



PORSCHE

Technical Manual

Boxster

Technical Information

Repair

Contents:

Group 0

Diagnosis

Part 2 (as of Repair Group 69)

WKD 483 521

TITEL.CHP

Foreword

The workshop documentation for the Boxster model has the designation **"Boxster" Technical Manual** and contains **Technical Information** as well as instructions on **Repairs**.

The integration of the technical information published in the "Boxster" Technical Manual with the descriptive matter on repairs provides the user with a complex reference work that combines into one book associated or cross-referenced material of relevance to workshops and originating from various information media.

The "Boxster" Technical Manual consists of 15 folders, subdivided into the following Groups

0	Entire vehicle – General
0	Diagnosis, part 1 (up to Repair Group 45) ^{*1}
0	Diagnosis, part 2 (as of Repair Group 69) ^{*2}
1	Engine, part 1 (up to Repair Group 13) ^{*3}
1	Engine, part 2 (as of Repair Group 15) ^{*4}
2	Fuel, exhaust, engine electronics
3	Transmission, manual transmission
3	Transmission, automatic transmission
4	Running gear
5	Body
6	Body equipment, exterior
7	Body equipment, interior
8 / 9	Air conditioning / Electrics
9	Circuit diagrams, part 1 (up to and including the '99 model) ^{*5}
9	Circuit diagrams, part 2 (as of the '00 model) ^{*6}

***1** The two folders with Group 0 are to be regarded as one folder; i.e. file the "Technical Information" notices only in front of the repair descriptions in the folder "Group 0 – Diagnosis, part 1" (up to Repair Group 45).

***2** The **second folder** "Group 0 – Diagnosis, part 2" (as of Repair Group 69) includes the further Repair Groups belonging to Group 0.

***3** The two folders with Group 1 are to be regarded as one folder; i.e. file the "Technical Information" notices only in front of the repair descriptions in the folder "Group 1 – Engine, part 1" (up to Repair Group 13).

***4** The **second folder** "Group 1 – Engine, part 2" (as of Repair Group 15) includes the further Repair Groups belonging to Group 1.

- | *5 The two folders with Group 9 are to be regarded as one folder; i.e. file the "Technical Information" notices only in front of the repair descriptions in the folder "Group 9 – Circuit diagrams, part 1" (up to the '99 model).
- *6 The **second folder** "Group 9 – Circuit diagrams, part 2" (as of the '00 model) includes the further circuit diagrams belonging to Group 9.

The "Boxster" Technical Manual has the same structure in each folder, with the following breakdown for all Groups:

Title page, "Boxster" Technical Manual

> Foreword

Title page: "Technical Information"

> Table of Contents, Technical information
> Technical information

Title page: "Repair"

> Repair Groups: overview
> Table of Contents, repairs
> General / technical data
> Instructions on repairs

As can be seen from the breakdown, the published Technical Information is in the front part of each folder – numbered according to the Groups. The Table of Contents assigned to each Group will be periodically updated.

Following the Technical Information, separated by a title page, the instructions on repairs – assigned according to the Groups or broken down into Repair Groups – are included in the folder.

The instructions on repairs will be extended and updated by means of supplements.

Note

Sheets that already exist in the "Boxster" Technical Manual and are updated or revised and thereby exchanged by a supplement are designated "Replacement sheet". Revisions or technical modifications on pages of these replacement sheets are identified for the user with a vertical bar at the margin.

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0 Diagnosis, part 2 (as of Repair Group 69)**69 Airbag diagnosis**

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96 Alarm system diagnosis

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69 01

Diagnosis/troubleshooting

Airbag

System B 04

Contents overview

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General information

The airbag system is constantly monitored by a diagnosis unit in the triggering unit. Any fault is signalled by a warning light.

The warning light for the airbag system lights up in the event of a fault.

The airbag warning light lights for approx. 3 seconds after the ignition is switched on and goes out if no fault has been entered in the fault memory.

If it lights up again, this indicates a fault in the system. The fault can be read out with the Porsche System Tester 2.

The following components must be removed and replaced following an accident in which the airbag system was triggered:

Contact unit

Airbag unit, driver's side

Airbag unit, passenger's side, if fitted and if triggered.

The triggering unit must be replaced after the airbag is triggered for the third time.

Note

A period of 10 seconds is required to enable the triggering unit to identify all faults in the system. In order to guarantee that every possible fault source is checked during the vehicle test, the ignition must be switched on for at least 10 seconds.

The fault memory must be cleared following a fault in the airbag system and after it has been remedied.

The replacement of a component must be noted in the Guarantee and Maintenance booklet. To do this, attach the documentation number in a free panel intended for that purpose. The documentation number is attached to the replacement part as a tear-off sticker.

Menu

Overview of the possible menus

Fault memory

Events

Lock

Extract coding

Modify coding

Fault memory: see Page 69 - D 10

Events: see Page 69 - D 17

Lock: see Page 69 - D 18

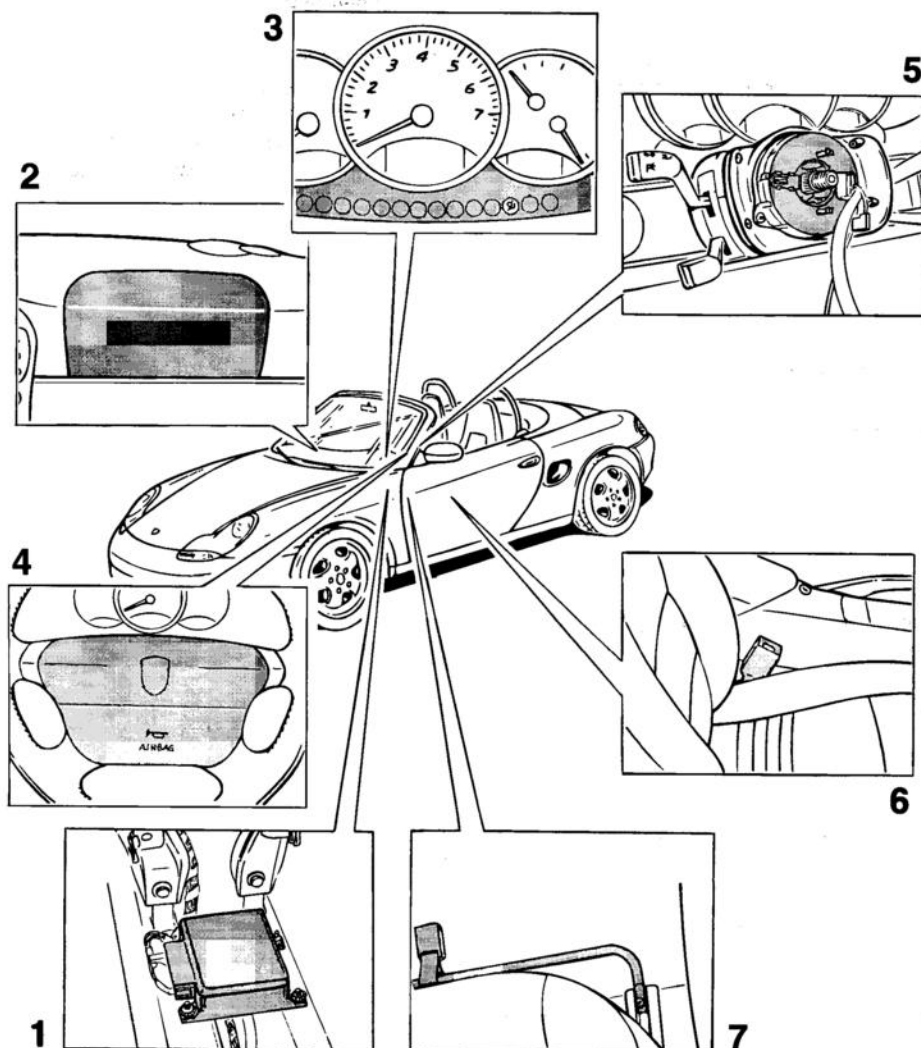
Extract coding: see Page 69 - D 19

Modify coding: see Page 69 - D 20

Note

Observe safety instructions (see Service No. 69)
when working on the airbag system.

Component arrangement



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Function, individual components

1. Triggering unit

Processes the incoming signals and triggers the airbag system when an accident is identified.

2. Passenger's airbag unit (if fitted)

Contains the airbag and the gas generator for the passenger.

3. Warning light

1. System readiness indicator.
2. Fault indication.

4. Driver's airbag unit

Contains the airbag and the gas generator for the driver.

5. Contact unit

Connection between the triggering unit and driver's airbag unit.

6. Belt buckle, driver/passenger

A switch is installed in each belt buckle in order to detect whether the seat belt is fastened or not.

7. Plug connection, child restraint system

If a child restraint system is used, the passenger's airbag unit must be deactivated. A plug connection (buckle) is installed under the passenger's seat for this purpose. The tongue of the child restraint system must be inserted into this plug connection.

System description

The airbag system consists of the components: triggering unit, contact unit, driver's airbag unit, passenger's airbag unit, child restraint system plug connection, belt buckle for driver, belt buckle for passenger and the warning light. A system self-test is performed after the ignition is switched on. The warning light is switched on during the self-test. If no faults are stored in the fault memory, the warning light goes out after approx. 3 seconds.

Up to max. 10 faults can be stored. A start and stop fault clock is kept for each fault.

The triggering unit has the following functions:

- Crash recognition and triggering time calculation

- Triggering the airbag system

- Recording the crash data

- Self-test and permanent monitoring of the airbag system

- Fault storage

- Fault display

- Fault output

- System readiness display

If the triggering unit is replaced, the data record for the appropriate vehicle must be loaded with the Porsche System Tester 2 and the triggering unit must be locked.

The warning light flashes before locking. The warning light goes out after locking was performed successfully (if no fault is present).

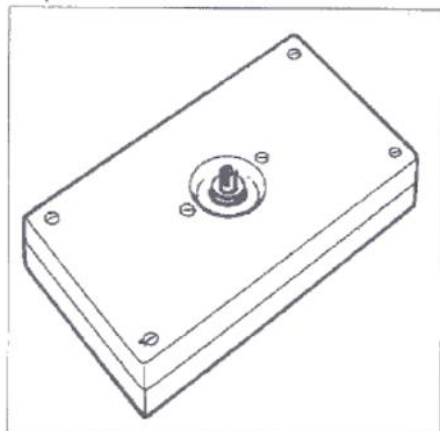
The triggering unit need not be replaced until after the third time the airbag is triggered or if the fault memory can no longer be cleared.

Tools

The following equipment is required for troubleshooting:

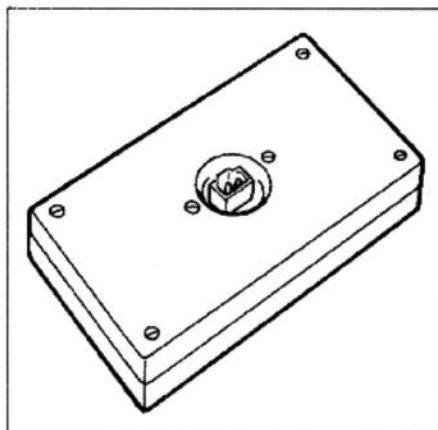
1. Porsche System Tester 2

2. Special tool 9516



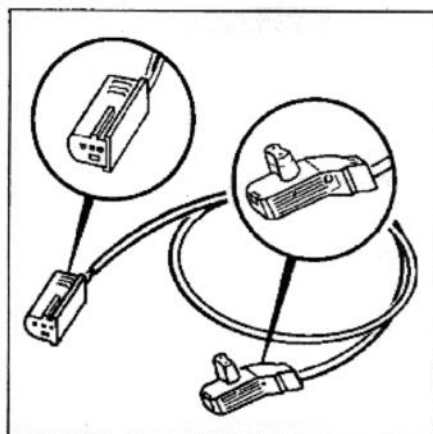
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3. Special tool 9516/1



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4. Special tool 9566



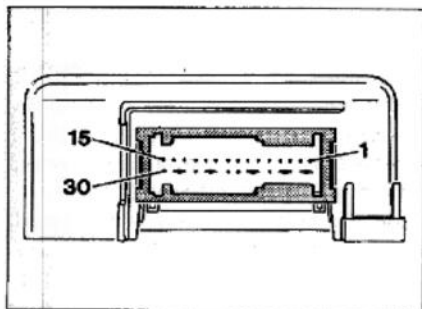
1798-68

5. Commercially available digital multimeter

Note

The special tools are used to check the ignition pill circuits.

For safety reasons, it is not permissible to drive with special tools attached instead of the airbag units.

Connector assignment, triggering unit

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- 1 - Free
- 2 - Free
- 3 - Free
- 4 - Free
- 5 - Terminal 15
- 6 - Terminal 31
- 7 - Warning light
- 8 - Buckle, passenger
- 9 - K-lead
- 10 - Driver's ignition pill, positive
- 11 - Driver's ignition pill, negative
- 12 - Buckle, driver
- 13 - Passenger's ignition pill, positive
- 14 - Passenger's ignition pill, negative
- 15 - Free
- 16/17 - Lug for opening the short circuit bridge
- 18/19 - Lug for opening the short circuit bridge
- 20 - Free
- 21/22 - Lug for opening the short circuit bridge
- 23 - Child seat detection
- 24 - Crash output
- 25/26 - Lug for opening the short circuit bridge
- 27 - Free
- 28/29 - Lug for opening the short circuit bridge
- 30 - Free

Fault memory

Overview of possible faults

Airbag warning light

Supply voltage

Ignition circuit, driver

Ignition circuit, passenger

Belt buckle, driver

Belt buckle, passenger

Child seat detection

Control unit faulty

When a changeover occurs from present to not present, a fault stop clock is started. The fault stop clock shows the time which has passed since the fault was no longer present. However, with both clocks, only ignition on times are shown. This means that the clocks are stopped when the ignition is switched off.

Note

If the fault memory cannot be erased, it is necessary to check whether the coding corresponds to the vehicle equipment.

A plus sign (+) present in the line or not present indicates a loose contact. A counter is started when the symbol changes from not present to present. This counter indicates how often the change took place from present to not present.

When a fault is identified, a fault start clock is started. The fault start clock shows the time in hours, minutes and seconds that has passed since the fault first occurred.

Fault overview

Test point	Fault code	Fault effect	Page
1	04, 05, 20, 21, 36	Fault memory	69 - D 12
2	10, 11, 26, 27, 39	Fault memory	69 - D 13
3	03	Fault memory	69 - D 14
4	01, 02	Fault memory **	69 - D 14
5	44, 45, 46, 50	Fault memory	69 - D 15
6	47, 48, 49, 51	Fault memory	69 - D 15
7	70, 71, 72, 73	Fault memory	69 - D 16
8	≥ 100	Fault memory ****	69 - D 16
9	XXX	Fault memory	69 - D 16

The warning light is on as long as the limit value is exceeded or not reached.

The warning light is not on.

In the case of fault codes 50, 51 and 65, the warning light is on as long as the limit value is exceeded or not reached.

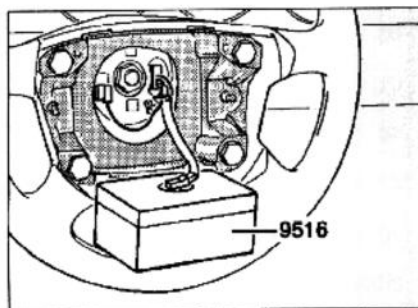
**** The fault memory cannot be cleared. The triggering unit must be replaced.

Fault, fault code**Possible causes, elimination, notes****Test point 1**

Ignition circuit, driver

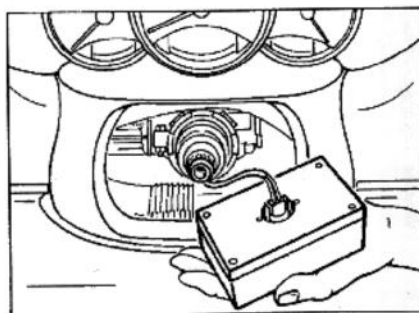
Fault codes 04, 05,
20, 21, 36

1. Remove driver's airbag unit.
2. Attach the special tool 9516 instead of the airbag unit.



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3. Clear the fault memory.
4. Check whether the fault appears again.
 - a) If the fault does not appear again, replace the airbag unit.
 - b) If the fault appears again, disconnect plug connection to the contact unit and attach special tool 9516/1.



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Fault, fault code	Possible causes, elimination, notes
	5. Clear the fault memory.
	6. Check whether the fault appears again.
	a) If the fault does not appear again, replace the contact unit.
	b) If the fault appears again, check the wiring harness for pinches and chafing damage.
	c) If no fault is found on the wiring harness, replace the triggering unit.

Note**Fault code 36**

This fault path is checked only once after the ignition is switched on.

Proceed as described below to determine whether the fault was eliminated:

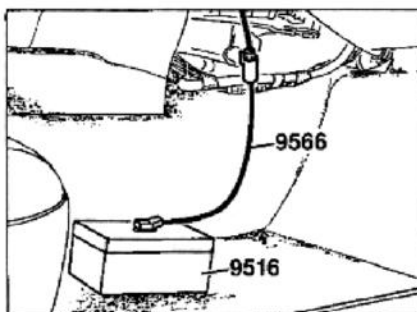
1. Clear the fault memory.
2. Switch off ignition.
3. Remove ignition key.
4. Switch on ignition.

Test point 2

Ignition circuit, passenger

Fault codes 10, 11, 26, 27, 39

1. Disconnect the plug connection to the passenger's airbag unit.
2. Attach the special tool 9516 in conjunction with special tool 9566.



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Fault, fault code	Possible causes, elimination, notes
	3. Clear the fault memory. 4. Check whether the fault appears again. a) If the fault does not appear again, replace the passenger's airbag unit. b) If the fault appears again, check the wiring harness for pinches and chafing damage. c) If no fault is found on the wiring harness, replace the triggering unit.

Note

Fault code 39

This fault path is checked only once after the ignition is switched on.

Proceed as described below to determine whether the fault was eliminated:

1. Clear the fault memory.
2. Switch off ignition.
3. Remove ignition key.
4. Switch on ignition.

Test point 3

Supply voltage

Fault code 03

1. Inspect the battery and generator.
2. Inspect the plug connection on the triggering unit for corrosion.

Test point 4

Airbag warning light

Fault codes 01, 02

1. Inspect the fuse for the supply voltage (terminal 15) for the instrument cluster.
2. Inspect the bulb and replace it if necessary.
3. Inspect the lead from the triggering unit pin 7 to the warning light for continuity and short circuit to positive.

Fault, fault code

Possible causes, elimination, notes

Test point 5

Belt buckle, driver

Fault codes 44, 45, 46, 50

1. Disconnect the plug connection X16.
2. Connect ohmmeter on the pin side on pins B7 and B8.
Display: approx. 400 Ω

Note

The belt tongue must not be inserted in the buckle.

3. Connect ohmmeter on the pin side on pin B7 and ground.
Display: $\infty \Omega$
4. Connect ohmmeter on the pin side on pins B7 and B8.
Insert the belt tongue in the buckle.
Display: approx. 100 Ω
5. Inspect the wiring harness to the triggering unit for pinches and chafing damage.

Test point 6

Belt buckle, passenger

Fault codes 47, 48, 49, 51

1. Disconnect the plug connection X17.
2. Connect ohmmeter on the pin side on pins B7 and B8.
Display: approx. 400 Ω

Note

The belt tongue must not be inserted in the buckle.

3. Connect ohmmeter on the pin side on pin B7 and ground.
Display: $\infty \Omega$
4. Connect ohmmeter on the pin side on pins B7 and B8.
Insert the belt tongue in the buckle.
Display: approx. 100 Ω
5. Inspect the wiring harness to the triggering unit for pinches and chafing damage.

Fault, fault code	Possible causes, elimination, notes
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Test point 7

Child seat detection

**Fault codes 70, 71,
72, 73**

1. Disconnect the plug on the triggering unit.
2. Connect ohmmeter to plug, pin 23 and ground.
Plug of child seat not inserted.
Display: approx. 2 k Ω

Plug of child seat inserted.
Display: approx. 260 Ω
3. Inspect the wiring harness to the triggering unit for pinches and chafing damage.

Test point 8

Control module

Fault code ≥ 100

Replace the triggering unit.

Test point 9

Unknown fault code

Fault code XXX

1. Inspect the ground points for corrosion.
2. Inspect the ignition on the secondary side.
3. Clear the fault memory.

Events

Crash data can be read out under the menu item Events. Up to max. three events can be stored. Each event covers 16 bytes. The triggering unit must be replaced after the third event, since the airbag warning light lights up continuously and the events cannot be deleted.

Lock

An unlocked triggering unit can be locked under the menu item **Lock**.

A locked triggering unit **cannot be unlocked again**.

If a triggering unit is unlocked, the airbag warning light flashes. The triggering unit must then be locked.

Replacement triggering units are supplied unlocked.

1. Select Driver's/Passenger's airbag or Driver's airbag according to the vehicle equipment.

2. Select vehicle type.

Note

The vehicle type cannot be changed again.

3. Select **Lock**.

If there is no fault, the following message is displayed after a short waiting period:

Airbag was locked

This ends locking.

The following messages can be displayed in a fault state:

Airbag was already locked

No Porsche control unit

Incorrect vehicle type

Incorrect database version

Incorrect equipment

In the event of a fault, the triggering unit cannot be locked.

In the case of the "wrong equipment" message, select the correct equipment.

Replace the triggering unit in the case of the other messages.

Extract coding

Under the menu item **Extract coding**, you can read out which equipment features are activated and which are not. Also, it is possible to read out the vehicle type and the data record version, and where the airbag triggering unit was locked.

The following equipment features can be read out:

Driver's/passenger's airbag

Driver's airbag only

Buckle (detects whether seat belt is fastened)

Child seat occupancy (detects whether a child seat is being used on the passenger's side)

USA (vehicles)

Modify coding

Under the menu item `Modify coding`, you can adapt the airbag triggering unit to the vehicle equipment.

After the airbag triggering unit is replaced, the coding must be adapted to the vehicle equipment.

The following equipment features can be changed:

Driver's/passenger's airbag

Buckle

Seat occupancy (passenger)

Child seat occupancy (passenger)

Note

If the coding does not agree with the vehicle equipment, faults will be displayed that do not really exist.

The ignition must be switched off and the ignition key removed after the coding is changed.

69 01 Diagnosis/troubleshooting, airbag**Diagnosis/Troubleshooting****Airbag****System B 05**

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Modify coding	69 - D 43

General information

The airbag system is constantly monitored by a diagnosis unit in the triggering unit. Any fault is signalled by a warning light.

The warning light for the airbag system lights up in the event of a fault.

The airbag warning light lights for approx. 3 seconds after the ignition is switched on and goes out if no fault has been entered in the fault memory.

If it lights up again, this indicates a fault in the system. The fault can be read out with the Porsche System Tester 2.

Note

A period of 10 seconds is required to enable the triggering unit to identify all faults in the system. In order to guarantee that every possible fault source is checked during the vehicle test, the ignition must be switched on for at least 10 seconds.

The fault memory must be cleared following a fault in the airbag system and after it has been remedied.

The replacement of a component must be noted in the Guarantee and Maintenance booklet. To do this, attach the documentation number in a free panel intended for that purpose. The documentation number is attached to the replacement part as a tear-off sticker.

The following components must be removed and replaced following an accident in which the airbag system was triggered:

Contact unit

Triggered airbag unit(s)

The triggering unit must be replaced after the airbag is triggered for the third time.



Warning:

Danger of injury

> Observe safety instructions when working on the airbag system (see Serv. No. 69).



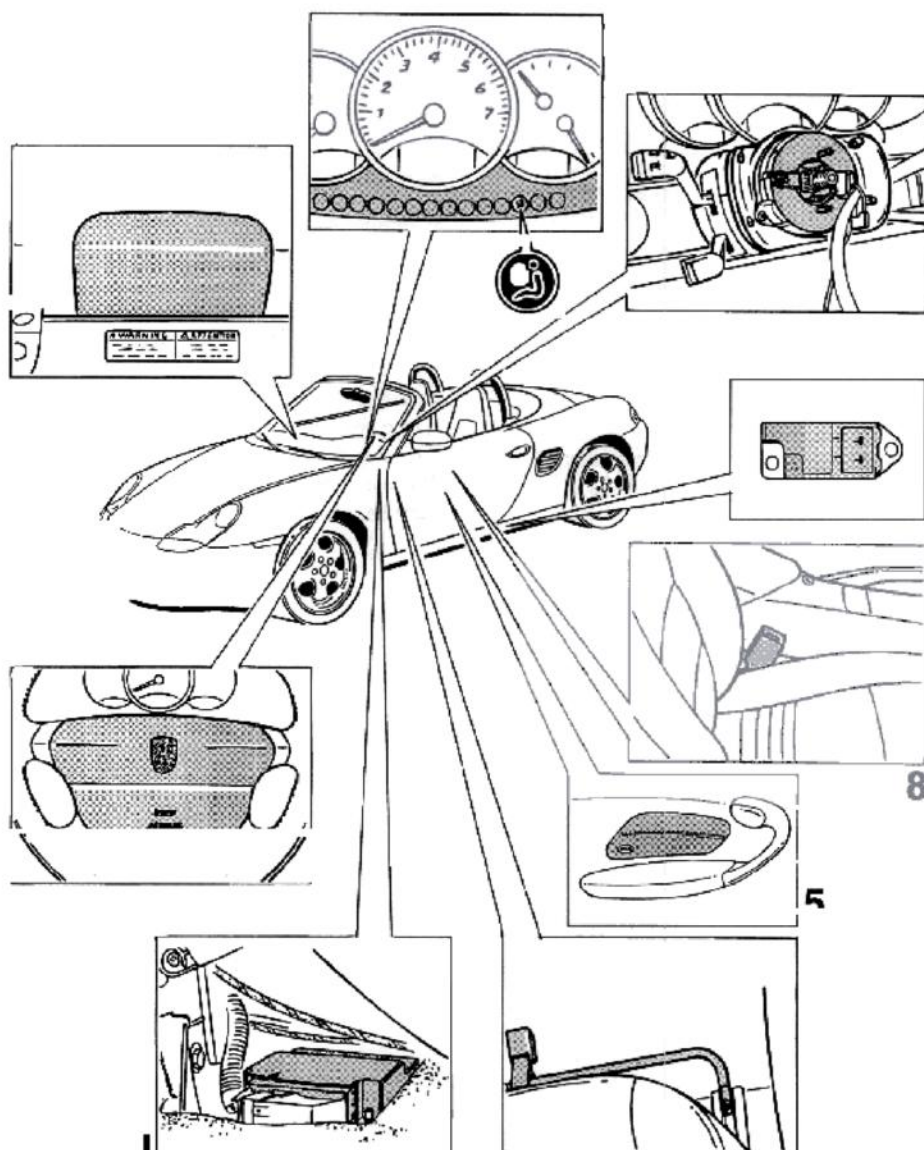
Menu

Overview of the possible menus

Fault memory:	see Page 69 - D 31
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Extract coding:	see Page 69 - D 42
Modify coding:	see Page 69 - D 43



Component arrangement



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Function, individual components

1. Triggering unit

Processes the incoming signals and triggers the airbag system when an accident is identified.

2. Passenger's airbag unit

Contains the airbag and the gas generator for the passenger.

3. Warning light

1. System readiness indicator.
2. Fault indication.

4. Driver's airbag unit

Contains the airbag and the gas generator for the driver.

5. Side airbags

The side airbags are located in the doors.
The side airbags include the airbag and the gas generator.

6. Contact unit

Connection between the triggering unit and driver's airbag unit.

7. Sensors for airbag

The two sensors are located at the right and left sides and measure the lateral acceleration in a side impact.

8. Belt buckle, driver/passenger

A switch is installed in each belt buckle in order to detect whether the seat belt is fastened or not.

9. Plug connection, child restraint system

If a child restraint system is used, the passenger's airbag unit must be deactivated.
A plug connection (buckle) is installed under the passenger's seat for this purpose.
The tongue of the child restraint system must be inserted into this plug connection.

System description

The airbag system consists of the following components:

Triggering unit

Contact unit

Driver's airbag unit

Passenger's airbag unit

Side airbags

Sensors for airbag (side-airbag sensors)

Plug connection, child restraint system

Belt buckle for driver

Belt buckle for passenger

Warning light

Self-test and permanent monitoring of the airbag system

Fault storage

Fault display

Fault output

System readiness display

The triggering unit need not be replaced until after the third time the airbag is triggered or if the fault memory can no longer be cleared.

If the triggering unit is replaced, the data record for the appropriate vehicle must be loaded with the Porsche System Tester 2 and the triggering unit must be locked.

The warning light flashes before locking.

The warning light goes out after locking was performed successfully (if no fault is present).

A system self-test is performed after the ignition is switched on. The warning light is switched on during the self-test. If no faults are stored in the fault memory, the warning light goes out after approx. 3 seconds.

Up to max. 10 faults can be stored. A start and stop fault clock is kept for each fault.

The triggering unit has the following functions:

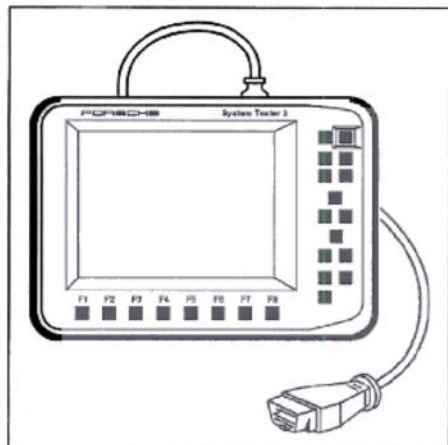
Crash recognition and triggering time calculation

Triggering the airbag system

Recording the crash data

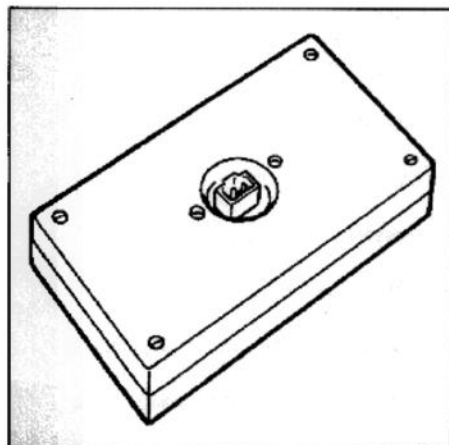
Tools

The following equipment is required for troubleshooting:



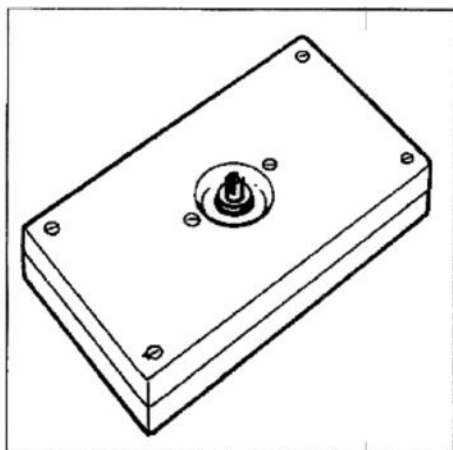
Porsche System Tester 2

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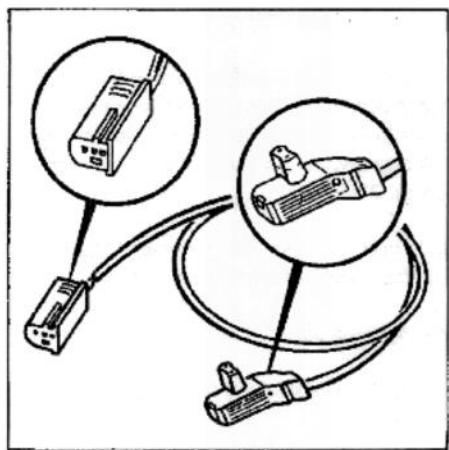
Special tool 9516/1

561_68



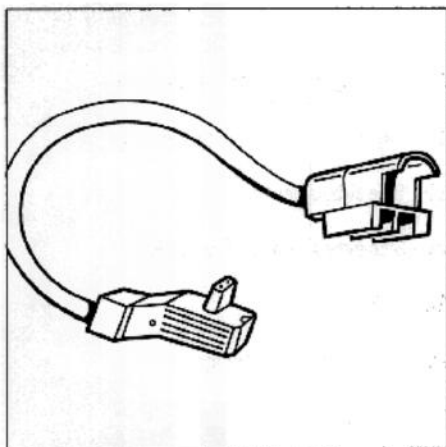
Special tool 9516

560_68



Special tool 9566

1798_68



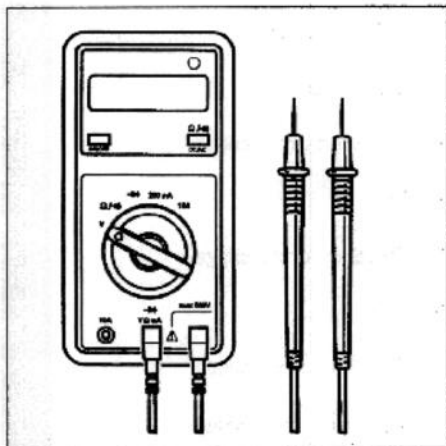
Special tool 9516/2

311_96



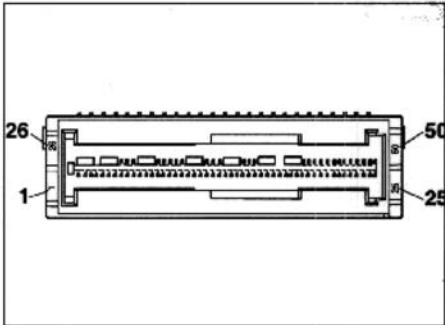
Caution!
Danger of injury if vehicle is driven with the special tools in place!

> Never drive with special tools attached instead of the airbag units.



Commercially available digital multimeter

2178_28

Connector assignment, triggering unit

313_98

- | | |
|--|--|
| 1 to 4 - Free | 18 - Passenger's side airbag, positive |
| 5 - Terminal 86 | 19 - Passenger's side airbag, negative |
| 6 - Terminal 31 | 20 - Side-airbag sensor, driver |
| 7 - Warning light | 21 - Side-airbag sensor, passenger |
| 8 - Buckle, passenger | 22 to 25 - Free |
| 9 - K-lead | 26 \ 27 - Short circuit bridge |
| 10 - Driver's ignition pill, positive | 28 \ 29 - Short circuit bridge |
| 11 - Driver's ignition pill, negative | 30 - Free |
| 12 - Buckle, driver | 31 \ 32 - Short circuit bridge |
| 13 - Passenger's ignition pill, positive | 33 - Child seat detection |
| 14 - Passenger's ignition pill, negative | 34 - Crash output |
| 15 - Free | 35 \ 36 - Short circuit bridge |
| 16 - Driver's side airbag, positive | 37 - Free |
| 17 - Driver's side airbag, negative | 38 \ 39 - Short circuit bridge |
| | 40 - Free |
| | 41 \ 42 - Short circuit bridge |
| | 43 \ 44 - Short circuit bridge |
| | 45 to 50 - Free |

Fault memory

Overview of possible faults

Airbag warning light
Supply voltage
Ignition circuit, driver
Ignition circuit, passenger
Ignition circuit, side airbag
Side-airbag sensor
Belt buckle, driver
Belt buckle, passenger
Child seat detection

Note

If the fault memory cannot be erased, it is necessary to check whether the coding corresponds to the vehicle equipment.

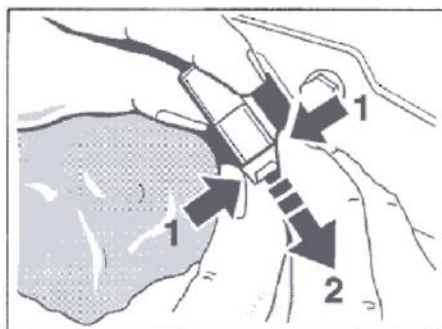
When a fault is stored, the Porsche System Tester 2 can provide more information about the fault if the F8 key is pressed. A counter is started when the symbol changes from *not present* to *present*. This counter indicates how often the change took place from *present* to *not present*. At this changeover, the display simultaneously changes from *static* to *sporadic*, which indicates a **loose contact**.

When a fault is identified, a fault start clock is started. The fault start clock shows the time in hours, minutes and seconds that has passed since the fault first occurred.

When a changeover occurs from *present* to *not present*, a fault stop clock is started. The fault stop clock shows the time which has passed since the fault was no longer present. However, with both clocks, only ignition-on times are shown. This means that the clocks are stopped when the ignition is switched off.

Unplugging the side-airbag plug

Press the locking tabs on both sides on the plug together and simultaneously pull out the plug.



Unplugging the side-airbag plug

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Fault overview

Test point	Fault code	Fault effect	Page
	04, 05, 20, 21, 36	Fault memory	69 - D 33
2	10, 11, 26, 27, 39	Fault memory	69 - D 34
3	03	Fault memory	69 - D 35
4	01, 02	Fault memory	69 - D 35
5	44, 45, 46, 50	Fault memory	69 - D 36
6	47, 48, 49, 51	Fault memory	69 - D 36
7	70, 71, 72, 73	Fault memory	69 - D 37
8	12, 13, 14, 15 28, 29, 30, 31 40, 41	Fault memory	69 - D 37
9	85, 87	Fault memory	69 - D 38
10	86, 88	Fault memory	69 - D 38
11	53, 56	Fault memory	69 - D 38
12	XXX	Fault memory	69 - D 39

Note

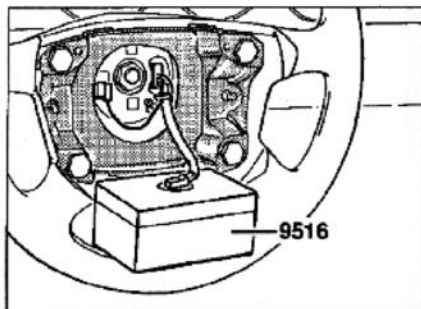
Fault codes 100 and higher are internal control module faults. The fault memory cannot be cleared. The control module must be replaced.

Fault, fault code**Possible causes, elimination, notes****Test point 1**

Ignition circuit, driver

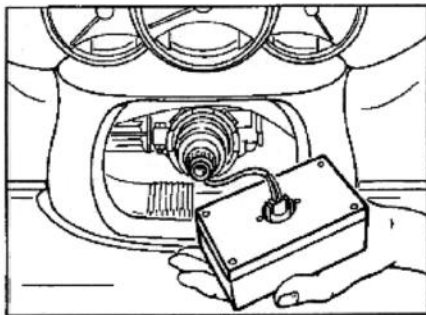
**Fault codes 04, 05,
20, 21, 36**

1. Remove driver's airbag unit.
2. Attach the special tool 9516 instead of the airbag unit.



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3. Clear the fault memory.
4. Check whether the fault appears again.
 - a) If the fault does not appear again, replace the airbag unit.
 - b) If the fault appears again, disconnect plug connection to the contact unit and attach special tool 9516/1.



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Fault, fault code**Possible causes, elimination, notes**

5. Clear the fault memory.
6. Check whether the fault appears again.
 - a) If the fault does not appear again, replace the contact unit.
 - b) If the fault appears again, check the wiring harness for pinches and chafing damage.
 - c) If no fault is found on the wiring harness, replace the triggering unit.

Proceed as described below to determine whether the fault was eliminated:

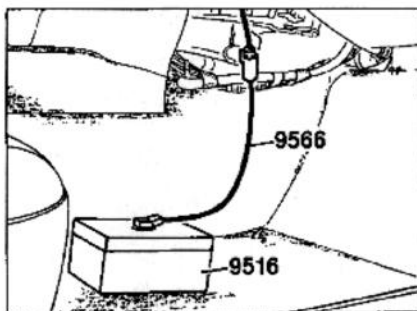
1. Clear the fault memory.
2. Switch off ignition.
3. Remove ignition key.
4. Switch on ignition.

Test point 2

Ignition circuit, passenger

**Fault codes 10, 11,
26, 27, 39**

1. Disconnect the plug connection to the passenger's airbag unit.
2. Attach the special tool 9516 in conjunction with special tool 9566.



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Fault, fault code

Possible causes, elimination, notes

3. Clear the fault memory.
4. Check whether the fault appears again.
 - a) If the fault does not appear again, replace the passenger's airbag unit.
 - b) If the fault appears again, check the wiring harness for pinches and chafing damage.
 - c) If no fault is found on the wiring harness, replace the triggering unit.

Proceed as described below to determine whether the fault was eliminated:

1. Clear the fault memory.
2. Switch off ignition.
3. Remove ignition key.
4. Switch on ignition.

Test point 3

Supply voltage

Fault code 03

1. Inspect the battery and generator.
2. Inspect the plug connection on the triggering unit for corrosion.

Note

The warning light is on as long as the limit value is exceeded or not reached.

Test point 4

Airbag warning light

Fault codes 01, 02

1. Inspect the fuse for the supply voltage (terminal 15) for the instrument cluster.
2. Inspect the bulb and replace it if necessary.
3. Inspect the lead from the triggering unit pin 7 to the warning light for continuity and short circuit to positive.

Fault, fault code	Possible causes, elimination, notes
-------------------	-------------------------------------

Test point 5

Belt buckle, driver

**Fault codes 44, 45,
46, 50**

1. Disconnect the plug connection X16.
2. Connect ohmmeter on the pin side on pins B7 and B8.
Display: approx. 400 Ω

Note

The belt tongue must not be inserted in the buckle.

3. Connect ohmmeter on the pin side on pin B7 and ground.
Display: $\infty \Omega$
4. Connect ohmmeter on the pin side on pins B7 and B8.
Insert the belt tongue in the buckle.
Display: approx. 100 Ω
5. Inspect the wiring harness to the triggering unit for pinches and chafing damage.

Note

The warning light is on as long as the limit value is exceeded or not reached.

Test point 6

Belt buckle, passenger

**Fault codes 47, 48,
49, 51**

1. Disconnect the plug connection X17.
2. Connect ohmmeter on the pin side on pins B7 and B8.
Display: approx. 400 Ω

Note

The belt tongue must not be inserted in the buckle.

3. Connect ohmmeter on the pin side on pin B7 and ground.
Display: $\infty \Omega$
4. Connect ohmmeter on the pin side on pins B7 and B8.
Insert the belt tongue in the buckle.
Display: approx. 100 Ω
5. Inspect the wiring harness to the triggering unit for pinches and chafing damage.

Fault, Fault code**Possible causes, elimination, notes****Test point 7**

Child seat detection

**Fault codes 70, 71,
72, 73**

1. Disconnect the plug on the triggering unit.
2. Connect ohmmeter to plug, pin 23 and ground.
Plug of child seat not inserted.
Display: approx. 2 k Ω

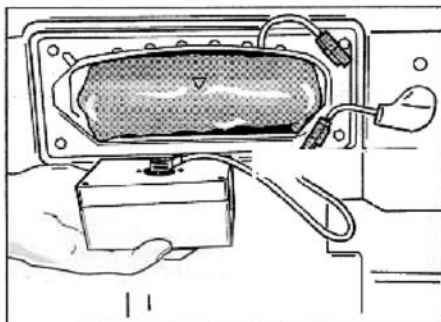
Plug of child seat inserted.
Display: approx. 260 Ω
3. Inspect the wiring harness to the triggering unit for pinches and chafing damage.

Test point 8

Ignition circuit, side airbag

**Fault codes 12, 13, 14,
15, 28, 29, 30, 31, 40, 41**

1. Pull off plug on the side airbag unit.
2. Connect special tools 9516 and 9516/2.
3. Clear fault memory.



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4. Check whether the fault appears again.

a) If the fault does not appear again, replace the side airbag.

b) If the fault appears again with the special tool, check the wiring harness for pinches and chafing damage.

c) If no faults are found on the wiring harness, replace the control unit.

Test point 9

Side-airbag sensor
(sensor for airbag)

Fault codes 85, 87

These faults are stored in the following cases:

1. There is an open circuit in the wire to the sensor.
2. There is a short to ground / voltage between pin 3 (sensor for airbag) and control module pin 20 or pin 21.
3. The sensor or control module is faulty.

Check wire to the sensor for open circuit / leakage resistance.
If no fault is detected in the wire, replace sensor.

Test point 10

Side-airbag sensor
(sensor for airbag)

Fault codes 86, 88

These faults are stored if there is a defect in the sensor.

Replace side-airbag sensor.

Test point 11

Side-airbag sensor
(sensor for airbag)

Fault codes 53, 56

These faults are stored if an incorrect side-airbag sensor is installed.

Replace the side-airbag sensor.

Test point 12

Unknown fault code

Fault code XXX

1. Inspect the ground points for corrosion.
2. Inspect the ignition on the secondary side.
3. Clear the fault memory.



Events

Crash data can be read out under the menu item **Events**. Up to max. three events can be stored. Each event covers 16 bytes.

The triggering unit must be replaced after the third event, since the airbag warning light lights up continuously and the events cannot be deleted.

Lock

An unlocked triggering unit can be locked under the menu item **Lock**.

A locked triggering unit **cannot be unlocked again**.

If a triggering unit is unlocked, the airbag warning light flashes. The triggering unit must then be locked.

Replacement triggering units are supplied unlocked.

1. Select Driver's/Passenger's airbag or Driver's airbag according to the vehicle equipment.
2. Select vehicle type.

Note

The vehicle type cannot be changed again.

3. Select Lock.

If there is no fault, the following message is displayed after a short waiting period:

Airbag was locked

This ends locking.

The following messages can be displayed in a fault state:

Airbag was already locked

No Porsche control unit

Incorrect vehicle type

Incorrect database version

Incorrect equipment

In the event of a fault, the triggering unit cannot be locked.

In the case of the "wrong equipment" message, select the correct equipment.

Replace the triggering unit in the case of the other messages.

Extract coding

Under the menu item `Extract coding`, you can read out which equipment features are activated and which are not. Also, it is possible to read out the vehicle type and the data record version, and where the airbag triggering unit was locked.

The following equipment features can be read out:

Driver's/passenger's airbag

Driver's airbag only

Buckle (detects whether seat belt is fastened)

Child seat occupancy (detects whether a child seat is being used on the passenger's side)

USA (vehicles)

Modify coding

Under the menu item `Modify coding`, you can adapt the airbag triggering unit to the vehicle equipment.

After the airbag triggering unit is replaced, the coding must be adapted to the vehicle equipment.

The following equipment features can be changed:

Driver's/passenger's airbag

Buckle

Seat occupancy (passenger)

Child seat occupancy (passenger)

USA vehicles

Note

If the coding does not agree with the vehicle equipment, faults will be displayed that do not really exist.

The ignition must be switched off and the ignition key removed after the coding is changed.

72 98 Diagnosis/troubleshooting, seat memory (System S 01)**Diagnosis/Troubleshooting****Seat memory****System S 01**