

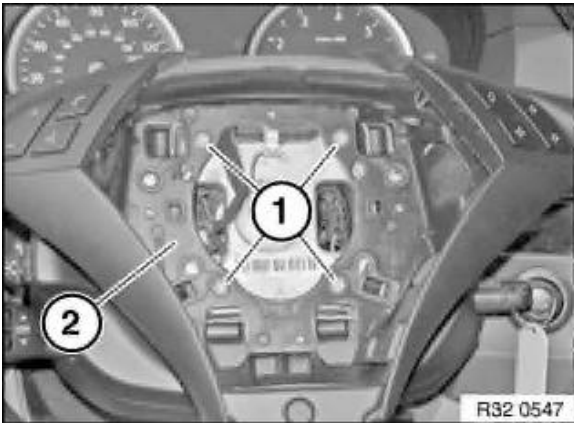
**Important!**

Do not twist volute spring cassette.

When installing, make sure that the locking pin on the rear side of the steering wheel engages in the driver recess.

*Necessary preliminary tasks:*

- Remove airbag unit
- Move steering wheel to straight-ahead position

Replacement only:

Release screws (1).

**Important!**

Risk of breakage!

Carefully remove multifunction steering wheel switches with decorative strips and retaining plate (2) from steering wheel.

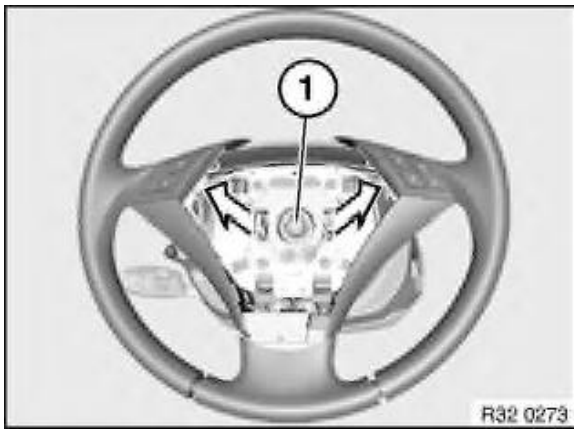
Disconnect plug connections on rear side.

*Installation:*

Make sure connecting cables are correctly routed.

Make sure that decorative strips and both multifunction steering wheel switches are correctly positioned on steering wheel (guide pins must not be damaged).

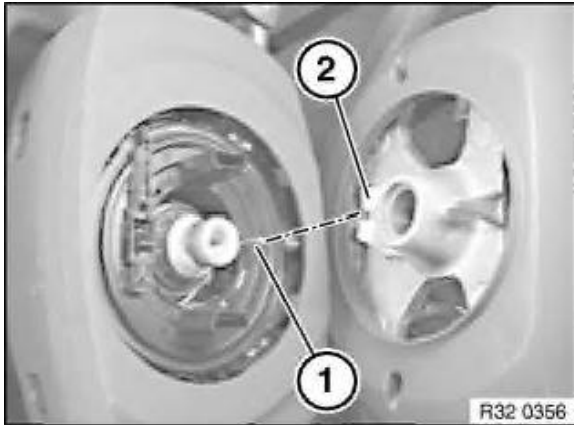
Tightening torque 32 33 2AZ .



Disconnect plug connection(s).  
Remove connecting lead(s) from steering wheel.  
Release screw (1) and remove steering wheel.  
Secure volute spring cassette with adhesive tape against twisting.

*Installation:*

Make sure connecting lead(s) is/are correctly laid.  
Tightening torque 32 33 1AZ .



*Installation:*

Locking pin (1) must engage in recess of driver (2).  
Align steering wheel using grooved tothing to steering column and attach.

**Warning!**

Observe the following instructions to avoid any risk of injury by the airbag unit.

- Comply with safety regulations for handling components with gas generators.
- Do not exert any force on the airbag unit.
- Use only specified tools for releasing the airbag unit.

Note: Incorrect handling may result in triggering of the airbag unit and thereby cause serious injury.

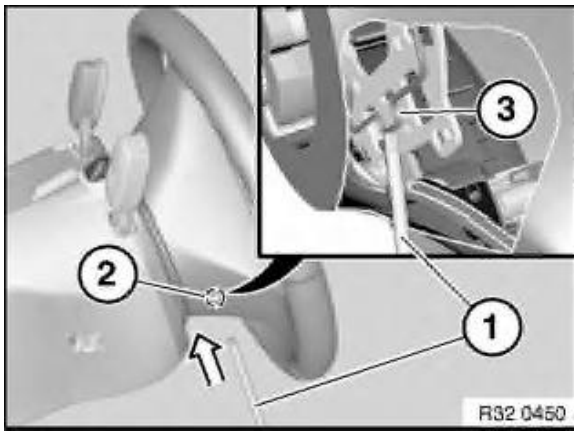
**Important!**

Steering wheel must be replaced if airbag unit has been triggered!

Follow procedure after airbag triggering.

*Necessary preliminary tasks:*

- Disconnect battery negative lead



Insert T25/T27 Torx screwdriver (1) from below into hole (2) until a springy resistance can be felt through annular spring (3) of airbag unit.

Continue to press in T25/T27 Torx screwdriver (1) until airbag unit is released.

*Installation:*

Make sure electrical leads are correctly positioned.

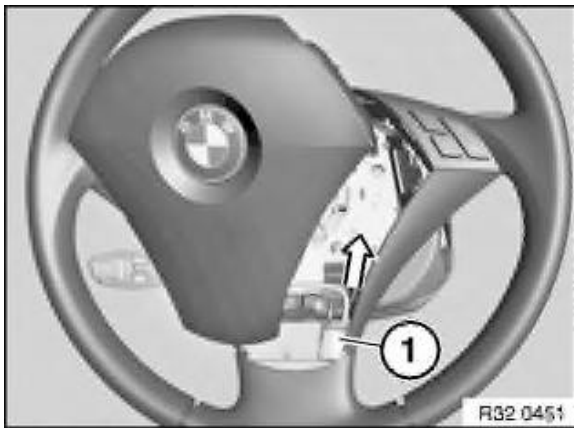
Snap airbag unit with uniform pressing force plane-parallel in direction of steering column shaft into steering wheel.



**Warning!**

Danger of injury!

Airbag unit may only be set down with the airbag itself facing upwards.



Disconnect plug connection (1) and remove airbag unit.

**It is essential to comply with the regulations as specified in the law relating to the use of explosives when working on airbag units and seat belt tensioners.**

Airbags, seat belt tensioners etc. are pyrotechnical objects. Pyrotechnical objects are assigned to different danger classes on the basis of the quantity of propellant that they contain. The assignment can be ascertained from the identification marking on the product:

### **Important!**

Failure to comply with the warning notices and repair instructions for gas generator components can cause accidental deployment and result in injury and vehicle damage!

This applies in particular to the following components:

- Airbag modules (driver's/front passenger airbags, side airbags)
- Buckle/belt tensioner
- Head airbag (ITS, AHPS)
- Active knee protection
- Active head restraint
- Safety battery terminal (SBK)

## **1. Regulations**

The regulations quoted in the following refer to the Federal Republic of Germany.

In all other countries, the relevant legislation and regulations must be observed in each case. Country-specific legal regulations that go beyond this information or court decisions based thereon must be followed in each case or given precedence over these regulations.

The following components used by BMW:

- Pyrotechnical restraint systems are subject to danger class PT1
- Gas generators are pyrotechnical objects belonging to danger class T1.

Handling, transporting and storing non-fired gas generators are subject to the "Explosive Materials Act" (law relating to the use of explosives dated 13/09/1976).

The relevant trade supervisory authority must be notified at least 2 weeks before pyrotechnical objects are handled for the first time. Here the relevant authority must be notified in writing of the person responsible (e.g. dealership owner, holder of general power of attorney or if necessary workshop supervisor). A certificate of qualification, i.e. specific training, is not required for the person responsible.

## **2. Disassembly and assembly**

- Inspection, testing and installation work may only be carried out by expert trained personnel in BMW Service.
- Work on components of the airbag system should only ever be carried out with the battery disconnected, the negative terminal post covered and the plug connection of the cable leading to the gas generator disconnected. If only the battery is disconnected, the following prescribed waiting period must be observed without fail:
  - 30 minutes for vehicles up to 9/93;
  - 1 minute for vehicles from 9/93
- In the event of breaks in work, a component with a gas generator that has been removed must be secured against access by other persons.

- Individual components must never be repaired. Instead, always replace them.
- Do not treat airbag system components with cleaning agents or grease.
- Components of the airbag system must not be exposed to temperatures in excess of 75 °C.
- Airbag system components, including electronic diagnostic components, which have been dropped from heights in excess of 0.5 m must not be reinstalled in the vehicles.
- Before installing, subject airbag system components (including electronic diagnostic components) to a visual inspection for damage and replace if necessary.
- Airbag system components may only be electrically tested while they are installed and only with the BMW diagnostic system / DIS.
- **Danger of injury:** The airbag module may only be set down with the airbag itself facing upwards. Otherwise the generator will be thrown upwards if it is fired.
- Do not point the firing pellet of a gas generator at other persons.
- Components with gas generators must not be fired while they are removed. They must be disposed of by special disposal companies or returned to BMW in the packaging of the new components.
- When carrying out straightening and welding work with an electric welder:
  - Disconnect battery
  - Cover negative terminal (post)
- Avoid all contact with the skin when removing a fired airbag module - wear gloves. Wash with water after contact with the skin.

### 3. Transport

- Components with gas generators must be sent off in the packaging of the new components.

### 4. Storage

- Observe the regulations of the relevant trade supervisory authority and the applicable national regulations.

### 32 33 Steering Wheel

|                                       | Type  | Thread | Tightening specification | Measure |
|---------------------------------------|---|--------|--------------------------|---------|
| 1AZ Steering wheel to steering column | E12, E21, E24,<br>E23, E28, E30   | Nut    |                          | 80 Nm   |
|                                       | E31, E32, E34,<br>E36, E38, E39,<br>E46, E52, E53,<br>E60, E61, E63,<br>E64, E65, E66,<br>E67, E83, E85,<br>E86 | Screw  |                          | 62.5 Nm |
| 2AZ Retaining plate to steering wheel | E60, E61, E63,<br>E64   | M5     |                          | 6 Nm    |