BMW Group - AIR: 2018-08-20 / 14:28

Retailer: 32934/01 Model: K1200GT

Vehicle identification number: ZN72879

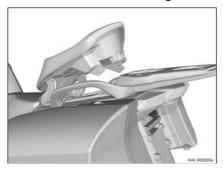
Development code: K44 Model code: 0587 Lead type: 0587 Order number: -

Installing additional wiring harness, starter/alternator »

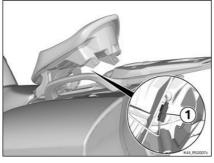
Remove the front and rear seats

Equipment trim-level variant:

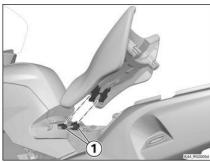
0518 - Seat heating OE



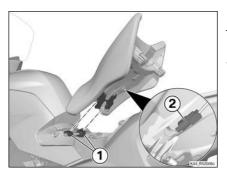
- Use the ignition key to unlock the seat lock and hold the lock in this position.
- · Remove rear seat.



- with seat heating ^{OE} (0518)
- Use the ignition key to unlock the seat lock and hold the lock in this position.
- Raise rear seat and disconnect plug (1).
- Remove rear seat.



• Pull the front seat slightly to the rear and lift it up to remove it from rubber mounts (1).



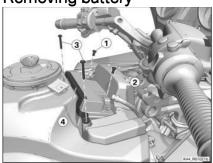
- with seat heating OE (0518)
- Pull the front seat slightly to the rear, disconnect plug (2) and lift the seat up to remove it from rubber mounts (1).

Remove the battery cover



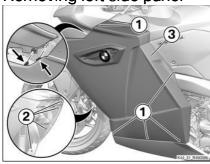
- Remove screws (1).
- Remove battery cover (2).

Removing battery



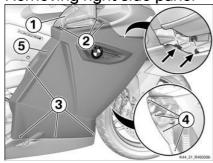
- Slacken screws (3), but do not remove.
- Disengage retainer (4) for battery.
- Remove screw (2) and disconnect the negative lead from the negative terminal of the battery.
- Open the cover, remove screw (1) and disconnect the positive lead from the positive terminal of the battery.
- · Remove the battery from the motorcycle.

Removing left side panel



- Remove the following components:
- Screws (1)
- Screws (2)
- Side panel (3)
- Note the retainers (arrows).

Removing right side panel

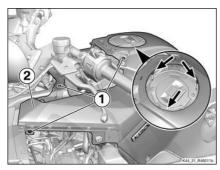


- Open stowage-compartment lid (1).
- Remove the following components, noting the retainers (arrows):
- Screws (2)
- Screws (3)
- Screws (4)
- Side panel (5)

Removing complete cover of fuel tank



• Remove screws (1) on right and left.

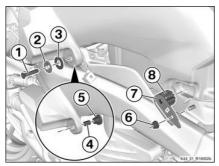


- Remove screws (1) on right and left.
- Remove complete cover (2), noting the retainers on the tank cover (arrows).

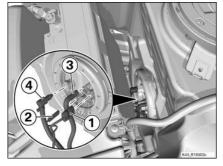
Remove the fuel tank



Disconnect hose (1).

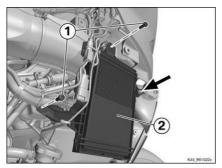


- Perform the following steps on both left and right sides:
- Remove screw (1) with washer (2) and rubber element (3).
- Remove bushings (4) and (5).
- Remove nut (6) and remove bracket (7) with rubber element (8).



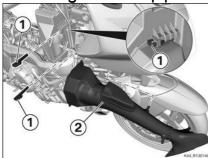
- Pull the fuel tank slightly to the rear.
- Disconnect plug (1) for the fuel pump and plug (2) for the fuellevel sensor.
- Disconnect breather hose (3).
- Disconnect fuel feed line (4) and ease the fuel tank back to remove.

Removing bracket of central vehicle electronics (ZFE) control unit



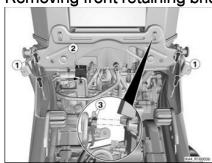
- Remove screws (1).
- Disengage bracket with control unit (2) from the holder (arrow) and carefully let it dangle to one side.

Removing intake air pipe



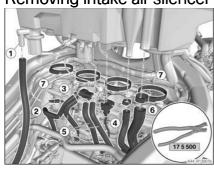
- Release two retaining hoops (1) and remove.
- Disengage intake air pipe (2) from the holder at the intake air silencer and from the rubber grommet and remove.

Removing front retaining bridge



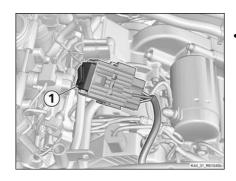
- Remove screws (1).
- · Remove starter relay (2) from the retaining bridge.
- Open cable tie (arrow).
- Pull the retaining bridge to the rear to remove, together with expander plugs (3).

Removing intake air silencer



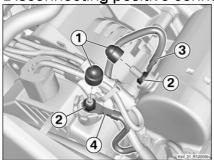
- Disconnect hose (1).
- Disconnect plug (2) of the secondary-air valve.
- Disconnect plug (3) of idle actuator.
- Disconnect plug (4) of the air--temperature sensor.
- Disconnect hoses (5) of idle actuator.
- Open clips (6) and (7) with pliers (No. 17 5 500) and disconnect the hoses.
- Slacken the intake air silencer and tilt it forward, noting the front guide on the main frame.
- Remove the intake air silencer with drain hose.

Removing starter relay



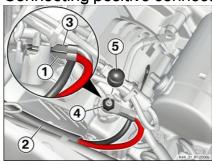
Remove starter relay (1).

Disconnecting positive connections at alternator and starter

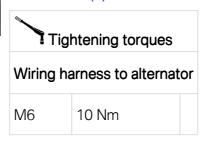


- Remove the following components:
- Dust caps (1)
- Nuts (2)
- Positive lead for starter (3)
- Positive lead for alternator (4)

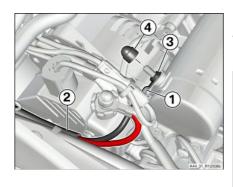
Connecting positive connections at alternator and starter



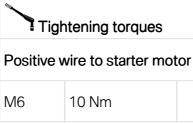
- Hold red positive lead (1) of additional wiring harness (2) and original positive lead for alternator (3) in position. Make sure that the connections of positive lead (1) of the additional wiring harness and original positive lead (3) are positioned with the flats toward each other.
- Install nut (4).



• Install dust cap (5).

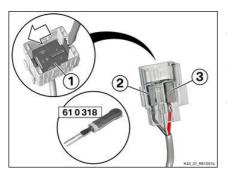


• Hold black positive lead (1) of additional wiring harness (2) in position and install nut (3).



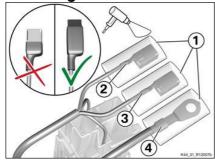
Install dust caps (4)

Unpinning load wires from starter relay



- Use a suitable tool, such as a screwdriver, to ease plug receptacle (1) aside.
- » Plug contacts are unlatched in the plug receptacle.
- Unpin plug contacts (2) and (3) with releasing tool (No. 61 0 318).

Insulating unused wires in succession



Slip lengths of heat shrink tubing (1) on to **unpinned** plug contacts (2) and (3) of the starter relay and unused positive lead (4) of the starter and position them correctly.

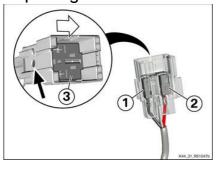
CAUTION

Working with hot components

Risk of burn injury

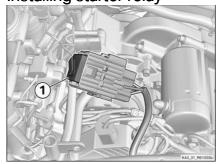
- Wear protective gloves.
- Heat lengths of tubing (1) uniformly and all round. In this process, make sure that lengths of heat-shrink tubing (1) do not slip out of position.
- Shrinking process is completed when heat shrink tubing (1) is seated all round on plug contacts (2), (3) and positive lead (4) and forms a good seal.

Unpinning load lines from starter relay



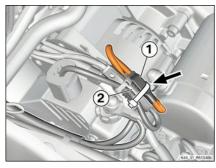
- Push black plug contact (1) and red plug contact (2) into plug receptacle (3) and pin the contacts.
- Push plug receptacle (3) to the side through the opening (arrow).
- » Plug contacts are latched in the plug receptacle.

Installing starter relay

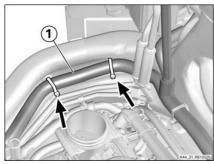


Install **new** starter relay (1).

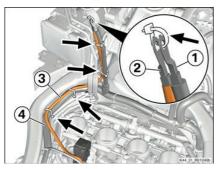
Routing additional wiring harness



Route unused positive lead (1) of the starter and secure it to cable legs (2) with a cable tie (arrow).

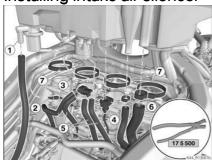


Remove the cable ties (arrows) for main wiring harness (1).



- Position battery positive terminal (1) for the main wiring harness and battery positive terminal (2) for the additional wiring harness with the **flats toward each other** and secure with a cable tie (arrow).
- Route additional wiring harness (3), making sure that it is routed above main wiring harness (4).
- Secure additional wiring harness (3) with cable ties (arrows).
- Remove the cable tie from battery positive terminals (1) and
 (2).

Installing intake air silencer



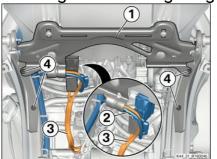
 Place the intake air silencer in position and route the drain hose forward.

≌ NOTICE

It is permissible to use suitable screw-type clamps for the throttle-valve stubs when performing repair work. When you position the clamps, it is very important to ensure that they are clear of adjacent components.

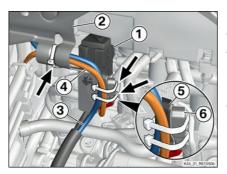
- Push the intake air silencer onto the throttle-valve union, noting front guide on the main frame.
- Close 4 clips (7) with pliers (No. 17 5 500) and tighten screw-type clamps, as applicable.
- Connect hose (1) of the secondary air system.
- Connect secondary air valve plug (2).
- Connect hoses (5) to the idle actuators.
- Connect idle-actuator plug (3).
- Connect air-temperature sensor plug (4).
- Push the hoses onto the intake air silencer and close clips (6) with pliers (No. 17 5 500).

Installing front retaining bridge



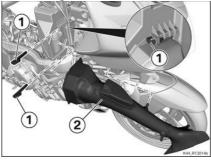
- Clean the tapped holes.
- Install complete retaining bridge (1).
- Route wiring harness (2) and additional wiring harness (3) in retaining bridge (1), making sure that they are both free of strain.
- Install new screws (4).

Tightening torques		
Tank holder, front/retaining bridge to main frame		
M6 x 20, Replace screws	8 Nm	
Thread-locking compound (Micro-encapsulated)		



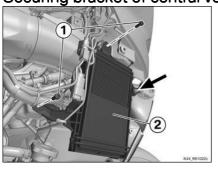
- Install starter relay (1) in retaining bridge (2).
- Align additional wiring harness (3) and wiring harness (4) free of strain in retaining bridge (2) and secure with cable tie (arrow).
- Secure disused plug contacts (5) and (6) of the starter relay in additional wiring harness (3) and wiring harness (4) with cable ties (arrows).

Installing intake air pipe



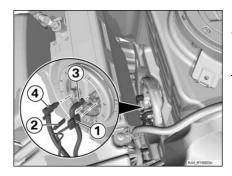
- Install the intake air pipe (2) lug first and then seat it at the rear attachment point.
- Insert two retaining hoops (1) and engage.

Securing bracket of central vehicle electronics (ZFE) control unit



- Seat bracket with control unit (2) in the holder (arrow) at the intake air pipe.
- Install screws (1).

Install the fuel tank

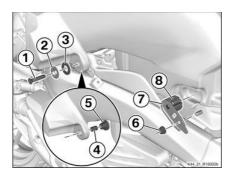


 Check the O-ring in quick-action coupling (4) for damage; replace if necessary.

ATTENTION

Application of force to close locked quick-action couplings Leak due to damaged O-rings

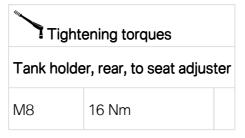
- Close the quick-action coupling of the fuel line only with the latch open/pressed.
- Place the fuel tank in position, open the latch on the female coupling of fuel delivery line (4) and, applying light pressure, press the male adapter into the female coupling until it engages with an audible click.
- Connect breather hose (3).
- Connect plug (1) for the fuel pump and plug (2) for the fuellevel sensor.



- · Position the fuel tank in the motorcycle.
- Perform the following steps on both left and right sides.
- Install bushings (5) and (4).
- Clean the tapped holes for screws (1).
- Install screw (1) with washer (2) and rubber element (3).

Tightening torques	
Fuel tank on front holder	
M8 x 50, Replace screw Thread-locking compound (Micro-encapsulated)	16 Nm

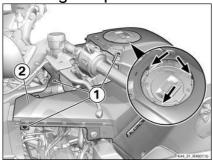
• Hold bracket (7) with rubber element (8) in position and install nut (6).



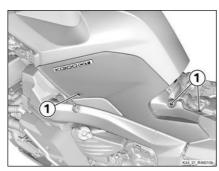


Connect hose (1).

Installing complete cover of fuel tank

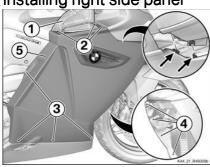


- Install complete cover (2), noting the retainers on the tank cover (arrows).
- Install screws (1) on right and left.



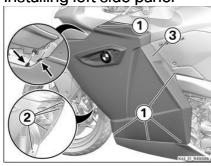
Install screws (1) on right and left.

Installing right side panel



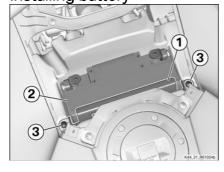
- Install the following components, noting the retainers (arrows):
- Side panel (5)
- Screws (4)
- Screws (3)
- Screws (2)
- Close stowage-compartment lid (1).

Installing left side panel

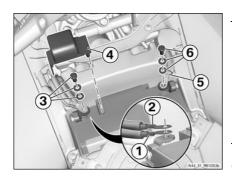


- Install the following components, noting the retainers (arrows):
- Side panel (3)
- Screws (2)
- Screws (1)

Installing battery



- Pull battery holder (1) to the rear and install battery (2).
- Hold battery holder (1) in position and tighten screws (3).



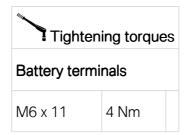
ATTENTION

Battery not connected in accordance with correct procedure Risk of short-circuit

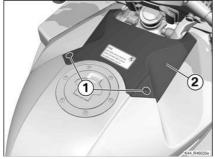
- Always proceed in compliance with specified installation sequence.
- Position positive terminal (1) for the additional wiring harness and positive terminal (2) for the main wiring harness with the flats toward each other.
- Install screw with spring washer and washer (3).

Tightening torques			
Battery terminals			
M6 x 11	4 Nm		

- Install cap for positive terminal (4).
- Hold negative lead (5) in position and install screw with spring washer and washer (6).



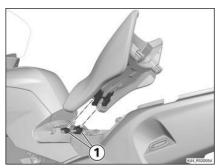
Installing battery cover



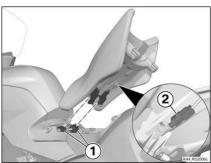
- Install battery cover (2).
- Install screws (1).

Installing front and rear seats Equipment trim-level variant:

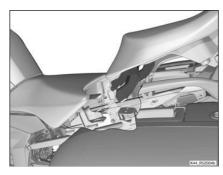
0518 - Seat heating OE



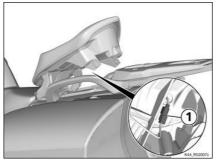
- Push the front seat forward into rubber mounts (1).
- Position the rear of the front seat on the mounts.



- with seat heating ^{OE} (0518)
- Connect plug (2).
- Push the front seat forward into rubber mounts (1).
- Position the rear of the front seat on the mounts.



- · Position the rear seat in the holder.
- Engage the seat lock by pressing down on the rear seat.



- with seat heating **OE** (0518)
- Connect plug (1).
- · Position the rear seat in the holder.
- Engage the seat lock by pressing down on the rear seat.

Final check of work performed Equipment trim-level variant:

0603 - Anti-theft alarm (DWA) OE

- · Check the following:
- The work as performed achieved the intended purpose.
- All reservoirs and containers have been filled and 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 the vehicle is roadworthy.
- The brake pads of the front and rear brakes are bedded against the brake discs.

► Function test, engine start suppression

≌ NOTICE

Engine start is not enabled if you pull the clutch with a gear engaged before switching on the ignition.

- with anti-theft alarm (**DWA**) OE (0603)
- Deactivate the anti-theft alarm system.

Check

- Centre the kill switch ("ON" position).
- · Select neutral.
- Switch on the ignition.
- » Neutral indicator light "N" lights up.
- Select a gear.
- » Neutral indicator light "N" goes out.
- Press the starter button.
- » Starter does not operate.
- Extend the side stand.
- Pull the clutch lever.
- · Press the starter button.
- » Starter does not operate.
- · Retract the side stand.
- Press the starter button without releasing the clutch lever.
- » Starter operates.

Result:

Not all test steps completed successfully.

Measure:

 Check functional check of engine start suppression and functional check of emergency and safety stop of the engine with BMW Motorrad diagnosis system.

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