

Remove upper section of intake filter housing on left.
Disconnect plug connection on solenoid valves.



Caution!

Two different versions:

- Solenoid valves not pretensioned
- Solenoid valves pretensioned

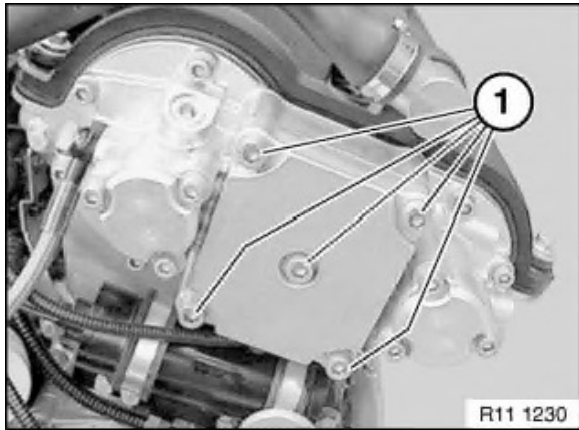
The solenoid valves and the VANOS adjustment unit of the pretensioned and non-pretensioned solenoid valves are different and must not be mixed when installed.

When the complete VANOS adjustment unit is replaced, the new version must be fitted with the pretensioned solenoid valves. It is sufficient here to replace only the VANOS adjustment unit of the cylinder bank in question.

Version up to 10/99: Solenoid valves not pretensioned.

Release screws (1).

Remove cover.



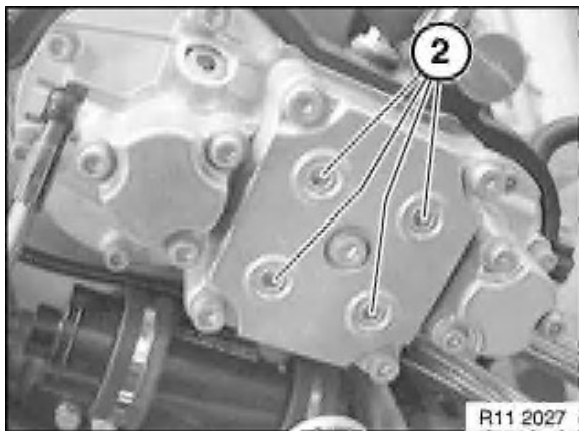
Version from 11/99: Solenoid valves pretensioned.

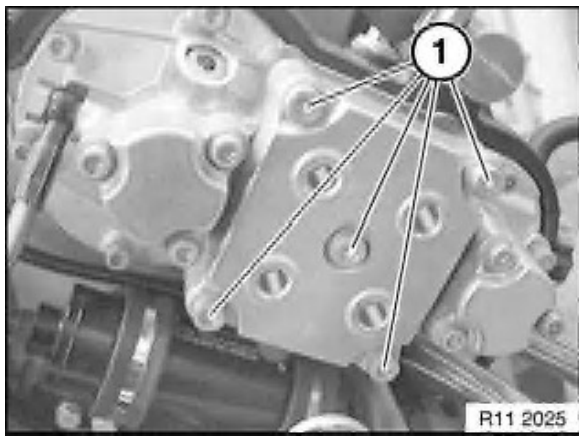
Note:

The solenoid valves are each pretensioned with a threaded pin in the VANOS adjustment unit.

The threaded pins are plastic-coated and do not have to be replaced.

Remove threaded pins (2).

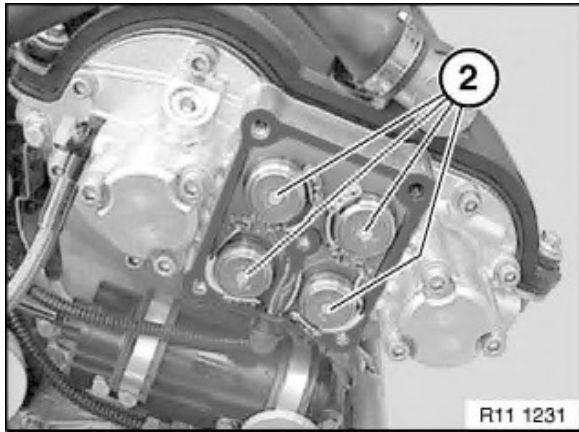




Version from 11/99: Solenoid valves pretensioned.

Release screws (1).

Remove cover.



Both versions:

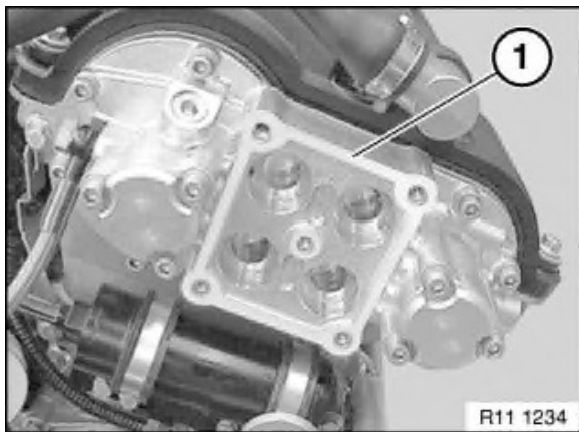
Note:

Oil drips from the bores once the solenoid valves have been removed. Have a cleaning cloth ready. Make sure no oil drips onto the belt drive.

Caution!

Risk of board breakage. Do not damage cable and soldering points.

The solenoid valves (2) can only be removed completely with the board. Using pliers, pull on solenoid valves (2) alternately and carefully in 1 mm steps until valves (2) are no longer secure.

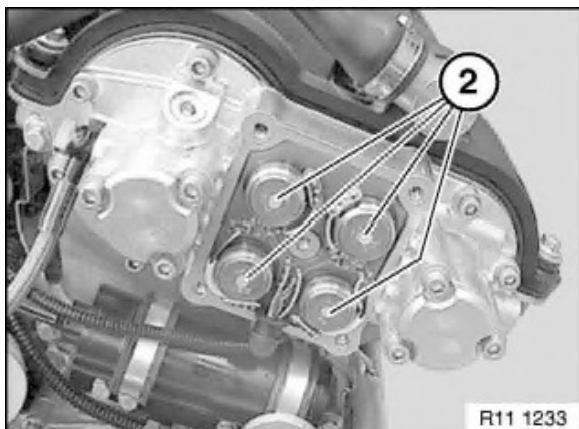


Both versions:

Installation:

No gasket residue is permitted to drop into the bores.

Clean gasket residue from sealing surface (1).



Both versions:

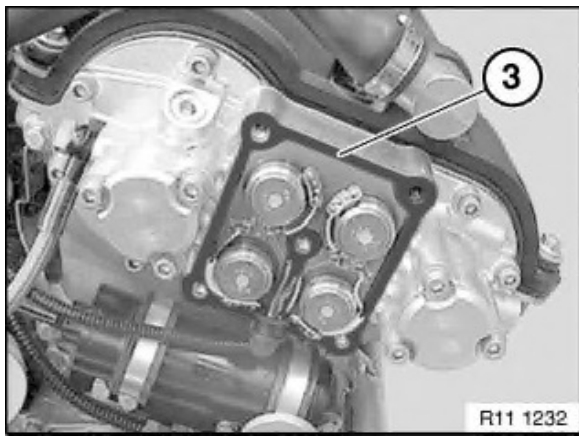
Installation:

Lubricate sealing rings on solenoid valves (2).

Caution!

Risk of board breakage. Do not damage cable and soldering points.

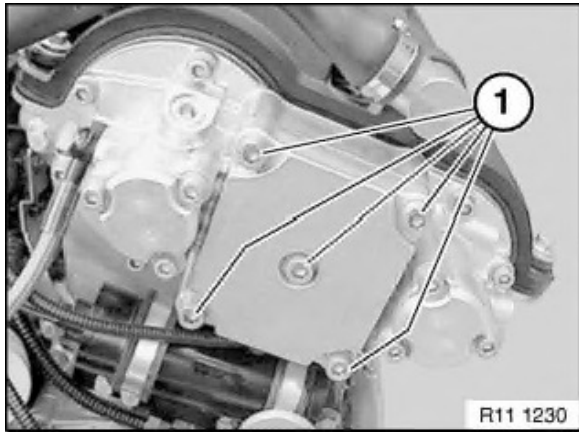
Press board at solenoid valves (2) uniformly and carefully into VANOS adjustment unit.



Both versions:

Installation:

Replace gasket (3).

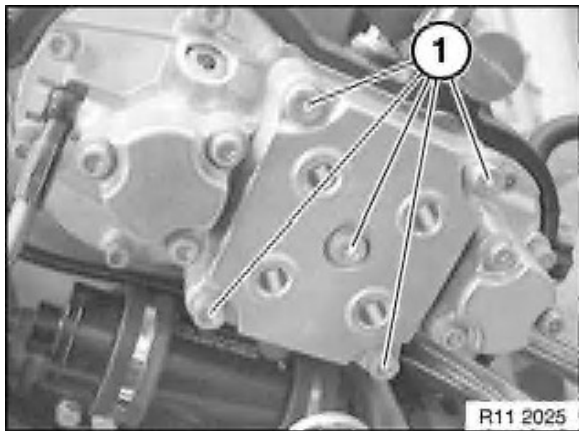


Version up to 10/99: Solenoid valves not pretensioned.

Installation:

Insert wiring grommet in housing recess. Fit cover.
Install and tighten down screws (1).
Tightening torque 11 36 10AZ.

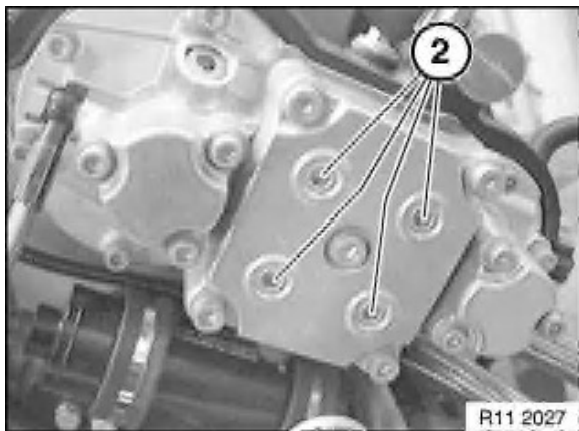
Assemble engine.



Version from 11/99: Solenoid valves pretensioned.

Installation:

Insert wiring grommet in housing recess. Fit cover.
Install and tighten down screws (1).
Tightening torque 11 36 10AZ.



Version from 11/99: Solenoid valves pretensioned.

Installation:

The threaded pins (2) are plastic-coated and do not have to be replaced.
Screw in threaded pins (2) by hand until they all rest uniformly on solenoid valves.
Tighten down threaded pins (2) to 16 Nm.

Assemble engine.

**Caution!**

There is air in the VANOS system once it is opened.

In the first few seconds after startup this results in a clearly discernible "rattling noise".

This rattling noise does "not" indicate incorrect assembly.

The rattling noise will disappear as soon as the oil pressure has built up and the system has vented.