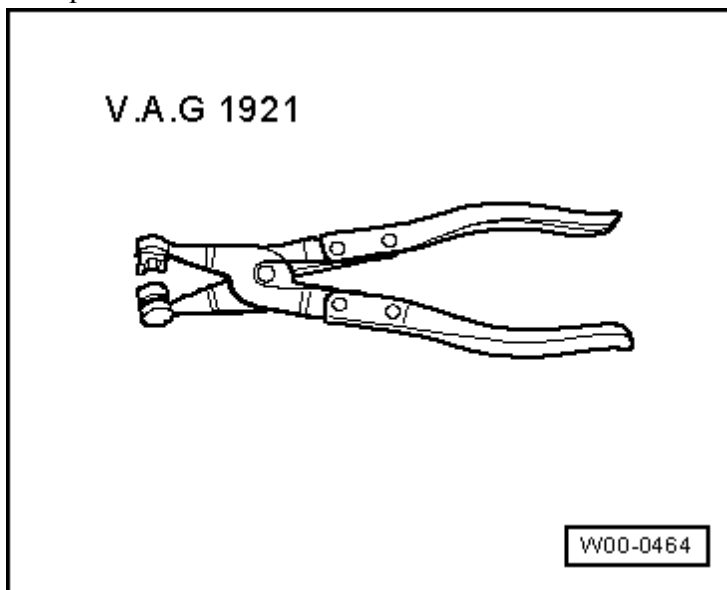


Removing and installing thermostat

Special tools and workshop equipment required

t Hose clip pliers -V.A.G 1921-



Removing



Note

The following description is for removal and installation on vehicles with secondary air system. Certain work steps may not apply to vehicles without secondary air system.

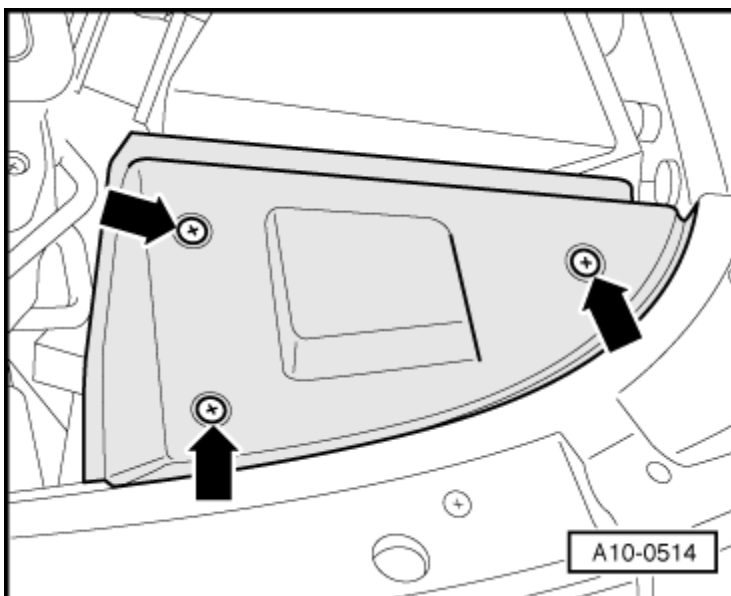
- Drain off coolant → [Chapter](#).
- Remove front left cover -arrows-.



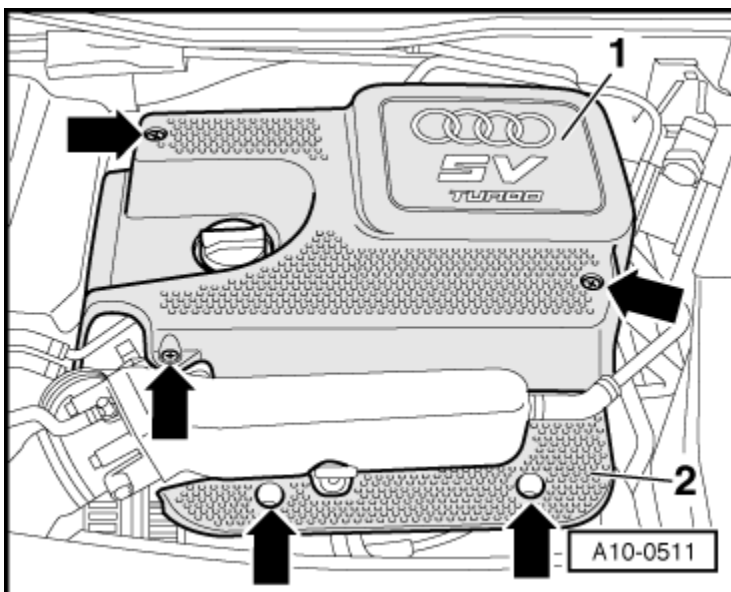
Caution

Observe notes on procedure for disconnecting the battery → [Rep. Gr.27](#).

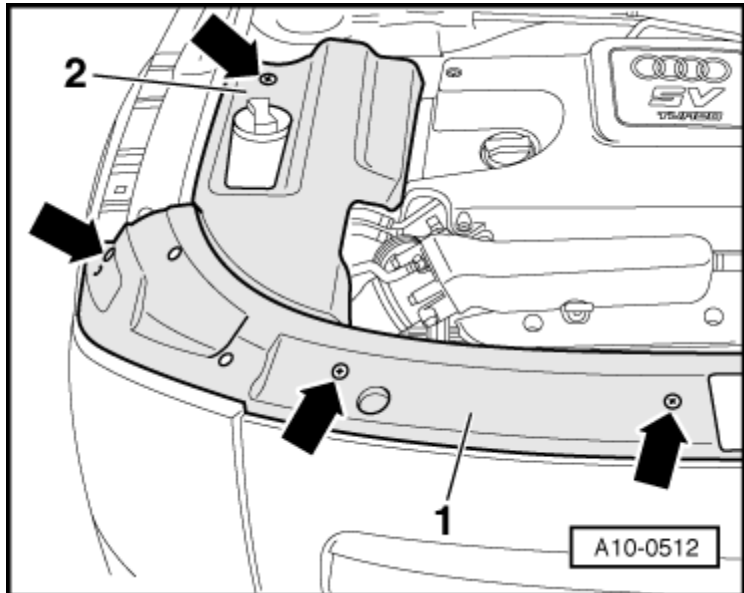
- Disconnect earth wire at battery with ignition switched off.



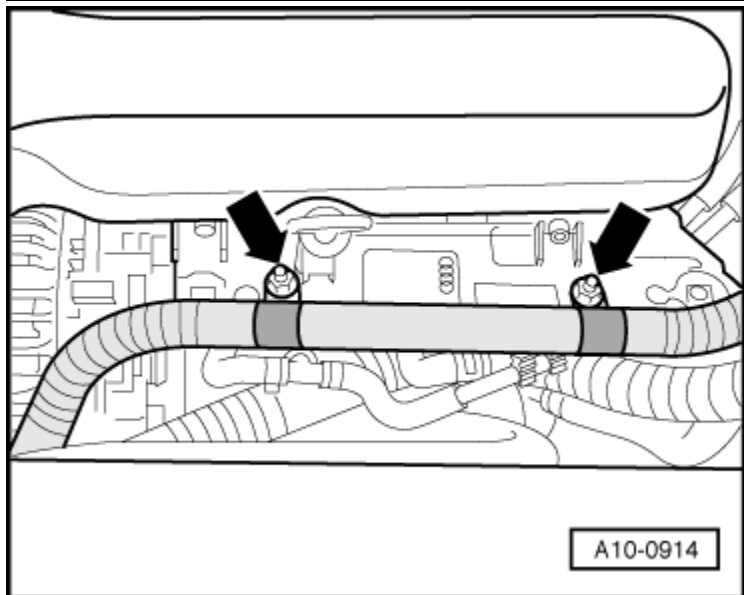
- Remove engine cover panel -1- and cover -2- in front of intake manifold -arrows-.



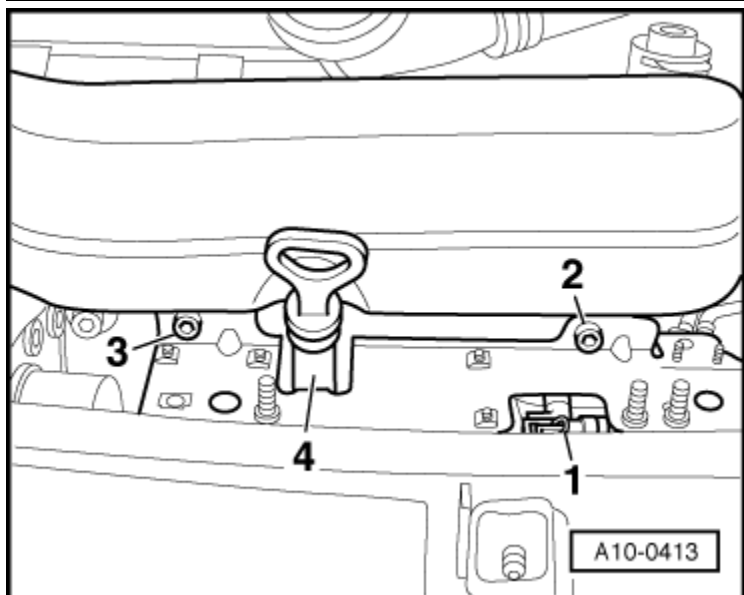
- Remove covers -1- and -2- at lock carrier (right-side) and above coolant expansion tank -arrows-.



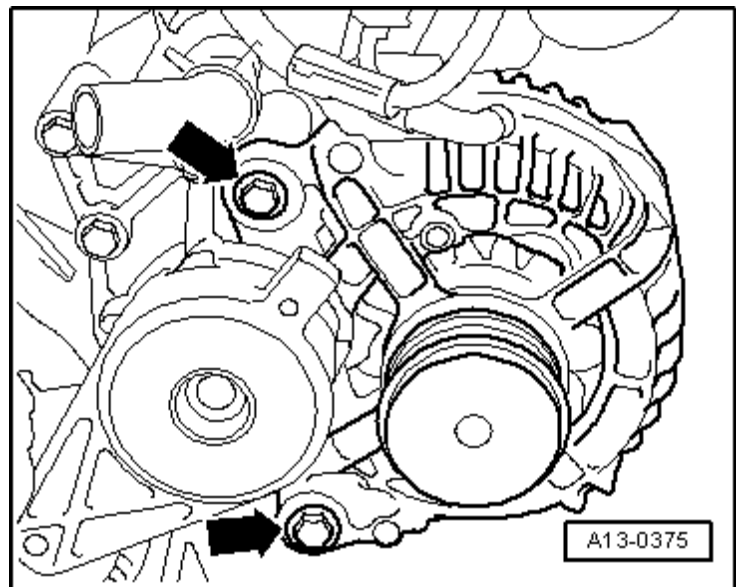
- Detach pipe for secondary air system from brackets on engine -arrows-.



- Remove bolts -2- and -3- and detach bracket for dipstick guide tube -4-.
- Unplug electrical connectors -1- for turbocharger air recirculation valve - N249- and secondary air inlet valve - N112- on underside of retainer.
- Detach vacuum hose going to electrical change-over valves at intake manifold.
- Disconnect both hoses from secondary air pump.
- Move bracket clear to the side.



- Slacken off poly V-belt and detach it from alternator pulley → [Chapter](#).
- Unbolt alternator -arrows- and move clear to the front. The electrical wires remain connected.



- Detach coolant hose from hose connection -3-.
- Unscrew bolts -4- and remove hose connection with O-ring -2- and thermostat -1-.

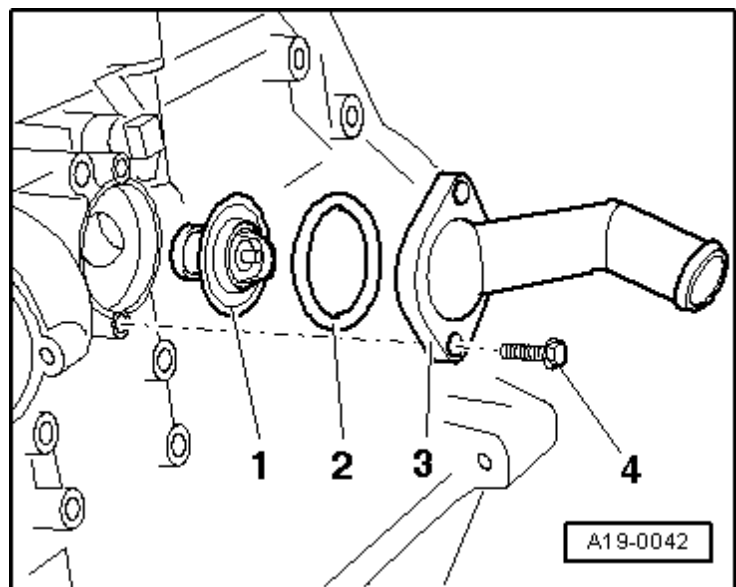
Installing

Installation is carried out in the reverse order; note the following:

i Note

Renew seals and gaskets.

- Clean and smoothen sealing surface for O-ring as required.
- Insert thermostat.
- 1 Cross-piece on thermostat should be vertical.
- Moisten new O-ring with coolant additive “G12+”.
- Install alternator → [Rep. Gr.27](#).
- Observe notes on procedures required after connecting battery → [Rep. Gr.27](#).
- Install poly V-belt → [Chapter](#).
- Fill cooling system → [Anchor](#).



Tightening torque

Component	Nm
Hose connection to cylinder block	15