

GF14.40-W-3017C	Component description for the temperature sensor downstream of the SCR catalytic converter	15.3.06
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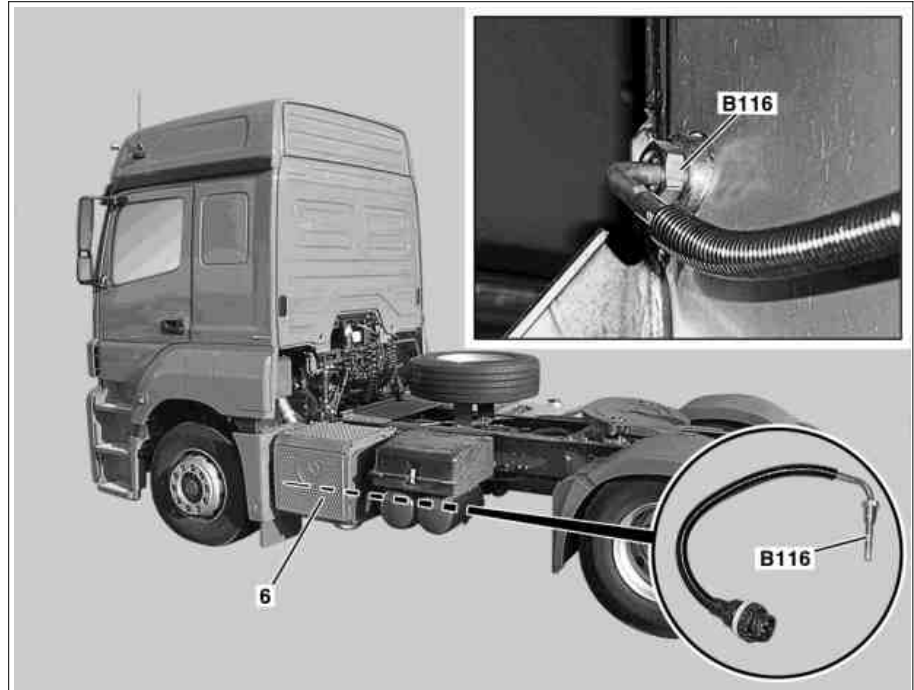
- ENGINE 900.9 in MODEL 970, 972, 975, 976 with CODE (MS4) BlueTec 4
- ENGINE 900.9 in MODEL 970, 972, 975, 976 with CODE (MS5) BlueTec 5
- ENGINE 902.9 in MODEL 970, 972, 974, 975, 976 with CODE (MS4) BlueTec 4
- ENGINE 902.9 in MODEL 970, 972, 974, 975, 976 with CODE (MS5) BlueTec 5
- ENGINE 924.9 in MODEL 970, 972, 974 with CODE (MS4) BlueTec 4
- ENGINE 924.9 in MODEL 970, 972, 974 with CODE (MS5) BlueTec 5
- ENGINE 902.9 in MODEL 950.5 /6, 952.5 /6, 953.6, 954.5, 957 with CODE (MS4) BlueTec 4
- ENGINE 902.9 in MODEL 950.5 /6, 952.5 /6, 953.6, 954.5, 957 with CODE (MS5) BlueTec 5
- ENGINE 926.9 in MODEL 950.5 /6, 952.5 /6, 953.6, 954.5, 957 with CODE (MS4) BlueTec 4
- ENGINE 926.9 in MODEL 950.5 /6, 952.5 /6, 953.6, 954.5, 957 with CODE (MS5) BlueTec 5

**Location**

6 Muffler with reduction catalytic converter

B116 Temperature sensor downstream of SCR catalytic converter

The temperature sensor downstream of the SCR catalytic converter (B116) is installed into the outlet chamber of the muffler with reduction catalytic converter (6).



W14.40-1207-06

**Task**

The temperature sensor downstream of the SCR catalytic converter (B116) detects the temperature of the exhaust flow in the outlet chamber of the muffler with reduction catalytic converter (6) and passes this information on as an electrical voltage signal to the SCR frame module control unit.

**Design**

The temperature sensor downstream of the SCR catalytic converter (B116) consists of a stainless steel threaded housing and an electrical connector..  
The sensor contains a measuring element, a PTC resistor. PTC stands for "Positive Temperature Coefficient" and means that the electrical resistance increases as the temperature increases.

The temperature sensor downstream of the SCR catalytic converter (B116) is a passive sensor (i.e., it is not supplied with voltage).

**Function**

The exhaust gas flowing past the temperature sensor downstream of the SCR catalytic converter (B116) influences the inside of the measuring element inside the sensor and thus the size of the electrical resistance. The values of the changing electrical resistance are transmitted in defined intervals as an analog signal to the SCR frame module control unit, are digitized there and then forwarded to the engine control (MR) control unit. Using this resistance value, the MR control unit calculates the associated temperature.