

Water Pump: Service and Repair

11 51 000 - Removing and installing/replacing water pump (N54)

Warning!

Danger of scalding!

Only perform this work after engine has cooled down.

Recycling:

Catch and dispose of drained coolant in a suitable container.
Observe country-specific waste-disposal regulations.

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 coolant thermostat See: Thermostat/Service and Repair/Removing and Installing/Replacing Coolant Thermostat

Release coolant hose (1).

Disconnect plug connection (4).

Release screws (5).

Installation Note:

Replace aluminium screws.

Tightening torque 11 51 1AZ See: Specifications.

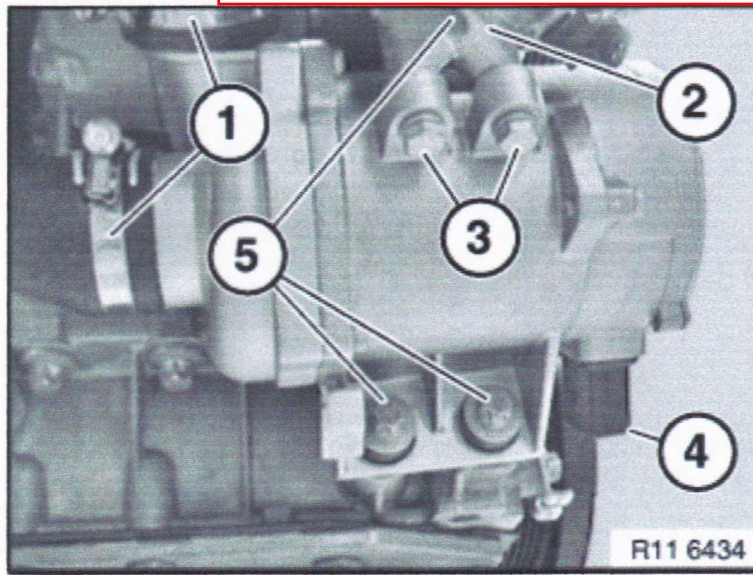
Installation Note:

If a coolant pump is reused, it must be mechanically rotated once (breakaway torque at pump gears).

One coolant pump rotation will be sufficient.

Assemble engine.

Venting instructions See: Service and Repair/Procedures/Venting Cooling System and Checking for Water Leaks must be observed **without fail**



	Type	Thread	Tightening specification	Measure
1AZ Coolant pump to crankcase	N54	M8 x 26	Replace screws. Thread repairs exclusively with aluminum Helicoll threaded insert. Jointing torque and angle of rotation must be observed without fail.	
			Jointing torque	10 Nm
			Torque angle	90 °
2AZ ASA screw (3 x) Coolant pump to bracket.	N54	M8 x 27		20.5 Nm
3AZ Hose clamp (1 x) Coolant hose between coolant pump and coolant thermostat.	N54	L42-48		3 Nm
4AZ Hose clamp (1 x) Coolant hose between coolant pump and feed line.	N54	L42-48		3 Nm

Thermostat: Service and Repair

Removing and Installing/Replacing Coolant Thermostat

11 53 000 - Removing and installing/replacing coolant thermostat (N54)

Warning!

Danger of scalding!

Only perform this work after engine has cooled down.

Recycling:

Catch and dispose of drained coolant in a suitable container.

Observe country-specific waste-disposal regulations.

Necessary preliminary tasks:

- Remove front underbody protection See: Body and Frame/Splash Guard/Service and Repair/Removing and Installing/Replacing Front Underbody Protection
- Draining coolant See: Coolant/Service and Repair

Release hose clamp (1) and detach coolant hose.

Release hose clamp (2) and detach coolant hose.

Unlock and detach coolant hose (3).

Unlock and detach coolant hose (4).

Disconnect plug connection (5).

Release screws (6).

Tightening torque 11 53 1AZ See: Engine/Specifications/Mechanical Specifications/Thermostat and Connections.

Remove coolant thermostat (7).

Note:

Illustration shows coolant thermostat removed.

Assemble engine.

