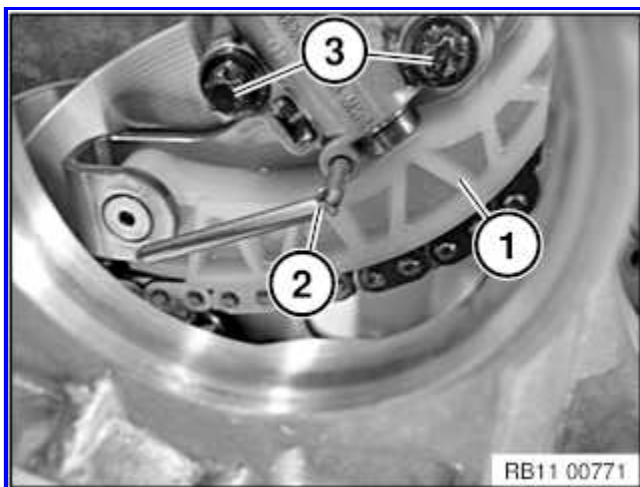


Important!

Before releasing the central bolt on the oil pump, the hydraulic chain tensioner must be drained.

Carefully press tensioning rail (1) with a suitable screwdriver (2) in direction of arrow.

As the oil pressure in the chain tensioner can only be drained pulsating, the tensioning rail (1) must be pressed several times.



Press the tensioning rail (1) and hold down.

Fix chain tensioner piston in position with a suitable lock pin (2).

Release screws (3).

Tightening torque: [11 41 7AZ](#).

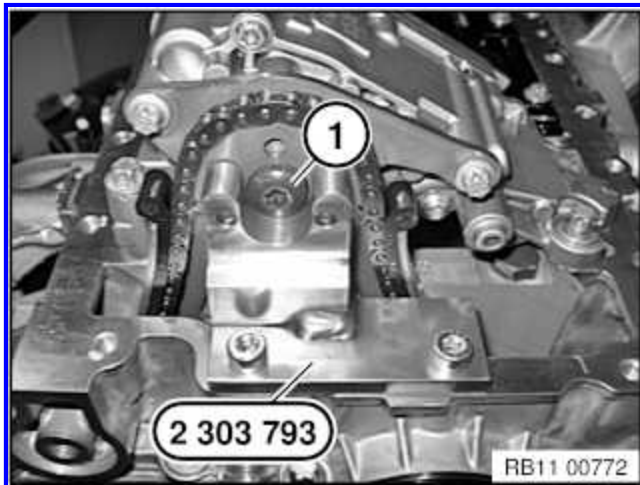
Note:

Sprocket must be blocked in order to release central bolt (1).

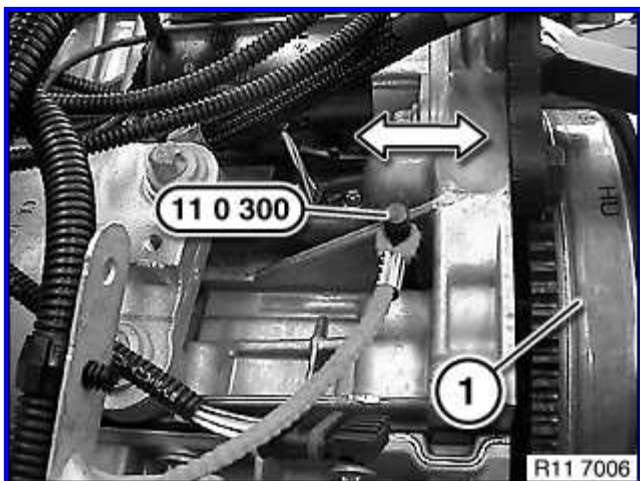
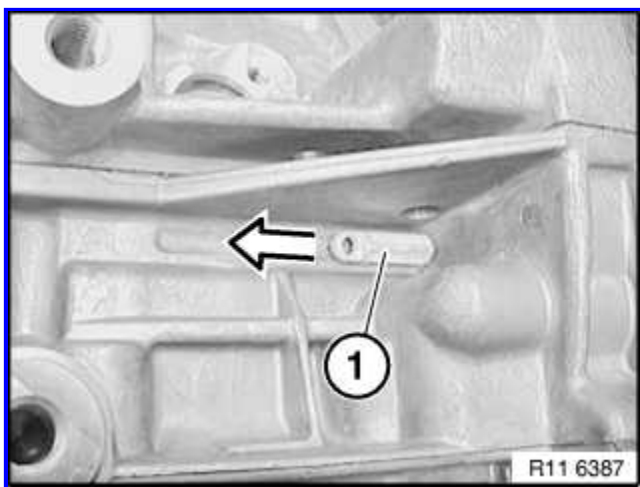
Secure special tool [2 303 793](#) to crankcase.

Release oil pump central bolt (1).

Tightening torque [11 41 5AZ](#).



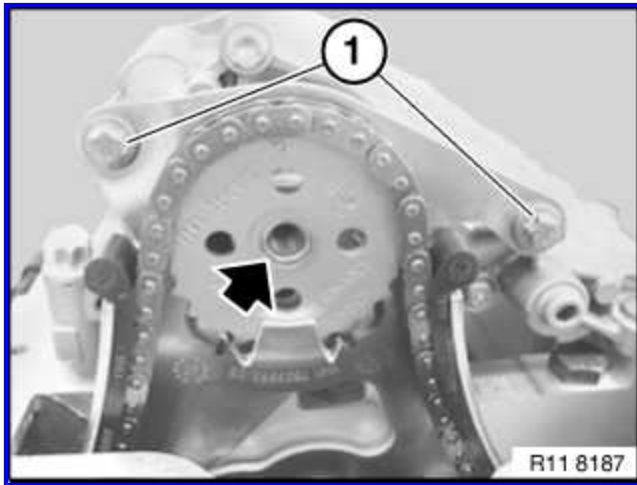
Remove fastener (1) in direction of arrow.



Position flywheel (1) with special tool [11 0 300](#) in TDC setting.

Release aluminium screws (1).

Remove oil pump drive gear from the drive shaft.

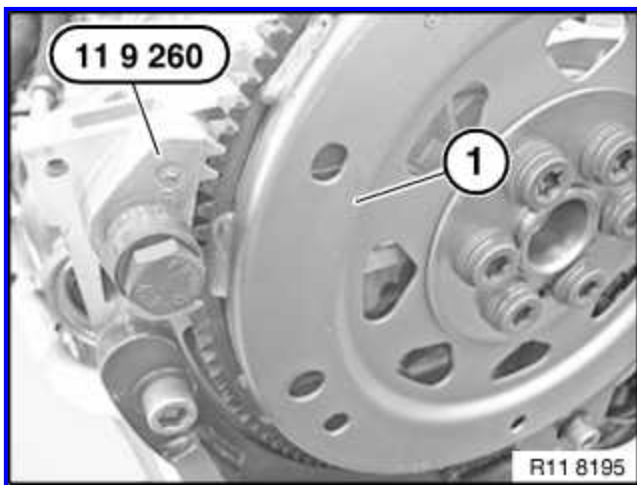
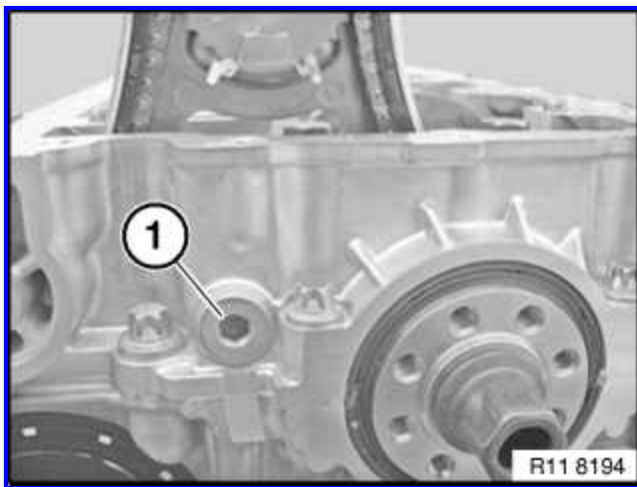


Open screw plug (1).

Tightening torque: [11 11 9AZ](#).

Installation note:

Replace sealing ring.



Lock flywheel (1) with special tool [11 9 260](#).

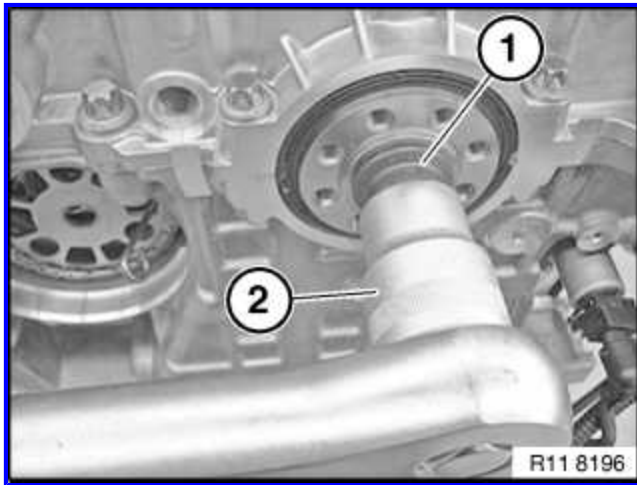
Important!

Do not remove special tools [11 0 300](#) and [11 4 280](#) to release central bolt (1).

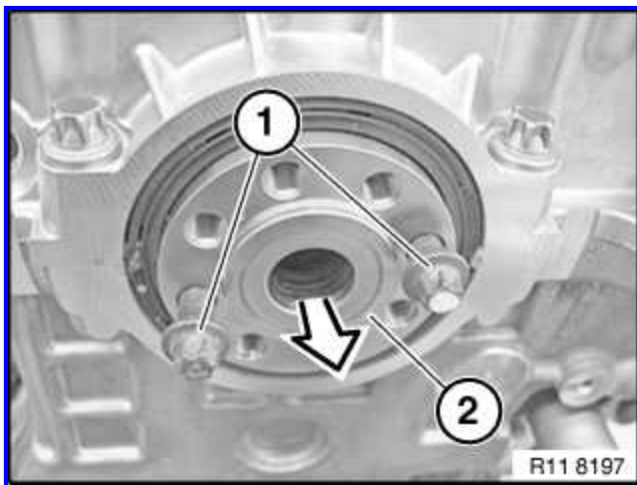
Release central bolt (1).

Installation note:

Release central bolt (1) with 3/4 tool (2).



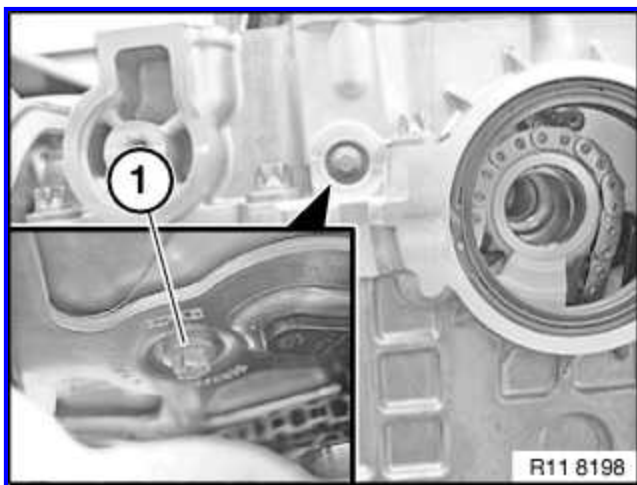
Breakaway torque approx. 500 Nm.



Screw in two screws (1) and remove hub (2) in direction of arrow.

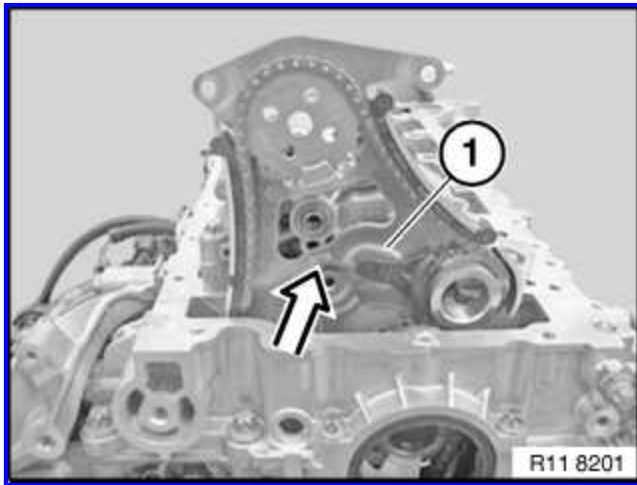
Installation note:

Replace front [crankshaft seal](#).



Release aluminium screw (1) with special tool [11 8 640](#).

Remove chain module (1) in direction of arrow.



Installation note:

Both grip discs must be attached to drive gear for oil pump with welding spots.

Grip discs are not individually available.

If grip discs are damaged, the drive gear for oil pump with grip discs must be replaced.



Installation note:

Grip disc (1) must be mounted.

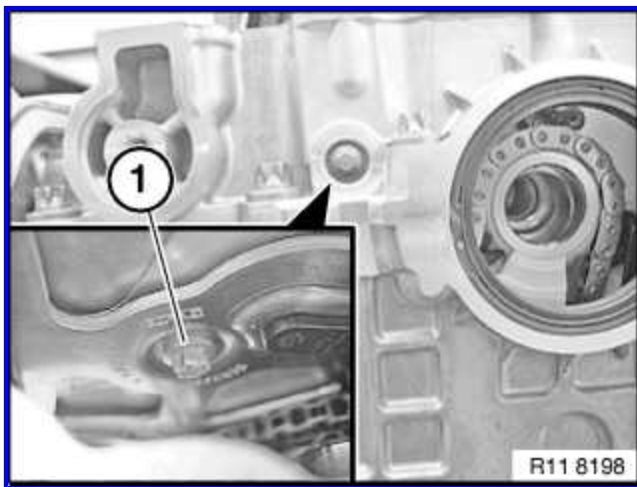
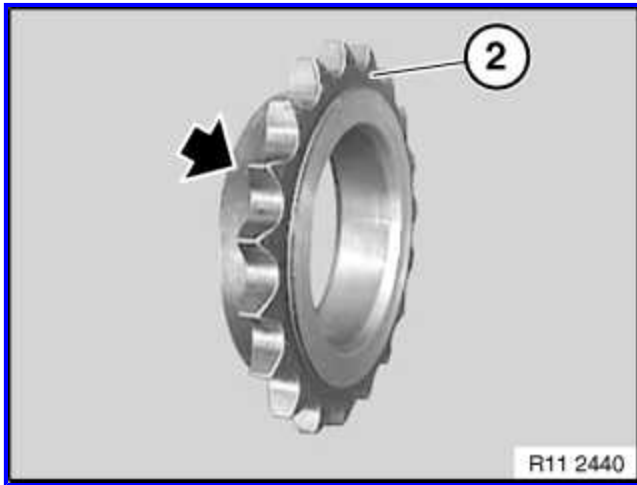
If grip disc (1) is not mounted, central bolt can come loose (engine damage).

Important!

Note direction of installation of camshaft sprocket (2).

Collar (see arrow) on camshaft sprocket (2) points to **engine**.

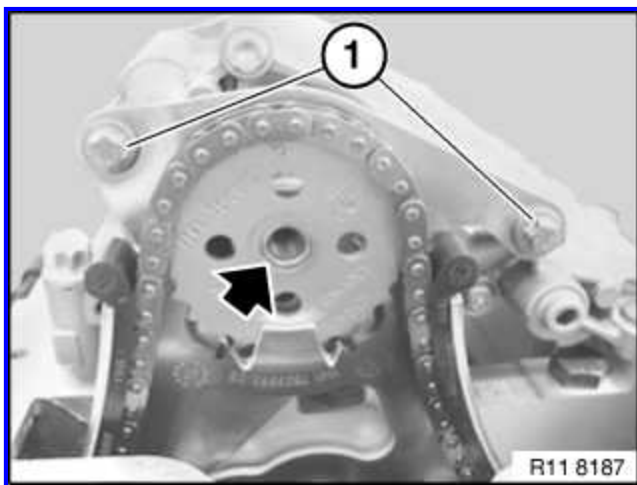
Incorrect assembly will result in **engine damage**.



Insert chain module.

Secure aluminium screw (1) with special tool [11 8 640](#).

Tightening torque: [11 41 3AZ](#).



Insert aluminium screws (1) for chain module.

Tightening torque [11 41 6AZ](#).

Installation note:

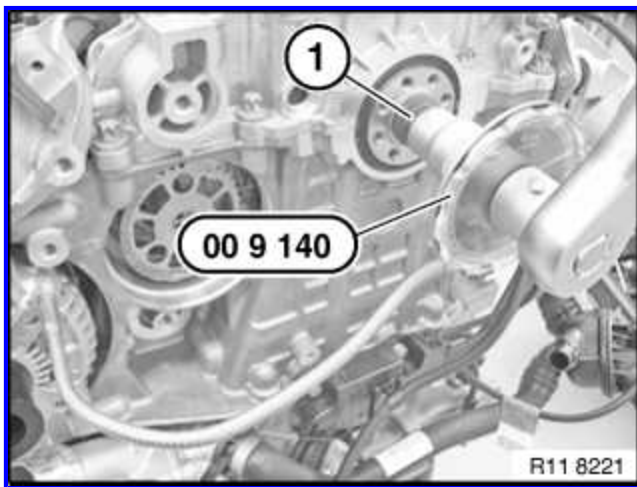
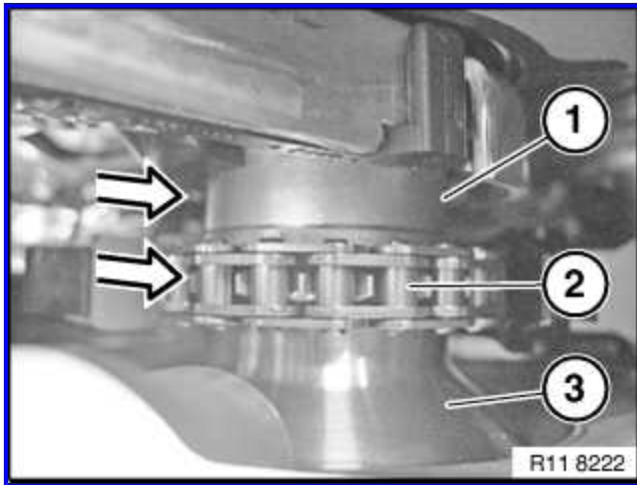
Replace aluminium screws.

Pay attention to mounting flats on oil pump drive.

Position module (1) for oil pump drive.

Position module (2) for camshaft drive.

Insert hub (3) for vibration absorber with grip disc.



Insert central bolt (1).

Secure central bolt with special tool [100 9 140](#).

Tightening torque [11 21 1AZ](#).

Installation note:

Replace front [crankshaft seal](#).



Assemble engine.