

RC 125

ART. NO. 3240080EN



Perform the work described in these setup instructions before the vehicle is delivered to the customer.

Read the setup instructions in their entirety before beginning work.

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

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.

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ISO 9001(12 100 6061)

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Issued by: TÜV Management Service

REG.NO. 12 100 6061

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This document is valid for the following models:

RC 125 EU (F5003X1, F5003X2)

RC 125 B.D. EU (F5003X3, F5003X4)

RC 125 JP (F5086X3, F5086X4)

RC 125 UK (F5022X3, F5022X4)



3240080en

18.03.2024

1 MEANS OF REPRESENTATION

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.



Indicates a voltage measurement.



Indicates a current measurement.



Indicates a resistance measurement.



Indicates the end of an activity including potential rework.

1.2 Formats used

The typographical formats used in this document are explained below.

Proprietary name

Indicates a proprietary name.

Name®

Indicates a protected name.

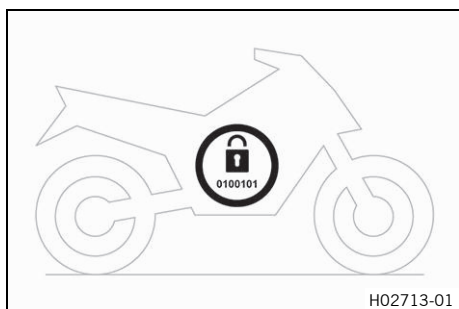
Brand™

Indicates a brand available on the open market.

Underlined terms

Refer to technical details of the vehicle or indicate technical terms, which are explained in the glossary.

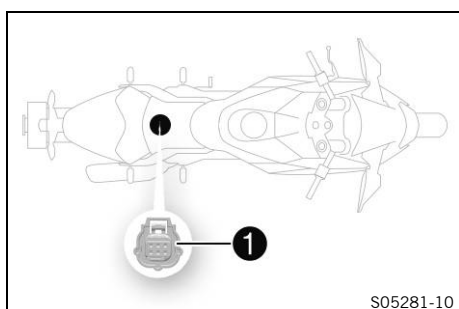
2.1 Transport mode



This vehicle was blocked for transport in the software. To operate the vehicle, the vehicle electronics must be enabled. This process is conducted during initial setup. Enabling ensures that the initial setup in is documented in electronic proof of service. Enabling can be performed either temporarily, e.g. for a test ride, or permanently for vehicle handover.

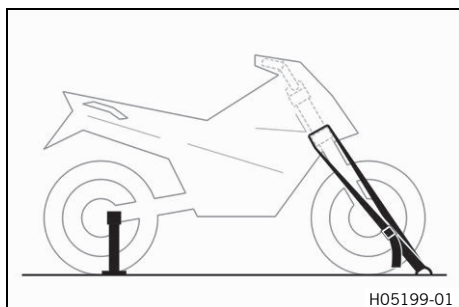
i Info
Make sure that the vehicle is permanently enabled before handing it over to the customer.

2.2 Diagnostics connector



Diagnostics connector ① is located under the front rider's seat.

2.3 Unpacking and setting up the vehicle



Preliminary work

- Remove the straps and the box.

Main work

- Remove the adhesive tape in the upper area of the motorcycle.
- Roll down the film at the sides.

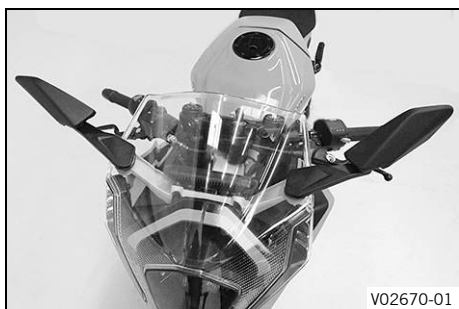
i Info
To avoid damaging the motorcycle during unpacking, leave the other films on the vehicle until you have finished work on the vehicle.

- Remove the separate enclosure and unpack it. Check the separate enclosure for completeness.

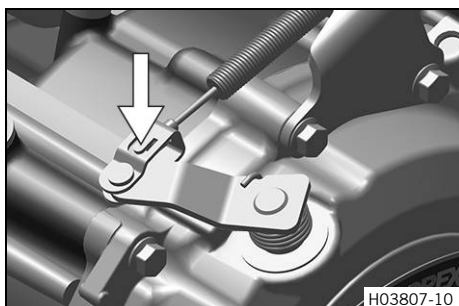
i Info
The procedure for missing components is described in the Customer Service Manual.

- Check the vehicle for transport damage.

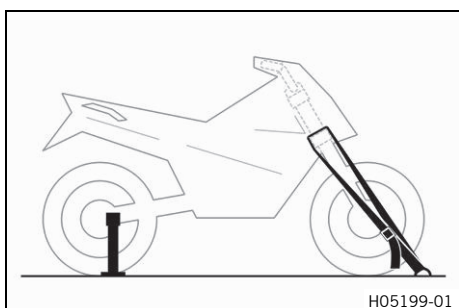
i Info
The procedure in the event of transport damage is described in the Customer Service Manual.



- Turn the rear mirror to the correct position on both sides.



- Make sure that the clutch cable is attached to the clutch release lever and secured.
- Check the clutch lever play. (📖 p. 6)
- Check the play in the throttle cable. (📖 p. 7)



- Carefully remove the bracket from the link fork.



Info

An assistant prevents the motorcycle from falling over.

- Carefully loosen and remove the tension belts around the lower triple clamp.
- ✓ The vehicle is released at the front.
- Together with an assistant, take the vehicle off the pallet.



Warning

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

- Keep 12 V batteries out of the reach of children.
- Wear suitable protective clothing and safety glasses.
- Avoid contact with battery acid and battery gases.
- Keep sparks or open flames away from the 12 V battery.
- Only charge 12 V batteries in well-ventilated rooms.
- Rinse the affected area immediately with plenty of water in the event of contact with the skin.
- Rinse eyes with water for at least 15 minutes and consult a doctor immediately if battery acid and battery gases get into the eyes.

- Fill the 12 V battery.



Info

Read the notes in the 12 V battery accessory pack.

- Charge the 12-V battery. (📖 p. 9)

Guideline

The 12-V battery must be fully charged before it is handed over to the customer.



Info

The first charging process may take longer with a new 12-V battery.



- Remove the front rider's seat. (📖 p. 7)
- Store the tool set below the seat.
- Remove spare key and **KEYCODECARD** and keep in a safe place for the handover.
- Remove the fuel tank cover. (📖 p. 8)
- Install the 12-V battery. (📖 p. 11)
- Remove the remaining film, padding, the corrugated cardboard, and the other packaging material.
- Mount the fuel tank cover. (📖 p. 9)
- Mount the front rider's seat. (📖 p. 8)
- Refuel. (📖 p. 14)
- Prepare the vehicle according to the specifications of the pre-sales inspection for handover to the customer.



Info

Transport mode must be deactivated to be able to start the motorcycle.

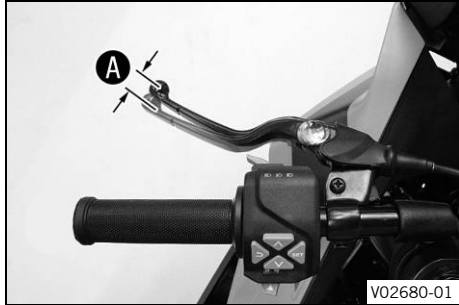


3.1 Checking the clutch lever play

Note

Clutch damage If there is no free travel by the clutch lever, the clutch will begin to slip.

- Check the free travel of the clutch lever each time before using the motorcycle.
- Adjust the free travel of the clutch lever when necessary in accordance with the specification.



- Check the clutch lever for smooth operation.
- Move the handlebar to the straight-ahead position.
- Pull the clutch lever until resistance is perceptible, and determine the play in the clutch lever **A**.

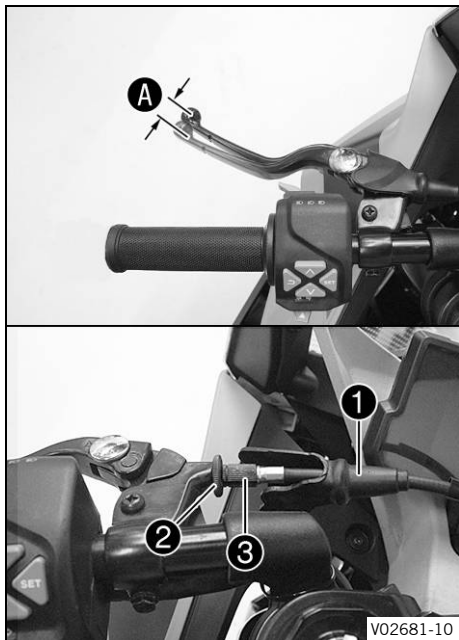
Clutch lever play A	1 ... 3 mm (0.04 ... 0.12 in)
----------------------------	-------------------------------

- » If the clutch lever play does not meet the specified value:
 - Adjust play in the clutch lever. (📖 p. 6)
- Move the handlebar to and fro over the entire steering range.

The clutch lever play must not change.

- » If the clutch lever play changes:
 - Check the routing of the clutch cable.

3.2 Adjusting play in the clutch lever



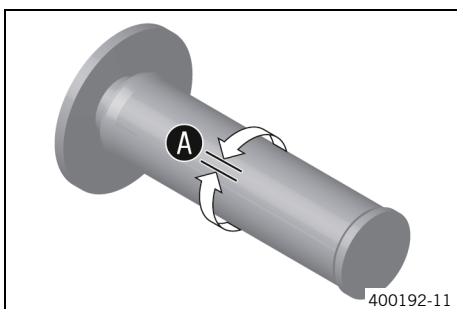
- Move the handlebar to the straight-ahead position.
- Push back sleeve **1**.
- Loosen lock nut **2**.
- Adjust the play in the clutch lever **A** by turning adjusting screw **3**.

Guideline

Clutch lever play A	1 ... 3 mm (0.04 ... 0.12 in)
----------------------------	-------------------------------

- Tighten lock nut **2**.
- Position bellows **1**.

3.3 Checking the play in the throttle cable



- Check the throttle grip for smooth operation.
- Move the handlebar to the straight-ahead position. Turn the throttle grip back and forth slightly and determine the play in throttle cable **A**.

Throttle cable play A	3 ... 5 mm (0.12 ... 0.2 in)
------------------------------	------------------------------

- » If the throttle cable play does not meet the specified value:
 - Adjust the play in the throttle cable. (📖 p. 7)



Danger

Danger of poisoning Exhaust gases are toxic and inhaling them may result in unconsciousness and death.

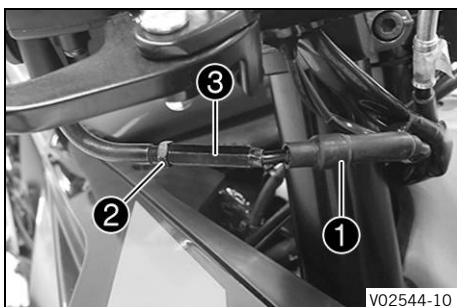
- Always make sure there is sufficient ventilation when running the engine.
- Use effective exhaust extraction when starting or running the engine in an enclosed space.

- Start the engine and let it run at idle speed. Move the handlebar to and fro over the entire steering range.

The idle speed must not change.

- » If the idle speed changes:
 - Check the throttle cable routing.

3.4 Adjusting the play in the throttle cable



- Move the handlebar to the straight-ahead position.
- Push back sleeve **1**.
- Loosen lock nut **2**.
- Adjust the play in the throttle cable by turning barrel adjuster **3**.

Guideline

Play in throttle cable	3 ... 5 mm (0.12 ... 0.2 in)
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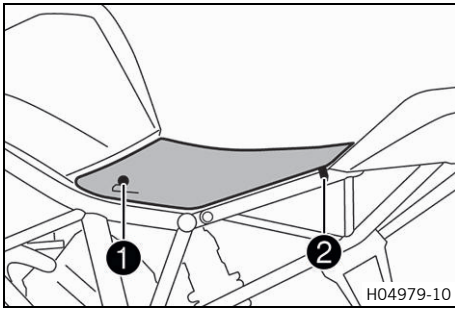
- Tighten lock nut **2**.
- Slide on sleeve **1**.

3.5 Removing the front rider's seat



- Insert the ignition key in seat lock **1** and turn it clockwise.
- Raise the rear of the front rider's seat, pull it toward the rear, and remove it upward.
- Remove the ignition key from the seat lock.

3.6 Mounting the front rider's seat



- Attach recesses **1** on the front rider's seat to the fuel tank, push the front rider's seat forward, and lower at the rear.
- ✓ The pin **2** locks audibly in place.
- Check that the front rider's seat is mounted correctly.

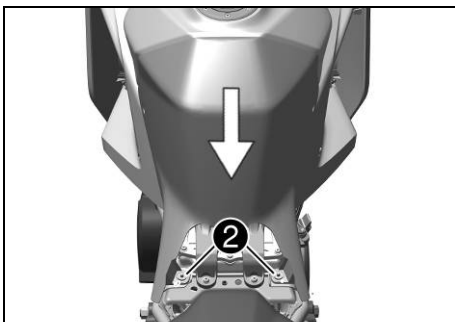
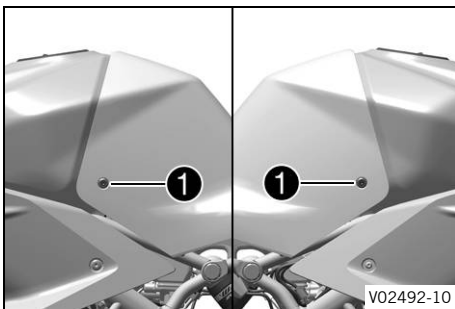
3.7 Removing the fuel tank cover

Preparatory work

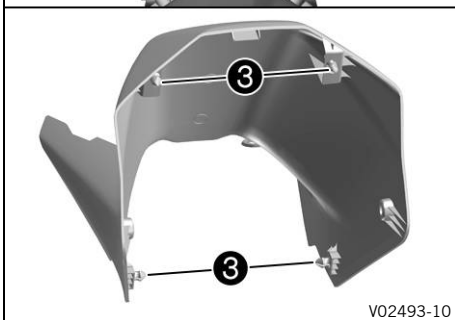
- Remove the front rider's seat. (📖 p. 7)

Main work

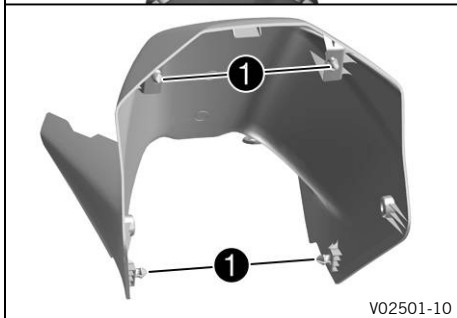
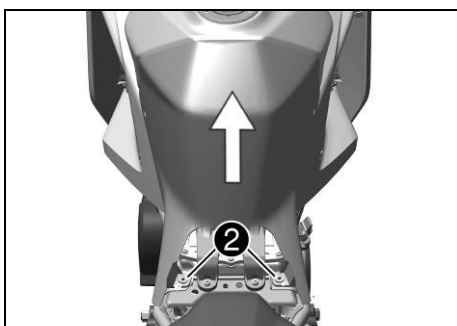
- Remove screws **1**.



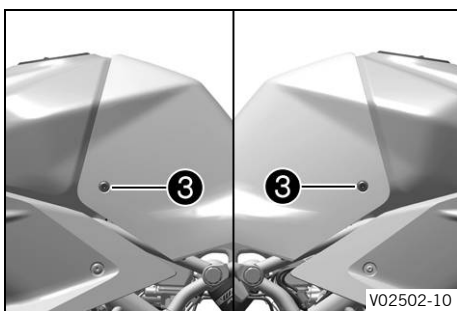
- Pull the fuel tank cover from holding lugs **2**.
- Pull holding lugs **3** out of the brackets.
- Pull the fuel tank cover off towards the rear and take off upwards.



3.8 Mounting the fuel tank cover



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Main work

- Position the fuel tank cover and slide it forward.
- ✓ Holding lugs ① engage in the brackets.
- Position brackets with rubber bushings ② on holding lugs and slide down.

- Mount and tighten screws ③.

Guideline

Remaining screws, trim	M6	6 Nm (4.4 lbf ft)
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- Check that the fuel tank cover is mounted correctly.

Finishing work

- Mount the front rider's seat. (🛠️ p. 8)

3.9 Charging the 12-V battery



Warning

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

- Keep 12 V batteries out of the reach of children.
- Wear suitable protective clothing and safety glasses.
- Avoid contact with battery acid and battery gases.
- Keep sparks or open flames away from the 12 V battery.
- Only charge 12 V batteries in well-ventilated rooms.
- Rinse the affected area immediately with plenty of water in the event of contact with the skin.
- Rinse eyes with water for at least 15 minutes and consult a doctor immediately if battery acid and battery gases get into the eyes.

Note

Danger of damage An incorrectly selected charging mode will damage the 12-V battery.

- Always select a charging mode that is compatible with the type of battery.



Note

Environmental hazard 12 V batteries contain environmentally hazardous materials.

- Do not dispose of 12 V batteries as household waste.
- Dispose of 12 V batteries at a collection point for used batteries.



Note

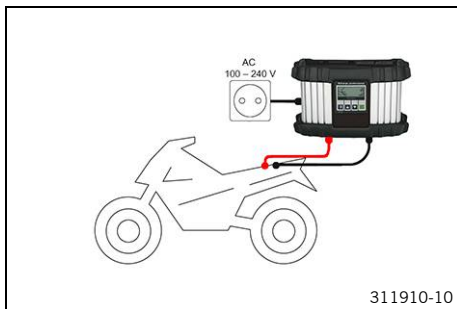
Environmental hazard Hazardous substances cause environmental damage.

- Dispose of oils, grease, filters, fuel, cleaning agents, brake fluid, etc., correctly and in compliance with the applicable regulations.



Info

Even when there is no load on the 12-V battery, it discharges steadily each day. The charging level and the method of charging are very important for the service life of the 12-V battery. Rapid recharging with a high charging current shortens the service life of the battery. If the charging current, charging voltage, or charging time is exceeded, electrolyte escapes through the safety valves. This reduces the capacity of the 12-V battery. If the 12-V battery is discharged by repeated starting, charge the 12-V battery immediately. If the 12-V battery is left in a discharged state for an extended period, it will become deeply discharged and sulfating occurs, thus destroying the battery. The 12-V battery is maintenance-free. The acid level does not have to be checked.



Preparatory work

- Remove the front rider's seat. (📖 p. 7)
- Remove the fuel tank cover. (📖 p. 8)
- Disconnect the negative cable of the 12-V battery. (📖 p. 11)

Main work

- Connect a battery charger to the 12-V battery. Adjust the battery charger.

EU battery charger **XCharge-professional** (00029095050)

Alternative 1

US battery charger **XCharge-professional** (00029095051)

Alternative 2

UK battery charger **XCharge-professional** (00029095052)



Info

Follow the instructions of the charger and the manual.

- Disconnect the battery charger after charging the 12-V battery.
- Guideline

The charging current, charging voltage, and charging time must not be exceeded.	
Recharge the 12-V battery regularly when the motorcycle is not being used	6 months

Finishing work

- Connect the negative cable of the 12-V battery. (📖 p. 11)
- Mount the fuel tank cover. (📖 p. 9)
- Mount the front rider's seat. (📖 p. 8)
- Set time and date. (📖 p. 12)

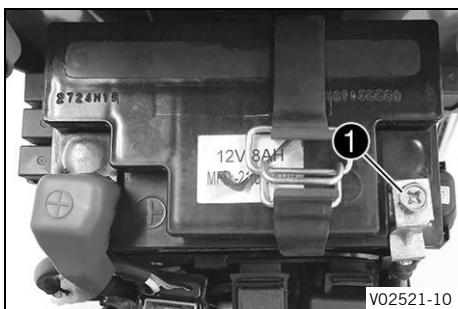
3.10 Disconnecting the negative cable of the 12-V battery

Preparatory work

- Remove the front rider's seat. (📖 p. 7)
- Remove the fuel tank cover. (📖 p. 8)

Main work

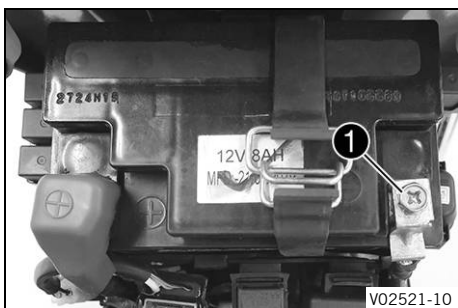
- Disconnect negative cable ❶ of the 12-V battery.



3.11 Connecting the negative cable of the 12-V battery

Main work

- Connect negative cable ❶ of the 12-V battery.



Finishing work

- Mount the fuel tank cover. (📖 p. 9)
- Mount the front rider's seat. (📖 p. 8)
- Set time and date. (📖 p. 12)

3.12 Installing the 12-V battery

Main work

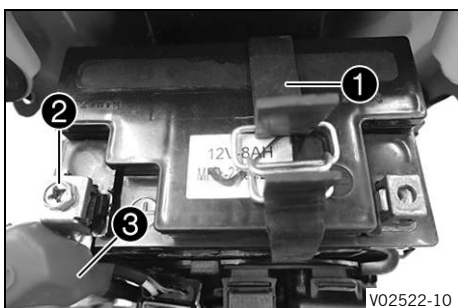
- Position the 12-V battery in the battery compartment.

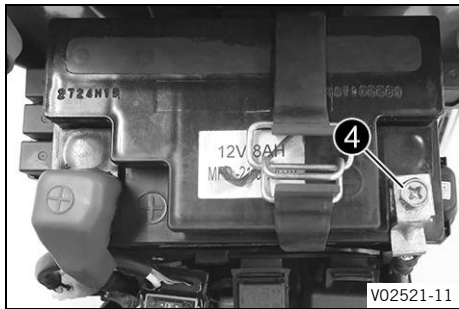
Guideline

The terminals of the battery must face upwards.

12-V battery (ETZ-9-BS)

- Attach rubber strap ❶.
- Position positive cable ❷ and mount and tighten the screw.
- Position positive terminal cover ❸.





- Position negative cable ④ and mount and tighten the screw.

Finishing work

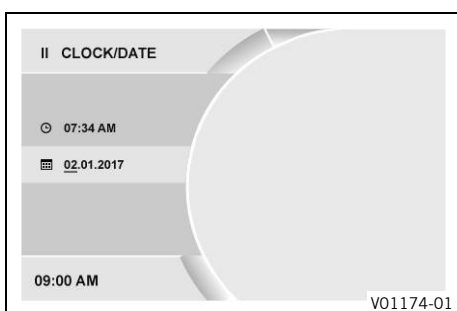
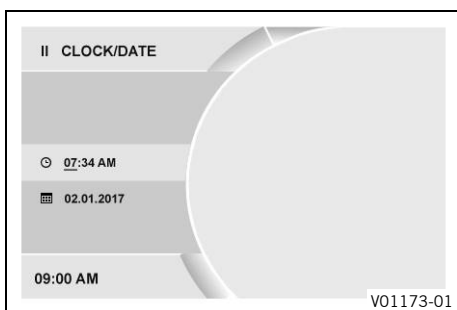
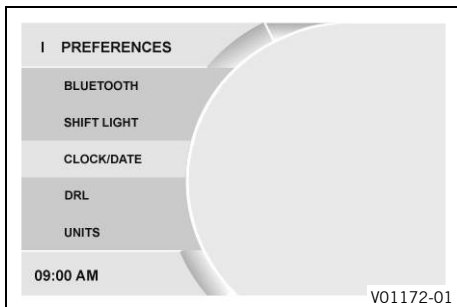
- Mount the fuel tank cover. (📖 p. 9)
- Mount the front rider's seat. (📖 p. 8)
- Set time and date. (📖 p. 12)

3.13 Setting the time and date

Condition

The motorcycle is stationary.

- Press the **SET** button when the menu is closed.
- Press **UP** or **DOWN** button until **Settings** appears. Press the **SET** button to open the menu.
- Press the **UP** or **DOWN** button until **Time/Date** is highlighted. Press the **SET** button to open the menu.



Setting the clock

- Press **UP** or **DOWN** button until the time is marked.
- Press the **SET** button.
 - ✓ The hour flashes and is underlined.
- Press **UP** or **DOWN** button until the current hour is set.
- Press the **SET** button.
 - ✓ The minutes flash and are underlined.
- Press **UP** or **DOWN** button until the current minute is set.
- Press the **SET** button.
 - ✓ The time is stored.

Setting the date

- Press **UP** or **DOWN** button until the date is marked.
- Press the **SET** button.
 - ✓ The day flashes and is underlined.
- Press **UP** or **DOWN** button until the current day is set.
- Press the **SET** button.
 - ✓ The month flashes and is underlined.
- Press **UP** or **DOWN** button until the current month is set.
- Press the **SET** button.
 - ✓ The year flashes and is underlined.
- Press **UP** or **DOWN** button until the current year is set.

- Press the **SET** button.
- ✓ The date is stored.



3.14 Opening the fuel tank filler cap



Danger

Fire hazard Fuel is highly flammable.

The fuel in the fuel tank expands when warm and can escape if overfilled.

- Do not fuel the vehicle in the vicinity of open flames or lit cigarettes.
- Switch off the engine for refueling.
- Make sure that no fuel is spilled; particularly not on hot parts of the vehicle.
- If any fuel is spilled, wipe it off immediately.
- Observe the specifications for refueling.



Warning

Danger of poisoning Fuel is harmful to health.

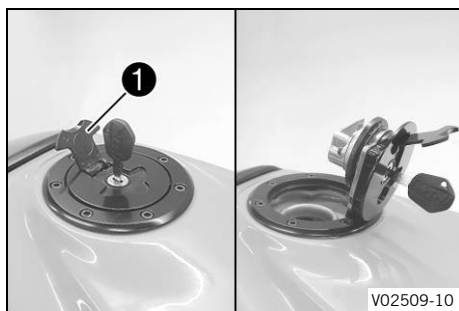
- Avoid skin, eye and clothing contact with fuel.
- Immediately consult a doctor if you swallow fuel.
- Do not inhale fuel vapors.
- Rinse the affected area immediately with plenty of water in the event of contact with the skin.
- Rinse the eyes thoroughly with water, and consult a doctor in case of fuel contact with the eyes.
- Change your clothing if fuel spills on them.
- Keep fuels correctly in a suitable canister, and out of the reach of children.



Note

Environmental hazard Improper handling of fuel is a danger to the environment.

- Do not allow fuel to enter the groundwater, the soil, or the sewage system.



- Lift cover ① of the fuel tank filler cap and insert the ignition key into the lock.

Note

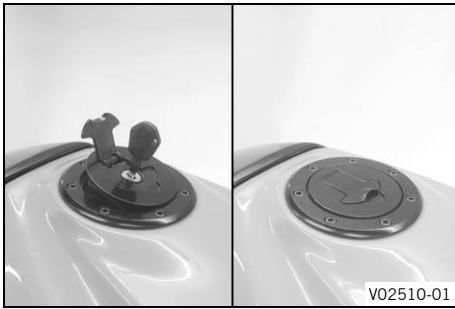
Danger of damage The ignition key may break if overloaded.

Damaged ignition keys must be replaced.

- Push down on the fuel tank filler cap to take pressure off the ignition key.
- Turn the ignition key 90° clockwise.
- Lift the fuel tank filler cap.



3.15 Closing the fuel tank filler cap



Warning

Fire hazard Fuel is highly flammable and a health hazard.

- Check that the fuel tank filler cap is locked correctly after closing.
- Change your clothing if fuel spills on them.
- Rinse the affected area immediately with plenty of water in the event of contact with the skin.

- Close the fuel tank filler cap.
- Turn the ignition key 90° clockwise.
- Push down the fuel tank filler cap and turn the ignition key counterclockwise until the fuel tank filler cap lock engages.
- Remove the ignition key and close the cover.

3.16 Refueling



Danger

Fire hazard Fuel is highly flammable.

The fuel in the fuel tank expands when warm and can escape if overfilled.

- Do not fuel the vehicle in the vicinity of open flames or lit cigarettes.
- Switch off the engine for refueling.
- Make sure that no fuel is spilled; particularly not on hot parts of the vehicle.
- If any fuel is spilled, wipe it off immediately.
- Observe the specifications for refueling.



Warning

Danger of poisoning Fuel is harmful to health.

- Avoid skin, eye and clothing contact with fuel.
- Immediately consult a doctor if you swallow fuel.
- Do not inhale fuel vapors.
- Rinse the affected area immediately with plenty of water in the event of contact with the skin.
- Rinse the eyes thoroughly with water, and consult a doctor in case of fuel contact with the eyes.
- Change your clothing if fuel spills on them.

Note

Material damage Inadequate fuel quality causes the fuel filter to quickly become clogged.

In some countries and regions, the available fuel quality and cleanliness may not be sufficient. This will result in problems with the fuel system.

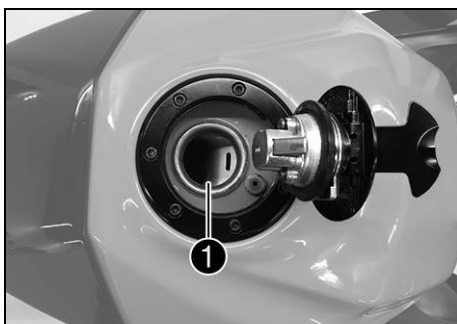
- Refuel only with clean fuel that meets the specified standards.



Note

Environmental hazard Improper handling of fuel is a danger to the environment.

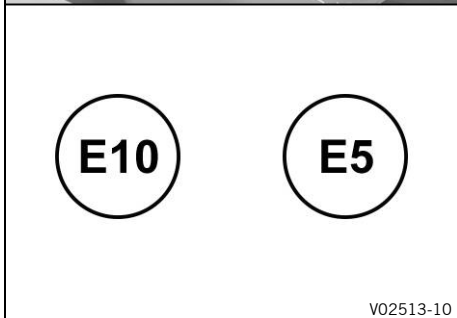
- Do not allow fuel to enter the groundwater, the soil, or the sewage system.



- Switch off the engine.
- Open the fuel tank filler cap. (📖 p. 13)
- Fill the fuel tank with fuel up to the lower edge **1** of the fuel filler.

Total fuel tank capacity, approx.	13.7 l (3.62 US gal)	Super unleaded (ROZ 95) (📖 p. 18)
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- Close the fuel tank filler cap. (📖 p. 14)



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4 TECHNICAL SPECIFICATIONS

4.1 chassis tightening torques

Remaining screws, chassis	M4	4 Nm (3 lbf ft)	
Remaining screws, chassis	M5	5 Nm (3.7 lbf ft)	
Remaining screws, trim	M5	4 Nm (3 lbf ft)	
Screw, anti-rotation lock, handlebar stub	M5	4 Nm (3 lbf ft)	
Screw, side stand sensor	M5	5 Nm (3.7 lbf ft)	Loctite®243™
Screw, wheel speed sensor wheel	M5	7 Nm (5.2 lbf ft)	Loctite®243™
Nut, tail light	M6	7 Nm (5.2 lbf ft)	
Remaining nuts, chassis	M6	15 Nm (11.1 lbf ft)	
Remaining screws, chassis	M6	9 Nm (6.6 lbf ft)	
Remaining screws, trim	M6	6 Nm (4.4 lbf ft)	
Screw, brake cylinder	M6	8 Nm (5.9 lbf ft)	Loctite®243™
Screw, chain guard	M6	3 Nm (2.2 lbf ft)	
Screw, cross connector, seat support	M6	5 Nm (3.7 lbf ft)	
Screw, front brake disc	M6	14 Nm (10.3 lbf ft)	Loctite®243™
Screw, fuel pump	M6	10 Nm (7.4 lbf ft)	
Screw, fuel tank attachment, lateral, on frame	M6	11 Nm (8.1 lbf ft)	
Screw, handlebar stub	M6	8 Nm (5.9 lbf ft)	Loctite®243™
Screw, magnetic holder on side stand	M6	5 Nm (3.7 lbf ft)	Loctite®243™
Nut, rear sprocket screw	M8	38 Nm (28 lbf ft)	
Remaining nuts, chassis	M8	25 Nm (18.4 lbf ft)	
Remaining screws, chassis	M8	30 Nm (22.1 lbf ft)	
Screw, bottom triple clamp	M8	15 Nm (11.1 lbf ft)	
Screw, connecting plate rear frame	M8	19 Nm (14 lbf ft)	
Screw, foot brake lever	M8	16 Nm (11.8 lbf ft)	Loctite®243™
Screw, fork stub	M8	15 Nm (11.1 lbf ft)	
Screw, fuel tank attachment, front, on frame	M8	20 Nm (14.8 lbf ft)	
Screw, handlebar clamp	M8	15 Nm (11.1 lbf ft)	
Screw, mirror holder	M8	19 Nm (14 lbf ft)	
Screw, passenger footrest unit	M8	20 Nm (14.8 lbf ft)	Loctite®243™
Screw, rear brake disc	M8	29 Nm (21.4 lbf ft)	Loctite®243™
Screw, shift lever	M8	17 Nm (12.5 lbf ft)	Loctite®243™
Screw, subframe bottom	M8	25 Nm (18.4 lbf ft)	Loctite®243™

Screw, top triple clamp	M8	15 Nm (11.1 lbf ft)
Screw, front brake caliper	M8x1	32 Nm (23.6 lbf ft) Loctite®243™
Banjo bolt, brake line	M10	24 Nm (17.7 lbf ft)
Nut, engine bearer, front	M10	48 Nm (35.4 lbf ft) Loctite®243™
Remaining nuts, chassis	M10	50 Nm (36.9 lbf ft)
Remaining screws, chassis	M10	46 Nm (33.9 lbf ft)
Screw, side stand	M10	35 Nm (25.8 lbf ft) Loctite®243™
Nut, side stand bracket	M10x1.25	36 Nm (26.6 lbf ft) Loctite®243™
Screw, bottom shock absorber	M10x1.25	50 Nm (36.9 lbf ft) Loctite®243™
Screw, front footrest bracket	M10x1.25	45 Nm (33.2 lbf ft) Loctite®243™
Screw, top shock absorber	M10x1.25	50 Nm (36.9 lbf ft) Loctite®243™
Swingarm pivot	M14	100 Nm (73.8 lbf ft)
Nut, rear wheel spindle	M14x1.5	100 Nm (73.8 lbf ft)
Screw, steering head, top	M16x1.5	47 Nm (34.7 lbf ft) Loctite®243™
Lambda sensor	M18x1.5	19 Nm (14 lbf ft)
Screw, subframe top	M22	120 Nm (88.5 lbf ft)
Screw, front wheel spindle	M24x1.5	45 Nm (33.2 lbf ft)
Nut, steering head	M30x1	5 Nm (3.7 lbf ft)
Nut, steering head	M30x1	Step 1 55 Nm (40.6 lbf ft) 2nd stage (loosen, counterclockwise) 2 turns Step 3 5 Nm (3.7 lbf ft)

Super unleaded (ROZ 95)

Standard/classification

- DIN EN 228 (ROZ 95)

Guideline

- Only use super unleaded fuel that matches or is equivalent to the specified standard.
- 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).



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18.03.2024

