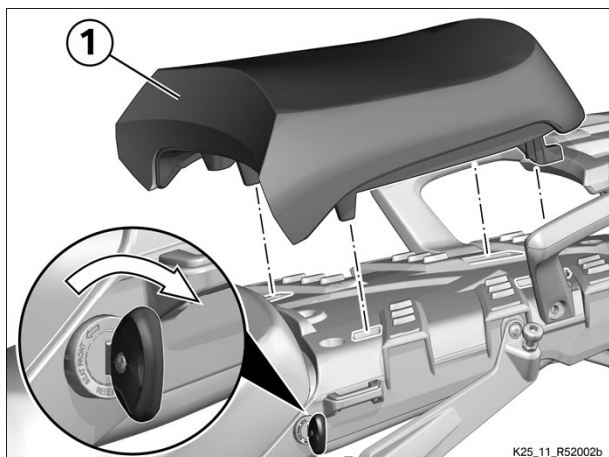
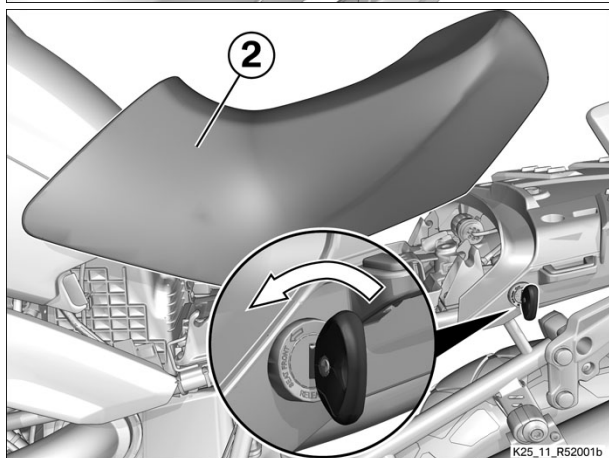


 **Removing front and rear seats**

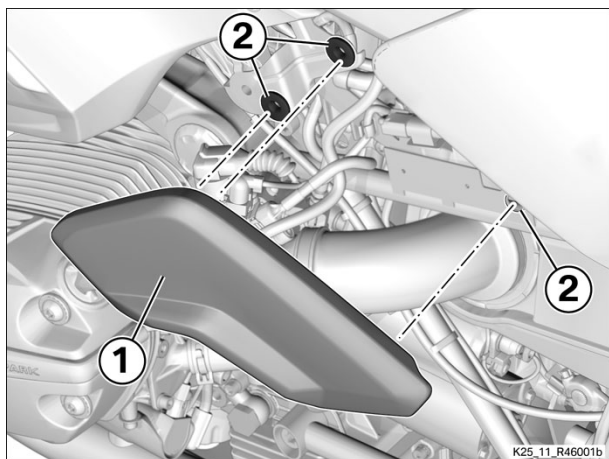


- Turn the key clockwise ([detail](#)) and remove rear seat (1).



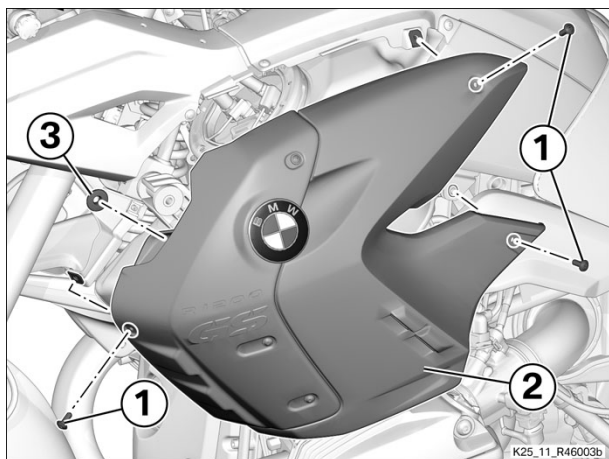
- Turn the key counter-clockwise ([detail](#)) and remove front seat (2).

 **Removing left side cover**



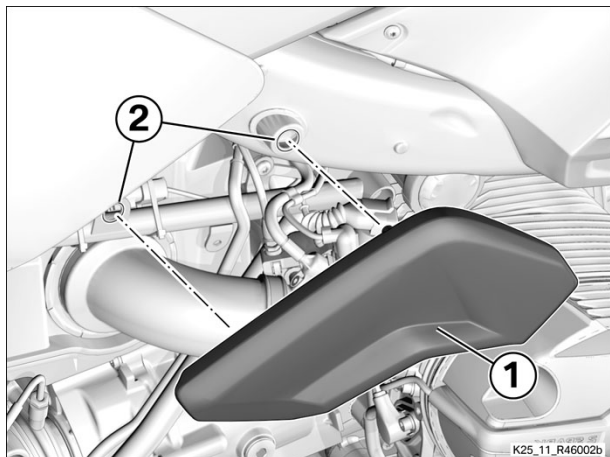
- Unclip side cover (1) from holders (2) and remove.

 **Removing left side panel**



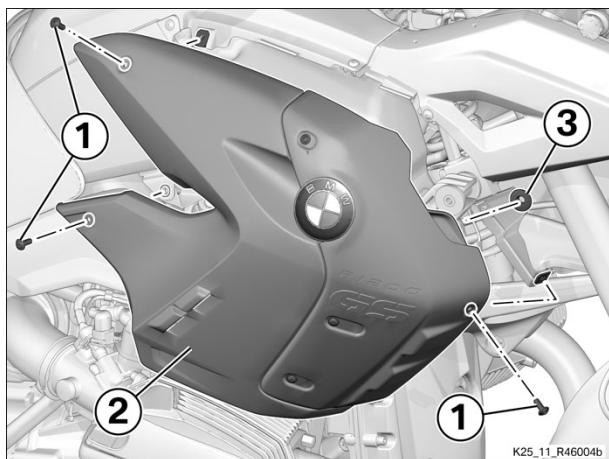
- Remove screws (1).
- Unclip side panel (2) from holder (3) and remove.

 **Removing right side cover**



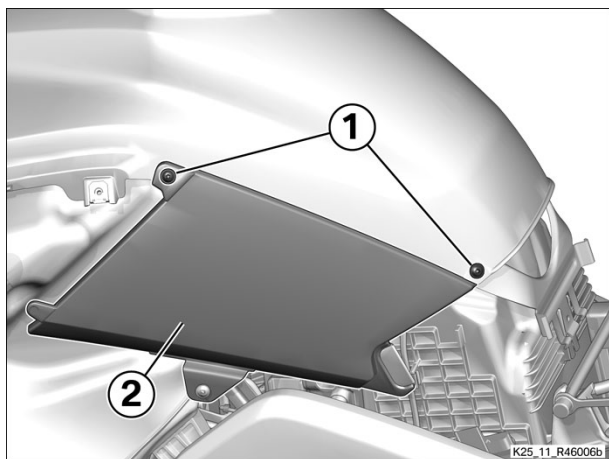
- Unclip side cover (1) from holders (2) and remove.

 **Removing right side panel**



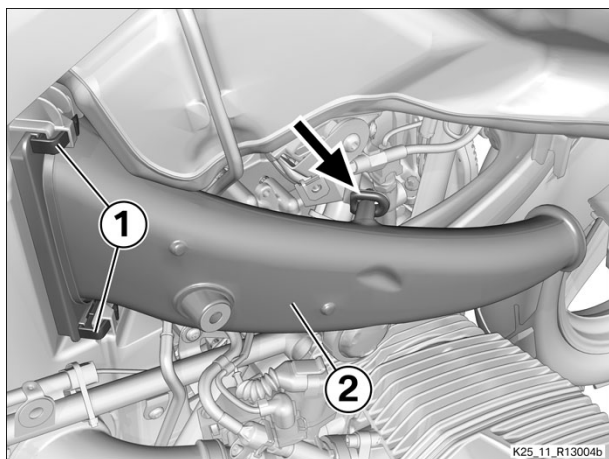
- Remove screws (1).
- Unclip side panel (2) from holder (3) and remove.

 **Removing trim panels of fuel tank**



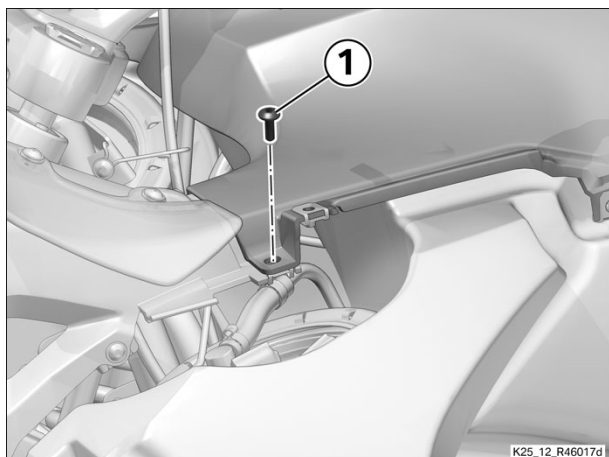
- Remove screws (1).
- Remove trim panels (2).

 **Removing intake air pipe**

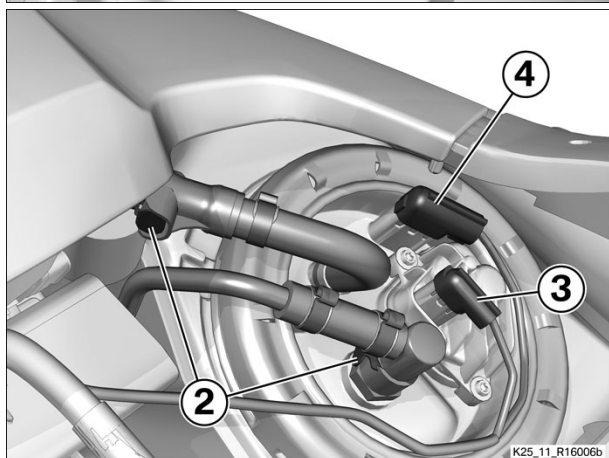


- Disengage retainer (1).
- Pull the retaining pin (arrow) out of the rubber sleeve.
- Remove intake air pipe (2).

 **Removing fuel tank**



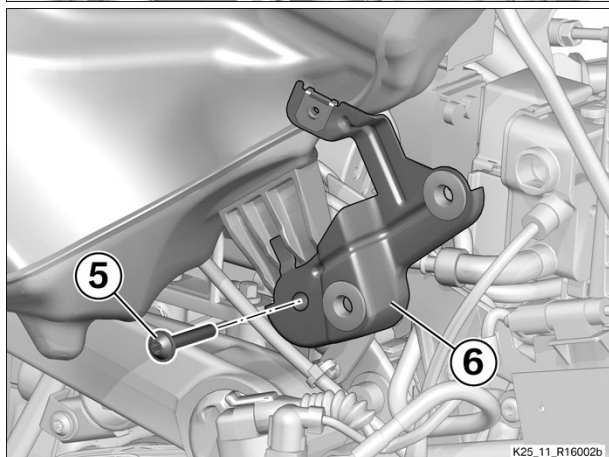
- Remove screws (1) on left and right.



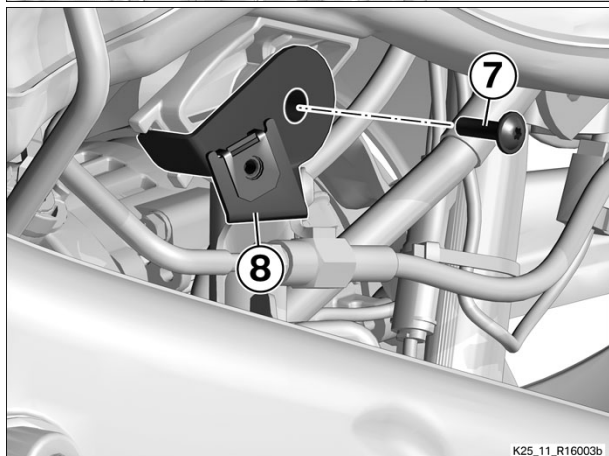
Warning

Fuel is flammable and a hazard to health. Observe all applicable safety regulations.

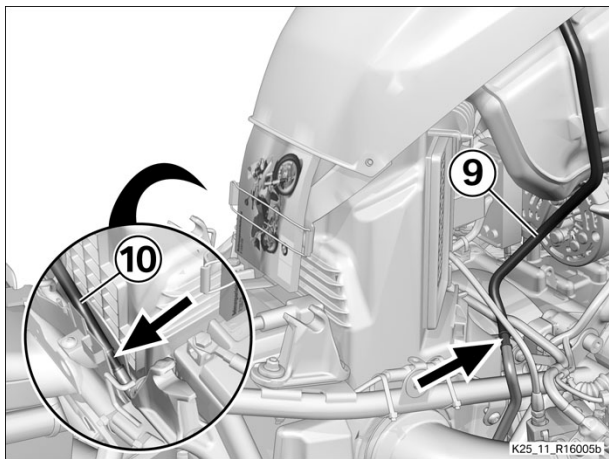
- Disconnect fuel delivery lines (2).
- Disconnect plug for fuel pump (3) and plug for fuel level sensor (4).



- Remove screw (5).
- Remove fairing bracket (6).



- Remove screw (7).
- Remove fairing bracket (8).



- Disconnect breather hose (9) and overflow hose (10) at the connectors (arrows).

- Lift the fuel tank up and to the rear to remove.

71 63 100 Installing additional headlight

+ 71 63 600



Note

Not all the components contained in the installation kit are necessary for installing the auxiliary headlights.



Note

The auxiliary headlights will work even if not registered with the on-board bus system with **CIP**. However, it is advisable to register them with the bus system because this will facilitate subsequent work with the diagnostic system.

Preparatory work

Removing front and rear seats

Removing left side cover

Removing left side panel

Removing right side cover

Removing right side panel

Removing trim panels of fuel tank

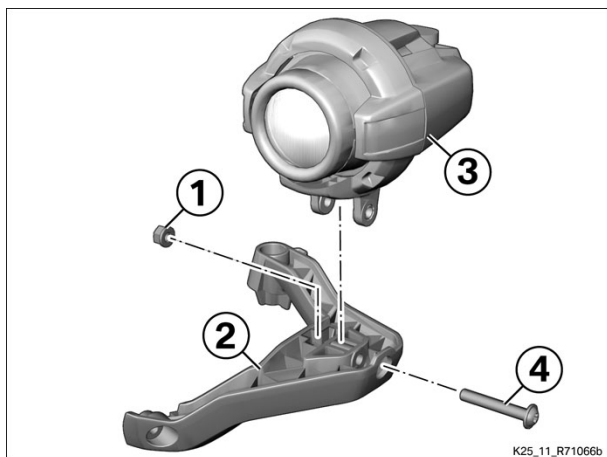
Removing intake air pipe

Removing fuel tank

Core activity

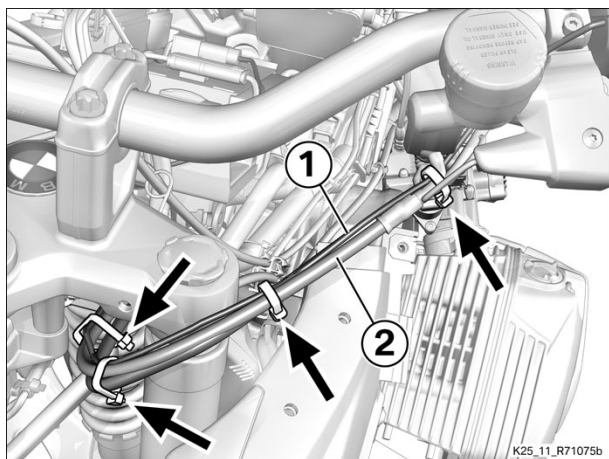
(-) Preassembling brackets for both sides

- Seat nut (1) in bracket (2).
- Insert auxiliary headlight (3) into bracket (2).
- Tighten screws (4) just tight enough to hold the auxiliary headlight in position, so that beam throw can subsequently be adjusted.

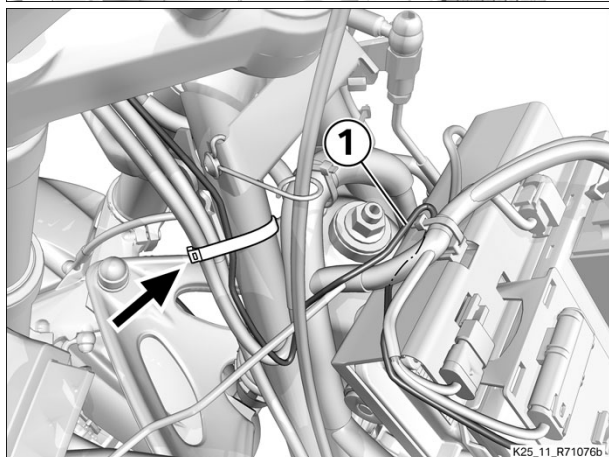


(-) Installing brackets with auxiliary headlights on both sides

- Remove screws (1); these screws are no longer needed as longer screws will be installed instead.
- Slip flat nuts (2) onto fairing bracket (3)(arrow).
- Hold the bracket complete with auxiliary headlight (4) in position.
- Install screws (5) and (6) and tighten until hand-tight.
- Tighten screw (5) first and then tighten screw (6).

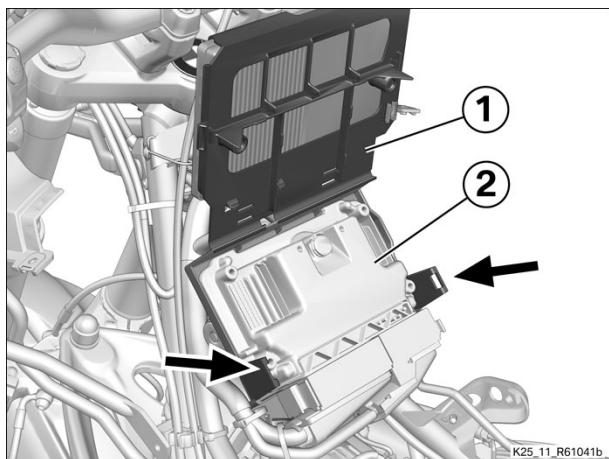


- Continue routing actuating cable (1) down.



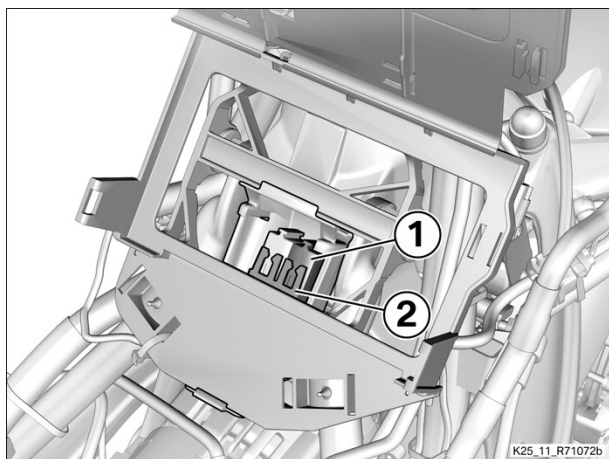
(-) Releasing control unit

- Open the clips (arrows) and swing up cover (1) and secure it so that it cannot close.
- Lift out control unit (2) and lay it behind the compartment.



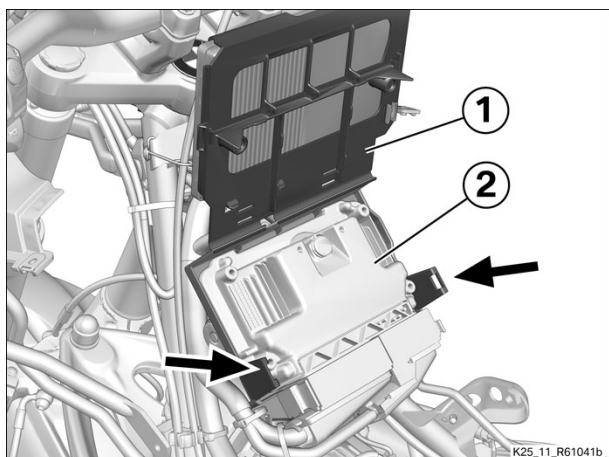
(-) Installing relay for auxiliary headlights

- Install relay (1) in the empty slot in relay base (2).



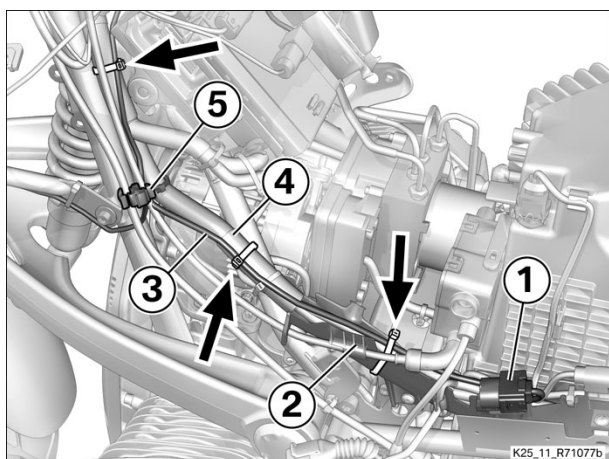
(-) Securing control unit

- Install control unit (2).
- Lower cover (1) and engage the clips (arrows).



(-) Routing wiring harness

- Seat retainer (1) on cable duct (2).



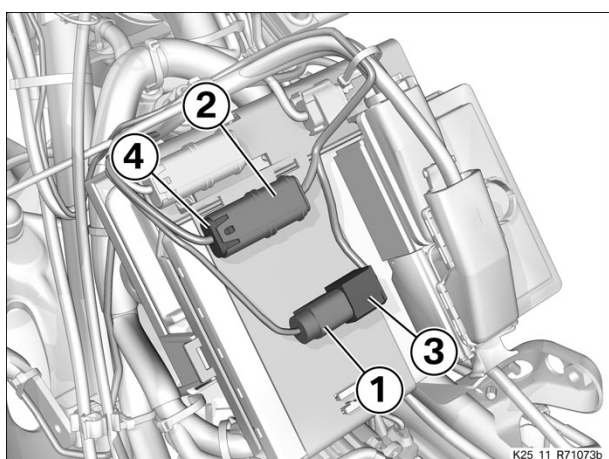
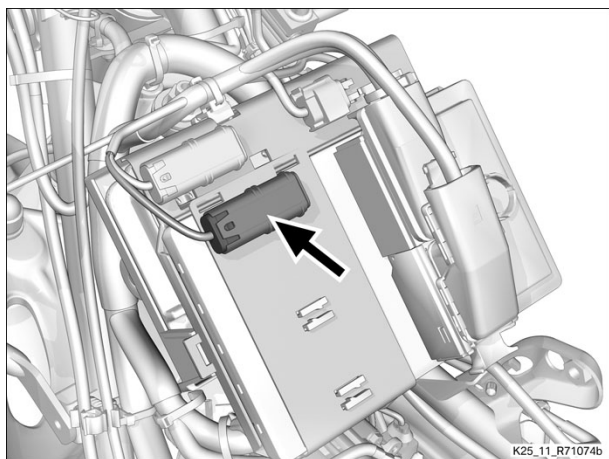
Technical data

- Route cable (3) forward along wiring harness (4) as far as the Y-branch and clip it into clip (5).
- Continue routing cable (3) up along wiring harness (4) until it reaches the control-unit box.
- Secure the cable with cable ties (arrows).

► Connecting plugs for auxiliary headlights

▷ Removing protective cap from plug

- Remove the protective cap (arrow) from the plug.

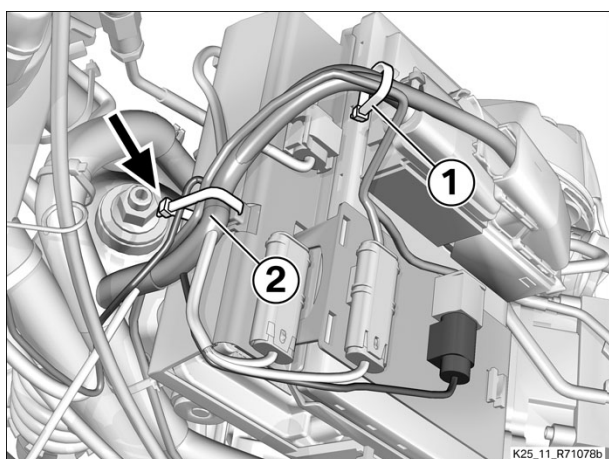


- Secure plugs (1) and (2) of the auxiliary headlights to the control-unit housing.
- Connect plug (1) of the auxiliary-headlight switch to plug (3).
- Connect plug (4) to wiring-harness plug (2).



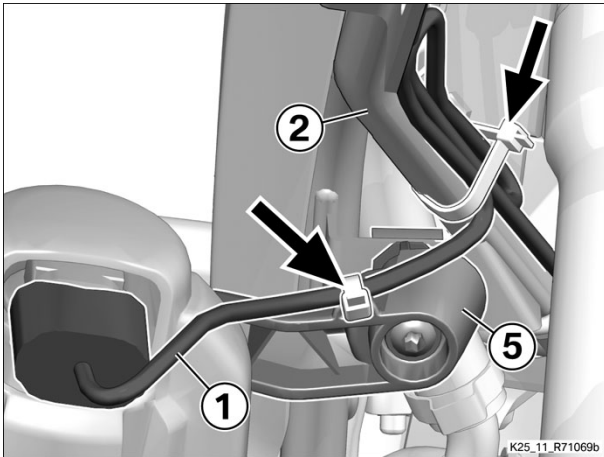
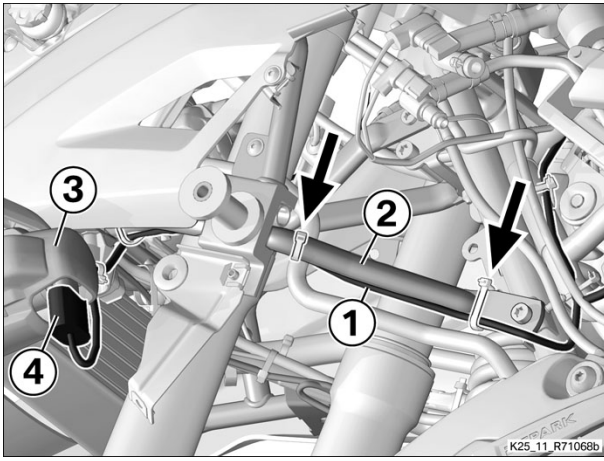
(-) Securing cable

- Secure cable with cable tie (1).
- If the cables are too long use a cable tie (arrow) to secure the looped cable to wiring harness (2).



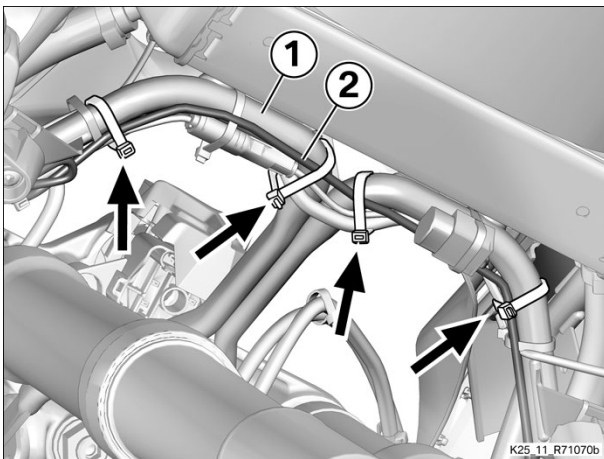
(-) Wiring-harness routing for left auxiliary headlight

- Route cable (1) forward along fairing carrier (2) to left auxiliary headlight (3) and secure it with cable ties (arrows).
- Connect plug (4) to auxiliary headlight (3).

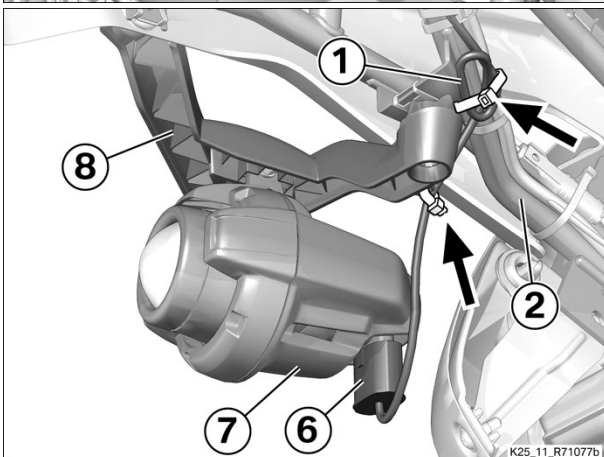


- Secure cable (1) with a cable tie (arrow) to bracket (5).
- Loop the cable if it is too long and secure the loop and the rest of the cable to fairing carrier (2) with a cable tie (arrow).

(-) Wiring-harness routing for right auxiliary headlight



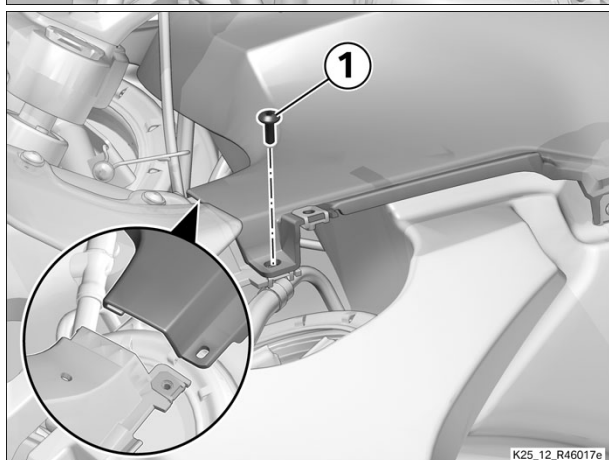
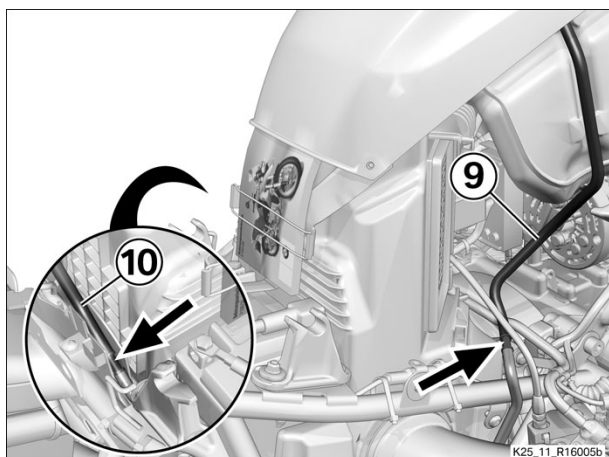
- Route cable (1) along fairing carrier (2) toward the right auxiliary headlight and secure it with cable ties (arrows).



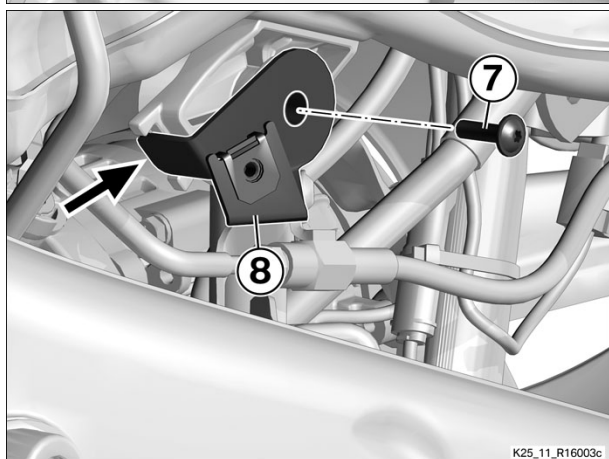
- Connect plug (6) to auxiliary headlight (7).
- Secure cable (1) with a cable tie (arrow) to bracket (8).
- If the cable is too long use a cable tie (arrow) to secure the looped cable to fairing carrier (2).

(-) Installing fuel tank


- Push the fuel tank from behind into the rubber mounts on the frame. Make sure that no lines, hoses or Bowden cables are trapped.
- Connect breather hose (9) and overflow hose (10) at the connectors (arrows).

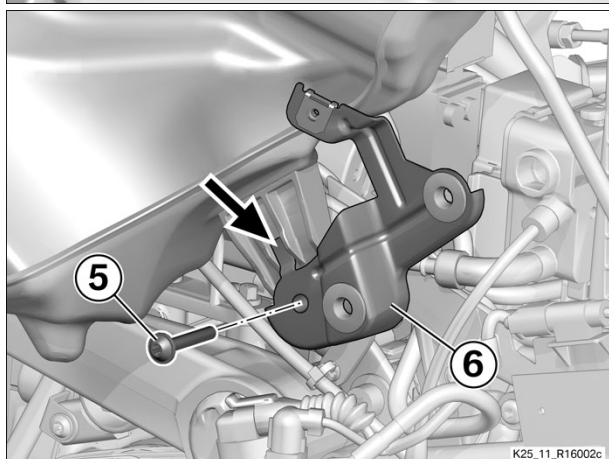


- Work the trim panel into position at the top wheel cover (detail).
- Install screws (1) on left and right.




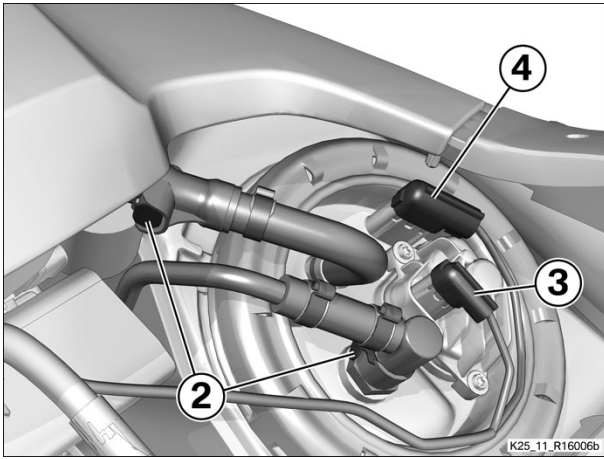
- Place fairing bracket (8) in position (arrow).
- Slightly raise the fuel tank at the rear and install screw (7).

 Tightening torques		
Fuel tank with bracket to front frame		
M8 x 45 - 10.9	19 Nm	




- Place fairing bracket (6) in position (arrow).
- Install screw (5).

 Tightening torques		
Fuel tank with bracket to front frame		
M8 x 45 - 10.9	19 Nm	



- Check the O-rings in quick-action couplings (2) for damage; replace if necessary.
- Lubricate the quick-action couplings to facilitate assembly.

 Fluids and lubricants		
Molykote 111	Silicone grease	11 00 7 660 832

 **Attention**

Lightly touching the latching pin of the female connector can cause the connector to latch. If this happens and force is applied in an attempt to close the male and female elements of the quick-action coupling, damage to the O-rings can result, and the O-rings will leak.

Make sure that the latch is open/pressed when you connect the two elements of the quick-action couplings in the fuel lines.

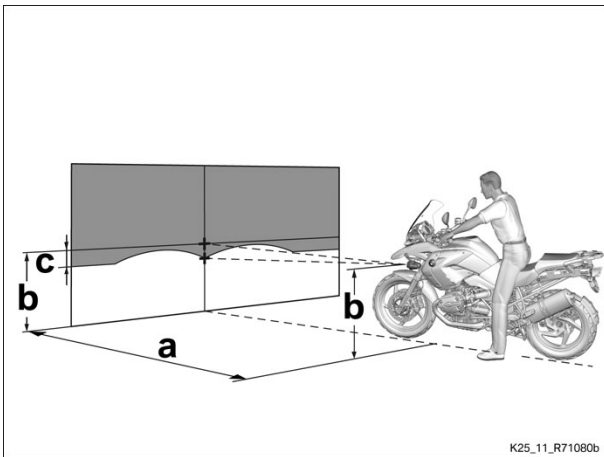
- Open the latches on the female couplings of fuel delivery lines (2) and, applying light pressure, press the male adapter into the female coupling.
- » The couplings engage with an audible click.
- Connect plug for fuel pump (3) and plug for fuel level sensor (4).


(-) Adjusting auxiliary headlights

- Start the engine.
- Stop the motorcycle on a smooth, level surface.
- Set the spring preload to the basic setting.
- Apply the rider's weight to the motorcycle.

Test

- Switch on the auxiliary headlights.
- Distances:
 - (a): Distance between auxiliary headlight and vertical surface
 - (b): Height of centre of auxiliary headlight
 - (c): Distance to light/dark cut-off



 Technical data			
Distance between headlight and vertical surface		10 m	
For headlight adjustment			

Result: Auxiliary-headlight beam angle not correct.

Measure:

- Slacken the screws and adjust the auxiliary headlight.
- Tighten the screws securing the auxiliary headlights and recheck the beam-angle settings.

(-) Connecting BMW Motorrad diagnostic system to motorcycle

 **Note**

You can find further details about the **BMW Motorrad** diagnostic system

in the respective operating manual.



- Connect the **BMW Motorrad** battery charger.

Workshop equipment

BMW Motorrad battery charger (version for Europe without GB)

BMW Motorrad battery charger (GB/AUS/NZL version)

BMW Motorrad battery charger (Japan version)

BMW Motorrad battery charger (USA/CAN version)

- **Begin by switching on the BMW Motorrad** diagnostic system and wait for it to power up.
- » The **Start Diagnosis** screen appears
- From this point on, follow the instructions issued by the **BMW Motorrad** diagnostic system.

(-) Reading fault memory with BMW Motorrad diagnostic system

- Read all fault memories.



Note

When working with the **BMW Motorrad** diagnostic system, always follow the instructions it issues.

- Perform all requisite repair work.

(-) Preparation for CIP (coding, individualisation and programming)

Precondition

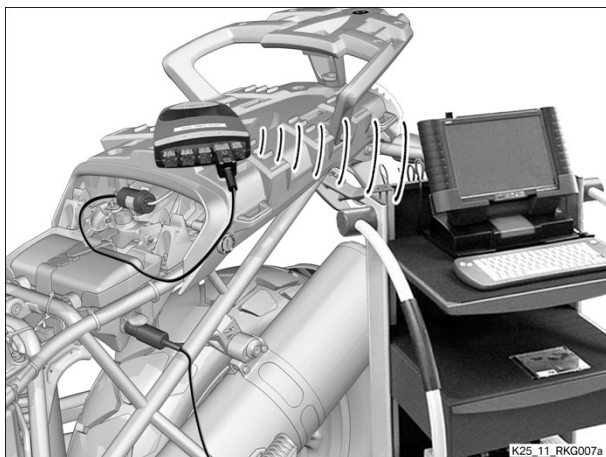
- Engine is off.
- Battery is fully charged and battery charger is connected.



Note

Do not attempt to perform work of any other kind on the motorcycle while programming/coding are in progress.

- Switch off all electrical consumers.
- **Begin by switching on the BMW Motorrad** diagnostic system and wait for it to power up.
- » The **Start Diagnosis** screen appears
- From this point on, follow the instructions issued by the diagnostic system.



- Perform diagnosis. Rectify faults, if found, **before** starting programming/coding.

- Start programming/coding with the **CIP** program and follow the

instructions issued by the diagnostic system.

(-) Disconnecting BMW Motorrad diagnostic system from motorcycle

- Terminate the diagnosis session correctly and switch off the ignition.
- Disconnect **KOMET** from the motorcycle and screw the cap onto the diagnosis plug.
- Disconnect the **BMW Motorrad** battery charger from the motorcycle.

Finishing work

Installing intake air pipe

Installing trim panels of fuel tank

Installing right side panel

Installing right side cover

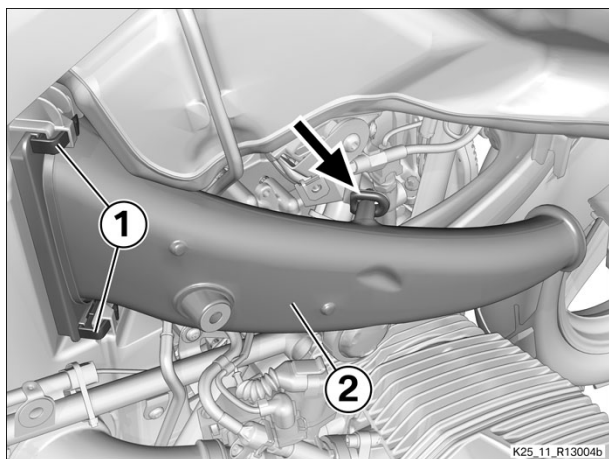
Installing left side panel

Installing left side cover

Installing front and rear seats

Final check of work performed

Installing intake air pipe

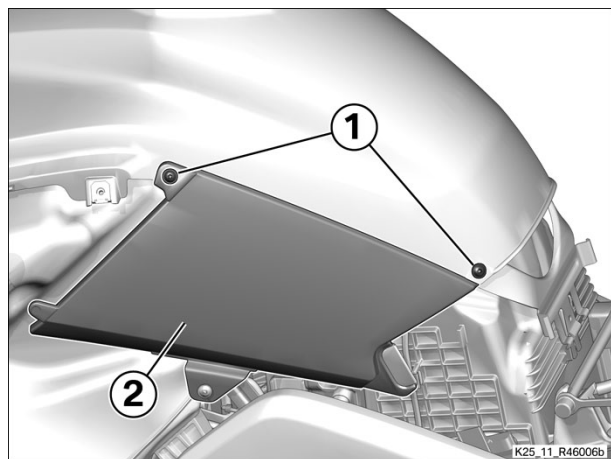


- Slide intake air pipe (2) into position and push in retainers (1) until they engage with an audible click.
- Push the retaining pin (arrow) fully home in the rubber sleeve.



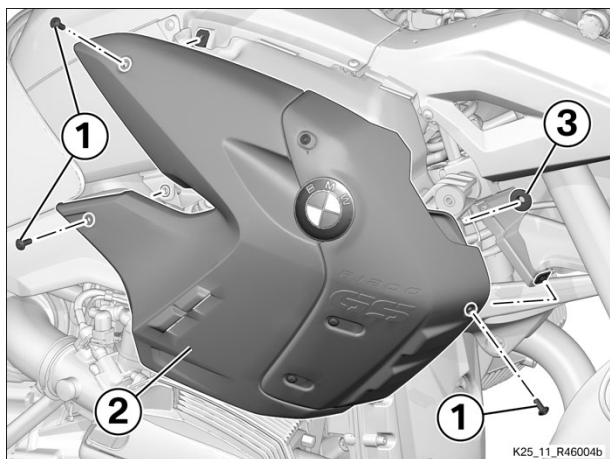
- Check that the throttle-valve cable is seated in the guide of the air intake pipe (arrow) and that it is has not been pulled out of the divider (detail).

 **Installing trim panels of fuel tank**



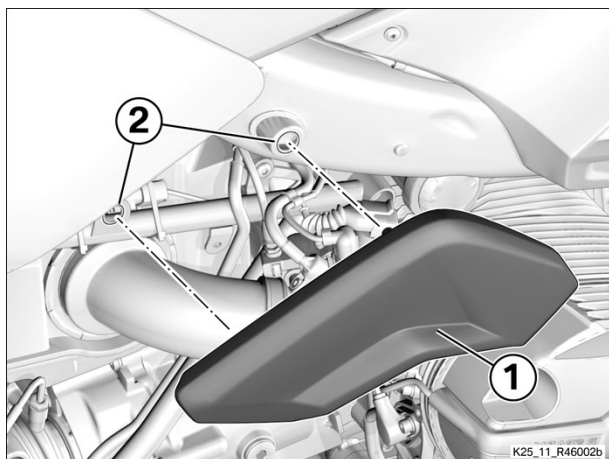
- Hold trim panels (2) in position.
- Install screws (1).

 **Installing right side panel**



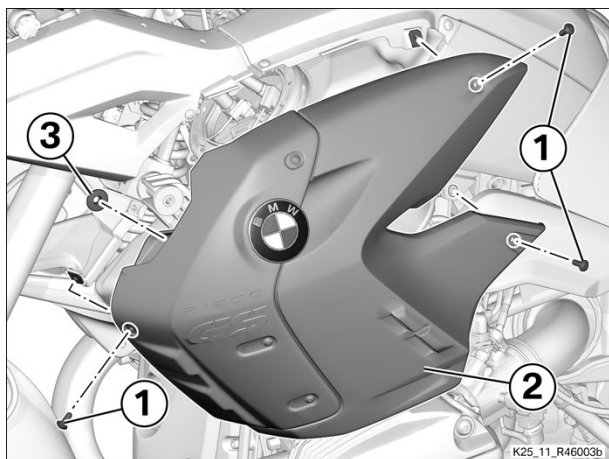
- Hold side panel (2) in position and push the snap-fit stud into holder (3).
- Install screws (1).

 **Installing right side cover**



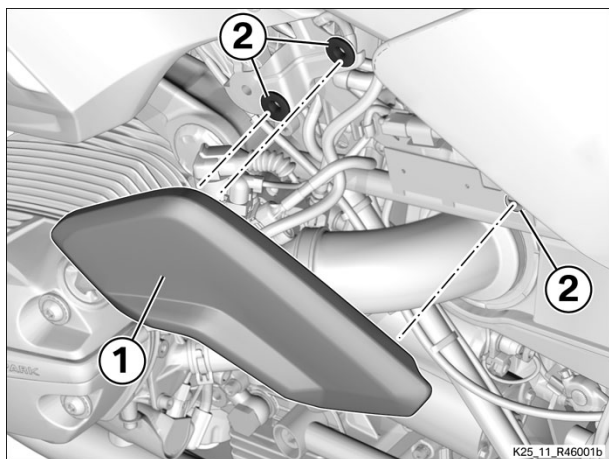
- Hold side cover (1) in position and push the snap-fit studs into holders (2).

 **Installing left side panel**



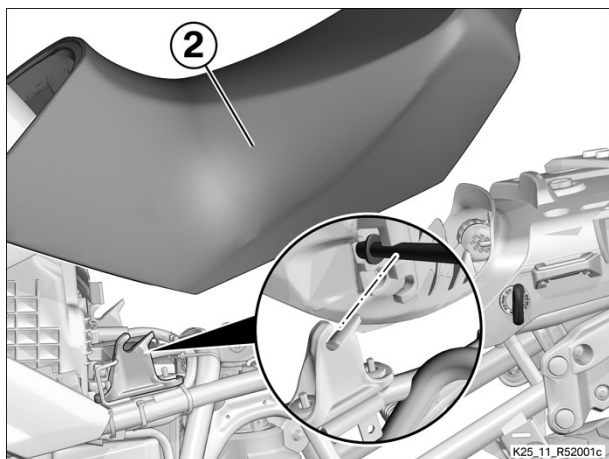
- Hold side panel (2) in position and push the snap-fit stud into holder (3).
- Install screws (1).

 **Installing left side cover**

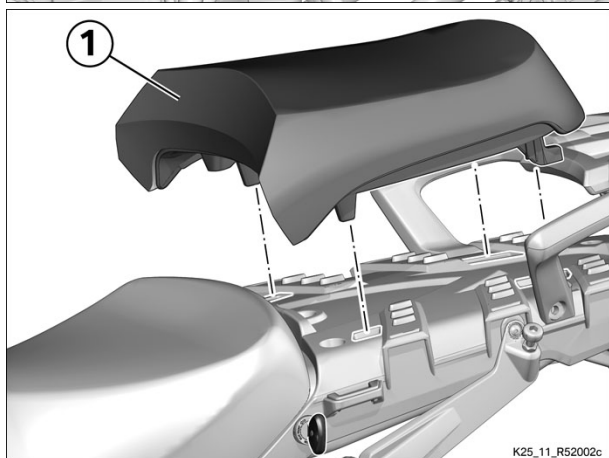


- Hold side cover (1) in position and push the snap-fit studs into holders (2).

 **Installing front and rear seats**



- Introduce front seat (2) into the front catch (detail).
- Firmly press down on front seat (2) at the rear.
- » The seat engages with an audible click.



- Hold rear seat (1) in position and press it down firmly at the front.
- » The seat engages with an audible click.

 **Final check of work performed**

- Check that
 - the work as performed achieved the intended purpose.
 - all reservoirs and containers have been filled and that all fluids and lubricants are at their correct levels.
 - all threaded fasteners released beforehand have been correctly retightened.
 - the fuel system is free of leaks.
 - the lights and signalling equipment are fully operational and that the motorcycle is roadworthy.
 - the brake pads of the front and rear brakes are bedded against the brake discs.