ENGINES 113.986 ENGINES 113.987

ENGINES 113.988 up to Model Year 08 /Modification Year 07 ENGINES 113.989 up to Model Year 08 /Modification Year 07

157 Firewall catalytic converter158 Underfloor catalytic converter

A1 Instrument cluster

A1e26 "CHECK ENGINE" indicator lamp

(for USA)

A1e58 Engine diagnosis indicator lamp G3/3 Left O<sub>2</sub> sensor upstream of TWC

G3/4 Right O<sub>2</sub> sensor upstream of

**TWC** 

G3/5 Left O<sub>2</sub> sensor downstream of

**TWC** 

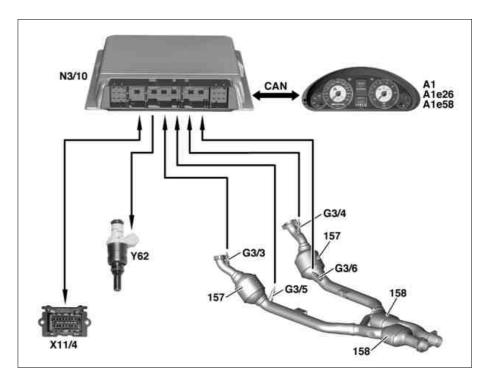
G3/6 Right O<sub>2</sub> sensor downstream of

TWC

N3/10 ME-SFI [ME] control unit X11/4 Data link connector Y62 Fuel injection valves

CAN CAN data bus

(Controller Area Network)



P07.61-3176-06

The ME-SFI [ME] control unit (N3/10) determines the lambda mean value from the O  $_2$  sensor signals downstream of TWC. This value is compared with a stored value for optimum exhaust emissions. If the deviation is too large after a number of measurements, a correction variable (delay time) is determined for the lambda control.

The correction variable (value for new O  $_2$  sensor upstream TWC approx. 0) makes it possible to compensate for aging of the O  $_2$  sensors upstream of TWC within certain limits. If the correction variable exceeds the limit value, the O  $_2$  sensors upstream of the TWC must be replaced.

The correction values are map-controlled and are implemented by the ME control unit by adapting the fuel injection. If limit values are exceeded or if the plausibility check of the O 2 A1e58 sensor signals (upstream and downstream of the catalytic converter) is failed, the engine diagnosis indicator lamp, or for A1e26 the CHECK ENGINE indicator lamp ( ) lights up in the instrument cluster (A1).

Exceeding a limit is stored in the fault memory and can be read out and deleted using STAR DIAGNOSIS.

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The effect of the firewall catalytic converters (157) is monitored with the  ${\rm O}_2$  sensor signals downstream of TWC.

Fuel injection valves, component description	Y62	GF07.03-P-6010SM
Component description for O <sub>2</sub> sensors	G3/3, G3/4, G3/5, G3/6	GF07.04-P-6100SM
ME-SFI [ME] control unit, component description	N3/10	GF07.61-P-6000SM
Component description for the exhaust system		GF49.00-P-3010SM
Three-way catalytic converter, component description	157, 158	GF49.10-P-2010SM
Component description for the engine diagnosis indicator lamp	A1e58 Except (USA)	GF54.30-P-5010SM
Component description for the "CHECK ENGINE" indicator lamp	A1e26 At USA	GF54.30-P-5011SM