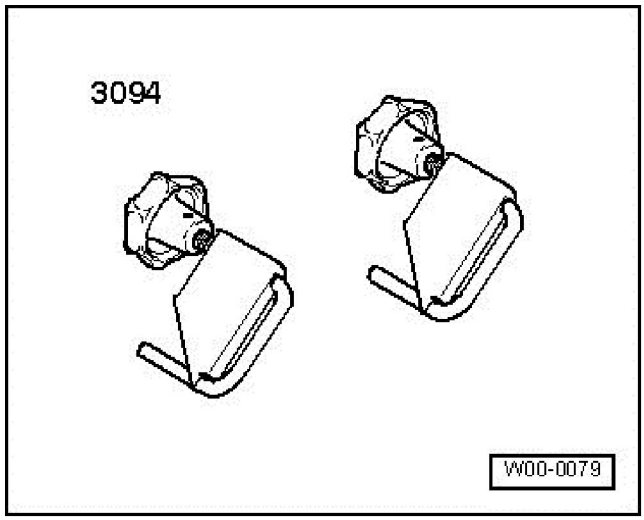
Water Pump: Service and Repair
Coolant Pump in Front of Electric Drive Power and Control Electronics V508

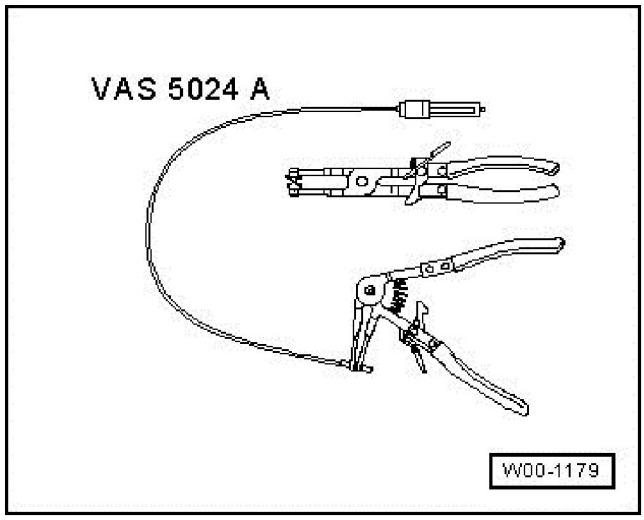
Coolant Pump in Front of Electric Drive Power and Control Electronics V508

Special tools, testers and auxiliary items required

‹› Hose clamps up to 25 mm diameter (3094)



‹› Spring type clip pliers (VAS 5024A)



Removing

- Read and follow the high voltage electrical system general warnings. Refer to=> [General Warnings when Working on High Voltage Systems] See: Heating and Air Conditioning/Control Module HVAC/Service Precautions.

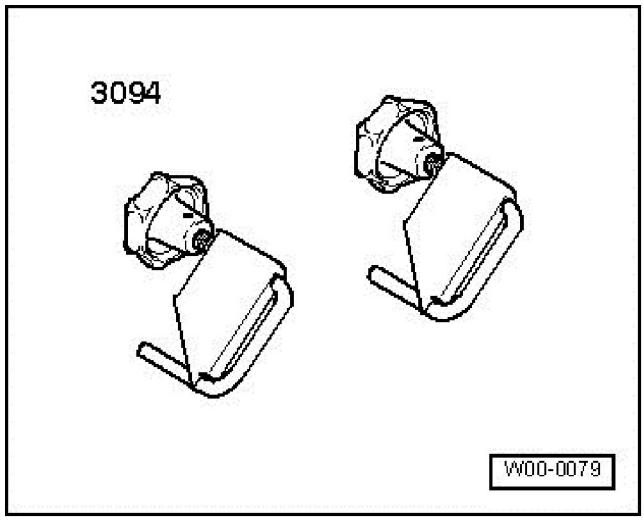
- Clamp the coolant hoses using the hose clamps up to 25 mm diameter (3094).

Water Pump: Service and Repair
Coolant pump in front of high voltage heater (PTC)

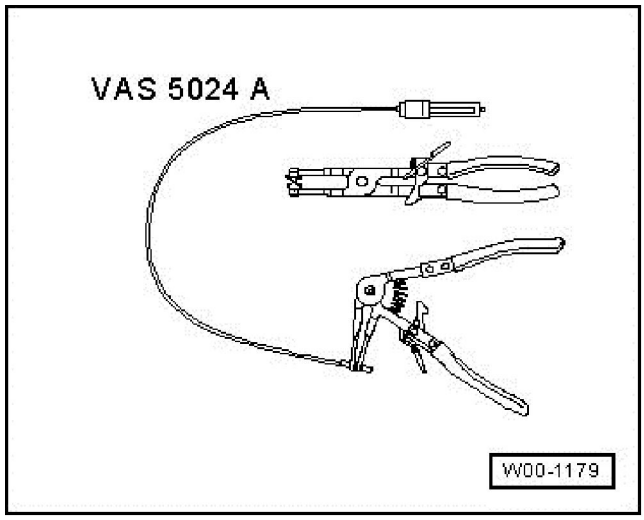
Coolant pump in front of high voltage heater (PTC)

Special tools, testers and auxiliary items required

‹› Hose clamps up to 25 mm diameter (3094)



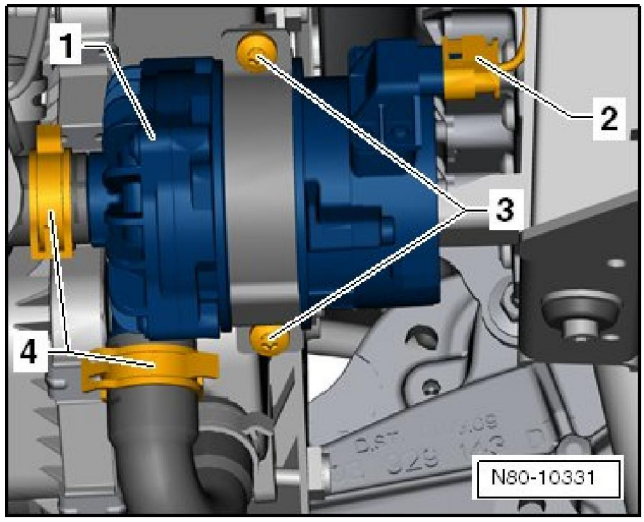
‹› Spring type clip pliers (VAS 5024A)



Removing

- Read and follow the high voltage electrical system general warnings. Refer to=> [General Warnings when Working on High Voltage Systems] See: Heating and Air Conditioning/Control Module HVAC/Service Precautions.

- Clamp the coolant hoses using the hose clamps up to 25 mm diameter (3094).



- Loosen clamp - **4** -.

Contact with hot engine coolant can cause severe scalding.

Coolant temperature can be above 100 °C with a warm engine. The cooling system is under pressure.

If necessary, reduce pressure and temperature before repairs.

- Remove the coolant hoses from the coolant pump in front of high voltage heater (PTC) (V509) - **1** -.
- Disconnect the connector - **2** - from the coolant pump in front of high voltage heater (PTC) (V509) - **1** -.
- Remove bolts - **3** - (8 +/- 0.8 Nm) and remove coolant pump in front of high voltage heater (PTC) (V509) - **1** -.

Installing

Installation is carried out in the reverse order while noting the following:

‹› Bleed the coolant circuit for the coolant pump in front of high voltage heater (PTC) (V509) after it has been installed. Information about coolant circuit bleeding can be found with the E-Fieldteam.

Water Pump: Service and Repair
Coolant Pump

Coolant Pump

Special tools, testers and auxiliary items required

‹› Refractometer (T10007)

‹› Hose Clip Pliers (VAS 6340)

‹› Torque Wrench (5-50 Nm) (V.A.G 1331)

Removing

‹› Always replace gaskets and seals.

- Drain the coolant. Refer to => [Draining and Filling] See: Cooling System/Service and Repair/Draining and Filling.

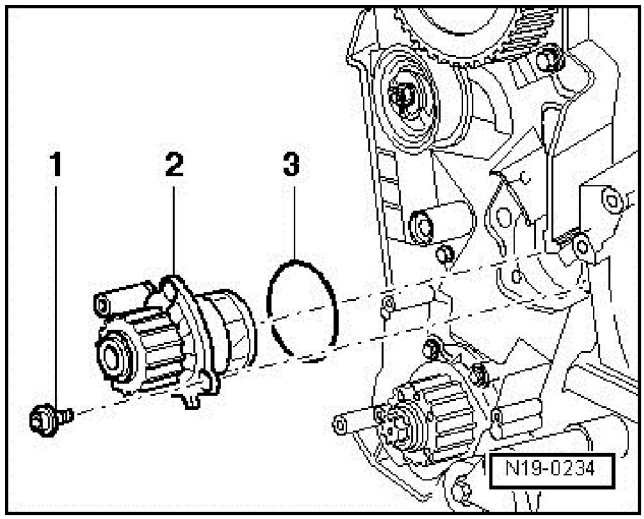
- Remove the ribbed belt. Refer to one of the following:

=> [Ribbed Belt (with Tensioner)] See: Drive Belts, Mounts, Brackets and Accessories/Drive Belt Tensioner/Service and Repair/Ribbed Belt (with Tensioner).

=> [Ribbed Belt (with Tensioning Roller)] See: Drive Belts, Mounts, Brackets and Accessories/Drive Belt Tensioner/Service and Repair/Ribbed Belt (with Tensioning Roller).

- Remove the toothed belt. Refer to => [Toothed Belt] See: Timing Components/Timing Belt/Service and Repair/Toothed Belt.

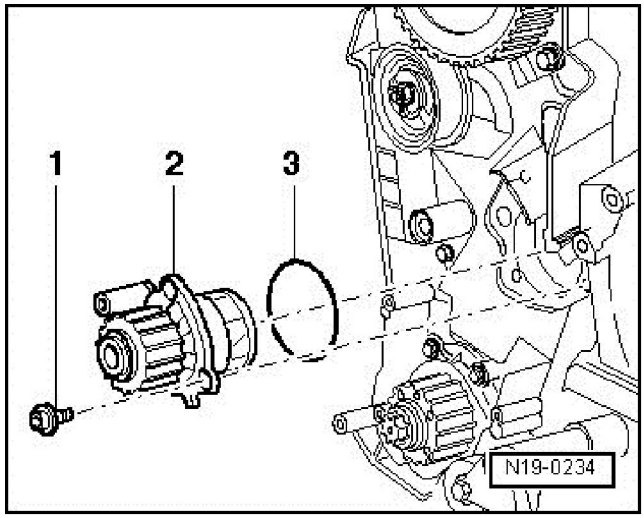
- Remove the coolant pump bolts - **1** - and carefully remove the coolant pump - **2** -.



Installing

Installation is carried out in the reverse order while noting the following:

- Lubricate the new O-ring - **3** - with coolant.



- Place the coolant pump - **2** - into the cylinder block and tighten the bolts - **1** - to 15 Nm.

‹› The sealing plug in the coolant pump faces downward.

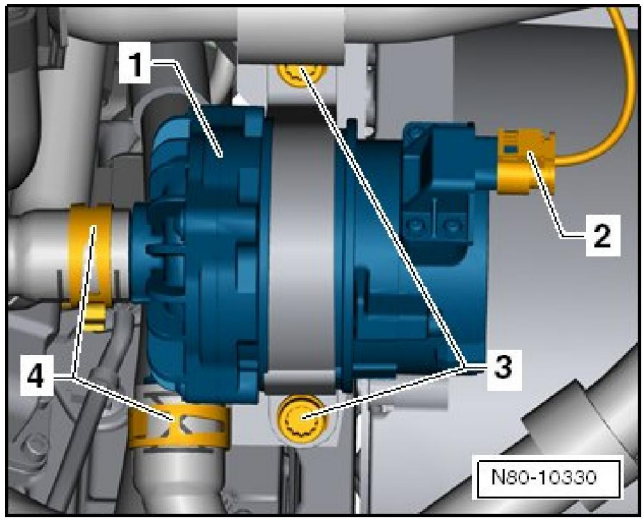
- Install the toothed belt. Refer to => [Toothed Belt] See: Timing Components/Timing Belt/Service and Repair/Toothed Belt.

- Install the ribbed belt. Refer to one of the following:

=> [Ribbed Belt (with Tensioner)] See: Drive Belts, Mounts, Brackets and Accessories/Drive Belt Tensioner/Service and Repair/Ribbed Belt (with Tensioner).

=> [Ribbed Belt (with Tensioning Roller)] See: Drive Belts, Mounts, Brackets and Accessories/Drive Belt Tensioner/Service and Repair/Ribbed Belt (with Tensioning Roller).

- Fill with coolant. Refer to => [Draining and Filling] See: Cooling System/Service and Repair/Draining and Filling.



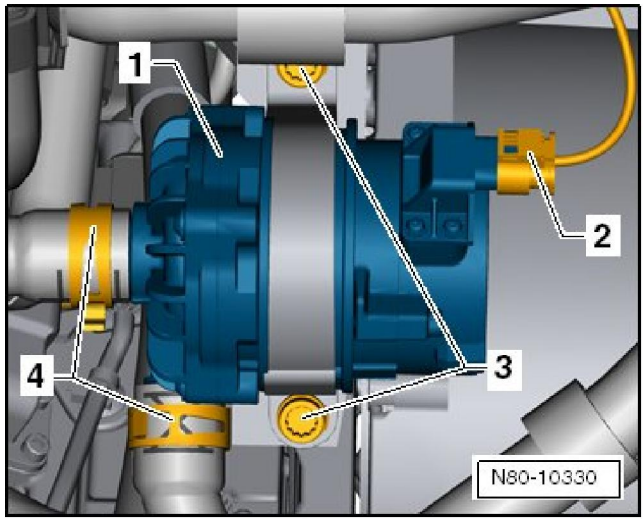
- Loosen clamp - **4** -.

Contact with hot engine coolant can cause severe scalding.

Coolant temperature can be above 100 °C with a warm engine. The cooling system is under pressure.

If necessary, reduce pressure and temperature before repairs.

- Remove the coolant hoses from the coolant pump in front of electric drive power and control electronics (V508) - **1** -.
- Disconnect the connectors - **2** - from the Coolant pump in front of electric drive power and control electronics (V508) - **1** -.



- Remove bolts - **3** - (8 +/- 0.8 Nm) and remove coolant pump in front of electric drive power and control electronics (V508) - **1** -.

Installing

Installation is carried out in the reverse order while noting the following:

‹› Bleed the coolant circuit after the coolant pump in front of electric drive power and control electronics (V508) has been installed. Information about coolant circuit bleeding can be found with the E-Fieldteam.