77 51 001 Installing LED auxiliary headlights (11 FRUs)

Equipment trim-level variant:
- LED auxiliary headlights
- Hand protectors

Note
The LED auxiliary headlights have an overheat cutout. The headlights automatically reduce their brightness if a certain temperature is reached; under extreme circumstances the headlights can even switch themselves off. The headlights return to full brightness once they have cooled down sufficiently.

Preparatory work
- Removing rear seat
- Removing front seat
- Removing centre cover for fuel tank
- Removing left side panel
- Removing left side cover
- Removing left cover for fuel tank
- Removing right side panel
- Removing right side cover
- Removing right cover for fuel tank
- Removing top front-wheel cover
- Removing left intake air pipe

Core activity
(-) Holder for cable tie to bracket for auxiliary headlight
- Install holder (1) for cable tie on bracket (2) for auxiliary headlight.

(-) Installing bracket for LED auxiliary headlight
- Insert threaded bushes (1) into front panel carrier (2).
(1) From below, work bracket (1) for the LED auxiliary headlight into position on front panel carrier (2).

(2) Install screws (3).

<table>
<thead>
<tr>
<th>Bracket, LED auxiliary headlight to front panel carrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>M6 x 30 Thread-locking compound (mechanical)</td>
</tr>
<tr>
<td>or, Thread-locking compound (Loctite 243, Medium strength)</td>
</tr>
<tr>
<td>8 Nm</td>
</tr>
</tbody>
</table>

(-) Installing LED auxiliary headlight

- Install nuts (1) in bracket (2).
- Hold LED auxiliary headlight (3) in position at bracket (2).
- Install screws (4).

<table>
<thead>
<tr>
<th>LED auxiliary headlight to bracket</th>
</tr>
</thead>
<tbody>
<tr>
<td>M6 x 40</td>
</tr>
<tr>
<td>6 Nm</td>
</tr>
</tbody>
</table>

(-) Installing switch for LED auxiliary headlights

▲ Removing left mirror

- Push back cover (5).
- Turn locknut (4) clockwise to slacken.
- Remove mirror (3) and left/right adapter (2).
- Remove washer (1).
Removing clamping block
- Remove screws (1).
- Remove clamping block (2) from handlebar fitting (3).

Installing clamping block for handlebar fitting for clutch
- Hold clamping block (1) in position at handlebar fitting (2).
- Loosely install screws (3).
- Position handlebar fitting (2) at the marks (arrow).
- Tighten screws (3).

<table>
<thead>
<tr>
<th>Tightening torques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handlebar fitting to handlebar</td>
</tr>
<tr>
<td>M6 x 30</td>
</tr>
</tbody>
</table>

- Hold switch for LED auxiliary headlights (1) in position at clamping block (2).
- Install screw (3).
- Installing left mirror
  - Install washer (1).
  - Install left/right adapter (2).

- Installing left mirror
  - Install washer (1).
  - Install left/right adapter (2).

- Installing left mirror
  - Install mirror (3) and adjust it to the correct position.
  - Tighten locknut (4).

- Installing left mirror
  - Slip cover (5) over the threaded fastener.

- Installing left mirror
  - Open the holders (arrows).
  - Route connecting line (1) down parallel to wiring harness (2).
  - Insert connecting line (1) into the holders (arrows) and close.
- Remove the original cable ties (arrows) and re-secure connecting line (1) to front panel carrier (2) with the cable ties (arrows) and lines disengaged beforehand, if applicable, at the same positions.

**(-) Removing protective cap from connecting plug**

- Remove the cable tie (arrow).
- Remove protective cap (1) from connecting plug (2).

**(-) Installing holder for cable tie on front cover**

- Install holder for cable tie (1) on front panel (2).
(-) Connecting switch for LED auxiliary headlight and LED auxiliary headlight

- Connect plug of connecting line for LED auxiliary headlights (1) to plug for LED auxiliary headlights (2).
- Connect plug for switch for LED auxiliary headlights (3) to plug of line branch (4).
- Secure plug (1), (2) and connecting line with cable tie (arrow) to front panel (5).
- Secure plug (3), (4) and line branch with cable tie (arrow) to front panel (6).
- Route connecting line for LED auxiliary headlights (7) further forward and secure with cable tie (arrow).
- Secure plug for daytime riding lights (8) and excess length of cable with cable tie (arrow) to connecting line for LED auxiliary headlights (7).

(-) Connecting and routing connecting line for LED auxiliary headlight

- Route long branch of connecting line (1) to right LED auxiliary headlight (2) and connect plug (3).
- Route short branch of connecting line (1) to left LED auxiliary headlight (4) and connect plug (5).
- Secure connecting line (1) with cable ties (arrows) to bracket (6).

Finishing work

Removing battery cover
Connecting BMW Motorrad diagnostic system to vehicle
Performing software update with ISTA/P
Disconnecting **BMW Motorrad** diagnostic system from vehicle
Installing battery cover
Installing left intake air pipe
Installing top front-wheel cover
Positioning left cover for fuel tank
Positioning right cover for fuel tank
Installing centre cover for fuel tank
Securing right cover for fuel tank
Installing right side cover
Installing right side panel
Securing left cover for fuel tank
Installing left side cover
Installing left side panel
Installing front seat
Installing rear seat
Adjusting LED auxiliary headlights
Final check of work performed