

3.1 Retractable Trunk Lid Grip (PSE/RTG) Model 140

Page

Diagnosis

Function Test 11/1

Electrical Test Program

Component Locations 21/1

Preparation for Test 22/1

Test 23/1

Pneumatic Test Program

Component Locations 31/1

Test 32/1

Diagnosis - Function Test (Retractable Trunk Lid Grip)

Preparation for Test

1. Check fuse F4-3 and fuse F4-11.
2. Battery voltage 11 – 14 V.
3. Central locking system **unlocked**.

Test step/Test scope	Test condition	Nominal value	Possible cause/Remedy ¹⁾
⇒ 1.0 Extend retractable trunk lid grip	Open trunk lid.	Retractable trunk lid grip extends.	<p>Retractable trunk lid grip does not extend and pump motor in PSE control module (A37, A37/1) does not run.</p> <p>23 PSE ⇒ 1.0, 23 ⇒ 1.0.</p> <p>Retractable trunk lid grip does not extend even though pump motor in PSE control module (A37, A37/1) runs.</p> <p>32 PSE ⇒ 5.0, 32 ⇒ 1.0, 3.0, Check for mechanical obstruction.</p>

¹⁾ Observe Preparation for Test, see 22.

Diagnosis - Function Test (Retractable Trunk Lid Grip)

Test step/Test scope	Test condition	Nominal value	Possible cause/Remedy ¹⁾
⇒ 2.0 Retract retractable trunk lid grip	Close trunk lid.	Trunk lid grip retracts in approx. 1 second.	<p>Retractable trunk lid grip does not extend and pump motor in PSE control module (A37, A37/1) does not run. 23 PSE ⇒ 1.0, 23 ⇒ 1.0.</p> <p>Retractable trunk lid grip does not extend even though pump motor in PSE control module (A37, A37/1) runs. 32 PSE ⇒ 6.0, 32 ⇒ 2.0, 4.0.</p>

1) Observe Preparation for Test, see 22.

Electrical Test Program - Component Locations (Retractable Trunk Lid Grip)

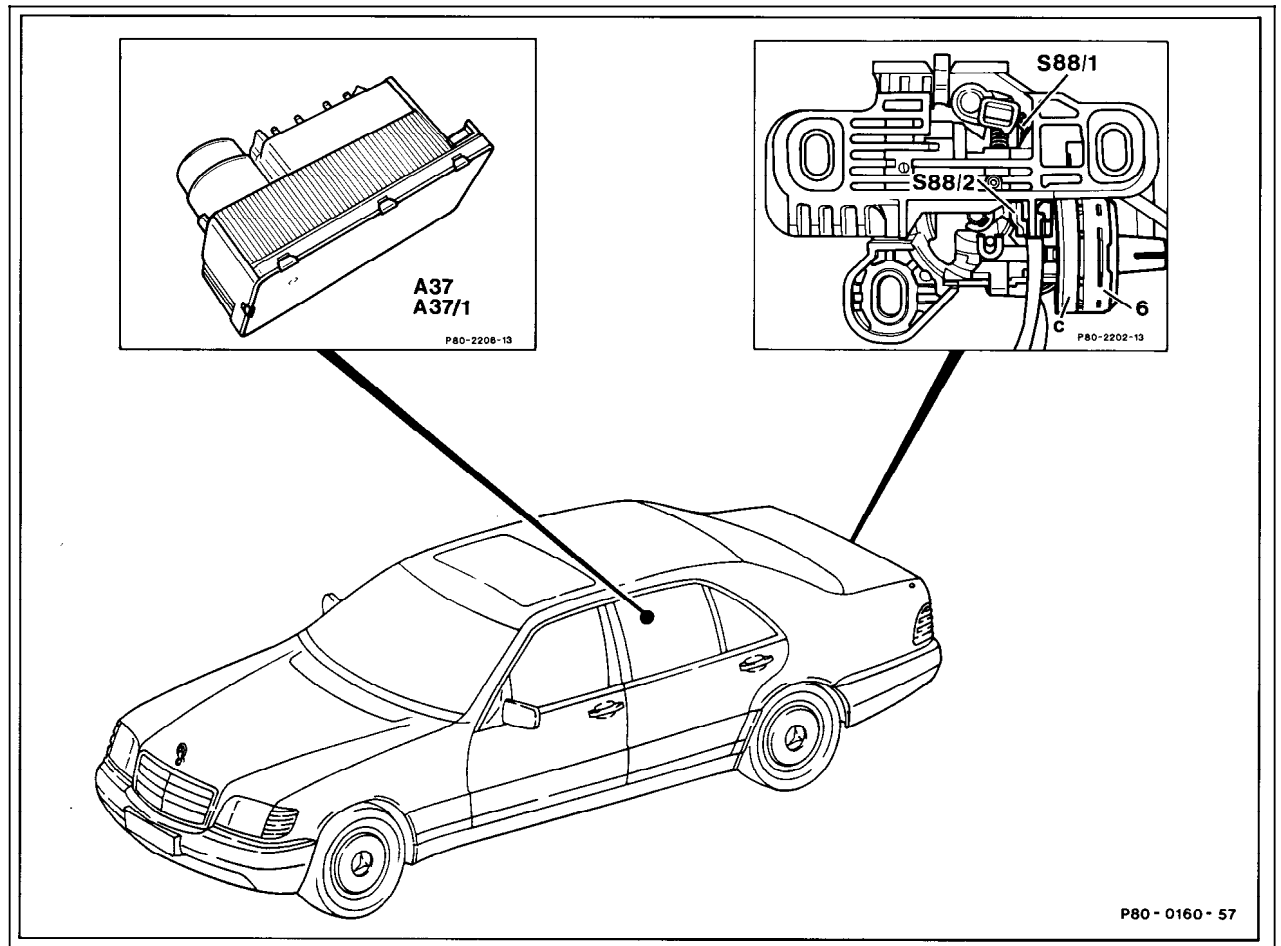


Figure 1

A37, A37/1 PSE control module
S88/1 Rotary tumbler/trunk lid microswitch

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Electrical Test Program - Preparation for Test (Retractable Trunk Lid Grip)

Preliminary work:

Diagnosis - Diagnostic Trouble Code (DTC) Memory 11 PSE (3.1)

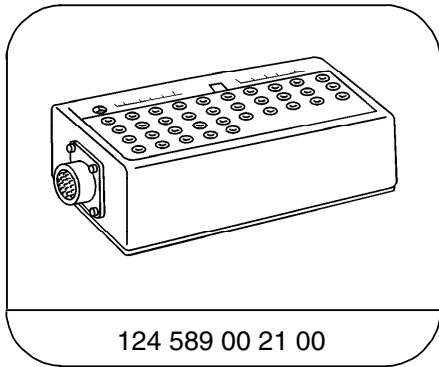
Preparation for Test:

1. Check fuse F4-3 and fuse F4-11.
2. Provide access to PSE control module (A37, A37/1).
3. Disconnect anti-theft alarm (ATA) control module (N26), infrared remote central locking (IRCL) control module (N54).
4. Connect socket box with test cable according to connection diagram, see 22 Fig.1.

Electrical wiring diagrams

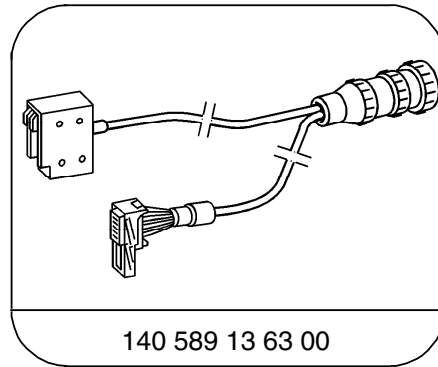
See Electrical Troubleshooting Manual, Model 140, Volume 2.

Special Tools



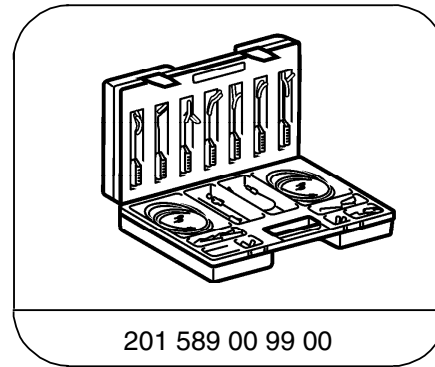
124 589 00 21 00

35-pin socket box



140 589 13 63 00

21-pin test cable



201 589 00 99 00

Electrical connecting set

Equipment

Multimeter ¹⁾	Fluke models 23, 83, 85, 87
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¹⁾ Available through the MBUSA Standard Equipment Program.

Electrical Test Program - Preparation for Test (Retractable Trunk Lid Grip)

Connection Diagram - Socket Box

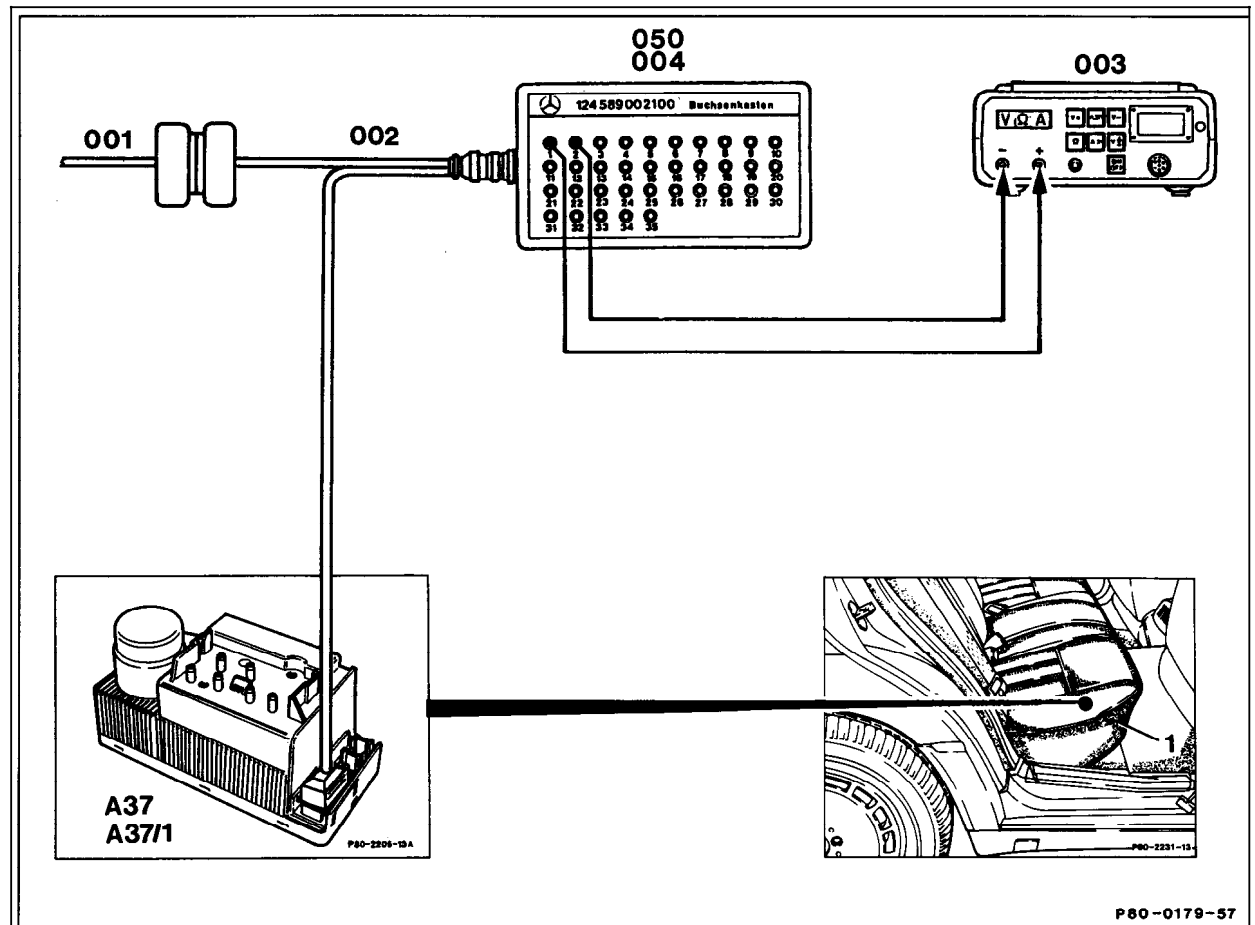


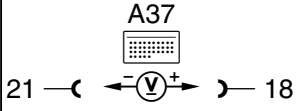
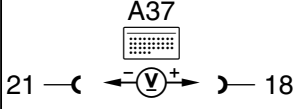

Figure 1

- 001 PSE control module connector
- 002 Test cable
- 003 Multimeter
- 004/050 Socket box
- A37, A37/1 PSE control module

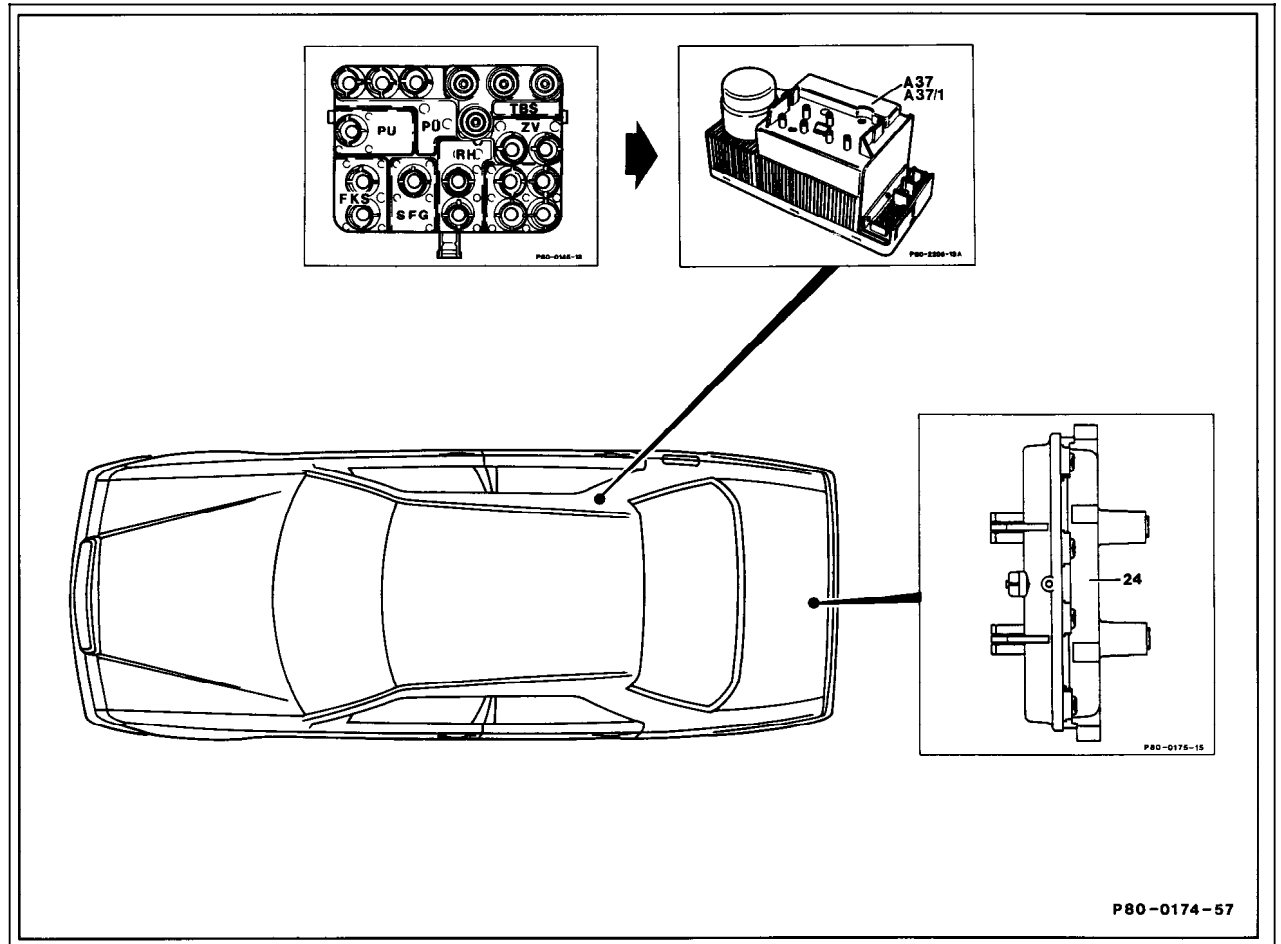
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Electrical Test Program - Test (Retractable Trunk Lid Grip)

Test step DTC	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 1.0	Rotary tumbler/trunk lid switch (S88/1) Voltage supply	 <p>A37 21 —(—(←(V)→ —(—()— 18</p>	Disconnect right and left tail lamp connectors. Trunk lid: closed open	>5 V <1 V	Wiring, ⇒ 1.1, PSE control module (A37 or A37/1). Wiring, ⇒ 1.1, A37 or A37/1.
⇒ 1.1	S88/1 Resistance	 <p>A37 21 —(—(←(V)→ —(—()— 18</p>	Disconnect PSE control module (A37 or A37/1) from  Trunk lid: closed open	>20 kΩ <40 Ω	Wiring, S88/1. Wiring, S88/1.

Pneumatic Test Program - Component Locations (Retractable Trunk Lid Grip)



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Pneumatic Test Program – Test (RTG)

Preliminary work:

Diagnosis - Diagnostic Trouble Code (DTC) Memory	11 PSE
PSE Control Module Test	32 PSE

Note:

As of 12/93, in vehicles as of chassis end number 118 121, pressure or vacuum for the lock striker actuator is applied in parallel with the retractable trunk lid grip actuator. If during diagnosis, the retractable trunk lid grip actuator and vacuum line are determined to be leak-free, be certain to check the multiple connector (3, Figure 1) and lock striker actuator (2, Figure 1) for possible leakage as well.

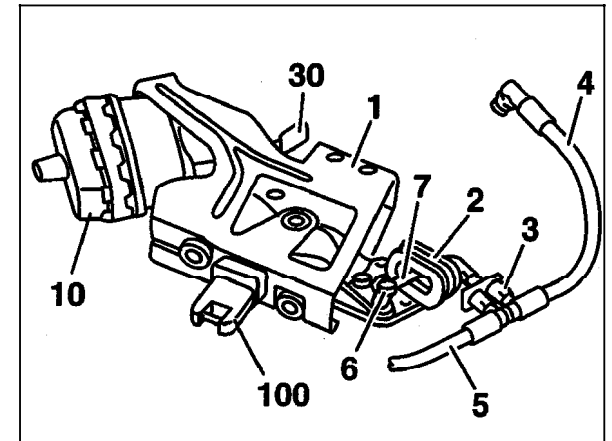
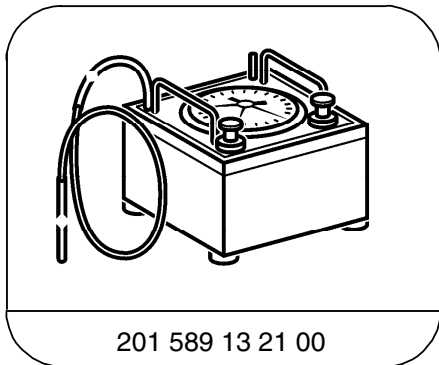


Figure 1

P88-5310-13

Special Tools



201 589 13 21 00

Tester

Pneumatic Test Program – Test (RTG)

A. Actuator

Preparation for Test:

1. Remove actuator (see SMS, Repair Instructions, Job No. 88-600).
2. Connect vacuum/pressure tester to the pneumatic connection of the actuator.
3. Seal the actuator throttle (arrow, Figure 2) with cap 000 987 29 45.

Parts Required for Test:

1	Pneumatic line	124 800 44 15
1	Connector	117 078 03 81
1	Cap	000 987 29 45

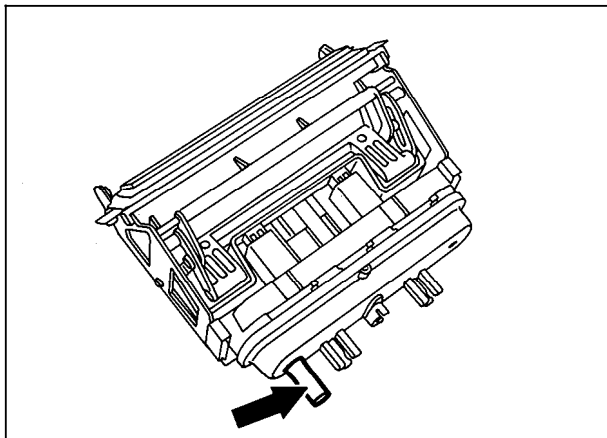


Figure 2

P80-5040-13

Pneumatic Test Program – Test (RTG)

A. Actuator

⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	Actuator holding pressure	Yellow connector on tester.	Apply 600 mbar pressure to actuator.	Pressure loss 25 mbar in 1 minute	Actuator leaks. Replace actuator.
2.0	Actuator holding vacuum	Black connector on tester.	Apply 300 mbar vacuum to actuator.	Vacuum loss 25 mbar in 1 minute	Actuator leaks. Replace actuator.

Pneumatic Test Program – Test (RTG)

B. Lines

Preparation for Test:

1. Connect tester to one end of the pneumatic line and cap the other end with cap 000 987 29 45.

Parts Required for Test:

- | | | |
|---|-----------------------|---------------|
| 1 | Cap | 000 987 29 45 |
| 1 | Connector, 50 mm long | 007 997 61 82 |
| 1 | Connector | 129 805 04 44 |

⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
3.0	Line holding pressure	Yellow connector on tester	Apply 600 mbar pressure to line.	Pressure drop 0 mbar in 1 minute	Pneumatic line leaks. Repair/replace line.
4.0	Line holding vacuum	Black connector on tester	Apply 300 mbar vacuum to line.	Vacuum loss 0 mbar in 1 minute	Pneumatic line leaks. Repair/replace line.