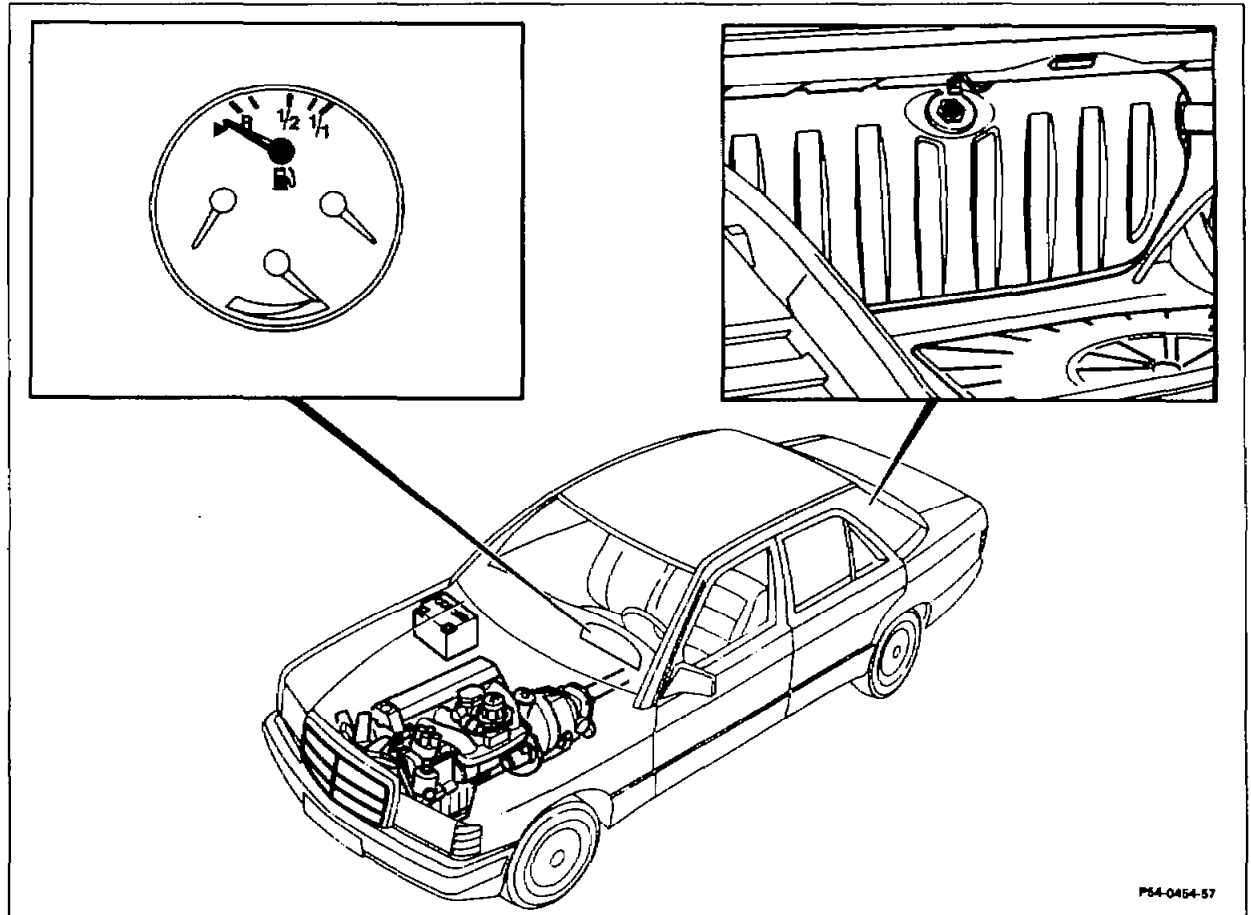


54-0257 Testing fuel gauge

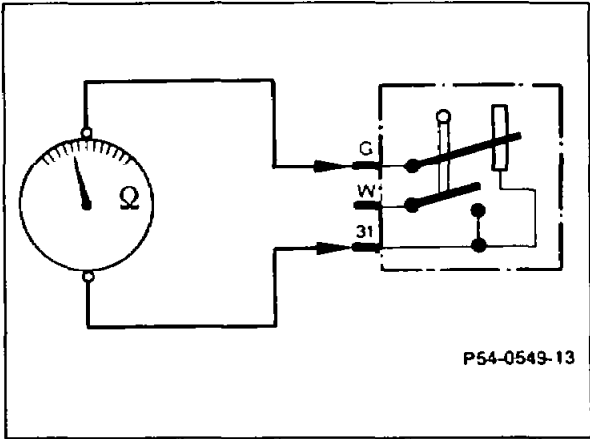
Preceding work:
Partition panel between fuel tank and trunk removed
(68-700).
Fuel gauge sensor removed (47-0120).

Operation no. of operation texts and work units or standard texts
and flat rates:



Testing fuel gauge sensor

Multimeter to terminal G and terminal 31 connect and measure resistance.



	Sedan 70 or 90 liter fuel tank	Model 124.034 (except exhaust countries) and model 124.036, 90 liter fuel tank	T-model	Convertible
In installed position Float down	85.6 ± 2.5 Ω	80.4 ± 0.6 Ω	77.8 ± 2.3 Ω	77.8 ± 0.8 Ω
Sensor turned 180° Float up	1.9 ± 0.7 Ω	1.9 ± 0.6 Ω	3.2 ± 0.7 Ω	3.2 ± 0.6 Ω

Testing reserve warning contact

Multimeter to terminal W and terminal 31 connect and measure resistance.

Specification approx. 0 Ω in installed position.
Specification ∞ Ω turned 180°.

Note

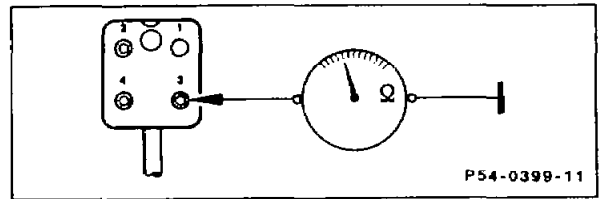
The reserve warning lamp lights up when the ignition is switched on (check function). As soon as the engine is running, it goes out provided the fuel tank contains more than the reserve quantity.

The reserve warning lamp lights up with a weak light for the check function, and with a brighter light for reserve warning.

Testing wiring harness

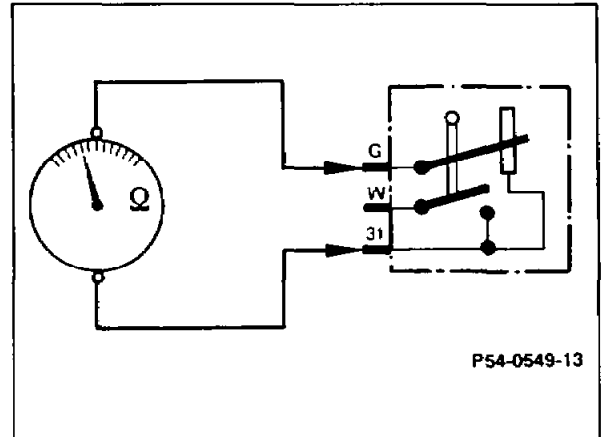
Resistance at contact 3 connector of fuel gauge sensor and vehicle ground measure.

Specification approx. 0 Ω , if test value is $\infty \Omega$
ground cable has open circuit.

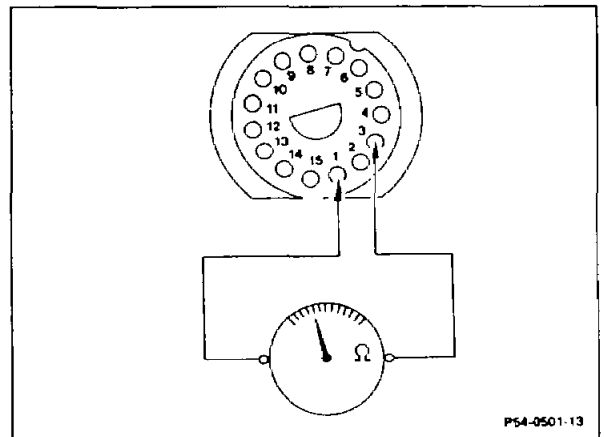


Fuel gauge sensor install (47-0120).

Measure resistance at terminal G and terminal
31 and note. The reading depends on the
contents of the fuel tank.



Connector at fuel gauge sensor plug in.
Instrument cluster remove (54-6015).
Multimeter connect to contacts 1 and 3 and measure
resistance.



Specification	is the reading measured and noted at terminal G and terminal 31 of fuel gauge sensor; minor variation possible due to line length.
Measured value higher or $\infty \Omega$	poor contact at wiring harness connectors (at instrument cluster, at main wiring harness, taillamp harness or at fuel gauge sensor), cold solder point or cable has open circuit.
No fault detected during tests	replace gauge.
Instrument cluster	install (54-6015).

Test data fuel gauge sensor

	Sedan	T-model	Mod. 124.036/ 034 ¹⁾	Convertible
Resistance with float up	$3.3 \pm 0.7 \Omega$	$8.6 \pm 0.7 \Omega$	$4.0 \pm 0.6 \Omega$	$8.6 \pm 0.7 \Omega$
Resistance with float down	$85.6 \pm 2.5 \Omega$	$77.8 \pm 2.3 \Omega$	$80.4 \pm 0.6 \Omega$	$77.8 \pm 0.8 \Omega$

¹⁾ Model 124.034 with 90 liter fuel tank (except exhaust countries)

Commercially available tester

Multimeter	e. g. Sun DMM-5
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