# WM 197819 REMOVING AND INSTALLING COOLANT TEMPERATURE SENSOR (EXCEPT TURBO COUPE, TURBO S COUPE, TURBO CABRIO & TURBO S CABRIO)

#### Tools

Designation	Туре	Number	Description	
crow-foot wrench	Commercially available tool	Nr.189-1		

#### Technical Values

Location	Description	Туре	Basic value	Tolerance 1	Tolerance 2				
Coolant temperature sensor	External Torx screw, M14 x 1.5 (brass)	Tightening torque	30 Nm (22 ft. lb.)	,					
Crankcase vent line on oilfilter housing	External Torx screw, M6 x 25	Tightening torque	10 Nm (7.5 ft. lb.)						

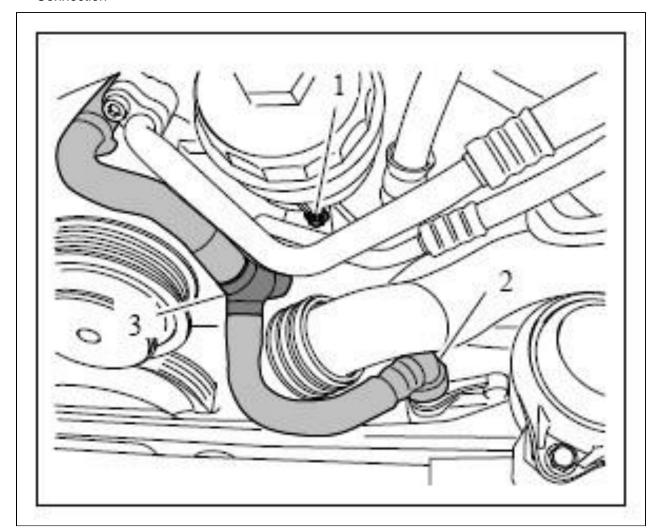
### Preliminary Work

- 1. Raise the vehicle.
  - $\rightarrow$  4X00IN01 LIFTING THE VEHICLE .
- 2. Allow engine to cool down.
- 3. Place protective covers on the vehicle to avoid damaging the body and passenger compartment.
- 4. Place cooling-water collection pan underneath.
- 5. Remove air cleaner housing.
  - $\rightarrow$  242519 REMOVING AND INSTALLING AIR CLEANER HOUSING section on "Removing".

Removing Coolant Temperature Sensor

1. Remove crankcase vent line at the oil-filter housing.

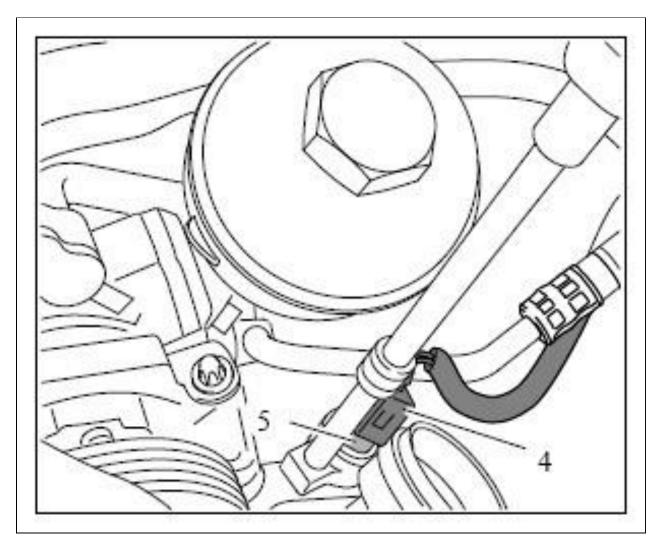
- 1. 1.1. Unscrew external Torx screw (E10, M6 x 20) -1- for the crankcase vent line on the oil-filter housing.
- 2. 1.2. Release crankcase vent line -2- and pull it off the engine ventilation cover on the cylinder head.
- 3. 1.3. Pull crankcase vent line -3- out of the oil-filter housing and lay it aside.
- 4. 1.4. Check O-rings and replace them if necessary. Fig 1: Identifying Crankcase/Vent Line Connection



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- 2. Remove coolant temperature sensor.
  - 1. 2.1. Disconnect cable plug -4-.
  - 2. 2.2. Loosen and unscrew coolant temperature sensor -5- using the crow-foot wrench Nr.189-1 .

Fig 2: Identifying Coolant Temperature Sensor



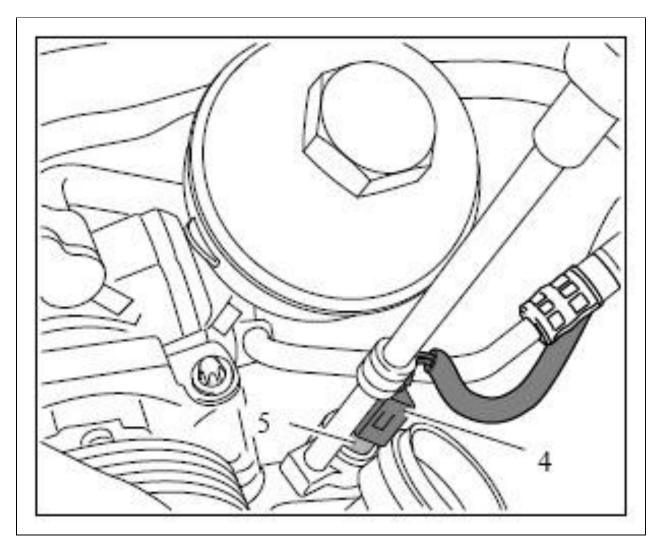
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Installing Coolant Temperature Sensor 1.

Replace sealing rings on crankcase vent line.

- 2. Install coolant temperature sensor.
  - 1. 2.1. Fit coolant temperature sensor -5- and tighten it using the crow-foot wrench Nr.189-1 .
    - → Tightening torque: 30 Nm (22 ft. lb.) -3 Nm (-2 ft. lb.)
  - 2. 2.2. Connect cable plug -4-.

Fig 3: Identifying Coolant Temperature Sensor

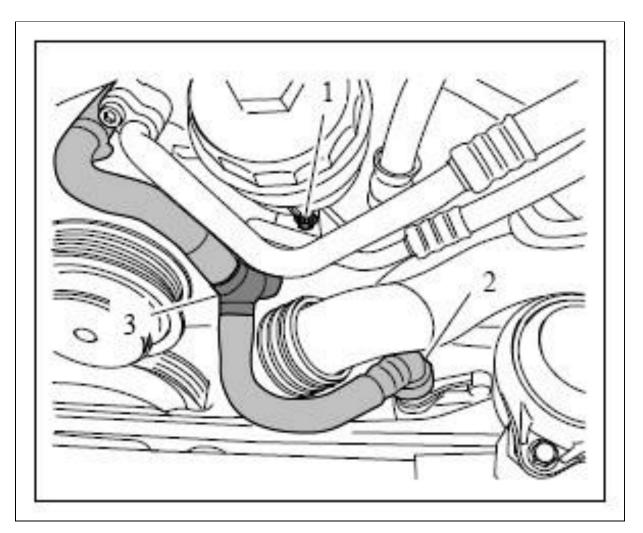


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- 3. Install crankcase vent line at the oil-filter housing.
  - 1. 3.1. Grease and fit new O-rings with Kluber Syntheso Glep grease (Porsche Part No. 000.043.204.68).
  - 2. 3.2. Connect crankcase vent line -2- . The plug-in connector must lock with an audible click.
  - 3. 3.3. Guide crankcase vent line -3- into the oil-filter housing.
  - 4. 3.4. Screw in and tighten external Torx screw (M6 x 20) -1- on the vent line at the oil-filter housing.

    → Tightening torque: 10 Nm (7.5 ft. lb.)

Fig 4: Identifying Crankcase/Vent Line Connection



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## Subsequent Work

- 1. Check the engine coolant level and top up if necessary.
  - $\rightarrow$  190101 CHECKING COOLING SYSTEM section on "Checking".
- 2. Install air cleaner housing.
  - → 242519 REMOVING AND INSTALLING AIR CLEANER HOUSING section on "Installing".