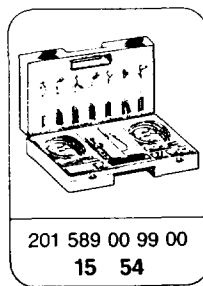
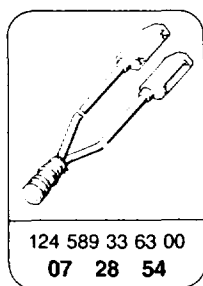
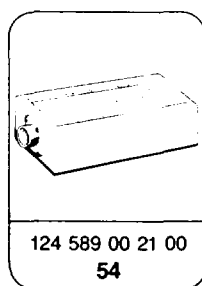


- | | | | |
|-------|---|------|--|
| A1 | Instrument cluster | K1/1 | 7-pin overvoltage protection relay 87E |
| A1e10 | Oxygen sensor indicator lamp, up to model year 1987. As of model year 1988 CHECK ENGINE indicator lamp (A1e26). | N3 | KE control unit |
| | | a | To KE control unit (N3) contact 1 |





Special tools



Commercially available tools and testers (see Workshop Equipment Manual)

Designation	e.g. Make, order no.
Multimeter	Sun, DMM-5

Symbols for testers



	Contact box
	Contact
	Connector
	Ground

Preconditions for test

- Battery voltage 11–14 V

See appropriate wiring diagram volume for wiring diagrams.


Symbols for test mode with multimeter

	Multimeter DC voltage mode
	Multimeter Resistance mode

Note

If the specification of a main test step, e.g. test step 1.0, is in order, proceed with the next main test step, e.g. test step 2.0.

If the specification of a main test step, e.g. test step 3.0, is not achieved, continue test with sub-test step, e.g. test step 3.1.

As of model year 1992 the CHECK ENGINE indicator lamp (A1e26) for  Federal is no longer fitted.

Test step	Test scope	Test connection	Operation/ Requirement	Specifi- cation	Possible cause/Remedy
1.0	Oxygen sensor failure indicator ¹⁾	Visual check	Ignition: ON	Oxygen sensor indicator lamp ¹⁾ (A1e10) lights up briefly .	Indicator lamp faulty, oxygen sensor indicator lamp (A1e10) ¹⁾ has no voltage, Open circuit in wiring cable (A1e10) → (N3) contact 15, Test KE control unit

¹⁾ As of model year 1988: CHECK ENGINE failure indicator (A1e26).

Test step	Test scope	Test connection	Operation/ Requirement	Specifi- cation	Possible cause/Remedy
2.0	Oxygen sensor indicator lamp (A1e10) ¹⁾ voltage supply	 A1e10 rt/ge ⊥ ←(V)→	Ignition: ON	11-14 V	Open circuit in wiring, Overvoltage protection relay (K1/1)
3.0	Cable ¹⁾	 A1e10 N3 gr/bl ←(Ω)→ 15	Ignition: OFF	< 1 Ω	Open circuit in wiring
4.0	CHECK ENGINE indicator lamp (A1e26) ²⁾	 A1e26 rt/ge ⊥ ←(V)→	Ignition: ON	11-14 V	Open circuit in wiring, Overvoltage protection relay (K1/1)
4.1	Cable ²⁾	 A1e26 N3 gr/gn ←(Ω)→ 15	Ignition: OFF	< 1 Ω	Open circuit in wiring

¹⁾ Up to model year 1987.

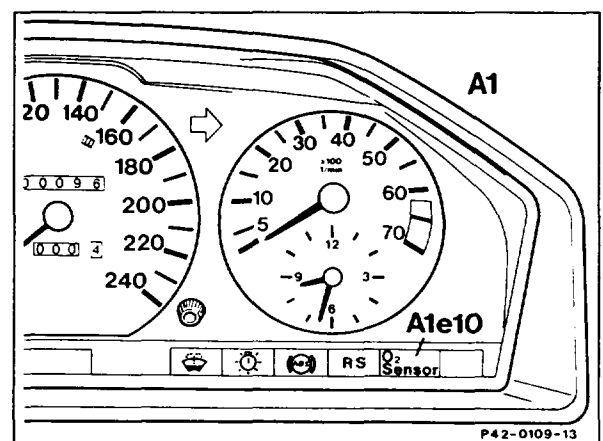
²⁾ As of model year 1988.

Oxygen sensor failure indicator as of model year 1986

A failure of the oxygen sensor is indicated in the instrument cluster (A1) by the oxygen sensor indicator lamp (A1e10) lighting up or, as of model year 1988 CHECK ENGINE indicator lamp (A1e26). The indicator lamp is actuated by the KE control unit.

Note

When the ignition is switched on, the indicator lamp lights up briefly.



As of model year 1988 the O₂-SENSOR indicator lamp in the instrument cluster has been replaced by the CHECK ENGINE indicator lamp.

