



Vauxhall Meriva Mk I (A)



### **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!**

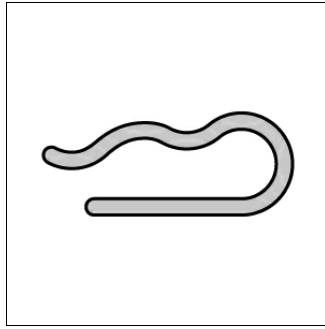
**Do not use oils, fats, chemicals and cleaners not approved by the manufacturer on airbag units.**

**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)



Intermediate steering shaft  
fixing tool  
OE (KM-6181)

## Required torques

### Tightening torques

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

Power steering motor screw(s) <b>(2)</b>	<b>(see figure 6)</b>		<b>9 Nm</b>
Steering column screw(s). <b>(7)</b>	<b>(see figure 6)</b>	<b>Use new screw(s) and nut(s).</b>	<b>20 Nm</b>
Intermediate steering shaft screw(s) <b>(3)</b>	<b>(see figure 7)</b>	<b>Use screw-locking compound.</b>	<b>at steering column 24 Nm + 60°</b>
Intermediate steering shaft screw(s) <b>(4)</b>	<b>(see figure 7)</b>	<b>Use screw-locking compound.</b>	<b>24 Nm</b>
Driver airbag screw(s)			<b>8 Nm</b>
Steering wheel screw		<b>Use new screws with the 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 height adjustment handle from steering wheel.

Unlock steering column shroud upper engagement pins. **(1)(2)**

Use mounting wedge(s). **(3)**

Remove upper steering column shroud. **(1)**

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

**(5)**

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

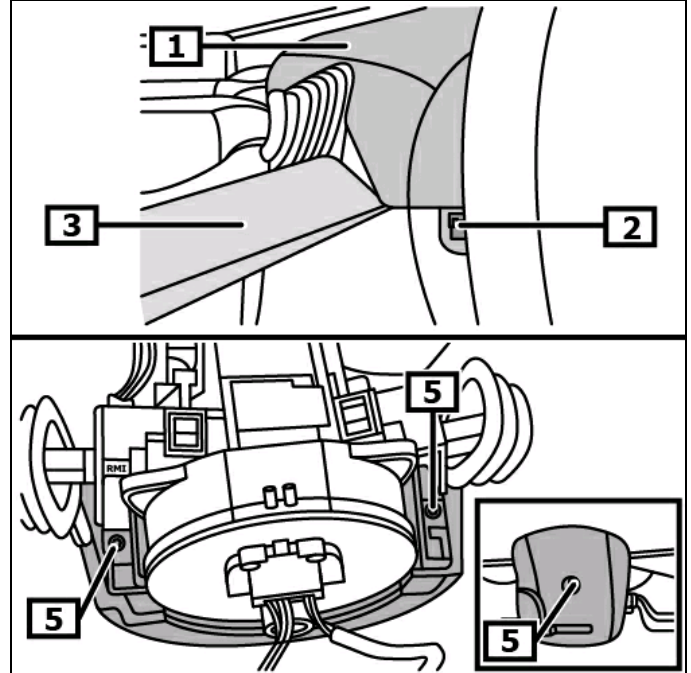
**(see figure 1)**

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

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

**(see figure 2)**

**Figure 1**



**1 Upper steering column shroud**

**2 Engagement pins**

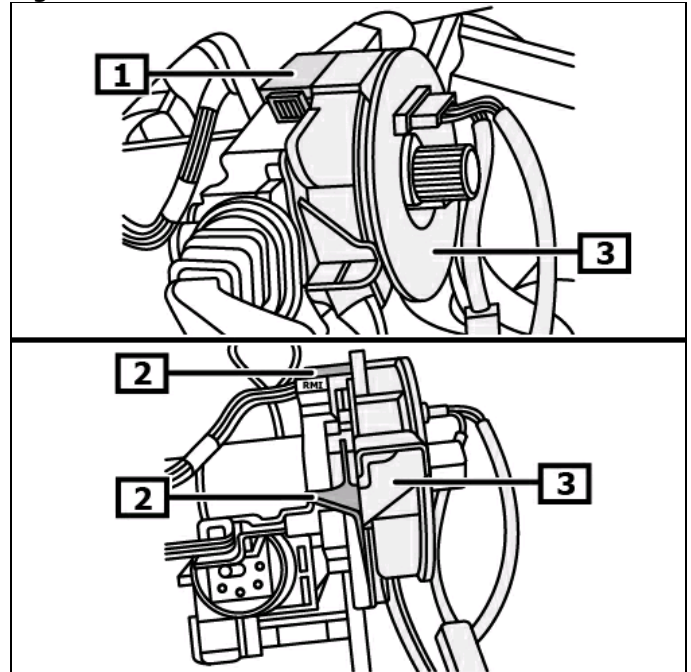
**3 Mounting wedge(s)**

**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**

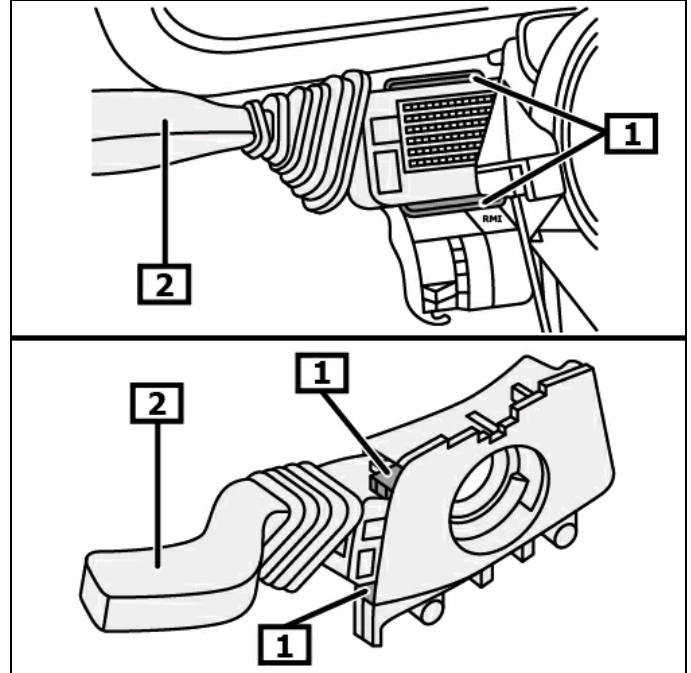
**Perform following workflow on both sides.**

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**

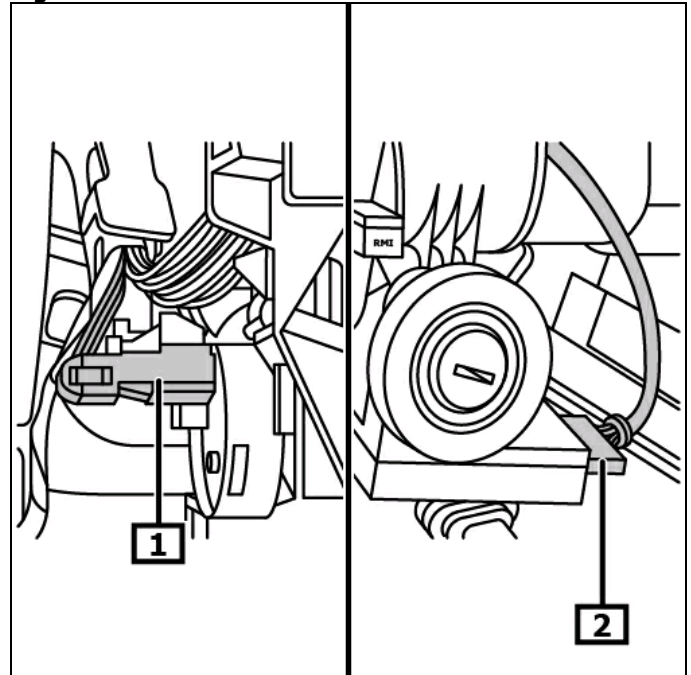
**2 Steering column switch**

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

Remove steering column module.

Remove dashboard covering.

**Figure 4**

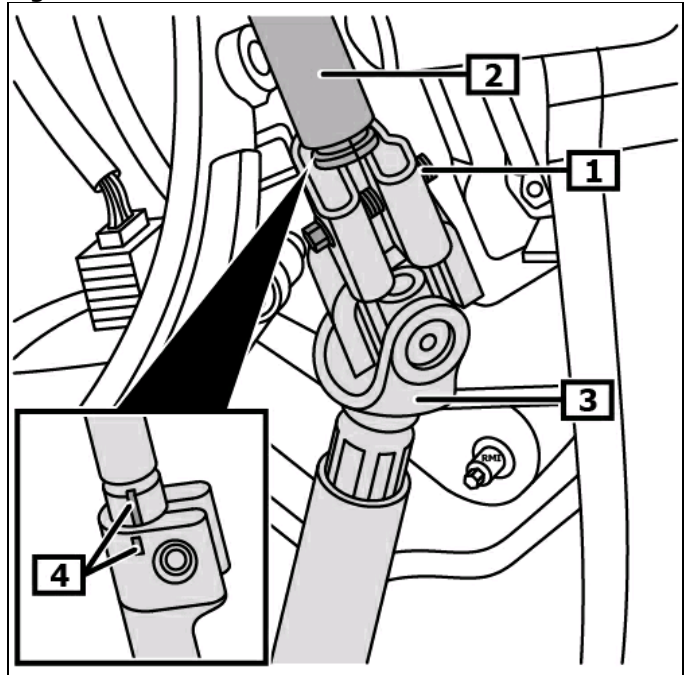


**1 Electrical connection(s)**

**2 Electrical connection(s)**

Unscrew and remove intermediate steering shaft screw. **(1)**  
Loosen intermediate steering shaft from steering spindle. **(2)**  
**(3)**  
**(see figure 5)**

**Figure 5**



**1 Intermediate steering shaft screw(s)**

**2 Steering spindle**

**3 Intermediate steering shaft**

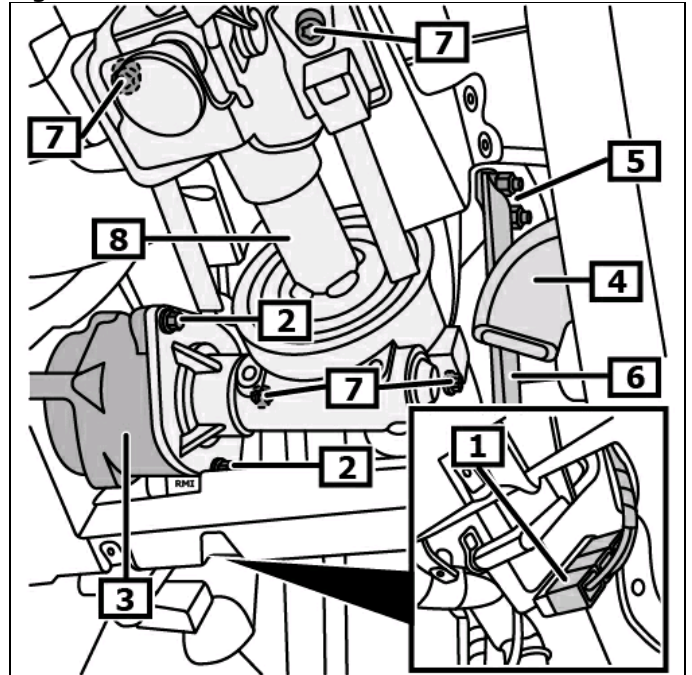
**4 Mark(s)**

Disconnect power steering motor electric plug connection(s). **(1)**  
 Remove cable tie.  
 Unscrew and remove power steering motor screw(s). **(2)**  
 Remove power steering motor. **(3)**  
 Remove driver's side footwell air duct. **(4)**  
 Unscrew and remove brake pedal hold-down device screw(s). **(5)**  
 Loosen brake pedal hold-down device and push aside. **(6)**  
 Unscrew the steering column screw(s). **(7)**  
 Remove the steering column. **(8)**  
**(see figure 6)**

Convert following components when replacing the steering column:

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

**Figure 6**



- |   |  |
|---|--|
| <b>1</b> Power steering motor electric plug connection(s) | <b>2</b> Power steering motor screw(s)         |
| <b>3</b> Electric motor for power steering                | <b>4</b> Driver's side footwell air duct       |
| <b>5</b> Brake pedal hold-down device                     | <b>6</b> Brake pedal hold-down device screw(s) |
| <b>7</b> Steering column screw(s).                        | <b>8</b> Steering column                       |

## **Install:**

**Set steering wheel to straight-ahead position.  
Installation in reverse order of removal.**

Screw in but do not yet tighten steering column screw(s). **(7)**

**Loosen steering column height adjustment.**

Tighten steering column screw(s) in following tightening order.  
**(7)**

Tighten screws in the order upper right, upper left, lower right  
lower left.

**(see figure 6)**

Recut thread on upper intermediate steering shaft universal joint  
and clean. **(1)**

Insert intermediate steering shaft fixing tool. **(1)(2)**

### **Required special tools**

Intermediate steering shaft fixing tool **OE (KM-6181)**

**(see figure 7)**

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

**(see figure 5)**

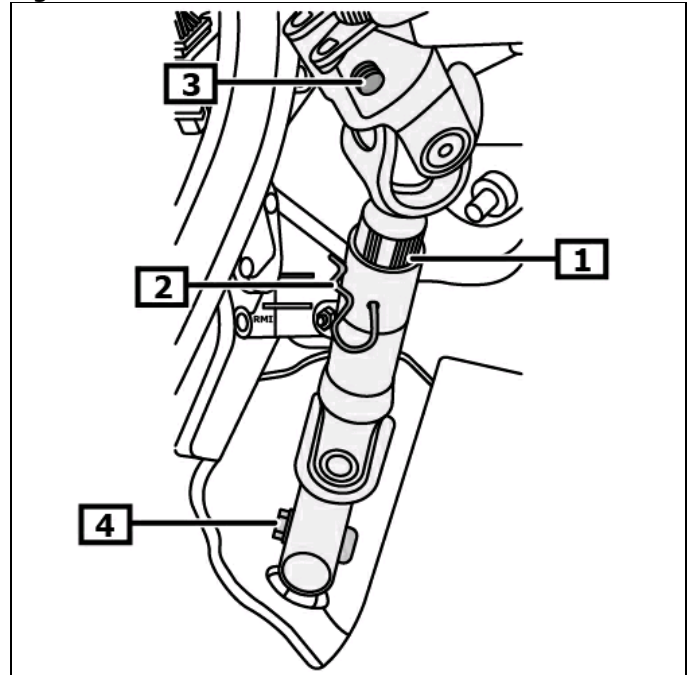
**Use new screw(s) and nut(s).**

Tighten intermediate steering shaft screw(s) and nut(s). **(3)(4)**

Remove intermediate steering shaft fixing tool. **(2)**

**(see figure 7)**

**Figure 7**



**1 Intermediate steering shaft**

**2 Intermediate steering shaft  
fixing tool**

**3 Intermediate steering shaft  
screw(s)**

**4 Intermediate steering shaft  
nut(s)**

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

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)**
- 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 8)**

**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.**

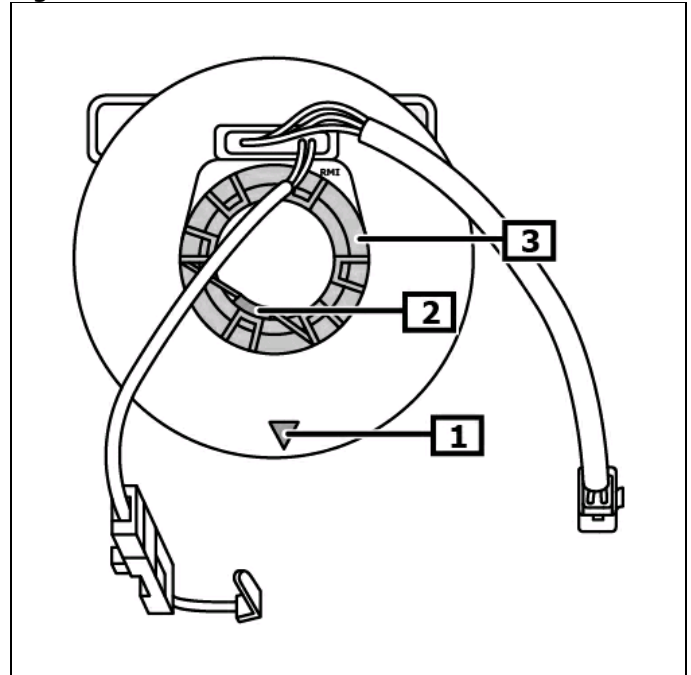
**Teach the steering angle sensor.**

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 8**



**1** Mark(s)

**2** Slip ring internal part retaining device

**3** Slip ring internal part