SETUP INSTRUCTIONS 2012

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690 Duke EU
690 Duke AUS/UK

Art. no. 3211890en

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.

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.

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 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.
V	Denotes a voltage measurement.
A	Denotes a current measurement.
Ω	Denotes a resistance measurement.

1.2 Formats used

The typographical formats used in this document are explained below.

Proprietary name	Identifies a proprietary name.
Name®	Identifies a protected name.
Brand™	Identifies a trademark.

2.1 Unpacking and setting up the vehicle


201895-10

– Remove the box and the plastic packaging.

Info
To avoid damaging the motorcycle while mounting the handlebar, leave the film on the fuel tank until all of the work on the motorcycle has been finished.

– Check the vehicle for transport damage.
– Unpack the separate enclosure and check its contents on the basis of the enclosure list.


201896-10

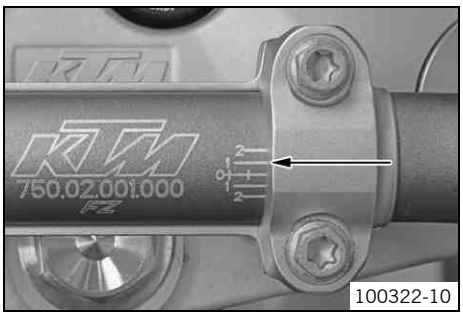
– Remove the controls from the transport holder. Remove the screws and handlebar clamps. Remove the transport holder.


201897-10

– Remove the right-hand handlebar weight.
– Position the controls on the right half of the handlebar. Tighten the screws.

Guideline

Screw, throttle grip	M5	3.5 Nm (2.58 lbf ft)



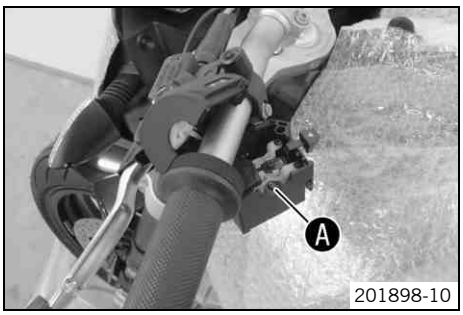
100322-10

– Position the handlebar.
✓ Marking **1** on the scale on the handlebar is situated in the middle of the handlebar clamp.
– Position the handlebar clamps. Tighten the screws evenly.

Guideline

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

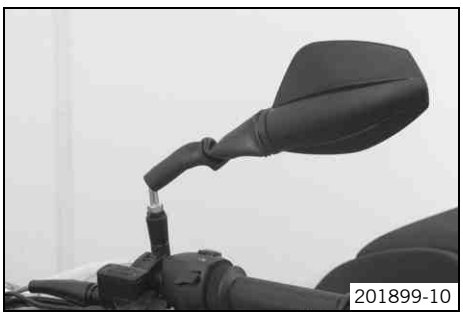
– Mount and tighten the right handlebar weight.
– Check the throttle grip for smooth operation.
– Position the controls on the left half of the handlebar.



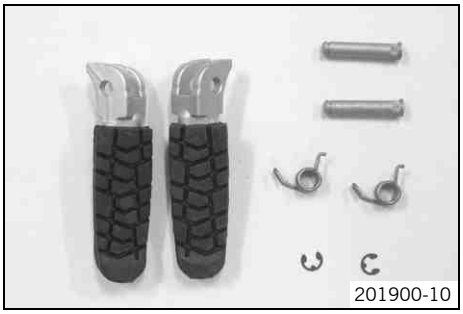
201898-10

Info
Position holding lug Ⓐ in the drill hole of the handlebar.

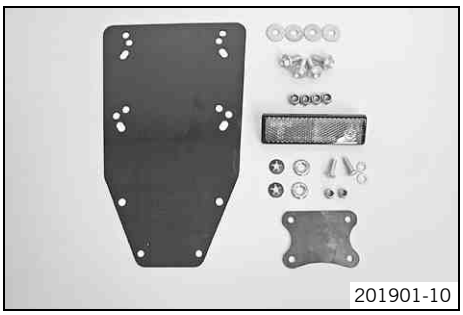
– Position all controls in their exact positions on the handlebar. Tighten all screws.


201899-10

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



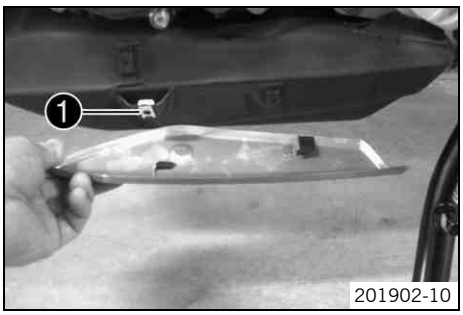
– Mount the footrests with the springs and bolts. Secure the pins with the lock rings.



– Mount the reflector.
– Remove the protective plastic.
– Carefully loosen and remove the tensioning belt over the swingarm.

Info
An assistant prevents the motorcycle from falling over.

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



– Mount clip-in nut ❶ on both sides. Hook the holdings lugs of the covers into the tabs. Mount and tighten screw.

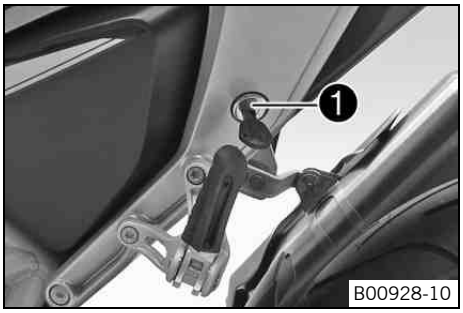
Warning
Risk of injury Battery acid and battery gases cause serious chemical burns.
– Keep batteries out of the reach of children.
– Wear suitable protective clothing and goggles.
– Avoid contact with battery acid and battery gases.
– Keep the battery away from sparks or open flames. Charge only in well-ventilated 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.

– Fill the battery.

Info
Read the notes in the battery package.

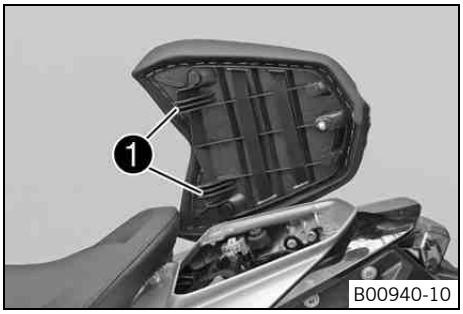
– Recharge the battery. (☛ p. 5)
– Install the battery. (☛ p. 6)
– Refuel. (☛ p. 7)
– Print out the current **PDI** form found on **KTM DEALER.NET** and perform the delivery inspection.
– Set kilometers or miles. (☛ p. 7)

3.1 Removing the passenger seat



– Insert the ignition key in seat lock ❶ and turn it clockwise.
– Raise the rear of the passenger seat, push it towards the rear, and remove it upward.
– Remove the ignition key from the seat lock.

3.2 Mounting the passenger seat



– Hook catches ❶ of the passenger seat onto the storage compartment, lower the rear, and simultaneously push forward.
– Press down the passenger seat until it clicks into place.

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.

– Finally, check that the passenger 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 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 passenger seat. (☛ p. 5)

– Disconnect the negative 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.

– Switch off the charger after charging. Disconnect the battery.

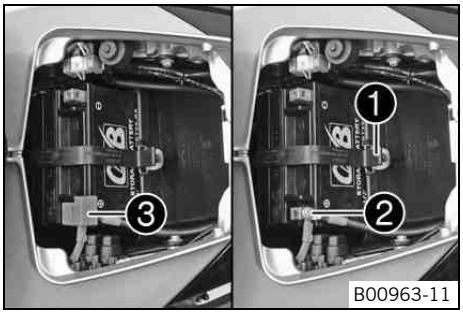
Guideline

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

– Mount the passenger seat. (☛ p. 5)
– Set the clock. (☛ p. 7)

3.4 Installing the battery



Main work

– Position the battery in the battery holder.

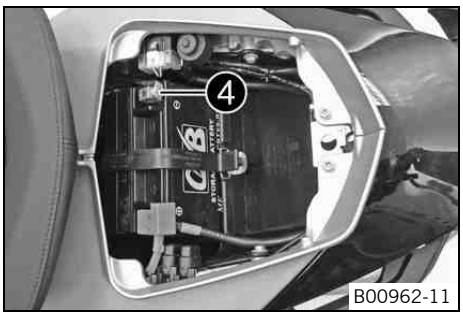
Info
The terminals of the battery must face in the direction of travel.

– Attach rubber band ❶.
– Reconnect the positive cable ❷ of the battery.

Guideline

Screw, battery terminal	M6	2.2 Nm (1.62 lbf ft)

– Position positive terminal cover ❸.



– Connect the negative cable ❹ of the battery.

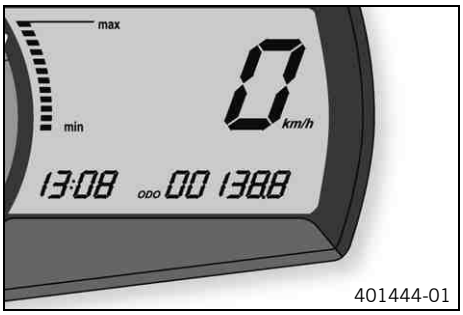
Guideline

Screw, battery terminal	M6	2.2 Nm (1.62 lbf ft)

Finishing work

– Mount the passenger seat. (☛ p. 5)
– Set the clock. (☛ p. 7)

3.5 Setting the clock



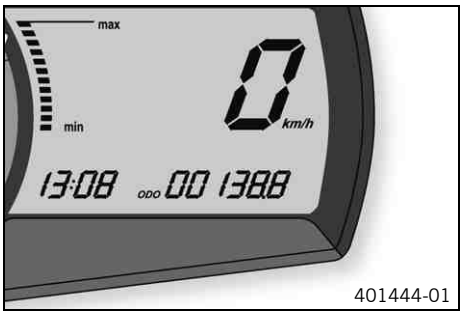
401444-01

Condition
The motorcycle is stationary.

– Switch on the ignition by turning the ignition key to the position ⟳.
– 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.
  ✓ The time is set.

3.6 Setting kilometers or miles

Info
If you change the unit, the value **ODO** is retained and converted accordingly.
Making the setting according to the country.



401444-01

Condition
The motorcycle is stationary.

– Switch on the ignition by turning the ignition key to the position ⟳.
– Press the **MODE** button repeatedly until the **ODO** mode is active.
– Keep the **MODE** button pressed until the display mode changes from **km/h** to **mph** or from **mph** to **km/h**.

3.7 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.

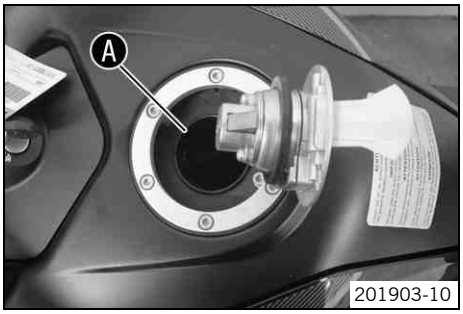
– Avoid contact of the fuel with skin, eyes and clothing. Do not inhale fuel vapors. If fuel gets into your eyes, rinse immediately with water and contact a doctor. Wash affected skin areas immediately with soap and water. If fuel is swallowed, contact a doctor immediately. Change clothing that has come 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.

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

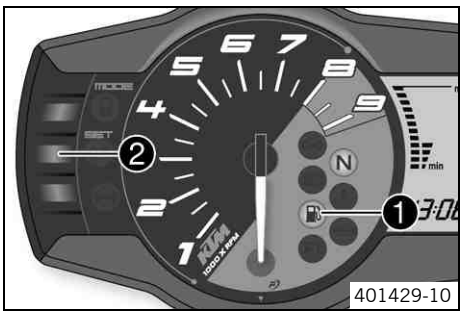
– Do not allow fuel to get into the ground water, the ground, or the sewage system.



– Switch off the engine.
– Open the filler cap. (☛ p. 8)
– Fill the fuel tank with fuel up to the lower edge ❹ of the filler neck.

Total fuel tank capacity, approx.	14 l (3.7 US gal)	Super unleaded (ROZ 95/RON 95/PON 91) (☛ p. 12)

– Close the filler cap. (☛ p. 8)



– Press the **SET** button ❷ for two seconds.

✓ The low fuel warning lamp ❶ switches off. **TRIP F** is set to 0 and the previous display mode appears.

Info
If you do not press the **SET** button ❷, the reset takes place automatically after about three minutes.

3.8 Opening the filler cap

Danger
Fire hazard Fuel is highly flammable.

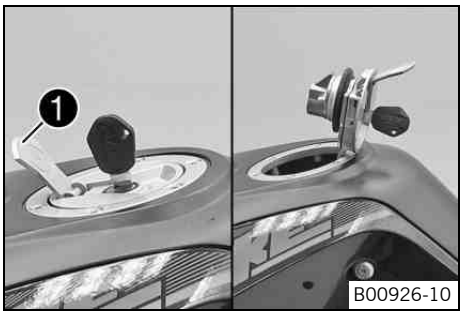
– Never refuel the vehicle near open flames or burning cigarettes, and always switch off the engine first. Be careful that no fuel is spilt, especially on hot vehicle components. Clean up spilt fuel immediately.
– Fuel in the fuel tank expands when warm and can escape if the tank is overfilled. See the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

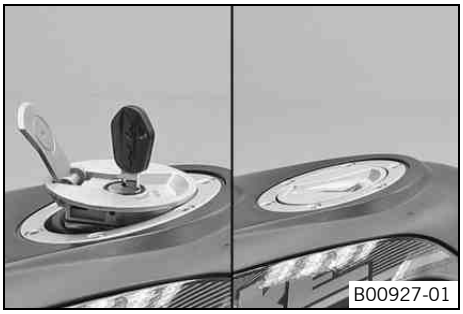


– Lift cover ❶ of the filler cap and insert the ignition key in the lock.

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.

3.9 Closing the filler cap



– Fold down the filler cap.
– Turn the ignition key 90° clockwise.
– Press down the filler cap and turn back the ignition key until the lock locks.

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.

– Remove the ignition key and close the cover.

Screw, combination instrument	EJOT	1 Nm (0.7 lbf ft)	–
Screw, combination instrument holder	EJOT	1 Nm (0.7 lbf ft)	–
Screw, headlight mask	EJOT	1 Nm (0.7 lbf ft)	–
Screw, side stand switch	M4	2 Nm (1.5 lbf ft)	**Loctite® 243™**
Bolt, foot brake lever stub	M5	6 Nm (4.4 lbf ft)	**Loctite® 243™**
Remaining screws, chassis	M5	5 Nm (3.7 lbf ft)	–
Screw, cable on starter motor	M5	3 Nm (2.2 lbf ft)	–
Screw, exhaust heat shield	M5	5 Nm (3.7 lbf ft)	**Loctite® 243™**
Screw, fuel level sensor	M5	3 Nm (2.2 lbf ft)	–
Screw, fuel pump	M5	4 Nm (3 lbf ft)	–
Screw, plastic clamp of brake line on fork leg	M5	2 Nm (1.5 lbf ft)	–
Screw, pressure regulator	M5	4 Nm (3 lbf ft)	–
Screw, side cover	M5	2 Nm (1.5 lbf ft)	–
Screw, throttle grip	M5	3.5 Nm (2.58 lbf ft)	–
Lower radiator bracket nut	M6	5 Nm (3.7 lbf ft)	–
Remaining nuts, chassis	M6	10 Nm (7.4 lbf ft)	–
Remaining screws on fuel tank	M6	6 Nm (4.4 lbf ft)	–
Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)	–
Screw, ball joint of push rod on foot brake cylinder	M6	10 Nm (7.4 lbf ft)	**Loctite® 243™**
Screw, battery holder	M6	3 Nm (2.2 lbf ft)	–
Screw, brake fluid reservoir of rear brake	M6	5 Nm (3.7 lbf ft)	–
Screw, control unit holder	M6	3 Nm (2.2 lbf ft)	–
Screw, foot brake cylinder	M6	10 Nm (7.4 lbf ft)	**Loctite® 243™**
Screw, fuel tap	M6	Tightening sequence: tighten in parallel 6 Nm (4.4 lbf ft)	–
Screw, horn	M6	6 Nm (4.4 lbf ft)	**Loctite® 243™**
Screw, lower radiator bracket	M6	5 Nm (3.7 lbf ft)	–
Screw, magnetic holder on side stand	M6	10 Nm (7.4 lbf ft)	**Loctite® 243™**
Screw, seat lock	M6	10 Nm (7.4 lbf ft)	**Loctite® 222**
Screw, side stand bracket	M6	10 Nm (7.4 lbf ft)	**Loctite® 243™**
Screw, SLS valve	M6	6 Nm (4.4 lbf ft)	–
Screw, voltage regulator	M6	8 Nm (5.9 lbf ft)	–
Nut, manifold on cylinder head	M8	20 Nm (14.8 lbf ft)	Copper paste
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	15 Nm (11.1 lbf ft)	–
Screw, exhaust clamp on main silencer	M8	25 Nm (18.4 lbf ft)	–
Screw, exhaust clamp on manifold	M8	25 Nm (18.4 lbf ft)	Copper paste
Screw, fork stub	M8	15 Nm (11.1 lbf ft)	–
Screw, front brake disc	M8	30 Nm (22.1 lbf ft)	**Loctite® 243™**
Screw, fuel tank bracket	M8	15 Nm (11.1 lbf ft)	–
Screw, handlebar clamp	M8	20 Nm (14.8 lbf ft)	–
Screw, handrail	M8	18 Nm (13.3 lbf ft)	**Loctite® 243™**
Screw, ignition lock (tamper-proof screw)	M8		**Loctite® 243™**
Screw, license plate holder	M8	18 Nm (13.3 lbf ft)	**Loctite® 243™**
Screw, linkage bracket, front engine fixing arm	M8	25 Nm (18.4 lbf ft)	**Loctite® 243™**

Screw, manifold on main silencer	M8	25 Nm (18.4 lbf ft)	Copper paste
Screw, rear brake disc	M8	30 Nm (22.1 lbf ft)	**Loctite® 243™**
Screw, rear footrest bracket	M8	25 Nm (18.4 lbf ft)	**Loctite® 243™**
Screw, rear footrest clamp	M8	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	12 Nm (8.9 lbf ft)	–
Screw, upper subframe	M8	35 Nm (25.8 lbf ft)	**Loctite® 243™**
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	50 Nm (36.9 lbf ft)	**Loctite® 243™**
Screw, foot brake lever	M10	25 Nm (18.4 lbf ft)	–
Screw, handlebar support	M10	20 Nm (14.8 lbf ft)	–
Screw, side stand	M10	35 Nm (25.8 lbf ft)	**Loctite® 243™**
Screw, top shock absorber	M10	50 Nm (36.9 lbf ft)	**Loctite® 243™**
Screw, front brake caliper	M10x1.25	45 Nm (33.2 lbf ft)	**Loctite® 243™**
Screw, lower subframe	M10x1.25	45 Nm (33.2 lbf ft)	**Loctite® 243™**
Lambda sensor	M12x1.25	25 Nm (18.4 lbf ft)	–
Nut, frame to linkage lever	M14x1.5	100 Nm (73.8 lbf ft)	–
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)	–
Nut, swingarm pivot	M16x1.5	100 Nm (73.8 lbf ft)	–
Screw, steering head	M20x1.5	40 Nm (29.5 lbf ft)	–
Adjusting ring of swingarm bearing	M24x1.5	25 Nm (18.4 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)	–

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).

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3211890en

08/2012

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KTM Group Partner

Photo: Mitterbauer/KTM