SETUP INSTRUCTIONS 2016



1290 Super Duke R

Art. no. 3213441en





INTRODUCTION

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.

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.

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REG.NO. 12 100 6061 KTM Sportmotorcycle GmbH 5230 Mattighofen, Austria

This document is valid for the following models: 1290 Super Duke R EU (F9903P9, F9903P2) 1290 Super Duke R Special Edition EU (F9903P0) 1290 Super Duke R FR (F9923P9, F9923P2) 1290 Super Duke R AU (F9960P9, F9960P2) 1290 Super Duke R Special Edition AU (F9960P0) 1290 Super Duke R US (F9975P9, F9975P2) 1290 Super Duke R Special Edition US (F9975P0) 1290 Super Duke R CN (F9987P9)



3213441en

03/2016

1 MEANS OF REPRESENTATION

1.1	Symbols used				
	The meaning of specific symbols is described below.				
\checkmark	Indicates an expected reaction (e.g. of a work step or a function).				
X	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).				
i	Indicates information with more details or tips.				
»	Indicates the result of a testing step.				
V	Denotes a voltage measurement.				
Α	Denotes a current measurement.				
Ω	Denotes a resistance measurement.				
1.2	Formats used				
The typogra	phical formats used in this document are explained below.				
Proprietary n	ame Identifies a proprietary name.				
Name®	Identifies a protected name.				
Brand™	Identifies a trademark.				

<u>Underlined terms</u> Refer to technical details of the vehicle or indicate technical terms, which are explained in the glossary.

2 SETUP

2.1 Unpacking and setting up the vehicle









- Preparatory work – Remove the box.
 - Main work
 - Remove the adhesive tape in the upper area of the motorcycle.

Roll down the film at the sides.



- 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.
- Check the vehicle for transport damage.
- Remove the controls from the transport holder. Remove the screws of the handlebar clamp. Take off the handlebar clamp and transport holder.

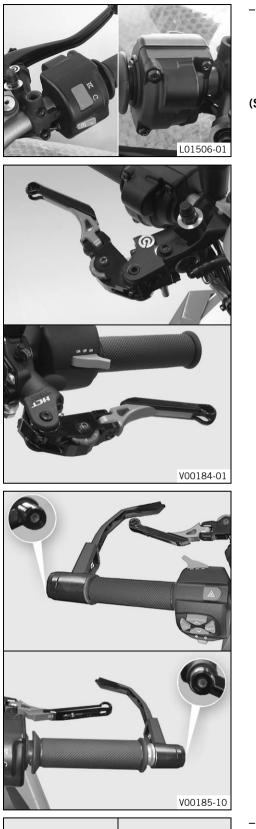
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- Remove the right-hand handlebar weight.
- Position the controls on the right half of the handlebar but do not tighten yet.

- Position the handlebar.
 - ✓ The markings of the handlebar scale are located centrally between the handlebar clamp.
- Position the handlebar clamp. Mount and tighten the screws evenly. Guideline

Screw, handlebar clamp	M8	20 Nm
		(14.8 lbf ft)



V00186-01

- Tighten the controls on the right half of the handlebar.

Guideline

Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)
Screw, combination switch, right	M5	3.5 Nm (2.58 lbf ft)

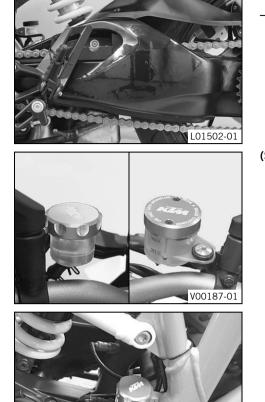
(Super Duke R Special Edition)

- Remove the mounted clutch and brake levers.

- Unpack and mount the KTM PowerParts levers included in the delivery.

- Mount the clutch and brake lever protection.
- Check the throttle grip for smooth operation.

Mount and tighten the rear mirror on both sides.



- Tape on the protective plastic sheet for the swingarm.

Remove the cable ties of the rider footrests.

(Super Duke R Special Edition)

- Take off the mounted clutch reservoir and brake fluid reservoir lids.
- Unpack and mount the KTM PowerParts lids included in the delivery.
- Take off the mounted foot brake cylinder lid.
- Unpack and mount the KTM PowerParts lid included in the delivery.

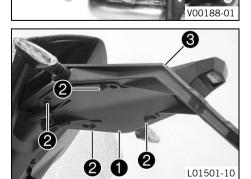
- Mount the clutch and alternator cover protection.

Guideline

Screw, clutch cover	M6	10 Nm (7.4 lbf ft)
Remaining screws, engine	M6	10 Nm (7.4 lbf ft)

Mount splash protector 1 with screws 2 on license plate holder 3.
 Guideline

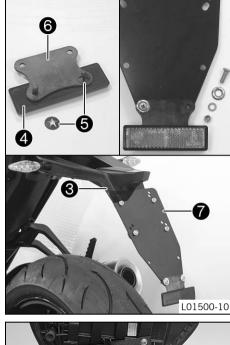
Remaining screws, chassisEJOT PT® K50x121 Nm (0.7 lbf ft)





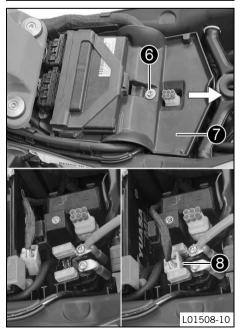


2 SETUP









- Mount reflector **4** with spring washers **5** on holding plate **6**.
- Mount holding plate 🜀 on license plate bracket 7.

(EU/AU/FR)

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Mount license plate bracket (7) on license plate holder (3).
 (US/CN)

- Bond the reflectors on the right and left side of the reflector holder.

(EU/AU/FR)

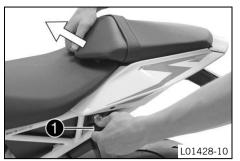
- Remove the passenger seat. (
 p. 7)
- Secure the tool set with the rubber holder.
- Carefully loosen and remove the tension belt from the frame.

• Info

An assistant prevents the motorcycle from falling over.

- Carefully loosen and remove the tension belts around the fork legs.
 The vehicle is released at the front.
- Together with an assistant, take the vehicle off the palette.
- Remove the radiator shield.
- Remove the front rider's seat. (🕮 p. 7)
- Remove screw **6**.
- Lift cover 7 at the rear and pull toward the rear.
- Fold up the cover.
- Plug in the connector of starter relay (8).
- Recharge the battery. (🛤 p. 9)
- Remove the protective plastic.
- Refuel. (🕮 p. 10)
- Prepare the vehicle according to the specifications in the KTM Dealer.net for handover to the customer.

3.1 Removing the passenger seat



- Insert the ignition key in seat lock ① and turn it clockwise.
 - Lift the passenger seat at the front and pull it out of the holder toward the front.
- Remove the passenger seat.

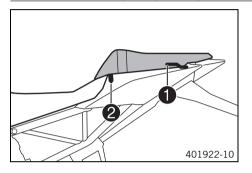
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Remove the ignition key.

3.2 Mounting the passenger seat



- Attach the recesses of the passenger seat in the guides **1** and lower at the front while pushing it back.
- Position locking pin ${f 2}$ in the lock housing and push down the passenger seat at the front.
- ✓ The locking pin engages with an audible click.
- Check that the passenger seat is correctly mounted.

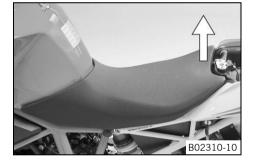
3.3 Removing the front rider's seat

Preparatory work

- Remove the passenger seat. (🕮 p. 7)

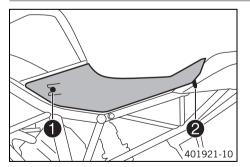
Main work

- Raise the rear of the front rider's seat.
- Detach the front of the front rider's seat and remove it.



Mounting the front rider's seat

3.4



Main work

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- Attach recesses 1 on the front rider's seat to the fuel tank and push the front rider's seat forward while lowering it.
 - ✓ Catch ② is located in the recess.
 - Check that the front rider's seat is correctly mounted.

Finishing work

- Mount the passenger seat. (🕮 p. 7)

3.5 Removing 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 sparks and open flames away from the battery. Only charge in well-ventilated rooms.
- 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.

Caution

Danger of accidents If the vehicle is operated with a discharged battery or without a battery, electronic components and safety equipment may be damaged.

- Never operate the vehicle with a discharged battery or without a battery.



Preparatory work

- Switch off all power consumers and switch off the engine.

Main work

- Remove screw 🚺.
- Lift cover **2** at the rear and pull toward the rear.
- Fold up the cover.
- Disconnect negative cable 3 of the battery.
 - Remove positive terminal cover 4 and disconnect the positive cable from the battery.
 - Take the battery **5** out of the battery compartment.

3.6 Installing 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.

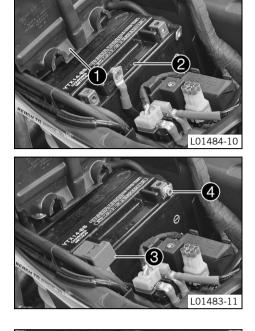
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- Keep sparks and open flames away from the battery. Only charge in well-ventilated rooms.
- In the event of skin contact, rinse with large amounts of water. If battery acid gets in the eyes, rinse with water for at least 15 minutes and contact a physician.

Caution

Danger of accidents If the vehicle is operated with a discharged battery or without a battery, electronic components and safety equipment may be damaged.

- Never operate the vehicle with a discharged battery or without a battery.



Main work

- Fold up cover 1. _
- Place battery **2** in the battery compartment.
- Position the positive cable and mount and tighten the screw. _ Guideline

duidenne				
Screw, battery terminal	M6	4.5 Nm (3.32 lbf ft)		

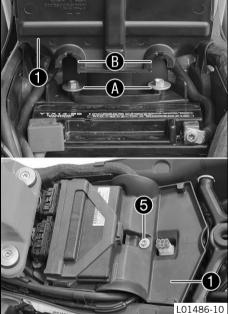
- Mount positive terminal cover 3.
- Position negative cable 4 and mount and tighten the screw. Guideline

Screw, battery terminal	M6	4.5 Nm
		(3.32 lbf ft)

Position cover **1**.

✓ Screw heads **(A)** engage in recesses **(B)**.

Mount and tighten screw **5**.



Finishing work

- Mount the front rider's seat. (
 p. 7)
- Mount the passenger seat. (
 p. 7)
- Set the time and date.

3.7 **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 sparks and open flames away from the battery. Only charge in well-ventilated rooms.
- 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 dispose of batteries with the household waste. Dispose of a defective battery in an environmentally friendly manner. Give the battery to your authorized KTM dealer or dispose of it at a collection point for used batteries.

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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 charging level and the method of charging are very important for the service life of the battery.

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

If the charging current, charging voltage, and charging time are exceeded, the battery will be destroyed.

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 sulfated, destroying the batterv.

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 passenger seat. (
 p. 7)
- Remove the front rider's seat. (
 p. 7)
- Remove the battery. (
 p. 8)

Main work

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

Battery charger XCharge-professional EU (00029095050)
Battery charger XCharge-professional US (00029095051)
Battery charger XCharge-professional GB (00029095052)
Battery charger XCharge-professional CH (00029095053)

Info

Follow the charger's instructions exactly.

Switch off the battery charger after charging and disconnect from the battery. Guideline

The charging current, charging voltage, and charging time must not be exceeded		
Charge the battery regularly when the motorcycle is not in use	3 months	

Finishing work

- Install the battery. (🕮 p. 8)
- Mount the front rider's seat. (B) p. 7)
- Mount the passenger seat. (
 p. 7)
- Set the time and date.

3.8 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.
 - The fuel in the fuel tank expands when warm and may emerge if overfilled. Follow the instructions on refueling.

Warning

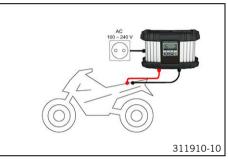
Danger of poisoning Fuel is poisonous and a health hazard.

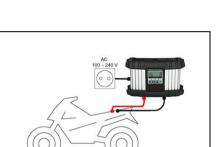
Fuel must not come into contact with the skin, eyes, or clothing. Do not breathe in the fuel vapors. If contact occurs with the eyes, rinse with water immediately and contact a physician. Immediately clean contaminated areas on the skin with soap and water. If fuel is swallowed, contact a physician immediately. Change clothing that is contaminated 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.



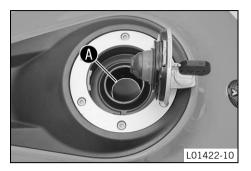


- Only refuel with clean fuel that meets the specified standards.



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. 11)
- Fill the fuel tank with fuel up to the lower edge (A) of the filler neck.

Total fuel tank capacity, approx.	18 (4.8 US gal)	Super unleaded (ROZ 95/RON 95/PON 91) (IP p. 15)
capacity, approx.		51) (→ p. 16)

Close the filler cap. (🕮 p. 12)

3.9 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.
- The fuel in the fuel tank expands when warm and may emerge if overfilled. Follow the instructions on refueling.

Warning

Danger of poisoning Fuel is poisonous and a health hazard.

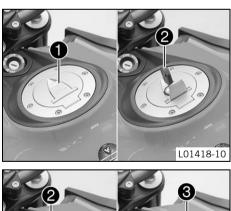
Fuel must not come into contact with the skin, eyes, or clothing. Do not breathe in the fuel vapors. If contact occurs with
the eyes, rinse with water immediately and contact a physician. Immediately clean contaminated areas on the skin with
soap and water. If fuel is swallowed, contact a physician immediately. Change clothing that has been contaminated with
fuel. Store fuel properly in a suitable canister and keep away from 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 cover **1** of the filler cap and insert ignition key **2** in the fuel tank lock.

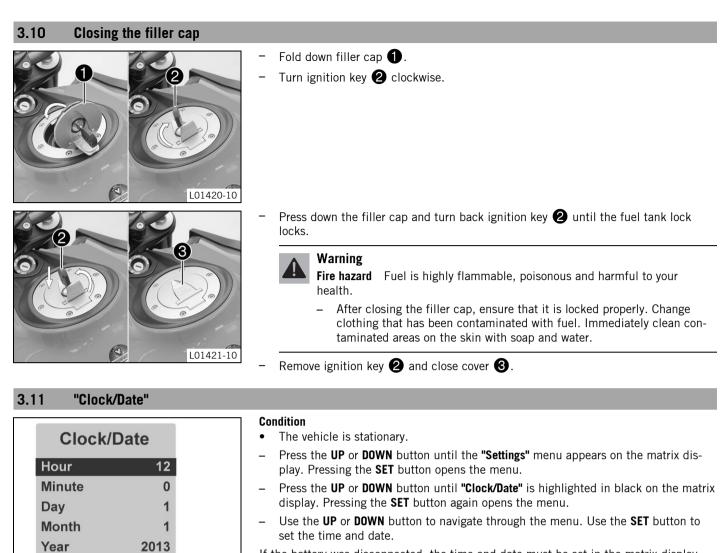
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Danger of damage Ignition key breakage.

- To take pressure off of the ignition key, push down on the filler cap. Damaged ignition keys must be replaced.
- Turn ignition key 2 clockwise.
- Fold open filler cap 3.

Note



401990-01

If the battery was disconnected, the time and date must be set in the matrix display.

4 TECHNICAL DATA

4.1 chassis tightening torques

	5		
Remaining screws, chassis	EJOT PT® K50x12	1 Nm (0.7 lbf ft)	-
Remaining screws, chassis	EJOT PT® K50x14	1 Nm (0.7 lbf ft)	-
Remaining screws, chassis	EJOT PT® K50x16	2 Nm (1.5 lbf ft)	-
Remaining screws, chassis	EJOT PT® K50x18	2 Nm (1.5 lbf ft)	-
Screw, fuel tank cover, quick connect nipple	EJOT PT® K60	2 Nm (1.5 lbf ft)	-
Screw, tail light	EJOT PT® K50x14	2.5 Nm (1.84 lbf ft)	-
Screw, combination switch, left	M4	2.5 Nm (1.84 lbf ft)	-
Screw, side stand switch	M4	2 Nm (1.5 lbf ft)	-
Remaining nuts, chassis	M5	5 Nm (3.7 lbf ft)	-
Remaining screws, chassis	M5	5 Nm (3.7 lbf ft)	-
Screw, cable channel	M5	5 Nm (3.7 lbf ft)	-
Screw, chain sliding guard	M5	5 Nm (3.7 lbf ft)	-
Screw, combination switch, right	M5	3.5 Nm (2.58 lbf ft)	-
Screw, cover part	M5x12	3.5 Nm (2.58 lbf ft)	-
Screw, filler cap	M5	3 Nm (2.2 lbf ft)	-
Screw, fuel level indicator	M5	3 Nm (2.2 lbf ft)	-
Screw, shock absorber adjusting ring	M5	5 Nm (3.7 lbf ft)	-
Ground fitting on frame	M6	10 Nm (7.4 lbf ft)	-
Nut, ABS unit attachment	M6	5 Nm (3.7 lbf ft)	-
Nut, cable on starter motor	M6	4 Nm (3 lbf ft)	-
Remaining nuts, chassis	M6	10 Nm (7.4 lbf ft)	-
Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)	-
Screw, ball joint of push rod on foot brake cylinder	M6	5 Nm (3.7 lbf ft)	Loctite [®] 243™
Screw, battery terminal	M6	4.5 Nm (3.32 lbf ft)	-
Screw, clutch assembly	M6	5 Nm (3.7 lbf ft)	Loctite [®] 243™
Screw, connecting piece, rear brake line	M6	10 Nm (7.4 lbf ft)	Loctite [®] 243™
Screw, cooler retaining bracket	M6	7 Nm (5.2 lbf ft)	-
Screw, exhaust clamp on main silencer	M6	8 Nm (5.9 lbf ft)	-
Screw, exhaust clamp on manifold	M6	8 Nm (5.9 lbf ft)	-
Screw, foot brake cylinder	M6	10 Nm (7.4 lbf ft)	Loctite [®] 243™
Screw, fuel pump	M6	6 Nm (4.4 lbf ft)	-
Screw, headlight mask, rear wall	M6	5 Nm (3.7 lbf ft)	-
Screw, license plate holder on lower rear panel	M6	12 Nm (8.9 lbf ft)	-
Screw, radiator hose clamp	M6	3 Nm (2.2 lbf ft)	-
Screw, sensor box	M6	6 Nm (4.4 lbf ft)	Loctite [®] 243™
Screw, shift lever stub	M6	10 Nm (7.4 lbf ft)	Loctite [®] 243™
Screw, shift rod	M6	5 Nm (3.7 lbf ft)	Loctite [®] 243™
Screw, shift shaft deflector on shift shaft	M6	18 Nm (13.3 lbf ft)	Loctite [®] 243™
Screw, side stand stub	M6	6 Nm (4.4 lbf ft)	Loctite [®] 243™
Screw, steering damper, holder, on frame	M6	8 Nm (5.9 lbf ft)	Loctite [®] 243™
Screw, step plate for foot brake lever	M6	10 Nm (7.4 lbf ft)	Loctite [®] 243™
Screw, wheel speed sensor, front	M6	4 Nm (3 lbf ft)	-
Screw, wheel speed sensor, rear	M6	4 Nm (3 lbf ft)	-
Nut, manifold on cylinder head	M8	Tightening sequence: Tighten the nuts evenly. Do not warp the metal plate. 25 Nm (18.4 lbf ft)	-

4 TECHNICAL DATA

Nut, rear sprocket	M8	36 Nm (26.6 lbf ft)	-
Nut, shift rod	M8	12 Nm (8.9 lbf ft)	-
Nut, shift rod	M8LH	12 Nm (8.9 lbf ft)	-
Nut, valve, angled	M8	4 Nm (3 lbf ft)	-
Remaining nuts, chassis	M8	25 Nm (18.4 lbf ft)	-
Remaining screws, chassis	M8	25 Nm (18.4 lbf ft)	-
Screw, axle clamp	M8	15 Nm (11.1 lbf ft)	-
Screw, bottom triple clamp	M8	12 Nm (8.9 lbf ft)	-
Screw, foot brake lever	M8	20 Nm (14.8 lbf ft)	Loctite [®] 243™
Screw, front brake disc	M8	30 Nm (22.1 lbf ft)	Loctite [®] 2701™
Screw, front rider footrest bracket	M8	25 Nm (18.4 lbf ft)	Loctite [®] 243™
Screw, handlebar clamp	M8	20 Nm (14.8 lbf ft)	-
Screw, ignition lock (tamper-proof screw)	M8	25 Nm (18.4 lbf ft)	-
Screw, rear brake caliper	M8	25 Nm (18.4 lbf ft)	Loctite [®] 2701™
Screw, rear brake disc	M8	30 Nm (22.1 lbf ft)	Loctite [®] 243™
Screw, shift lever on footrest bracket	M8	20 Nm (14.8 lbf ft)	Loctite [®] 243™
Screw, shift shaft deflector on frame	M8	10 Nm (7.4 lbf ft)	Loctite [®] 243™
Screw, side stand bracket	M8	25 Nm (18.4 lbf ft)	Loctite [®] 243™
Screw, side stand spring	M8	15 Nm (11.1 lbf ft)	Loctite [®] 2701™
Screw, steering damper on holder	M8	8 Nm (5.9 lbf ft)	Loctite [®] 243™
Screw, steering damper on triple clamp	M8	8 Nm (5.9 lbf ft)	Loctite [®] 243™
Screw, top triple clamp	M8	15 Nm (11.1 lbf ft)	-
Remaining nuts, chassis	M10	45 Nm (33.2 lbf ft)	-
Remaining screws, chassis	M10	45 Nm (33.2 lbf ft)	-
Screw, engine bearer	M10	45 Nm (33.2 lbf ft)	Loctite [®] 243™
Screw, front brake caliper	M10	45 Nm (33.2 lbf ft)	Loctite [®] 243™
Screw, instrument support	M10	40 Nm (29.5 lbf ft)	Loctite [®] 243™
Screw, side stand	M10	35 Nm (25.8 lbf ft)	Loctite [®] 243™
Screw, side stand bracket	M10	45 Nm (33.2 lbf ft)	Loctite [®] 243™
Screw, side stand retaining plate	M10	45 Nm (33.2 lbf ft)	Loctite [®] 243™
Banjo bolt, brake line	M10x1	25 Nm (18.4 lbf ft)	-
Banjo bolt, brake line, connecting piece, rear	M10x1	15 Nm (11.1 lbf ft)	-
Nut, rear hub shock absorber carrier	M10x1.25	45 Nm (33.2 lbf ft)	Loctite [®] 243™
Lambda sensor	M12x1.25	25 Nm (18.4 lbf ft)	-
Screw, bottom shock absorber	M14x1.5	80 Nm (59 lbf ft)	Thread greased
Screw, top shock absorber	M14x1.5	80 Nm (59 lbf ft)	Thread greased
Screw, eccentric	M16	70 Nm (51.6 lbf ft)	_
Nut, swingarm pivot	M19x1.5	130 Nm (95.9 lbf ft)	Thread greased
Nut, seat lock	M22x1.5	6 Nm (4.4 lbf ft)	_
Screw, steering head, top	M22x1.5	50 Nm (36.9 lbf ft)	-
Bolt, front axle	M25x1.5	45 Nm (33.2 lbf ft)	Thread greased
Nut, steering head	M28x1.0	Step 1 10 Nm (7.4 lbf ft) Step 2 (loosen, counter- clockwise) 60°	_
Nut, rear axle, shock absorber side	M35x1.5	200 Nm (147.5 lbf ft)	Loctite [®] 262 TM /lock the lock- ing wire with locking varnish
Nut, rear axle	M50x1.5	250 Nm (184.4 lbf ft)	Thread greased/lock locking wire with locking varnish

5 SUBSTANCES

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

Standard/classification

- 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 n

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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