

**1190 RC8 R EU/UK  
1190 RC8 R FR  
1190 RC8 R JP  
1190 RC8 R USA**

Art. no. 3211892en



**KTM**



The work described in these setup instructions must be performed before the vehicle is delivered to the customer.

Read the setup instructions in their entirety before beginning work.

Print out the current **PDI** form found on the **KTM DEALER.NET**.

These setup instructions were written to correspond to the latest state of this series. We reserve the right to make changes in the interest of technical advancement without at the same time updating this manual.

We shall not provide a description of general workshop methods. Likewise, safety rules that apply in a workshop are not specified here. It is assumed that the work will be performed by a fully trained mechanic.

All specifications are non-binding. KTM Sportmotorcycle AG specifically reserves the right to modify or delete technical specifications, prices, colors, forms, materials, services, designs, equipment, etc., without prior notice and without specifying reasons, to adapt these to local conditions, as well as to stop production of a particular model without prior notice. KTM accepts no liability for delivery options, deviations from illustrations and descriptions, as well as misprints and other errors. The models portrayed partly contain special equipment that does not belong to the regular scope of delivery.

© 2012 KTM-Sportmotorcycle AG, Mattighofen Austria

All rights reserved

Reproduction, even in part, as well as copying of all kinds, is permitted only with the express written permission of the copyright owner.



ISO 9001(12 100 6061)

According to the international quality management standard ISO 9001, KTM uses quality assurance processes that lead to the maximum possible quality of the products.

Issued by: TÜV Management Service

REG.NO. 12 100 6061

KTM-Sportmotorcycle AG  
5230 Mattighofen, Austria

## 1.1 Symbols used

The meaning of specific symbols is described below.



Indicates an expected reaction (e.g. of a work step or a function).



Indicates an unexpected reaction (e.g. of a work step or a function).



Indicates a page reference (more information is provided on the specified page).



Indicates information with more details or tips.



Indicates the result of a testing step.



Denotes a voltage measurement.



Denotes a current measurement.



Denotes a resistance measurement.

## 1.2 Formats used

The typographical formats used in this document are explained below.

<b>Proprietary name</b>	Identifies a proprietary name.
-------------------------	--------------------------------

<b>Name®</b>	Identifies a protected name.
--------------	------------------------------

<b>Brand™</b>	Identifies a trademark.
---------------	-------------------------

## 2.1 Unpacking and setting up the vehicle

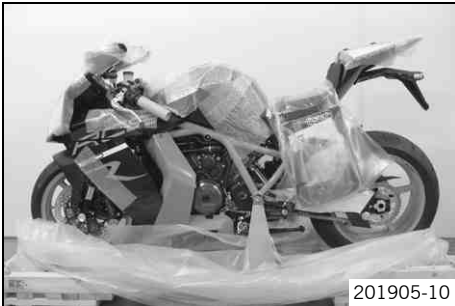


### Preparatory work

- Remove the carton.

### Main work

- Remove the adhesive tape in the upper area of the motorcycle.



- Roll down the film at the sides.



### Info

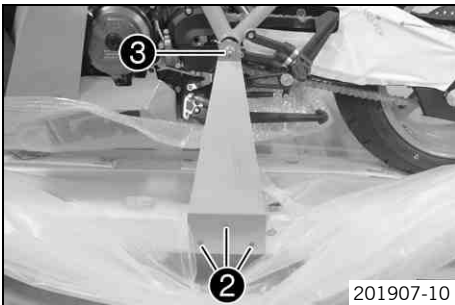
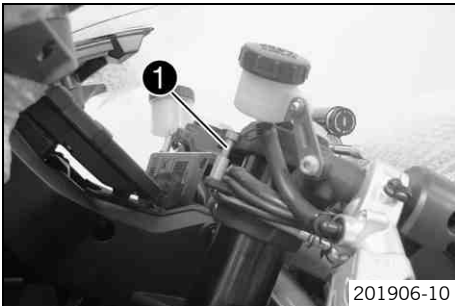
To avoid damaging the motorcycle during unpacking, leave the other films on the vehicle until you have finished work on the vehicle.

- Remove the separate enclosure from the seat.
- Unpack the separate enclosure and check that it is complete based on the enclosure list.
- Check the vehicle for transport damage.
- Remove screw ❶ with the distance sleeve from both handlebar stubs.
- Adjust the handlebar height/position. (🔧 p. 5)



### Info

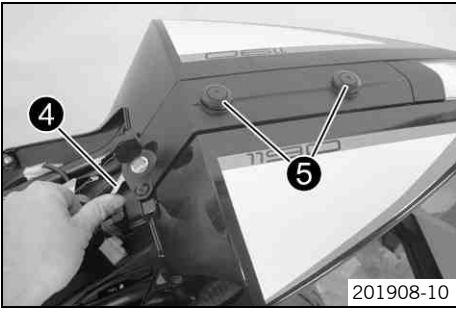
Mount the handlebar stubs in the low position.



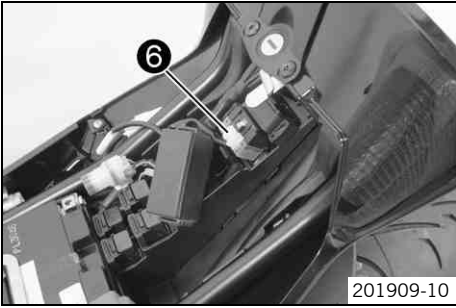
- An assistant holds the motorcycle.
- Remove screws ❷ of the retaining bracket on both sides.
- Remove nut ❸.
- Remove the retaining bracket and threaded rod on both sides.
- Push the motorcycle off of the pallet.



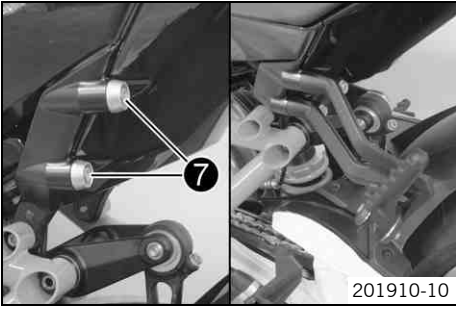
- Mount the reflector.



- Remove the seat. (🔧 p. 7)
- Activate lever 4.
- Remove locking caps 5.
- Mount the passenger seat. (🔧 p. 7)



- Recharge the battery. (🔧 p. 8)
- Pull the fuse box out of the holder. Plug in connector 6. Mount the fuse box again.
- Store the tool set below the seat (except USA).
- Fit the seat. (🔧 p. 7)



- Remove screws 7 and the bushings on both sides.
- Mount the passenger footrests on both sides with the screws from the separate enclosure.

Guideline

Screw, rear footrest bracket	M8	25 Nm (18.4 lbf ft)
------------------------------	----	------------------------

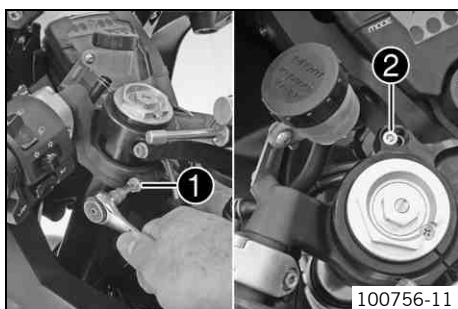
- Remove the remaining films.
- Fill up with fuel. (🔧 p. 9)
- Set the kilometers/miles **SET KM/MILES**. (🔧 p. 10)
- Set the clock with **SET CLOCK**. (🔧 p. 11)
- Print out the current **PDI** form found on **KTM DEALER.NET** and perform the delivery inspection.
- Perform a fault memory query.

## 3.1 Adjusting the handlebar height/position



## Info

The handlebar stub position must be identical on the left and right of the vehicle.



## Adjusting the high position of the handlebar stubs:

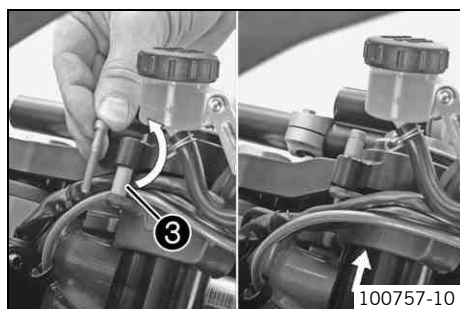
- Loosen screw ①.



## Info

Loosen the screw several turns to prevent damage to the fork paint when moving the handlebar stub.

- Remove screw ②.



- Remove distance sleeve ③.
- All cables routed under the upper triple clamp must now be routed under the handlebar stub.
- Push the handlebar stub carefully up to the upper triple clamp. Watch out for the handlebar position difference.

## Guideline

Handlebar position difference	6.5°
-------------------------------	------

- Position the distance sleeve above the triple clamp.
- Mount and tighten screw.

## Guideline

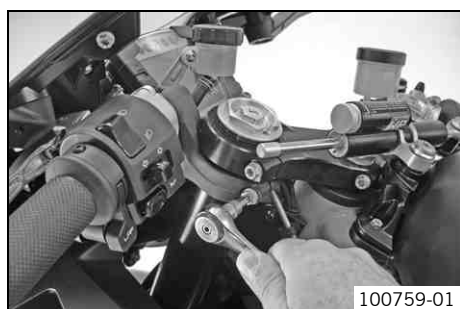
Remaining frame bolts	M5	5 Nm (3.7 lbf ft)
-----------------------	----	-------------------

- Tighten the screw.

## Guideline

Screw, handlebar stub	M8	20 Nm (14.8 lbf ft)
-----------------------	----	---------------------

- Repeat the adjustments on the other handlebar stub.
- Move the handlebar to and fro over the entire steering range.
  - » If the cables restrict the freedom of movement of the steering:
    - Correct the cable routing.
  - » If a component restricts the freedom of movement of the steering or comes into contact with the trim:
    - Establish freedom of movement and reposition the component.



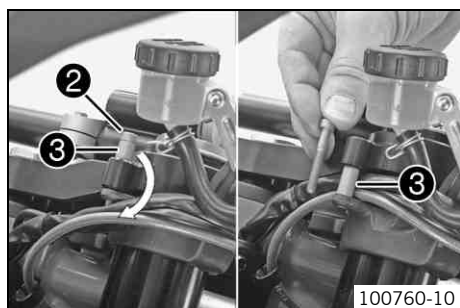
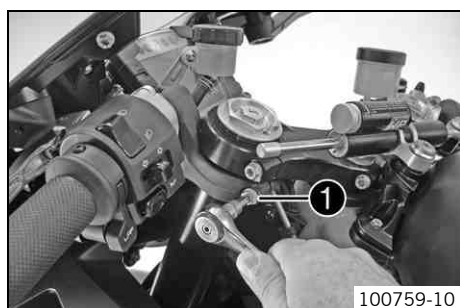
## Adjusting the low position of the handlebar stubs:

- Loosen screw ①.



## Info

Loosen the screw several turns to prevent damage to the fork paint when moving the handlebar stub.



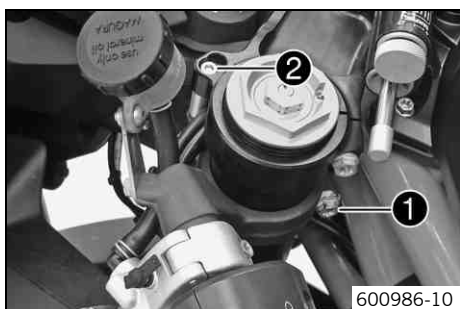
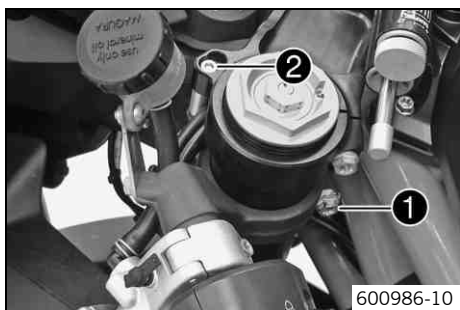
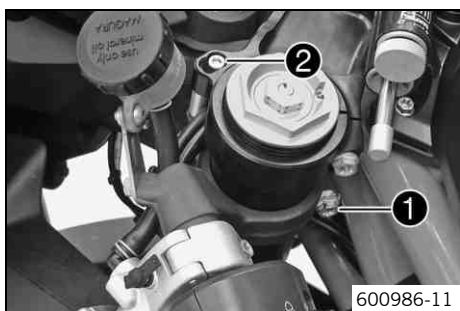
- Remove screw ② with distance sleeve ③.
- Carefully shift the handlebar stub by the length of the distance sleeve. Watch out for the handlebar position difference.

## Guideline

Length, distance sleeve	15 mm (0.59 in)
Handlebar position difference	6.5°

- Lay all cables between the upper triple clamp and the handlebar stub.
- Position the distance sleeve.





- Mount and tighten screw.

Guideline

Remaining frame bolts	M5	5 Nm (3.7 lbf ft)
-----------------------	----	-------------------

- Tighten the screw.

Guideline

Screw, handlebar stub	M8	20 Nm (14.8 lbf ft)
-----------------------	----	---------------------

- Repeat the adjustments on the other handlebar stub.
- Move the handlebar to and fro over the entire steering range.
  - » If the cables restrict the freedom of movement of the steering:
    - Correct the cable routing.
  - » If a component restricts the freedom of movement of the steering or comes into contact with the trim:
    - Establish freedom of movement and reposition the component.

#### Adjusting the narrow position of the handlebar stubs:

- Loosen screw ①.



#### Info

Loosen the screw several turns to prevent damage to the fork paint when moving the handlebar stub.

- Remove screw ② with distance sleeve.
- Carefully turn the handlebar stub toward the fuel tank.

Guideline

Handlebar position difference	6.5°
-------------------------------	------

- Position the distance sleeve.
- Mount and tighten screw ②.

Guideline

Remaining frame bolts	M5	5 Nm (3.7 lbf ft)
-----------------------	----	-------------------

- Tighten screw ①.

Guideline

Screw, handlebar stub	M8	20 Nm (14.8 lbf ft)
-----------------------	----	---------------------

- Repeat the adjustments on the other handlebar stub.
- Carefully move the handlebar to and fro over the entire steering range.
  - » If a component restricts the freedom of movement of the steering or comes into contact with the trim:
    - Establish freedom of movement and reposition the component.

#### Adjusting the wide position of the handlebar stubs:

- Loosen screw ①.



#### Info

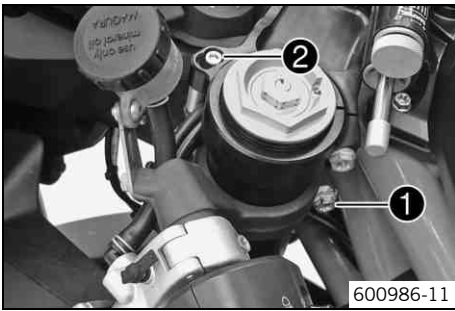
Loosen the screw several turns to prevent damage to the fork paint when moving the handlebar stub.

- Remove screw ② with distance sleeve.
- Carefully turn the handlebar stub away from the fuel tank.

Guideline

Handlebar position difference	6.5°
-------------------------------	------





- Position the distance sleeve.
- Mount and tighten screw ❷.

Guideline

Remaining frame bolts	M5	5 Nm (3.7 lbf ft)
-----------------------	----	-------------------

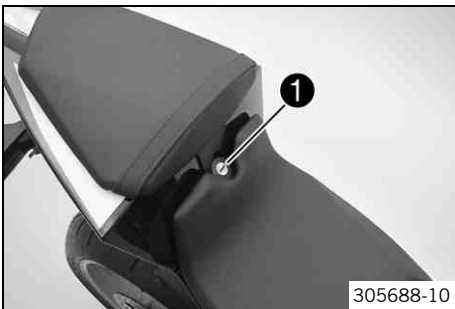
- Tighten screw ❶.

Guideline

Screw, handlebar stub	M8	20 Nm (14.8 lbf ft)
-----------------------	----	------------------------

- Repeat the adjustments on the other handlebar stub.
- Carefully move the handlebar to and fro over the entire steering range.
  - » If a component restricts the freedom of movement of the steering or comes into contact with the trim:
    - Establish freedom of movement and reposition the component.

## 3.2 Removing the seat



- Insert the ignition key in the seat lock ❶ and turn it clockwise.
- Raise the rear of the seat, push it towards the rear, and remove it upwards.

## 3.3 Mounting the passenger seat



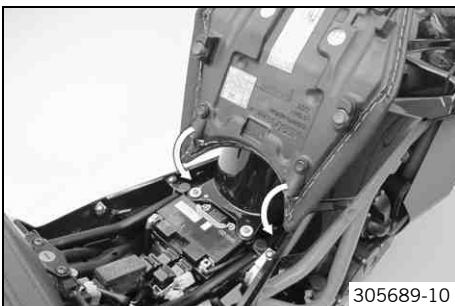
### Warning

**Danger of accidents** The passenger seat can come loose from the anchoring if it is not mounted correctly.

- After mounting the passenger seat, check that it is locked correctly by pulling up.

- Position the passenger seat in the space provided.
- Press down the passenger seat until it clicks into place.
- Finally, check that the passenger seat is correctly mounted.

## 3.4 Fitting the seat



- Position the recesses of the seat to the lugs on the frame, lower the rear end and simultaneously push it forward.
- Lock the seat by turning the ignition key in the seat lock.
- Remove the ignition key from the seat lock.
- Finally, check that the seat is correctly mounted.

## 3.5 Recharging the battery

**Warning**

**Risk of injury** Battery acid and battery gases cause serious chemical burns.

- Keep batteries out of the reach of children.
- Wear suitable protective clothing and goggles.
- Avoid contact with battery acid and battery gases.
- Keep the battery away from sparks or open flames. Charge only in well-ventilated areas.
- In the event of skin contact, rinse with large amounts of water. If battery acid gets in the eyes, rinse with water for at least 15 minutes and contact a physician.

**Warning**

**Environmental hazard** The battery contains elements that are harmful to the environment.

- Do not discard batteries with the household trash. Dispose of a defective battery in an environmentally compatible manner. Give the battery to your KTM dealer or to a recycling center that accepts used batteries.

**Warning**

**Environmental hazard** Hazardous substances cause environmental damage.

- Oil, grease, filters, fuel, cleaners, brake fluid, etc., should be disposed of as stipulated in applicable regulations.

**Info**

Even when there is no load on the battery, it discharges steadily.

The charge state and the type of charge are very important for the service life of the battery.

Rapid recharging with a high charging current shortens the battery's service life.

If the charging current, charging voltage and charging time are exceeded, electrolyte escapes through the safety valves. This reduces the battery capacity.

If the battery is depleted from starting the vehicle repeatedly, the battery must be charged immediately.

If the battery is left in a discharged state for an extended period, it will become over-discharged and sulfate, destroying the battery.

The battery is maintenance-free, i.e., the acid level does not have to be checked.

**Preparatory work**

- Switch off all power consumers and switch off the engine.
- Remove the seat. (☛ p. 7)
- Disconnect the negative (minus) cable of the battery to avoid damage to the motorcycle's electronics.

**Main work**

- Connect the battery charger to the battery. Switch on the battery charger.

Battery charger (58429074000)

You can also use the battery charger to test the rest potential and start potential of the battery, and to test the alternator. With this device, you cannot overcharge the battery.

**Info**

Never remove lid ❶.

Charge the battery at no more than 10% of the capacity specified on the battery housing ❷.

- Switch off the charger after charging. Reconnect the battery.

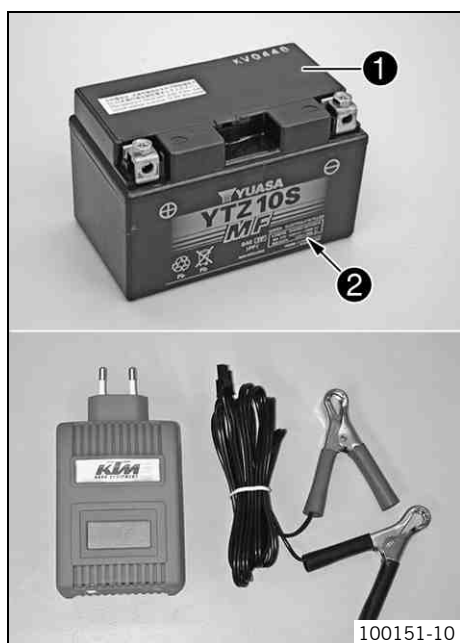
**Guideline**

The charge current, charge voltage and charge time must not be exceeded.


Charge the battery regularly when the motorcycle is not in use	3 months
--	----------


**Finishing work**

- Fit the seat. (☛ p. 7)
- Set the clock with **SET CLOCK**. (☛ p. 11)



3.6 Refueling

- **Danger**  
**Fire hazard** Fuel is highly flammable.
- Never refuel the vehicle near open flames or burning cigarettes, and always switch off the engine first. Be careful that no fuel is spilt, especially on hot vehicle components. Clean up spilt fuel immediately.
  - Fuel in the fuel tank expands when warm and can escape if the tank is overfilled. See the notes on refueling.


- **Warning**  
**Danger of poisoning** Fuel is poisonous and a health hazard.
- Avoid contact of the fuel with skin, eyes and clothing. Do not inhale fuel vapors. If fuel gets into your eyes, rinse immediately with water and contact a doctor. Wash affected skin areas immediately with soap and water. If fuel is swallowed, contact a doctor immediately. Change clothing that has come into contact with fuel.

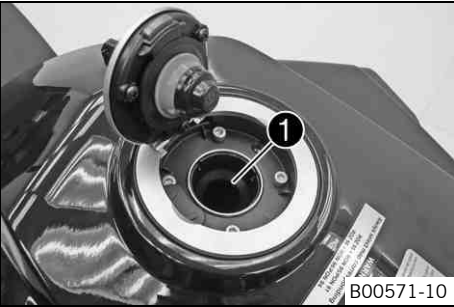
**Note**  
**Material damage** Premature clogging of the fuel filter.

- In some countries and regions, the available fuel quality and cleanliness may not be sufficient. This will result in problems with the fuel system.
- Only refuel with clean fuel that meets the specified standards.

**Note**  
**Material damage** Incorrect mapping damages the engine.

- Adjust the mapping of the engine electronics for the fuel quality currently in use.

- **Warning**  
**Environmental hazard** Improper handling of fuel is a danger to the environment.
- Do not allow fuel to get into the ground water, the ground, or the sewage system.





- Switch off the engine.
- Open the filler cap. (☞ p. 9)
- Fill the fuel tank with fuel up to the lower edge ❶ of the fuel filler.


Total fuel tank capacity, approx.	16.5 l (4.36 US gal)	Super unleaded (ROZ 95/RON 95/PON 91) (☞ p. 14)
		Super unleaded (ROZ 98 / RON 98 / PON 94) (☞ p. 14)

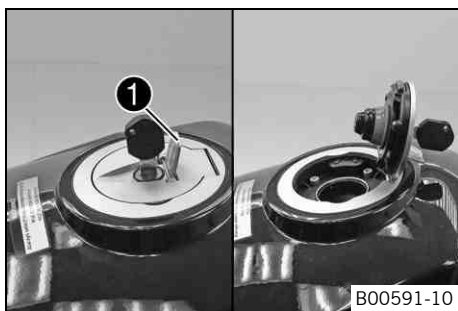
- Close the filler cap. (☞ p. 10)
- Adjust the mapping of the engine electronics. (☞ p. 11)

3.7 Opening the filler cap

- **Danger**  
**Fire hazard** Fuel is highly flammable.
- Never refuel the vehicle near open flames or burning cigarettes, and always switch off the engine first. Be careful that no fuel is spilt, especially on hot vehicle components. Clean up spilt fuel immediately.
  - Fuel in the fuel tank expands when warm and can escape if the tank is overfilled. See the notes on refueling.

- **Warning**  
**Danger of poisoning** Fuel is poisonous and a health hazard.
- Avoid contact between fuel and skin, eyes and clothing. Do not inhale fuel vapors. If fuel gets into your eyes, rinse immediately with water and contact a doctor. Wash affected skin areas immediately with soap and water. If fuel is swallowed, contact a doctor immediately. Change clothing that has come into contact with fuel. Store fuel in a suitable canister according to regulations and keep it out of the reach of children.

- **Warning**  
**Environmental hazard** Improper handling of fuel is a danger to the environment.
- Do not allow fuel to get into the ground water, the ground, or the sewage system.



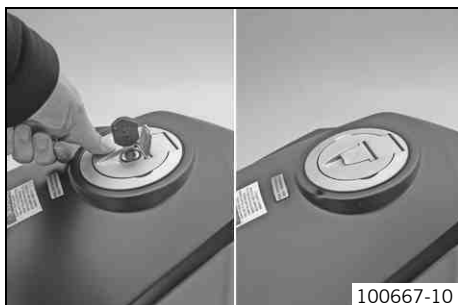
- Lift the cover ❶ of the filler cap and insert the ignition key in the lock.

## Note

**Danger of damage** Ignition key breakage.

- To take pressure off of the ignition key, push down on the filler cap. Damaged ignition keys must be replaced.
- Turn the ignition key 90° clockwise.
- Open the filler cap.

## 3.8 Closing the filler cap



## Warning

**Fire hazard** Fuel is highly flammable, poisonous and harmful to your health.

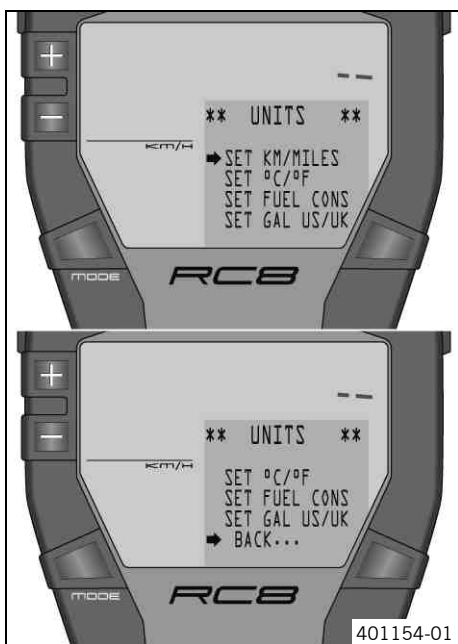
- When closing the filler cap, ensure that it is closed correctly. Change clothing that came into contact with fuel. Immediately clean skin that came into contact with fuel using soap and water.
- Close the filler cap. Push down the filler cap slightly until the lock closes.
- Remove the ignition key and close the cover.

## 3.9 Setting the kilometers/miles SET KM/MILES



## Info

Making a country-specific setting.



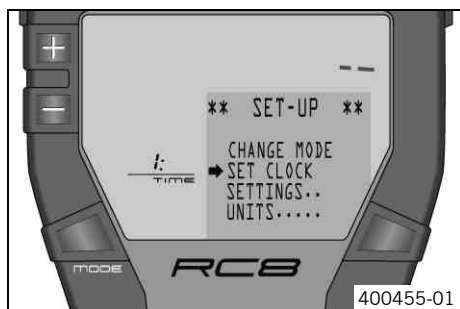
## Condition

The ignition is on.

The motorcycle is stationary.

- Press the button and the button for 3 - 5 seconds.
- Press the button three times until the symbol shows **UNITS** in the info display.
- Press the **MODE** button briefly.
- Press the **MODE** button briefly.
  - ✓ The selected unit appears on the left in the display.
- Select the unit with the or the .
- Press the **MODE** button briefly.
  - ✓ The settings are stored and the display changes to the **UNITS** menu.
- Press the button briefly and repeatedly until the symbol shows **BACK...** in the info display.
- Press the **MODE** button briefly.
- Press the button briefly and repeatedly until the symbol shows **EXIT SETUP** in the info display.
- Press the **MODE** button briefly.

## 3.10 Setting the clock with SET CLOCK

**Condition**

The ignition is on.  
The motorcycle is stationary.

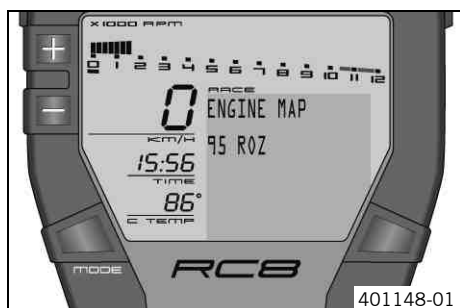
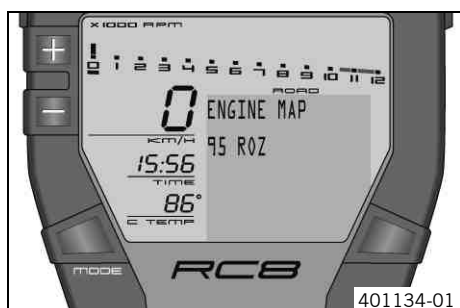
- Press the button and the button for 3 - 5 seconds.
- Press the button once until the symbol shows **SET CLOCK** in the info display.
- Press the **MODE** button briefly.
  - ✓ The hour is shown.
- Set the hour with the button or the button .
- Press the **MODE** button briefly.
  - ✓ The minutes are shown.
- Set the minutes with the button or the button .
- Press the **MODE** button briefly.
  - ✓ The settings are stored and the display changes to the **SET-UP** menu.
- Press the button briefly and repeatedly until the symbol shows **EXIT SETUP** in the info display.
- Press the **MODE** button briefly.

## 3.11 Adjusting the mapping of the engine electronics ENGINE MAP

**Note**

**Material damage** Incorrect mapping damages the engine.

- Adjust the mapping of the engine electronics for the fuel quality currently in use.

**Condition**

The ignition is on.  
The motorcycle is stationary.

**Condition****ROAD mode**

- Press the **MODE** button briefly and repeatedly until **ENGINE MAP** appears in the info display.
- Press the **MODE** button for 3 - 5 seconds.
- Select the mapping with the button or the button .
- Press the **MODE** button for 3 - 5 seconds.
  - ✓ The setting is stored.

**Condition****RACE mode**

- Press the **MODE** button briefly and repeatedly until **ENGINE MAP** appears in the info display.
- Press the **MODE** button for 3 - 5 seconds.
- Select the mapping with the button or the button .
- Press the **MODE** button for 3 - 5 seconds.
  - ✓ The setting is stored.

Screw, side stand switch	M4	2 Nm (1.5 lbf ft)	Loctite® 243™
Remaining frame bolts	M5	5 Nm (3.7 lbf ft)	–
Screw, brake fluid reservoir of rear brake	M5	5 Nm (3.7 lbf ft)	Loctite® 243™
Screw, brake line holder	M5	5 Nm (3.7 lbf ft)	–
Screw, chain guard	M5	5 Nm (3.7 lbf ft)	–
Screw, chain sliding guard	M5	5 Nm (3.7 lbf ft)	–
Screw, fuel level indicator	M5	3 Nm (2.2 lbf ft)	–
Screw, fuel tank guard	M5x12	3 Nm (2.2 lbf ft)	–
Screw, steering damper fixing bracket	M5	5 Nm (3.7 lbf ft)	Loctite® 243™
Bolt, foot brake lever stub	M6	10 Nm (7.4 lbf ft)	Loctite® 243™
Remaining chassis nuts	M6	10 Nm (7.4 lbf ft)	–
Remaining chassis screws	M6	10 Nm (7.4 lbf ft)	–
Screw, exhaust clamp	M6	8 Nm (5.9 lbf ft)	–
Screw, exhaust heat shield	M6	15 Nm (11.1 lbf ft)	–
Screw, foot brake cylinder	M6	10 Nm (7.4 lbf ft)	Loctite® 243™
Screw, foot brake lever	M6	15 Nm (11.1 lbf ft)	Loctite® 243™
Screw, fuel pump	M6	6 Nm (4.4 lbf ft)	–
Screw, shift lever stub	M6	10 Nm (7.4 lbf ft)	Loctite® 243™
Screw, shift rod	M6	12 Nm (8.9 lbf ft)	Loctite® 243™
Screw, shift shaft deflector on chain securing guide	M6	7 Nm (5.2 lbf ft)	Loctite® 243™
Screw, shift shaft deflector on shift shaft	M6	18 Nm (13.3 lbf ft)	Loctite® 243™
Fork end pinch bolts	M8	15 Nm (11.1 lbf ft)	–
Nut, forked bracket on foot brake lever	M8	30 Nm (22.1 lbf ft)	Loctite® 243™
Remaining chassis nuts	M8	25 Nm (18.4 lbf ft)	–
Remaining chassis screws	M8	25 Nm (18.4 lbf ft)	–
Screw for lifting gear support, rear	M8	18 Nm (13.3 lbf ft)	–
Screw of rear brake caliper	M8	22 Nm (16.2 lbf ft)	Loctite® 243™
Screw, bottom triple clamp	M8	15 Nm (11.1 lbf ft)	–
Screw, clamp, eccentric shaft of deflector	M8	18 Nm (13.3 lbf ft)	–
Screw, front brake disc	M8	30 Nm (22.1 lbf ft)	Loctite® 243™
Screw, front footrest bracket	M8	25 Nm (18.4 lbf ft)	Loctite® 243™
Screw, handlebar stub	M8	20 Nm (14.8 lbf ft)	–
Screw, ignition lock	M8	16 Nm (11.8 lbf ft)	Loctite® 243™
Screw, rear brake disc	M8	30 Nm (22.1 lbf ft)	Loctite® 243™
Screw, rear footrest bracket	M8	25 Nm (18.4 lbf ft)	–
Screw, shift lever	M8	25 Nm (18.4 lbf ft)	Loctite® 243™
Screw, side stand bracket	M8	25 Nm (18.4 lbf ft)	Loctite® 243™
Screw, spring holder on side stand bracket	M8	15 Nm (11.1 lbf ft)	Loctite® 243™
Screw, steering damper clamp on console	M8	20 Nm (14.8 lbf ft)	Loctite® 243™
Screw, steering damper fixing bracket on triple clamp	M8	10 Nm (7.4 lbf ft)	Loctite® 243™
Screw, steering stem	M8	20 Nm (14.8 lbf ft)	–
Screw, subframe	M8	20 Nm (14.8 lbf ft)	Loctite® 243™
Screw, top triple clamp	M8	17 Nm (12.5 lbf ft)	–
Remaining chassis nuts	M10	45 Nm (33.2 lbf ft)	–
Remaining chassis screws	M10	45 Nm (33.2 lbf ft)	–

Screw, connecting lever, shock absorber deflector	M10	45 Nm (33.2 lbf ft)	Loctite® 243™
Screw, engine bearer	M10	45 Nm (33.2 lbf ft)	–
Screw, shock absorber	M10	45 Nm (33.2 lbf ft)	Loctite® 243™
Screw, side stand	M10	35 Nm (25.8 lbf ft)	Loctite® 243™
Rear sprocket bolt	M10x1.25	50 Nm (36.9 lbf ft)	Loctite® 243™
Screw, front brake caliper	M10x1.25	45 Nm (33.2 lbf ft)	Loctite® 243™
Nut of bell crank on frame	M14x1.5	100 Nm (73.8 lbf ft)	–
Lambda sensor	M18x1.5	45 Nm (33.2 lbf ft)	–
Nut, swingarm pivot	M19x1.5	130 Nm (95.9 lbf ft)	Thread greased
Screw, seat lock	M22x1.5	8 Nm (5.9 lbf ft)	–
Bolt, front axle	M25x1.5	45 Nm (33.2 lbf ft)	–
Nut, rear wheel spindle	M25x1.5	90 Nm (66.4 lbf ft)	Thread greased
Screw, steering head	M25x1.5	18 Nm (13.3 lbf ft)	–



## Super unleaded (ROZ 95/RON 95/PON 91)

### According to

- DIN EN 228 (ROZ 95/RON 95/PON 91)

### Guideline

- Only use unleaded super fuel that matches or is equivalent to the specified fuel grade.
- Fuel with an ethanol content of up to 10 % (E10 fuel) is safe to use.



### Info

Do **not** use fuel containing methanol (e. g. M15, M85, M100) or more than 10 % ethanol (e. g. E15, E25, E85, E100).

---

## Super unleaded (ROZ 98 / RON 98 / PON 94)

### According to

- DIN EN 228 (ROZ 98 / RON 98 / PON 94)



3211892en

08/2012

