



Vauxhall Combo Mk II (C), Corsa Mk II (C) (W5L, F08), Tigra TwinTop



### **DANGER**

**Airbag unit can trigger unintentionally!**

**Airbag unit is a pyrotechnic component that can lead to death on improper handling!**

**Only specially trained employees may carry out any work on the airbag system.**

**Disconnect the battery.**

**Always store airbag unit with the padded side pointing upward.**

**Always transport airbag unit in appropriate packaging.**

**Never leave airbag unit unattended, but lock safely in an appropriate cabinet.**

**Do not open or repair airbag unit.**

**Only install airbag unit in undamaged condition.**

**Do not perform any measurements on the airbag unit using a test lamp or multimeter.**

**Wear protective gloves and safety goggles.**

**No person may stay inside the vehicle when re-connecting the battery.**

### **NOTE**

**Ensure proper cleanliness when working on the servo-steering.**

**Steering column adjustment must remain locked during steering column removal.**

**Generally replace self-locking as well as corroded screws and nuts.**

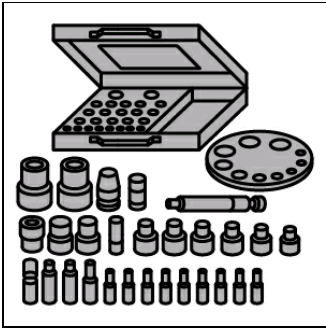
**Repair work of any kind on the electromechanical steering column is not permissible, it must basically be completely replaced.**

**Observe disposal regulations!**

**Do not use oils, fats, chemicals and cleaners not approved by the manufacturer on airbag units.**

**The illustrations of these installation instructions are exemplary and are only intended for better understanding.**

## **Required special tools**



Socket and bit set  
OE (MKM-604-D)

## **Required torques**

### **Tightening torques**

**Self-locking screws and nuts must always be replaced.**

Intermediate steering shaft screw(s) <b>(1)</b>	<b>(see figure 7)</b>	<b>Use screw-locking compound.</b>	<b>Screw(s), at steering column 24 Nm + 60°</b>
Steering column <b>(1)(2)</b>	<b>(see figure 8)</b>		<b>Nut(s) 22 Nm; Screw(s) 22 Nm</b>
Driver airbag screw(s)			<b>8 Nm</b>
Steering wheel nut(s)		<b>Use screw-locking compound.</b>	<b>30 Nm</b>

## Remove:

Move steering wheel to the centre position and let steering lock engage.

Disconnect battery (negative terminal).

Keep waiting time of min. 1 min.

Remove driver's airbag.

### Required special tools

Socket and bit set **OE (MKM-604-D)**  
- Bit socket **OE (MKM-604-29)**

Demount steering wheel.

Remove tilt adjustment handle from steering wheel. **(If present)**

Unscrew and remove steering wheel height adjustment handle screw(s). **(1)**

Remove height adjustment handle from steering wheel. **(2)**

Unlock steering column shroud upper engagement pins. **(3)**

Remove upper steering column shroud. **(4)**

Unscrew and remove steering column shroud(s) lower screw(s). **(5)**

Remove lower steering column shroud. **(6)**

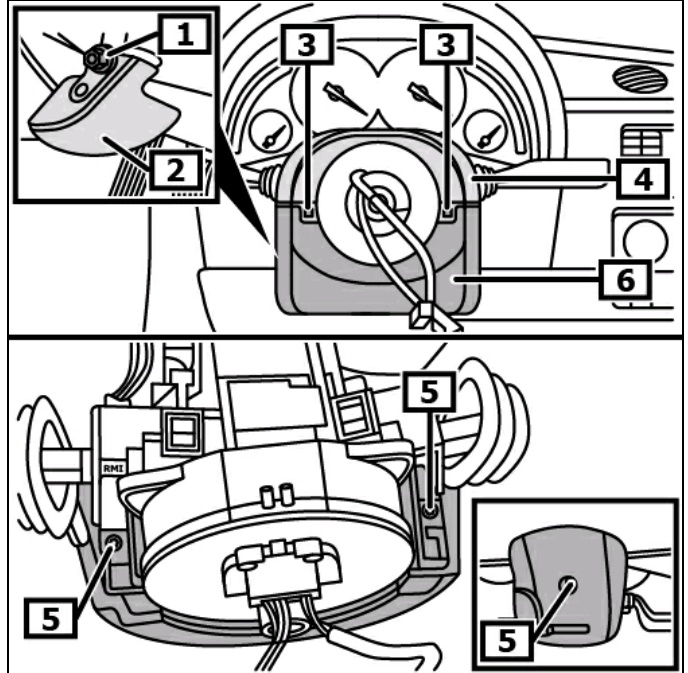
**(see figure 1)**

Loosen contact unit electric plug connection. **(1)**

Remove contact unit. **(2)(3)**

**(see figure 2)**

Figure 1



1 Steering wheel height adjustment handle screw(s)

2 Height adjustment handle

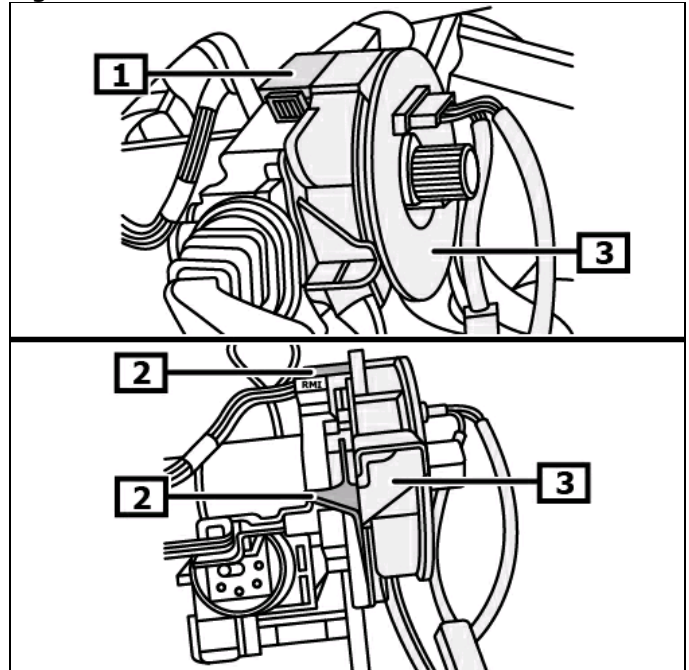
3 Engagement pins

4 Upper steering column shroud

5 Steering column shroud(s)

6 Lower steering column shroud screw(s)

Figure 2



1 Electrical connection(s)

2 Engagement pins

3 Contact unit

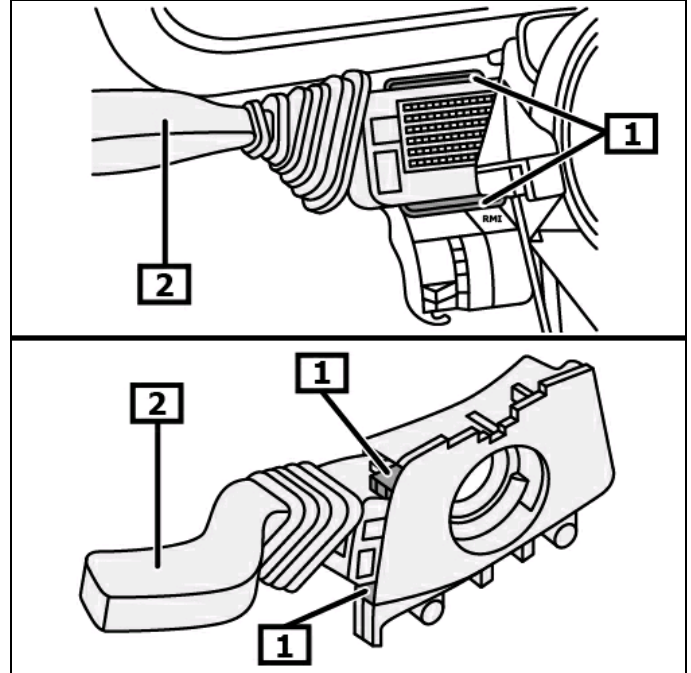
**Perform following workflow on both sides.**

Unlock steering column switch engagement pin using suitable tool. **(1)**

Remove steering column switch from steering column module. **(2)**

**(see figure 3)**

**Figure 3**



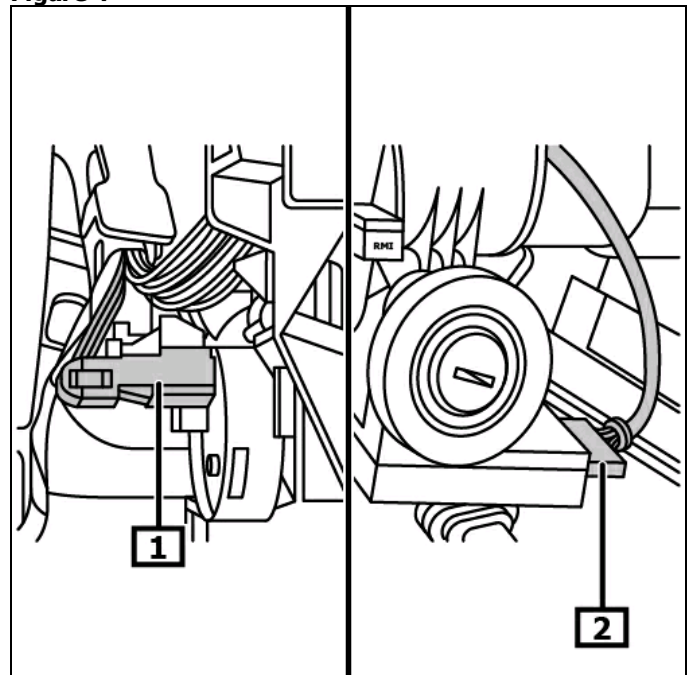
**1 Engagement pins**

**2 Steering column switch**

Disconnect electric plug connection(s). **(1)(2)**  
**(see figure 4)**

Remove steering column module.

**Figure 4**



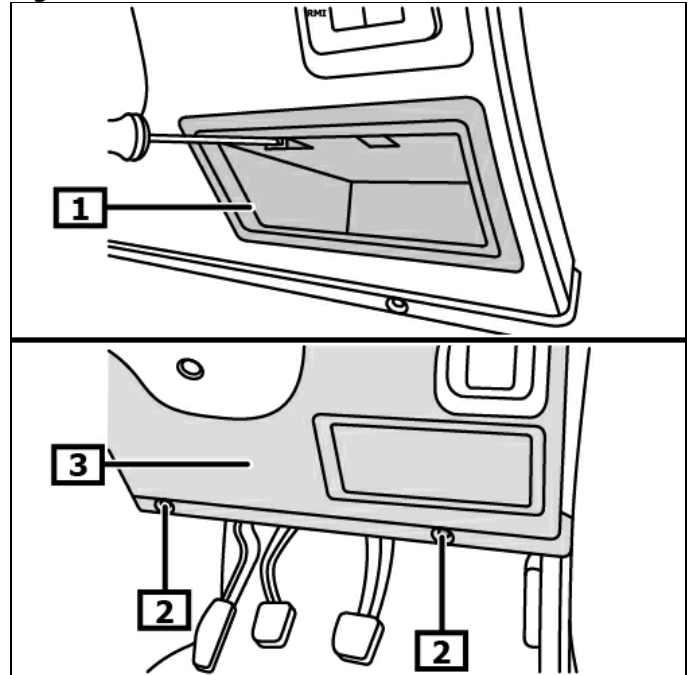
**1 Electrical connection(s)**

**2 Electrical connection(s)**

Remove storage box. **(1)**  
 Unscrew screw(s). **(2)**  
 Remove trim(s). **(3)**  
**(see figure 5)**

Unscrew and remove driver's side footwell paneling screw(s).  
 Remove the footwell panelling.  
 Remove driver's side footwell air duct.

**Figure 5**



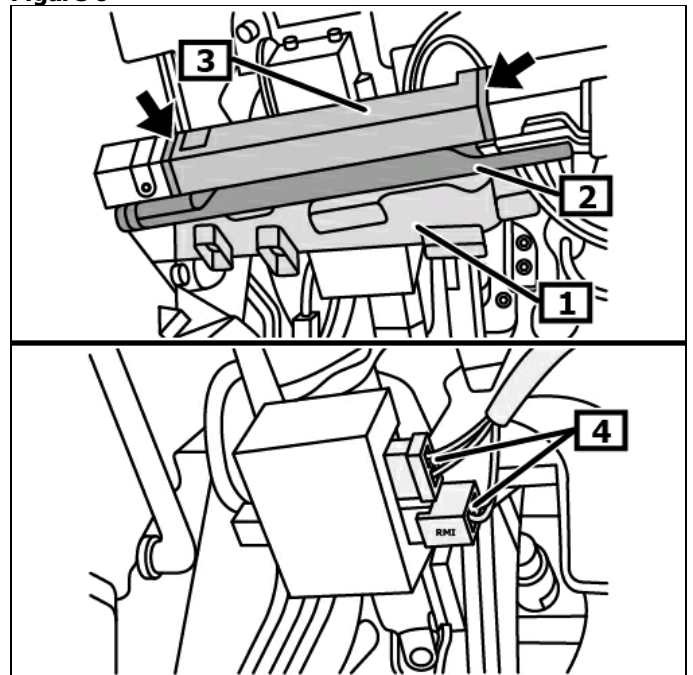
**1** Parcel tray

**2** Screw(s)

**3** Trim

Remove driver's side footwell air duct. **(1)**  
 Remove dashboard bracket in footwell. **(2)**  
 Cut out footwell paneling bracket. **(3) (Arrows)**  
 Remove electric plug connection from electric power steering control unit. **(4)**  
**(see figure 6)**

**Figure 6**



**1** Driver's side footwell air duct

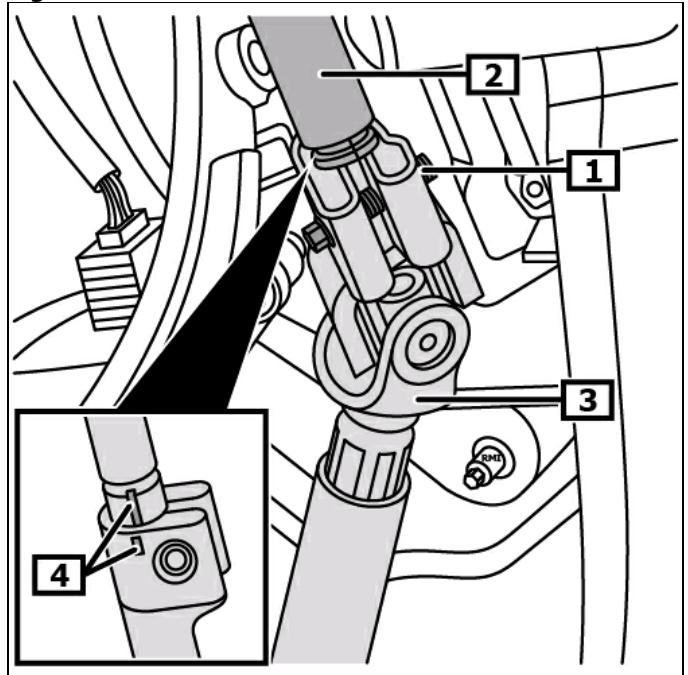
**2** Dashboard bracket in footwell

**3** Footwell paneling bracket

**4** Electrical connection(s)

Unscrew and remove intermediate steering shaft screw. **(1)**  
 Loosen intermediate steering shaft from steering spindle. **(2)**  
**(3)**  
**(see figure 7)**

**Figure 7**



- |   |                           |
|---|---------------------------|
| <b>1</b> Intermediate steering shaft screw(s) | <b>2</b> Steering spindle |
| <b>3</b> Intermediate steering shaft          | <b>4</b> Mark(s)          |

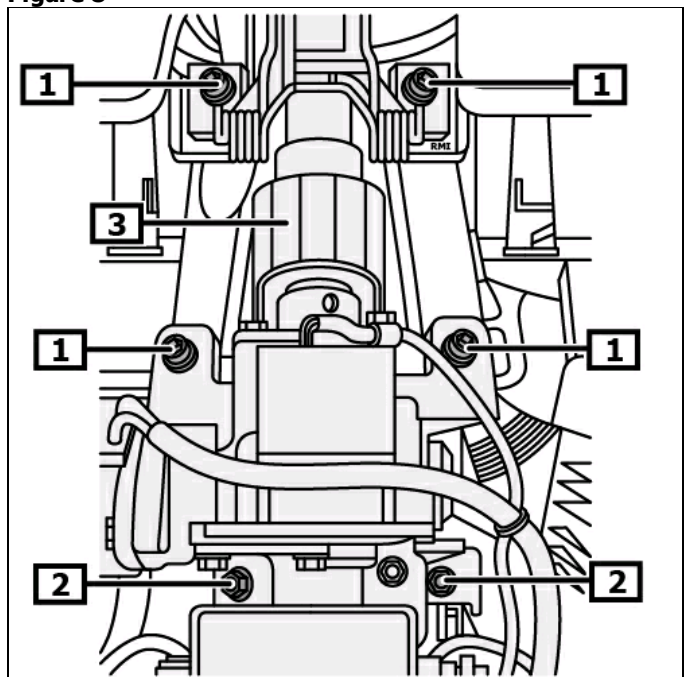
**Steering column tilt adjustment must be locked!**

Unscrew the steering column screw(s). **(1)**  
 Unscrew and remove steering column nut(s). **(2)**  
 Remove the steering column. **(3)**  
**(see figure 8)**

Convert following components when replacing the steering column:

- Electric power steering control unit
- Immobilizer control unit
- Ignition starter switch
- Ignition lock

**Figure 8**



- |                                    |                                 |
|------------------------------------|---------------------------------|
| <b>1</b> Steering column screw(s). | <b>2</b> Steering column nut(s) |
| <b>3</b> Steering column           |                                 |

## **Install:**

### **Installation in reverse order of removal.**

Screw in but do not tighten steering column screw(s) and nut(s). **(1)(2)**

Tighten steering column nut(s). **(2)**

Tighten steering column screw(s). **(1)**

**(see figure 8)**

Markings must flush when installing the steering spindle and intermediate steering shaft. **(4)**

**(see figure 7)**

Check before installation whether the slip ring is in center position.

- The slip ring can be installed when the slip ring is in center position and the markings flush. **(1)**

- Put the slip ring into center position as follows if the slip ring markings do not flush. **(1)**

Press and keep slip ring retaining device depressed. **(2)**

Turn slip ring internal part counterclockwise up to first resistance. **(3)**

**(3)**

Turn back slip ring internal part clockwise by 2,5 turns.

Keep on turning slip ring internal part until markings flush. **(1)**

**(3)**

**(see figure 9)**

### **Continue assembly in reverse order of removal.**

Code radio and reprogram vehicle settings if required.

Check electrical system for function.

### **Check driving position to the front, adjust if needed.**

## **Teach the steering angle sensor.**

Switch on ignition.

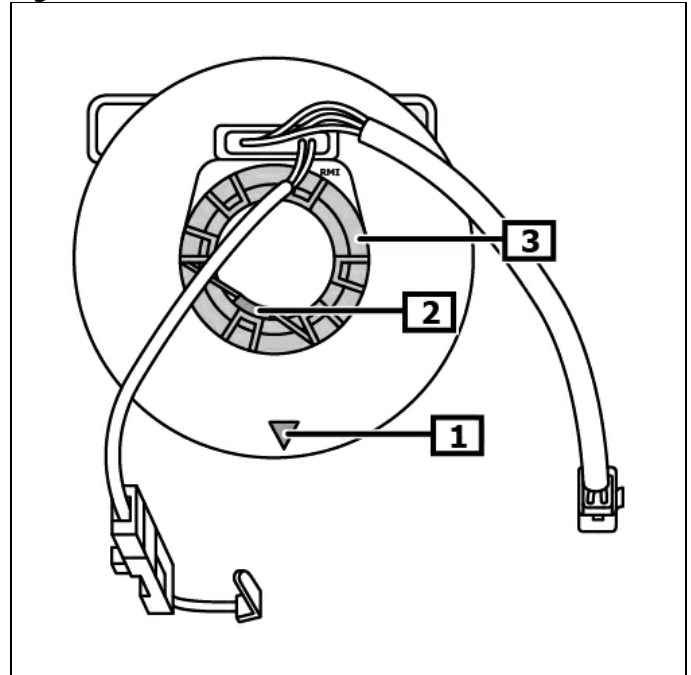
Turn the steering wheel up to the right and left stop.

Power steering indicator light goes out.

Steering-angle sensor needs to be taught-in using a suitable diagnostic unit if power steering indicator light does not go out.

**Note position of EOBD connection.**

**Figure 9**



**1 Mark(s)**

**2 Slip ring internal part retaining device**

**3 Slip ring internal part**