SETUP INSTRUCTIONS 2016



690 Enduro R

Art. no. 3213426en





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: 690 Enduro R EU (F9703P8) 690 Enduro R AU (F9760P8) 690 Enduro R US (F9775P8)



3213426en

11/2015

1 MEANS OF REPRESENTATION

Brand™

Underlined terms

	· ·				
-	pols used				
The meaning of s	The meaning of specific symbols is described below.				
	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).				
$\mathbf{\wedge}$					
-	Indicates a page reference (more information is provided on the specified page).				
•	Indicates information with more details or tips.				
Ĭ					
»	Indicates the result of a testing step.				
V	Denotes a voltage measurement.				
Α	Denotes a current measurement.				
Ω	Denotes a resistance measurement.				
22					
1.2 Forma	ats used				
The typographical	formats used in this document are explained below.				
Proprietary name	Identifies a proprietary name.				
Name®	Identifies a protected name.				
	· · · · · · · · · · · · · · · · · · ·				

Identifies a trademark.

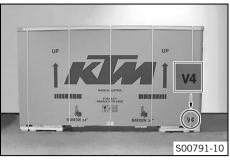
in the glossary.

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

2

2 SETUP

2.1 Unpacking and setting up the vehicle



Remove the straps and box.

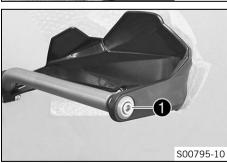
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- 500792-10
- S00793-10







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 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 and handlebar clamps.
- Remove the transport holder.
 - Remove screw **1** of the right hand guard.

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

Info

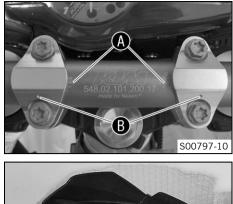
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The figure shows how to route the cable and lines.

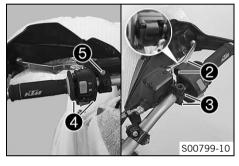
- Mount the screws.

3

2 SETUP







- Position the handlebar.
- Position the handlebar clamps. Mount the four screws and tighten evenly. Guideline

Screw, handlebar clamp	M8	20 Nm (14.8 lbf ft)
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✓ Markings **B** face backwards.

- Position the controls on the left half of the handlebar.
- Mount the screws.

- Position all controls in their exact positions on the handlebar.

- Tighten screws **2** and **3**.

Guideline			
Screw, throttle grip	M5	3.5 Nm (2.58 lbf ft)	
Screw, brake assembly	M6	5 Nm (3.7 lbf ft)	

- Check the throttle grip for smooth operation.
- Mount and tighten the screw of the right hand guard.
 - Tighten screws **4** and **5**.

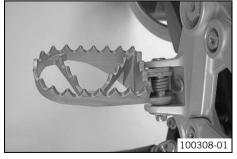
Guideline

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Screw, combination switch, left		3.5 Nm (2.58 lbf ft)
Screw, clutch assembly	M6	5 Nm (3.7 lbf ft)

Mount and tighten the rear mirror adapter and rear mirror on both sides.





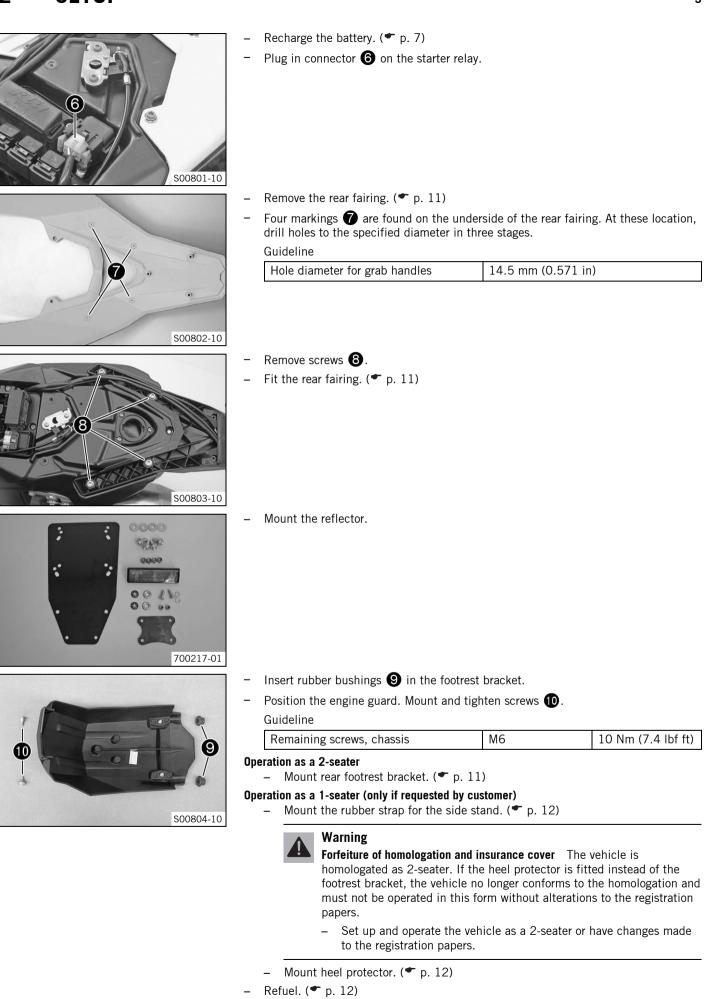
 Mount the footrests with springs and pins. Secure the pins using washers and cotter pins.

Pliers for footrest spring (58429083000)

- Remove the protective plastic.
- Carefully loosen and remove the tension belt over 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 palette.



2 SETUP

- Prepare the vehicle according to the specifications in the **KTM Dealer.net** for handover to the customer.
- Set the kilometers or miles. (• p. 13)

3.1 Removing the seat



- Pull on strap **①** and raise the rear of the seat at the same time.
- Pull back the seat and lift it off.

3.2 Mounting the seat



- Hook slot 1 of the seat onto screw 2, press the rear downward and at the same time push it forward.
- Push locking pin (3) into lock housing (4) and push the back of the seat down until the locking pin locks in place with an audible click.
- Check, finally, that the seat is correctly mounted.

3.3 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.



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 still loses power 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 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, which means that the acid level does not need to be checked.



Preparatory work

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

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 rest potential and start potential of the battery, and to test the alternator. With this device, you cannot overcharge the battery.

lnfo

Never remove lid 1.

Charge the battery with a maximum of 10% of the capacity specified on the battery housing **2**.

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

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

Finishing work

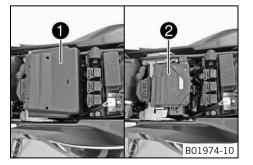
- Install the battery. (🕶 p. 9)
- Mount the seat. (🕶 p. 7)

3.4 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.



Preparatory work

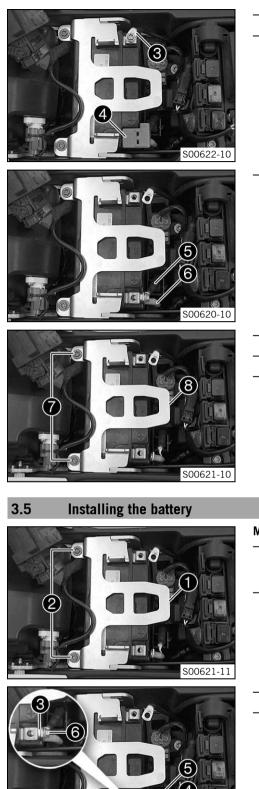
- Switch off all power consumers and switch off the engine.
- Remove the seat. (🕶 p. 7)

Main work

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- Remove battery cover **①**.
- Pull EFI control unit 2 off the holder and set it to one side.

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Take off the positive terminal cover 4.

Disconnect the ABS connection cable **(5)** and positive cable **(6)** from the battery.

- Remove screws 🕜.

- Pull retaining bracket 🔞 of the battery forward and remove it.
- Lift the battery up and out.



Never operate the motorcycle with a discharged battery or without a battery. In both cases, electrical components and safety devices can be damaged. The vehicle will therefore no longer be roadworthy.

Main work

- Insert the battery into the battery compartment with the terminals facing rearward.

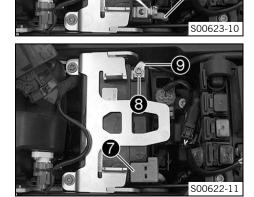
Battery (YTZ10S)			
Position retaining bracket 1 and mount and tighten screws 2 .			
Guideline			
Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)	

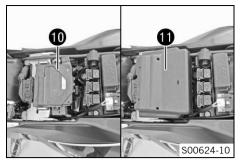
- Position washer 3, positive cable 4, and ABS connection cable 5.
- Mount and tighten screw 6.

Guideline

- Position positive terminal cover 7.
- Position washer (3) and negative cable (9), and mount and tighten the screw.
 Guideline

Screw, battery terminal	M6	4.5 Nm (3.32 lbf ft)
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- Position EFI control unit 🔟.
- Mount battery cover 🚺.

Finishing work

- Set the clock. (🕶 p. 13)

3.6 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.

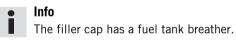
Fuel must not come into contact with the skin, eyes, or clothing. Do not breathe in the fuel vapors. If contact occurs with
the eyes, rinse with water immediately and contact a physician. Immediately clean contaminated areas on the skin with
soap and water. If fuel is swallowed, contact a physician immediately.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



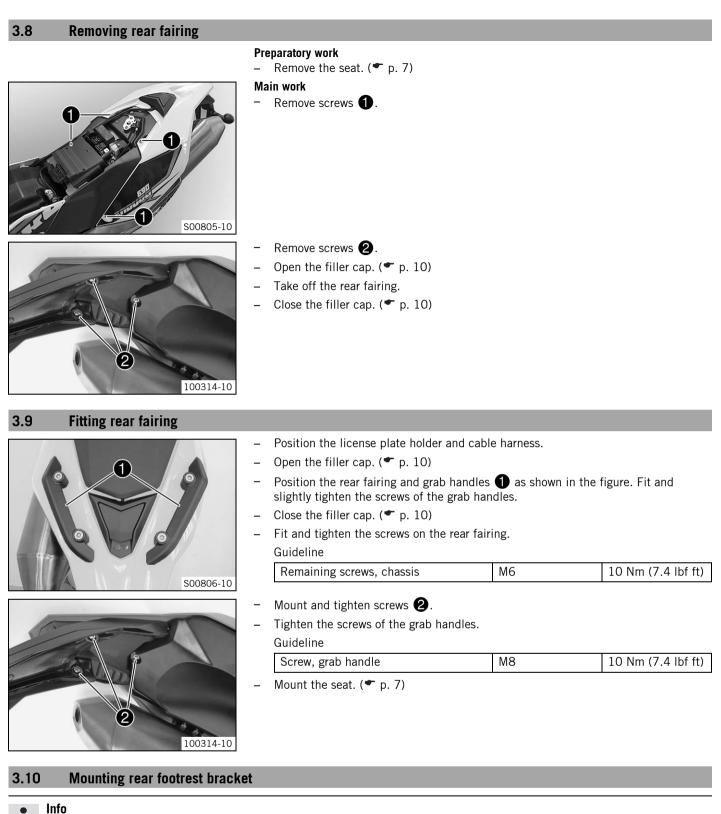
- Lift cover 🕕 of filler cap and insert the ignition key.
- Turn the ignition key 90° counterclockwise and remove the filler cap.



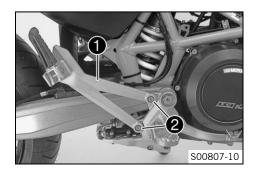
3.7 Closing filler cap



- Put the filler cap back on and turn the ignition key 90° clockwise.
- Remove the ignition key and fold down the cover.



The operations are the same for the left and right sides.



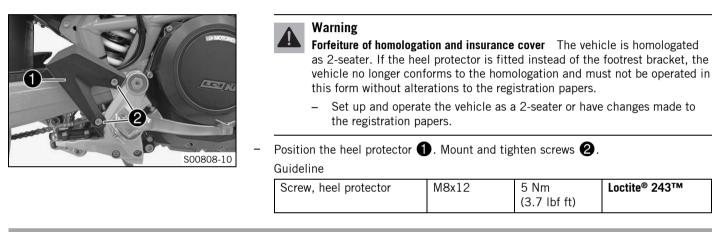
Position the footrest bracket 1. Mount a	nd tighten screws 2).
Guideline		
Screw, rear footrest bracket		25 Nm (18.4 lbf ft)

3.11 Mounting the rubber strap for the side stand and the product of the specified size at marking . brill a hole of the specified size at marking . Guideline Hole diameter for rubber strap 8.0 mm (0.315 in) Info A marking is found on the inside of the left heel protector. Mount the rubber strap.

3.12 Mounting heel protector

Info

The operations are the same for the left and right sides.



3.13 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.

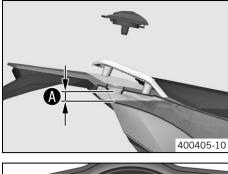
- In some countries and regions, the available fuel quality and cleanliness may not be sufficient. This will result in problems with the fuel system.
- Only refuel with clean fuel that meets the specified standards.



Warning

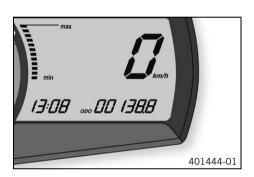
Environmental hazard Improper handling of fuel is a danger to the environment.

- Do not allow fuel to get into the ground water, the ground, or the sewage system.





3.14 Setting the clock



- Switch off the engine.
- Open the filler cap. (🕶 p. 10)
- Fill the fuel tank with fuel up to measurement (A).
 Guideline

Measurement		20 mm (0.79 in)	
Total fuel tank capacity, approx.	12 (3.2 US gal)	Super unleaded (ROZ 95/RON 95/PON 91) (* p. 16)	

- Close the filler cap. (🕶 p. 10)
- Press the SET button 2 for two seconds.
 - The fuel level warning lamp switches off. TRIP F is set to 0.0 and the display returns to the previous display mode.

Info

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If you do not press the **SET** button **2**, the reset takes place automatically after approx. three minutes.

Condition

The motorcycle is stationary.

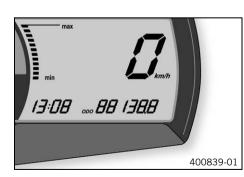
- Switch on the ignition by turning the ignition key to position \mathbf{ON} \bigcirc .
- Press the MODE button repeatedly until the ODO mode is active.
- Keep the MODE button and the SET button pressed simultaneously.
 The time display begins to flash.
- Press the **MODE** button to set the hour.
- Press the **SET** button to set the minute.
- Keep the **MODE** button and the **SET** button pressed simultaneously.
 - \checkmark The time is set.

3.15 Setting the kilometers or miles

Info

If the unit is changed, the value is retained and converted accordingly. Make the setting according to the country.

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Condition

The motorcycle is stationary.

- Switch on the ignition by turning the ignition key to position \mathbf{ON} \bigcirc .
- Press the MODE button repeatedly until the ODO display mode is active.
- Keep the MODE button pressed until the display mode changes from km/h to mph or from mph to km/h.

Guideline

Activation duration of MODE button	10 s
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4 TECHNICAL DATA

4.1 chassis tightening torques

	E LOT		
Screw, chain guard	EJOT	2 Nm (1.5 lbf ft)	-
Screw, combination instrument	EJOT	1 Nm (0.7 lbf ft)	-
Screw, license plate holder, bottom	EJOT	3 Nm (2.2 lbf ft)	-
Screw, side cover on spoiler	EJOT	1 Nm (0.7 lbf ft)	-
Screw, side stand switch	EJOT	2 Nm (1.5 lbf ft)	-
Screw, SLS valve	EJOT	2 Nm (1.5 lbf ft)	-
Fitting, side stand switch	M4	2 Nm (1.5 lbf ft)	-
Spoke nipple, front wheel	M4.5	4 Nm (3 lbf ft)	-
Bolt, foot brake lever stub	M5	6 Nm (4.4 lbf ft)	Loctite [®] 243™
Remaining nuts, chassis	M5	4 Nm (3 lbf ft)	-
Remaining screws, chassis	M5	4 Nm (3 lbf ft)	-
Screw, brake line holder on swingarm	M5	4 Nm (3 lbf ft)	-
Screw, cable on starter motor	M5	3 Nm (2.2 lbf ft)	_
Screw, combination switch, left	M5	3.5 Nm (2.58 lbf ft)	-
Screw, electrical holder	M5	3 Nm (2.2 lbf ft)	-
Screw, exhaust heat shield	M5	8 Nm (5.9 lbf ft)	Loctite [®] 243™
Screw, fuel hose clamp on fuel tank	M5	5 Nm (3.7 lbf ft)	-
Screw, fuel level sensor	M5	3 Nm (2.2 lbf ft)	-
Screw, fuel pump	M5	4 Nm (3 lbf ft)	-
Screw, fuel tank closure flange	M5	2.5 Nm (1.84 lbf ft)	-
Screw, headlight mask	M5	5 Nm (3.7 lbf ft)	-
Screw, pressure regulator	M5	4 Nm (3 lbf ft)	-
Screw, throttle grip	M5	3.5 Nm (2.58 lbf ft)	-
Spoke nipple, rear wheel	M5	4 Nm (3 lbf ft)	-
Remaining nuts, chassis	M6	10 Nm (7.4 lbf ft)	-
Remaining screws on fuel tank	M6	5 Nm (3.7 lbf ft)	-
Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)	-
Screw connection, foot brake cylinder	M6	10 Nm (7.4 lbf ft)	_
Screw, ABS control unit	M6	5 Nm (3.7 lbf ft)	_
Screw, air filter box top	M6	2 Nm (1.5 lbf ft)	_
Screw, ball joint of push rod on foot brake cylinder	Мб	10 Nm (7.4 lbf ft)	Loctite [®] 243™
Screw, battery terminal	M6	4.5 Nm (3.32 lbf ft)	_
Screw, brake assembly	M6	5 Nm (3.7 lbf ft)	_
Screw, brake fluid reservoir of rear	M6	5 Nm (3.7 lbf ft)	_
brake			
Screw, chain guard	M6	2 Nm (1.5 lbf ft)	Loctite [®] 243™
Screw, chain guide	M6	8 Nm (5.9 lbf ft)	-
Screw, chain sliding guard	M6	8 Nm (5.9 lbf ft)	Loctite [®] 243™
Screw, clutch assembly	M6	5 Nm (3.7 lbf ft)	-
Screw, fan hood	M6	4 Nm (3 lbf ft)	-
Screw, front brake disc	M6	14 Nm (10.3 lbf ft)	Loctite [®] 243™
Screw, ignition lock	M6	10 Nm (7.4 lbf ft)	Loctite [®] 243™
Screw, lower radiator bracket	M6	8 Nm (5.9 lbf ft)	-
Screw, magnetic holder on side stand	M6	6 Nm (4.4 lbf ft)	Loctite [®] 243™
Screw, radiator guard	M6	8 Nm (5.9 lbf ft)	-
Screw, rear brake disc	M6	14 Nm (10.3 lbf ft)	Loctite [®] 243™
Screw, seat lock	M6	5 Nm (3.7 lbf ft)	-
Screw, side cover	M6	5 Nm (3.7 lbf ft)	-
Screw, upper radiator bracket	M6	10 Nm (7.4 lbf ft)	_
Screw, voltage regulator	M6	8 Nm (5.9 lbf ft)	_
Screw, voltage regulator	M6	8 Nm (5.9 lbf ft)	-

4 TECHNICAL DATA

Screw, wheel speed sensor	M6	6 Nm (4.4 lbf ft)	-
Nut, rear sprocket screw	M8	35 Nm (25.8 lbf ft)	Loctite [®] 2701™
Remaining nuts, chassis	M8	25 Nm (18.4 lbf ft)	-
Remaining screws, chassis	M8	25 Nm (18.4 lbf ft)	-
Screw, bottom triple clamp	M8	12 Nm (8.9 lbf ft)	-
Screw, chain sliding piece	M8	15 Nm (11.1 lbf ft)	-
Screw, connection lever on frame	M8	30 Nm (22.1 lbf ft)	Loctite [®] 243™
Screw, foot brake lever	M8	25 Nm (18.4 lbf ft)	Loctite [®] 243™
Screw, fork stub	M8	15 Nm (11.1 lbf ft)	-
Screw, front brake caliper	M8	25 Nm (18.4 lbf ft)	Loctite [®] 243™
Screw, front footrest bracket	M8	25 Nm (18.4 lbf ft)	_
Screw, fuel tank bracket	M8	15 Nm (11.1 lbf ft)	-
Screw, fuel tank, bottom	M8	25 Nm (18.4 lbf ft)	Loctite [®] 243™
Screw, fuel tank, top	M8	25 Nm (18.4 lbf ft)	Loctite [®] 243™
Screw, grab handle	M8	10 Nm (7.4 lbf ft)	-
Screw, handlebar clamp	M8	20 Nm (14.8 lbf ft)	-
Screw, heel protector	M8x12	5 Nm (3.7 lbf ft)	Loctite [®] 243™
Screw, license plate holder, top	M8	20 Nm (14.8 lbf ft)	-
Screw, main silencer clamp	M8	12 Nm (8.9 lbf ft)	Copper paste
Screw, main silencer holder	M8	25 Nm (18.4 lbf ft)	-
Screw, main silencer holder on fuel tank	M8	25 Nm (18.4 lbf ft)	-
Screw, rear footrest bracket	M8x16	25 Nm (18.4 lbf ft)	-
Screw, side stand bracket	M8	25 Nm (18.4 lbf ft)	Loctite [®] 243™
Screw, spring holder on side stand bracket	M8	25 Nm (18.4 lbf ft)	Loctite [®] 243™
Screw, steering stem	M8	20 Nm (14.8 lbf ft)	-
Screw, top triple clamp	M8	17 Nm (12.5 lbf ft)	_
Engine carrying screw	M10	45 Nm (33.2 lbf ft)	Loctite [®] 243™
Remaining nuts, chassis	M10	45 Nm (33.2 lbf ft)	_
Remaining screws, chassis	M10	45 Nm (33.2 lbf ft)	_
Screw, bottom shock absorber	M10	45 Nm (33.2 lbf ft)	Loctite [®] 243™
Screw, engine bearer on frame	M10	45 Nm (33.2 lbf ft)	_
Screw, handlebar support	M10	40 Nm (29.5 lbf ft)	Loctite [®] 243™
Screw, side stand	M10	35 Nm (25.8 lbf ft)	Loctite [®] 243™
Screw, top shock absorber	M10	45 Nm (33.2 lbf ft)	Loctite [®] 243™
Banjo bolt, brake line	M10x1	20 Nm (14.8 lbf ft)	-
Screw, swingarm pivot	M12	80 Nm (59 lbf ft)	-
Lambda sensor	M12x1.25	25 Nm (18.4 lbf ft)	Copper paste
Nut, linkage lever on swingarm	M14x1.5	100 Nm (73.8 lbf ft)	-
Nut, linkage lever to rocker arm	M14x1.5	100 Nm (73.8 lbf ft)	-
Screw, bottom steering head	M20x1.5	60 Nm (44.3 lbf ft)	Loctite [®] 243™
Screw, top steering head	M20x1.5	12 Nm (8.9 lbf ft)	-
Screw, front wheel spindle	M24x1.5	45 Nm (33.2 lbf ft)	-
Nut, rear wheel spindle	M25x1.5	90 Nm (66.4 lbf ft)	-

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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KTM Sportmotorcycle GmbH 5230 Mattighofen/Austria http://www.ktm.com



