

# SETUP INSTRUCTIONS 2008



**Packaging 4**

**690 DUKE EU**

**690 DUKE AUS/UK**

**690 DUKE JP**

**690 DUKE USA**

ART. NO. 3211338en

**KTM**



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

Read the setup instructions in their entirety before beginning work.

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

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

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

All specifications are non-binding. KTM Sportmotorcycle AG in particular 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.

© 2008 by KTM-Sportmotorcycle AG, Mattighofen Austria

All rights reserved

Reproduction, even in part, is permitted only with the express written permission of the copyright owner.



REG.NO. 12 100 6061

ISO 9001(12 100 6061)

Within the meaning of 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

KTM-Sportmotorcycle AG  
5230 Mattighofen, Austria

## Symbols used

The symbols used are explained in the following.



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).



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

## Formats used

The typographical and other formats used are explained in the following.

<b>Name</b>	Indicates a proprietary name.
<b>Protected name<sup>®</sup></b>	Identifies a protected name.
<b>Trademark<sup>™</sup></b>	Identifies a brand in merchandise traffic.

## Unpacking and setting up the vehicle



- Remove the box and the plastic packaging.

**i** **Info**

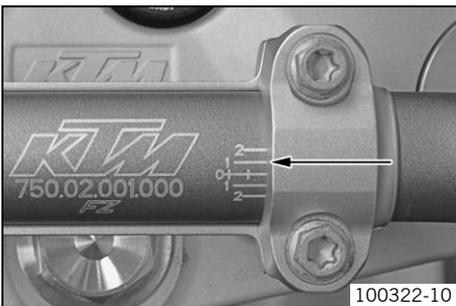
To avoid damaging the motorcycle when mounting the handlebar, do not remove the plastic on the fuel tank until after all of the work has been completed.



- Check the vehicle for transport damage.
- Unpack the separate enclosure and check its contents on the basis of the enclosure list.
- Remove the operating elements from the transport holder. Remove the screws and handlebar clamps. Remove the transport holder.



- Position the operating elements on the right half of the handlebar.
- Position the handlebar.
- Position the handlebar clamps. Fit and slightly tighten the four screws.



- Position the handlebar exactly.
- ✓ The mark **1** of the scale on the handlebar should be in the center of the handlebar clamp.
- Tighten the four screws evenly.

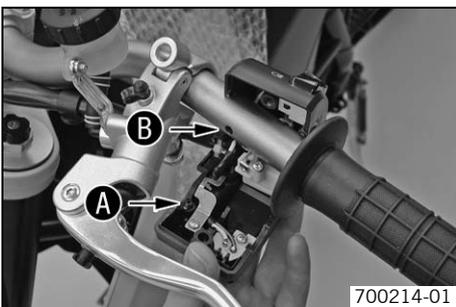
Guideline

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

- Mount and tighten the right handlebar weight.
- Position the operating elements on the left half of the handlebar.

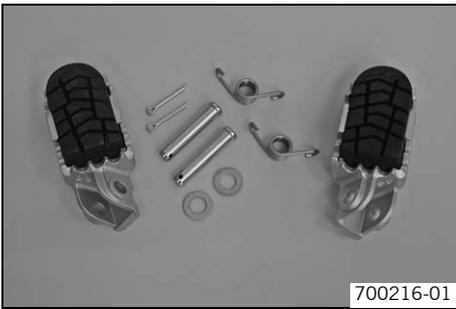
**i** **Info**

Position holding lug **A** in bore **B**.



- Mount and tighten the rear mirror adapter and rear mirror on both sides.
- Position all operating elements exactly on the handlebar. Tighten all screws.

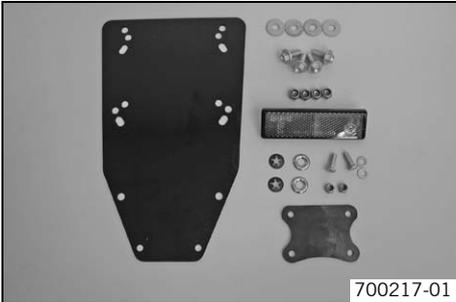




700216-01

- Mount the footrests with the springs and bolts. Secure the bolts using the washers and pins.

Plier for footrest spring (58429083000)



700217-01

- Mount the reflector.
- Recharge the battery. (🔧 S. 6)
- Stow away the tool set under the seat.



700211-01

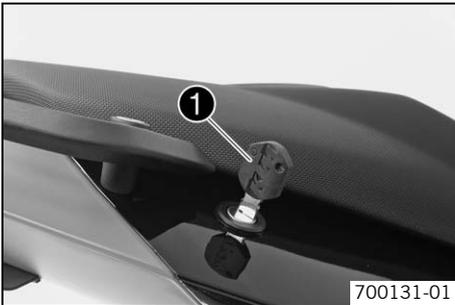
- Remove the protective plastic.
- Carefully loosen and remove the tensioning belt over the link fork.

**i Info**

An assistant prevents the motorcycle from falling over.

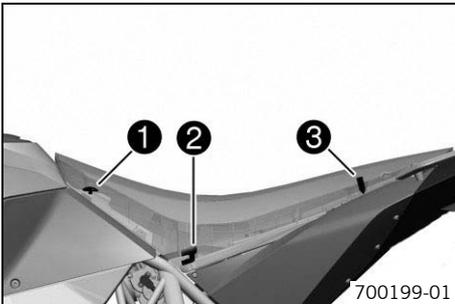
- Carefully loosen and remove the tensioning belts around the lower triple clamp.
  - ✓ The vehicle is released at the front.
- Together with an assistant, take the vehicle off of the palette.
- Fit the front spoiler. (🔧 S. 8)
- Fill up with fuel. (🔧 S. 8)
- Print out the current **PDI** form found on **KTM DEALER.NET** and perform the delivery inspection.
- Set kilometers or miles. (🔧 S. 7)

## Removing the seat



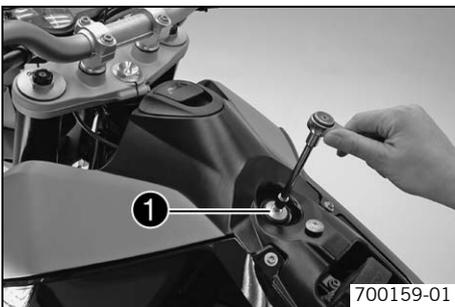
- Insert the ignition key in the seat lock ❶ and turn it 45° counterclockwise.
- Lift up the seat at the rear, pull it back and remove from above.

## Mounting the seat



- Suspend the seat on the screw ❶, press the rear downwards and at the same time push it forwards. The two projections ❷ must be inserted into the frame.
- Push the locking pin ❸ into the lock housing and push the back of the seat down until the locking pin locks in place with an audible click.
- Remove the ignition key from the seat lock.
- Finally, check that the seat is correctly mounted.

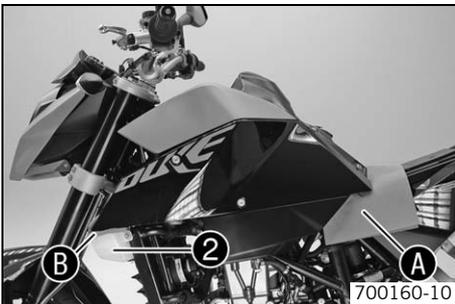
## Reinstalling the fuel tank



- Remove the seat. (☛ S. 5)
- Remove screw ❶.

**i Info**

The fuel lines do not need to be disconnected.

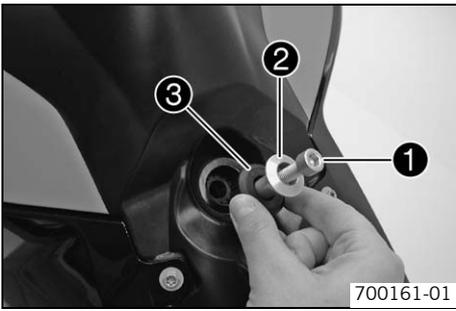


- Lay a cloth **A** over the subframe and straighten the steering.
- Carefully raise the fuel tank and move it backwards.
- Place the fuel tank on the vehicle so that the left spoiler is still lying on the compensating tank **2** (see illustration). Place a cloth **B** between the compensating tank and the spoiler to prevent damage.

## Positioning the fuel tank



- Remove the cloth **B** from between the compensating tank and the spoiler.



- Carefully move the fuel tank forwards and lower it.
- Mount and tighten screw ① with bearing sleeve ② and rubber bushing ③. Check fuel tank for tight fitting.

Guideline

Screw, fuel tank bracket	M8	15 Nm (11.1 lbf ft)
--------------------------	----	------------------------

- Check the routing of the fuel hoses.
- Mount the seat. (☛ S. 5)

**Recharging the battery**

**Warning**  
**Risk of injury** Battery acid and battery gases cause serious cauterization.

- 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 fire. Charge only 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 doctor.

**Warning**  
**Environmental hazard** Components and battery acid are a danger to the environment.

- Do not dispose of batteries in normal household waste. Take defective or used batteries to a battery recycling operator.

**Warning**  
**Environmental hazard** Problem materials cause environmental damage.

- Dispose of oil, grease, filters, fuel, cleaning substances, brake fluid, batteries, etc. according to regulations.

**i Info**  
 Even if there is no load on the battery, it loses power every day.  
 The charge state and the type of charge are very important for the service life of the battery.  
 Fast recharging with a high charge current shortens the battery's service life.  
 If the charge current, the charge voltage and the charge time are exceeded, electrolyte escapes through the breathing holes.  
 The battery capacity is then reduced.  
 If the battery is discharged from starting, it must be recharged immediately.  
 If it stands for a long time in a discharged state, the battery becomes over-discharged and sulfated, and then it is destroyed.  
 The battery is maintenance-free, i.e., the acid level does not have to be checked.

- Switch off all power-consuming components and switch off the engine.
- Reinstall the fuel tank. (☛ S. 5)
- Disconnect the minus (negative) cable of the battery to avoid damage to the motorcycle's electronics.



- 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 generator. With this device, you cannot overcharge the battery.



**Info**

Never remove the lid ❶.  
Charge the battery according to the instructions ❷ on the battery casing.

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

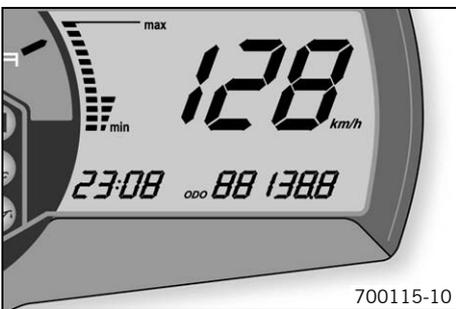
Guideline

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
---	----------

- Position the fuel tank. (☛ S. 5)
- Mount the seat. (☛ S. 5)
- Set the clock. (☛ S. 7)

**Setting the clock**



**Condition**

The motorcycle is standing.

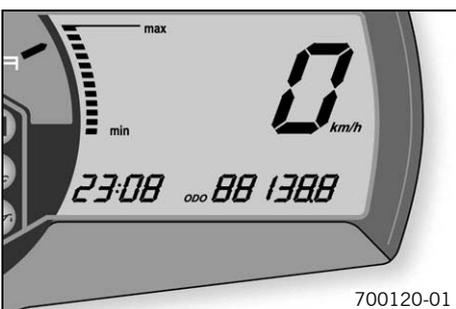
- Switch on the ignition by turning the ignition key to the position ○ ON (690 DUKE USA).
- Press the **MODE** button several times until the **ODO** display mode is active.
- Keep the **MODE** button and the **SET** button pressed simultaneously.
  - ✓ The time begins to flash.
- Press the **MODE** button to adjust the hour.
- Press the **SET** button to adjust the minute.
- Keep the **MODE** button and the **SET** button pressed simultaneously.
  - ✓ The time is set.

**Setting kilometers or miles**



**Info**

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



**Condition**

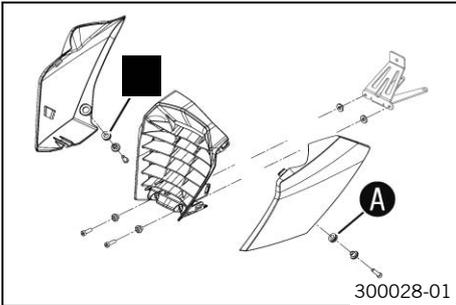
The motorcycle is standing.

- Switch on the ignition by turning the ignition key to the position ○ ON (690 DUKE USA).
- Press the **MODE** button several times 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**.

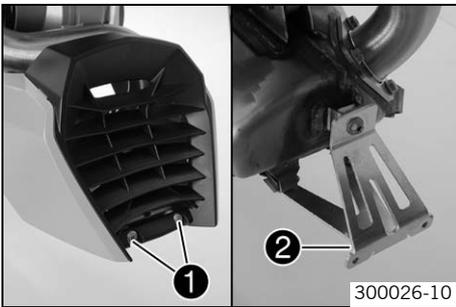
Guideline

Activation duration of <b>MODE</b> button	10 s
---	------

**Fitting front spoiler**



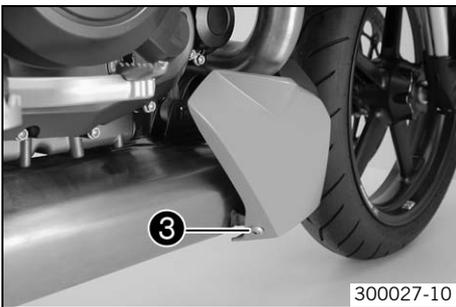
- Position the front spoiler side parts to the center part and latch in.
- Fit the rubber grommets **A**.



- Position the front spoiler to the retaining bracket **2**. Fit screws **1** with bushes, but do not tighten yet.

**i Info**

Do not forget the insulating washer on the retaining bracket.



- Fit and tighten screw **3** with a flange adapter on both sides.

Guideline

Screw, bug spoiler	M6	7 Nm (5.2 lbf ft)
--------------------	----	-------------------

- Fully tighten screws **1**.

Guideline

Screw, bug spoiler	M6	7 Nm (5.2 lbf ft)
--------------------	----	-------------------

**Refueling**



**Danger**

**Fire hazard** Fuel can easily catch fire.

- Never fill up 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 specifications on filling up with fuel.



**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.



**Warning**

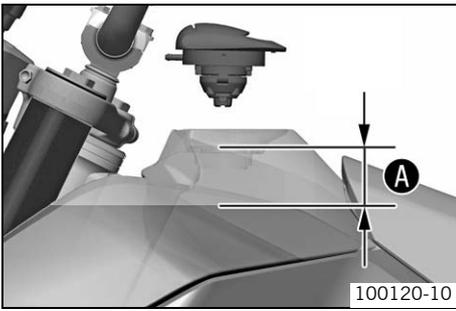
**Environmental hazard** Improper handling of fuel is a danger to the environment.

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



**Info**

This motorcycle is equipped with a regulated catalyst. Leaded fuel will destroy the catalyst. You should therefore use unleaded fuel only.



- Switch off engine.
- Open the filler cap.
- Fill the fuel tank with fuel up to measurement **A**.

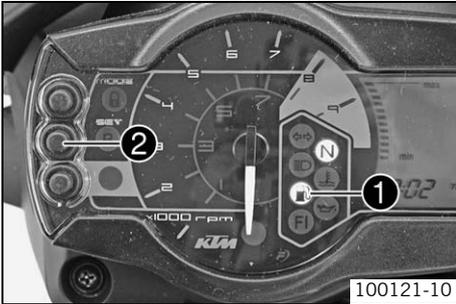
Guideline

Measurement of <b>A</b>	50 mm (1.97 in)	
Fuel tank content	13.5 l (3.57 US gal)	Super unleaded (ROZ 95 / RON 95 / PON 91) (☛ S. 12)

- Close the filler cap.
- Press the **SET** **2** function button for 2 seconds.
- ✓ The fuel level warning lamp **1** switches off. **TRIP F** is set to 0 and appears in the previous display mode.

**i** Info

If you do not press the **SET** **2** function button, the reset takes place automatically after about 3 minutes.



Screw, combination instrument		1 Nm (0.7 lbf ft)	–
Screw, combination instrument holder		1 Nm (0.7 lbf ft)	–
Screw, side stand switch	M4	2 Nm (1.5 lbf ft)	<b>Loctite® 243™</b>
Remaining screws, chassis	M5	4 Nm (3 lbf ft)	–
Screw, pressure regulator	M5	4 Nm (3 lbf ft)	–
Screw, footbrake pedal foothold	M5	6 Nm (4.4 lbf ft)	<b>Loctite® 243™</b>
Screw, plastic clamp of brake line on fork leg	M5	2 Nm (1.5 lbf ft)	–
Screw, fuel pump	M5	4 Nm (3 lbf ft)	–
Screw, fuel level indicator	M5	3 Nm (2.2 lbf ft)	–
Screw, side cover	M5	2 Nm (1.5 lbf ft)	–
Screw, seat lock	M5	3 Nm (2.2 lbf ft)	<b>Loctite® 222</b>
Screw, starter cable on starter	M5	3 Nm (2.2 lbf ft)	–
Remaining nuts, chassis	M6	15 Nm (11.1 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, brake fluid reservoir of rear brake	M6	5 Nm (3.7 lbf ft)	–
Screw, battery holder	M6	3 Nm (2.2 lbf ft)	–
Screw, bug spoiler	M6	7 Nm (5.2 lbf ft)	–
Screw, footbrake cylinder	M6	10 Nm (7.4 lbf ft)	<b>Loctite® 243™</b>
Screw, horn	M6	6 Nm (4.4 lbf ft)	<b>Loctite® 243™</b>
Screw, license plate holder	M6	8 Nm (5.9 lbf ft)	–
Screw, ball joint of push rod on footbrake cylinder	M6	10 Nm (7.4 lbf ft)	<b>Loctite® 243™</b>
Screw, lower radiator bracket	M6	5 Nm (3.7 lbf ft)	–
Screw, fuel tap	M6	Tightening sequence: tighten in parallel 6 Nm (4.4 lbf ft)	–
Screw, magnetic holder on side stand	M6	10 Nm (7.4 lbf ft)	<b>Loctite® 243™</b>
Screw, voltage regulator/rectifier	M6	8 Nm (5.9 lbf ft)	–
Screw, SLS valve	M6	6 Nm (4.4 lbf ft)	–
Screw, headlight mask	M6	5 Nm (3.7 lbf ft)	–
Screw, side stand bracket	M6	10 Nm (7.4 lbf ft)	<b>Loctite® 243™</b>
Screw, control unit holder	M6	3 Nm (2.2 lbf ft)	–
Nut, rear sprocket screw	M8	35 Nm (25.8 lbf ft)	<b>Loctite® 243™</b>
Nut, manifold on cylinder head	M8	25 Nm (18.4 lbf ft)	Copper paste
Remaining nuts, chassis	M8	30 Nm (22.1 lbf ft)	–
Remaining screws, chassis	M8	25 Nm (18.4 lbf ft)	–
Screw, rear brake disc (690 DUKE EU, 690 DUKE AUS/UK, 690 DUKE JP, 690 DUKE USA)	M8	30 Nm (22.1 lbf ft)	<b>Loctite® 243™</b>
Screw, front brake disc (690 DUKE EU, 690 DUKE AUS/UK, 690 DUKE JP, 690 DUKE USA)	M8	30 Nm (22.1 lbf ft)	<b>Loctite® 243™</b>
Screw, main silencer fixation	M8	25 Nm (18.4 lbf ft)	–
Screw, spring holder on side stand bracket	M8	15 Nm (11.1 lbf ft)	<b>Loctite® 243™</b>
Screw, rear footrest bracket	M8	25 Nm (18.4 lbf ft)	<b>Loctite® 243™</b>
Screw, top triple clamp	M8	12 Nm (8.9 lbf ft)	–
Screw, bottom triple clamp	M8	15 Nm (11.1 lbf ft)	–
Screw, fork stub	M8	15 Nm (11.1 lbf ft)	–
Screw, steering stem	M8	20 Nm (14.8 lbf ft)	–
Screw, handrail	M8	6 Nm (4.4 lbf ft)	–

Screw, fuel tank bracket	M8	15 Nm (11.1 lbf ft)	–
Screw, manifold on main silencer	M8	25 Nm (18.4 lbf ft)	Copper paste
Screw, handlebar clamp	M8	20 Nm (14.8 lbf ft)	–
Screw, upper subframe	M8	35 Nm (25.8 lbf ft)	<b>Loctite® 243™</b>
Screw, side stand bracket	M8	25 Nm (18.4 lbf ft)	<b>Loctite® 243™</b>
Screw, linkage bracket, front engine bracket	M8	25 Nm (18.4 lbf ft)	<b>Loctite® 243™</b>
Screw, ignition lock	M8		<b>Loctite® 243™</b>
Screw, front brake caliper	M10x1.25	45 Nm (33.2 lbf ft)	<b>Loctite® 243™</b>
Screw, lower subframe	M10x1.25	45 Nm (33.2 lbf ft)	<b>Loctite® 243™</b>
Engine carrying screw	M10	45 Nm (33.2 lbf ft)	<b>Loctite® 243™</b>
Remaining nuts, chassis	M10	50 Nm (36.9 lbf ft)	–
Remaining screws, chassis	M10	45 Nm (33.2 lbf ft)	–
Screw, top shock absorber	M10	45 Nm (33.2 lbf ft)	<b>Loctite® 243™</b>
Screw, bottom shock absorber	M10	45 Nm (33.2 lbf ft)	<b>Loctite® 243™</b>
Screw, handlebar support	M10	20 Nm (14.8 lbf ft)	–
Screw, side stand	M10	35 Nm (25.8 lbf ft)	<b>Loctite® 243™</b>
Lambda probe	M12x1.25	24.5 Nm (18.07 lbf ft)	–
Nut, frame to linkage lever	M14x1.5	100 Nm (73.8 lbf ft)	–
Nut, linkage lever to rocker arm	M14x1.5	100 Nm (73.8 lbf ft)	–
Nut, linkage lever on swingarm	M14x1.5	100 Nm (73.8 lbf ft)	–
Nut, swingarm pivot	M16x1.5	100 Nm (73.8 lbf ft)	–
Screw, steering head	M20x1.5	12 Nm (8.9 lbf ft)	–
Adjusting ring of swingarm bearing	M24x1.5	25 Nm (18.4 lbf ft)	–
Screw, front wheel spindle	M24x1.5	40 Nm (29.5 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)



3211338en



04/2008 Photo: Mitterbauer



**KTM-Sportmotorcycle AG**  
5230 Mattighofen/Austria  
<http://www.ktm.com>