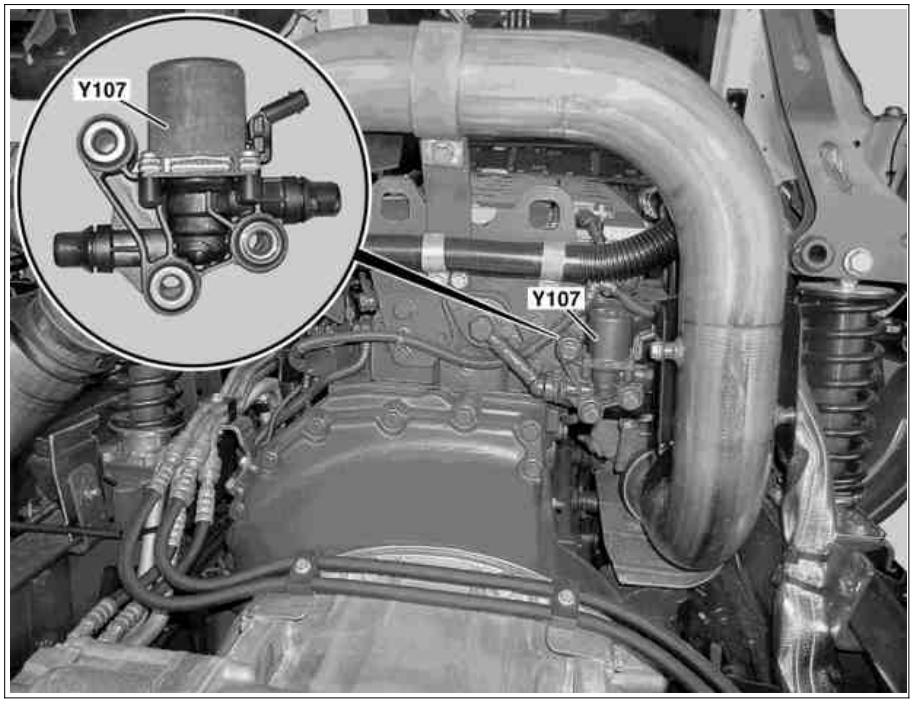
ENGINE 900.9 in MODEL 970, 972, 975, 976 with CODE (MS4) BlueTec 4
ENGINE 900.9 in MODEL 970, 972, 975, 976 with CODE (MS5) BlueTec 5
ENGINE 902.9 in MODEL 970, 972, 974, 975, 976 with CODE (MS4) BlueTec 4
ENGINE 902.9 in MODEL 970, 972, 974, 975, 976 with CODE (MS5) BlueTec 5
ENGINE 924.9 in MODEL 970, 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

Illustrated on model 950.5
Y107 SCR tank heater solenoid valve

The SCR tank heater solenoid valve (Y107) is located at the rear on the Motor at the height of the cylinder head.



W14.40-1267-06

Task

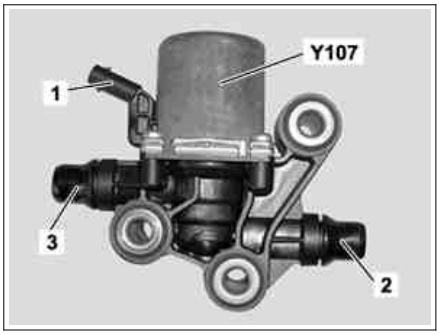
Coolant is branched off via the SCR tank heater solenoid valve (Y107) from the engine coolant circuit to heat the AdBlue line circuit and the AdBlue tank.

Design

1 Electrical connector
2 Coolant inlet
3 Coolant outlet

Y107 SCR tank heater solenoid valve

The SCR tank heater solenoid valve (Y107) is a 2/2-way valve with line fittings for coolant lines.
Inside the valve, the valve body is designed as a solenoid armature.



W14.40-1083-01

Function

The SCR tank heater solenoid valve (Y107) is actuated by the engine control MR control unit. Via the fill level and SCR temperature combination sensor integrated in the AdBlue tank, it detects when the temperature of the tank contents is approaching the defined limit value of around 8 °C. As soon as the coolant reaches a temperature of ≥65 °C, the SCR tank heater solenoid valve receives the signal to open (Y107) from the MR control unit, so that coolant is branched off from the engine coolant circuit.
When the SCR tank heater solenoid valve is not open (Y107), the coolant is available at the closed valve body inside the component.

This valve body keeps the passage between the coolant supply line and the coolant working line closed via the force of a push spring.
When current is applied the valve body slides and opens the passage so that coolant can flow through.
When the current is interrupted, the spring pushes it back into its starting position. Thus means that the passage is blocked off again.