OWNER'S MANUAL 2019



1290 Super Duke R

Art. no. 3213927en





DEAR KTM CUSTOMER

Congratulations on your decision to purchase a KTM motorcycle. You are now the owner of a state-of-the-art sports motorcycle that will give you enormous pleasure if you service and maintain it properly.

We hope you enjoy riding this motorcycle!

Enter the serial numbers of your vehicle below.

Vehicle identification number (🕮 p. 26)	Dealer's stamp
Fusing a control (60 a 07)	
Engine number (🕮 p. 27)	
Key number (🕮 p. 27)	

The Owner's Manual contained the latest information for this model series at the time of going to print. However, minor differences due to further developments in design cannot be ruled out completely.

All specifications are non-binding. KTM Sportmotorcycle GmbH 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 figures and descriptions, misprints, and other errors. The models portrayed partly contain special equipment that does not belong to the regular scope of supply.

© 2018 KTM Sportmotorcycle GmbH, Mattighofen Austria All rights reserved



DEAR KTM CUSTOMER

Reproduction, even in part, as well as copying of all kinds, is permitted only with the express written permission of the copyright owner.



ISO 9001(12 100 6061)

KTM applies quality assurance processes that lead to the highest possible product quality as defined in the ISO 9001 international quality management standard. Issued by: TÜV Management Service

REG.NO. 12 100 6061

KTM Sportmotorcycle GmbH Stallhofnerstraße 3 5230 Mattighofen, Austria

This document is valid for the following models: 1290 Super Duke R EU (F9903S9, F9903S2) 1290 Super Duke R JP (F9986S2)

1	MEANS	OF REPRESENTATION	10	4	VIEW O	F VEHICLE	22
	1.1 1.2	Symbols used			4.1 4.2	View of vehicle, front left (example) View of vehicle, rear right	
2	SAFET	Y ADVICE	12			(example)	24
	2.1	Use definition – intended use	12	5	SERIAL	NUMBERS	26
	2.2	Misuse			5.1	Vehicle identification number	26
	2.3	Safety advice			5.2	Type label	26
	2.4	Degrees of risk and symbols			5.3	Key number	
	2.5	Tampering warning			5.4	Engine number	27
	2.6	Safe operation			5.5	Fork part number	28
	2.7	Protective clothing			5.6	Shock absorber article number	28
	2.8	Work rules	16		5.7	Steering damper article number	29
	2.9	Environment	17	6	CONTR	OLS	30
	2.10	Owner's Manual	17	Ü			
3	IMPOR	TANT NOTES	18		6.1	Clutch lever	
5	IIIII OIK	TART NOTEO	10		6.2	Hand brake lever	
	3.1	Manufacturer and implied warranty	18		6.3	Throttle grip	
	3.2	Fuel, auxiliary substances	18		6.4	Combination switch, left side	
	3.3	Spare parts, accessories	18		6.5	Light switch	
	3.4	Service	19		6.6	Menu switch	33
	3.5	Figures	19		6.7	Turn signal switch	
	3.6	Customer service	19		6.8	Horn button	35
					6.9	Cruise control system tip switch	35
					6.10	Combination switch, right	39

6.11	Hazard warning flasher switch	40	7.6	Display	62
6.12	Emergency OFF switch/electric		7.7	TRACK Display (optional)	64
	starter button	41	7.8	Shift warning light	66
6.13	Race-on tip switch	42	7.9	Fuel level display	67
6.14	Steering lock	43	7.10	Time	68
6.15	Immobilizer	44	7.11	Coolant temperature indicator	68
6.16	Race-on key	44	7.12	Trip distance counter	69
6.17	Opening fuel tank filler cap	45	7.13	Cruise control indicator	69
6.18	Closing the fuel tank filler cap	47	7.14	Menu	70
6.19	Seat lock	48	7.14.1	Favorites	70
6.20	Baggage lugs	48	7.14.2	Set Favorites	71
6.21	Tool set	49	7.14.3	Trip 1	71
6.22	Opening storage compartment	49	7.14.4	Trip 2	72
6.23	Closing storage compartment	50	7.14.5	Settings	73
6.24	Supporting strap	51	7.14.6	Language	74
6.25	Passenger foot pegs	51	7.14.7	Unit settings	74
6.26	Shift lever	52	7.14.8	Fuel Cons	75
6.27	Foot brake lever	53	7.14.9	Distance	76
6.28	Side stand	53	7.14.10	O Temp	77
COMBI	NATION INSTRUMENT	55	7.14.1	1 Pressure	78
COMIDI	NATION INSTITUTE IN THE INTERIOR INT	33	7.14.12	2 Service	79
7.1	Combination instrument	55	7.14.13	3 Clock/Date	79
7.2	Activation and test		7.14.14	4 Shift Light	80
7.3	Day-Night mode		7.14.1	5 DRL	81
7.4	Warnings		7.14.16	6 Quick Selector 1	82
7.5	Indicator lamps	58	7.14.1	7 Quick Selector 2	83

7.14.1	8 Extra Functions	84		8.5	Adjusting the basic position of the	
7.14.1	9 General Info	85			foot brake lever 📤	106
7.14.2	0 Warning	86		8.6	Setting the step plate of the foot	
7.14.2					brake lever	107
7.14.2	2 Ride Mode	88		8.7	Checking the basic position of the	
7.15	TPMS	89			shift lever	108
7.16	Heated grips (optional)	90		8.8	Adjusting the basic position of the	
7.17	Heating (optional)	91			shift lever 🔦	
7.18	Quick Shift + (optional)	91		8.9	Setting the shift lever stub	110
7.19	Track (optional)	92		8.10	Adjusting the tilt of the	
7.20	Launch Control (optional)	92			combination instrument	111
7.21	Anti Wheelie Mode (optional)	93 (9	PRFPA	RING FOR USE	114
7.22	Bluetooth® (optional)					
7.23	KTM MY RIDE (optional)	95				
7.24	Pairing (optional)	96				
7.25	Audio (optional)	99		9.3	Loading the vehicle	116
7.26	Telephony (optional)	100	10	RIDING	INSTRUCTIONS	119
ERGON	IOMICS	102		10.1	Checks and maintenance measures	
8.1	Handlebar position	102			when preparing for use	119
	·			10.2	Starting the vehicle	120
0.2		102		10.3	Launch Control (optional)	123
8.3	•			10.4	Starting off	123
		104		10.5	Starting off with launch control	
8.4					(optional)	124
		105		10.6	Quickshifter+ (optional)	125
	7.14.1 7.14.2 7.14.2 7.14.2 7.15 7.16 7.17 7.18 7.19 7.20 7.21 7.22 7.23 7.24 7.25 7.26 ERGON 8.1 8.2	7.14.19 General Info	7.14.19 General Info	7.14.19 General Info	7.14.19 General Info	7.14.19 General Info 85 7.14.20 Warning 86 7.14.21 MTC/ABS 86 7.14.22 Ride Mode 88 7.14.22 Ride Mode 88 7.14.23 Ride Mode 89 7.16 Heated grips (optional) 90 7.17 Heating (optional) 91 7.18 Quick Shift + (optional) 91 7.19 Track (optional) 92 7.20 Launch Control (optional) 92 7.21 Anti Wheelie Mode (optional) 93 7.22 Bluetooth® (optional) 94 7.23 KTM MY RIDE (optional) 95 7.24 Pairing (optional) 96 7.25 Audio (optional) 99 7.26 Telephony (optional) 100 ERGONOMICS 102 8.1 Handlebar position 102 8.2 Adjusting the basic position of the clutch lever 104 8.3 Adjusting the basic position of the clutch lever 104 8.4 Adjusting the basic position of the

	10.7	Shifting, riding	126		12.7	Adjusting the rebound damping of	
	10.8	MSR (optional)	132			the shock absorber	152
	10.9	Applying the brakes	133		12.8	Measuring the rear wheel	
	10.10	Stopping, parking	135			dimension unloaded	153
	10.11	Transporting	137		12.9	Checking the static sag of the	
	10.12	Refueling	139			shock absorber	154
11	SERVIC	CE SCHEDULE	141		12.10	Adjusting the spring preload of the	1.55
						shock absorber 4	155
	11.1	Additional information		13	SERVIC	CE WORK ON THE CHASSIS	158
	11.2	Required work			13.1	Lifting the meterovale with the rear	
	11.3	Recommended work	144		13.1	Lifting the motorcycle with the rear lifting gear	150
12	SUSPE	NSION SETTING	145		13.2	Removing the rear of motorcycle	130
	12.1	Fork/shock absorber	145		15.2	from the lifting gear	158
	12.2	Adjusting the compression	110		13.3	Lifting the motorcycle with the	
	12.2	damping of the fork	145			front lifting gear	159
	12.3	Adjusting the rebound damping of			13.4	Taking the motorcycle off the front	
		the fork	147			lifting gear	160
	12.4	Compression damping of the shock			13.5	Raising the motorcycle with the	
		absorber	148			work stand (inserted)	161
	12.5	Adjusting the low-speed			13.6	Removing the motorcycle from the	
		compression damping of the shock				work stand (inserted)	163
		absorber	149		13.7	Cleaning the dust boots of the fork	
	12.6	Adjusting the high-speed				legs 🛂	
		compression damping of the shock			13.8	Removing the passenger seat	
		absorber	150		13.9	Mounting the passenger seat	166

	13.10	Removing the front rider's seat	167		14.8	Checking the brake linings of the	
	13.11	Mounting the front rider's seat	168			rear brake	199
	13.12	Mounting the helmet lock on the		15	WHEEL	S, TIRES	201
		vehicle				,	
		Removing the main silencer 🔦			15.1	Removing the front wheel	
	13.14	Installing the main silencer 🖣	171		15.2	Installing the front wheel 📤	
	13.15	Checking the chain for dirt	173		15.3	Removing the rear wheel 4	
	13.16	Cleaning the chain	173		15.4	Installing the rear wheel 4	208
	13.17	Checking the chain tension	175		15.5	Checking the tire condition	211
	13.18	Adjusting the chain tension	177		15.6	Checking tire pressure	213
	13.19	Checking the chain, rear sprocket,			15.7	Using tire repair spray	215
		engine sprocket, and chain guide	178	16	EI ECTI	RICAL SYSTEM	216
	13.20	Checking/correcting the fluid level		10	LLLCII	MICAL STSTEM	210
		of the hydraulic clutch	183		16.1	Daytime running light (DRL)	216
4	DDAKE	SYSTEM	106		16.2	Removing the 12-V battery ⁴	217
.4	DRANE	3131EW	100		16.3	Installing the 12-V battery ◀	219
	14.1	Anti-lock braking system (ABS)	186		16.4	Charging the 12-V battery ◀	222
	14.2	Checking the brake discs	189		16.5	Changing the Race-on key battery	228
	14.3	Checking the front brake fluid			16.6	Changing the main fuse	229
		level	191		16.7	Changing the fuses in the fuse	
	14.4	Adding front brake fluid 4	192			box	233
	14.5	Checking the front brake linings	194		16.8	Checking the headlight setting	238
	14.6	Checking the rear brake fluid			16.9	Adjusting the headlight range	239
		level	196		16.10	Connecting the USB cable	240
	14.7	Adding rear brake fluid 4	197		16.11	Disconnecting the USB cable	242
					16.12	Diagnostics connector	

	16.13	Front ACC1 and ACC2	244	21	STORA	GE	271
	16.14	ACC1 and ACC2 rear	245		21.1	Storage	271
17	COOLI	NG SYSTEM	246		21.2	Preparing for use after storage	
	17.1	Checking the coolant level in the		22	TROUB	ELESHOOTING	274
	17.2	compensating tank Correcting the coolant level in the	246	23	TECHN	ICAL DATA	278
		compensating tank	248		23.1	Engine	278
18	ENGIN	E TUNING	251		23.2 23.3	Engine tightening torques Capacities	
	18.1	Ride Mode	251		23.3.1		
	18.2	Motorcycle traction control (MTC)	252		23.3.2	Coolant	285
	18.3	Slip adjustment (optional)	253		23.3.3	Fuel	285
	18.4	Throttle Response (optional)	254		23.4	Chassis	286
19	SERVIC	CE WORK ON THE ENGINE	255		23.5	Electrical system	
	19.1	Checking the engine oil level	255		23.6 23.7	Tires	
	19.2	Changing the engine oil and oil	233		23.7	ForkShock absorber	
	100	filter, cleaning the oil screens 4			23.9	Chassis tightening torques	
	19.3	Adding engine oil	263	24	DECLA	RATIONS OF CONFORMITY	298
20	CLEAN	ING, CARE	266		24.1		
	20.1	Cleaning the motorcycle	266		24.1	Declarations of conformity	290
	20.2	Checks and maintenance steps for	200		24.2	Country-specific declarations of conformity	302
		winter operation	269	0.5			
				25	SUBST	ANCES	303

26	AUXILI	ARY SUBSTANCES	307		
27	STANDARDS 3				
28	INDEX OF SPECIAL TERMS 3				
29	LIST OF ABBREVIATIONS 3				
30	LIST 0	F SYMBOLS	313		
		Red symbols			
	30.2	Yellow and orange symbols	313		
	30.3	Green and blue symbols	314		
INDEX 31					

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).



All work marked with this symbol requires specialist knowledge and technical understanding. In the interest of your own safety, have these jobs performed by an authorized KTM workshop! Your motorcycle will be optimally cared for there by specially trained experts using the auxiliary tools required.



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 the end of an activity, including potential rework.

1.2 Formats used

The typographical formats used in this document are explained below.

Proprietary name	ndicates a	proprietary	name.
------------------	------------	-------------	-------

Name® Indicates a protected name.

Brand™ Indicates a brand available on the open market.

<u>Underlined terms</u>

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

11

2 SAFETY ADVICE

2.1 Use definition — intended use

The vehicle is designed and constructed to withstand the usual demands of regular traffic and use on race courses. This vehicle is not suitable for offroad use.



Info

This vehicle is only authorized for operation on public roads in its homologated version.

2.2 Misuse

The vehicle must only be used as intended.

Dangers can arise for people, property and the environment through use not as intended.

Any use of the vehicle beyond the intended and defined use constitutes misuse.

Misuse also includes the use of operating and auxiliary fluids which do not meet the required specification for the respective use.

2.3 Safety advice

A number of safety instructions need to be followed to operate the product described safely. Therefore read this instruction and all further instructions included carefully. The safety instructions are highlighted in the text and are referred to at the relevant passages.

Info

Various information and warning labels are attached in prominent locations on the product described. Do not remove any information or warning labels. If they are missing, you or others may not recognize dangers and may therefore be injured.

2.4 Degrees of risk and symbols



Danger

Identifies a danger that will immediately and invariably lead to fatal or serious permanent injury if the appropriate measures are not taken.



Warning

Identifies a danger that is likely to lead to fatal or serious injury if the appropriate measures are not taken.



Caution

Identifies a danger that may lead to minor injuries if the appropriate measures are not taken.

Note

Identifies a danger that will lead to considerable machine and material damage if the appropriate measures are not taken.



Note

Indicates a danger that will lead to environmental damage if the appropriate measures are not taken.

2 SAFETY ADVICE

2.5 Tampering warning

Tampering with the noise control system is prohibited. Federal law prohibits the following acts or the causing thereof:

- 1 The removal or rendering inoperative by any person other than for purposes of servicing, repair, or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use, or
- the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

Among those acts presumed to constitute tampering are the acts listed below:

- 1 Removal or puncturing of the main silencers, baffles, header pipes or any other components which conduct exhaust gases.
- 2 Removal or puncturing of parts of the intake system.
- 3 Lack of proper maintenance.
- 4 Replacing moving parts of the vehicle, or parts of the exhaust system or intake system, with parts other than those specified by the manufacturer.

2.6 Safe operation



Danger

Danger of accidents A rider who is not fit to ride poses a danger to him or herself and others.

- Do not operate the vehicle if you are not fit to ride due to alcohol, drugs or medication.
- Do not operate the vehicle if you are physically or mentally impaired.



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.



Warning

Danger of burns Some vehicle components become very hot when the vehicle is operated.

- Do not touch any parts such as the exhaust system, radiator, engine, shock absorber, or brake system before the vehicle parts have cooled down.
- Let the vehicle parts cool down before you perform any work on the vehicle.

Only operate the vehicle when it is in perfect technical condition, in accordance with its intended use, and in a safe and environmentally compatible manner.

The vehicle should only be used by trained persons. An appropriate driver's license is needed to ride the vehicle on public roads.

Have malfunctions that impair safety promptly eliminated by an authorized KTM workshop.

Adhere to the information and warning labels on the vehicle.

2 SAFETY ADVICE

2.7 Protective clothing



Warning

Risk of injury Missing or poor protective clothing presents an increased safety risk.

- Wear appropriate protective clothing such as helmet, boots, gloves as well as trousers and a jacket with protectors on all rides.
- Always wear protective clothing that is in good condition and meets the legal regulations.

In the interest of your own safety, KTM recommends that you only operate the vehicle while wearing protective clothing.

2.8 Work rules

Special tools are necessary for certain tasks. The tools are not a component of the vehicle, but can be ordered using the number in parentheses. Example: bearing puller (15112017000)

During assembly, use new parts to replace parts which cannot be reused (e.g. self-locking screws and nuts, seals, sealing rings, O-rings, pins, and lock washers).

In the case of certain screws, a screw adhesive (e.g. **Loctite®**) is required. Observe the manufacturer's instructions.

After disassembly, clean the parts that are to be reused and check them for damage and wear. Change damaged or worn parts.

After completing a repair or service work, check the operating safety of the vehicle.

2.9 Environment

If you use your motorcycle responsibly, you can ensure that problems and conflicts do not occur. To protect the future of the motorcycle sport, make sure that you use your motorcycle legally, display environmental consciousness, and respect the rights of others.

When disposing of used oil, other operating and auxiliary fluids, and used components, comply with the laws and regulations of the respective country.

Because motorcycles are not subject to the EU regulations governing the disposal of used vehicles, there are no legal regulations that pertain to the disposal of an end-of-life motorcycle. Your authorized KTM dealer will be glad to advise you.

2.10 Owner's Manual

It is important that you read this Owner's Manual carefully and completely before making your first trip. The Owner's Manual contains useful information and many tips on how to operate, handle, and service your motorcycle. Only then will you find out how to customize the vehicle ideally for your own use and how you can protect yourself from injury.

Keep the Owner's Manual in an accessible place to enable you to refer to it as needed.

If you would like to know more about the vehicle or have questions on the material you read, please contact an authorized KTM dealer.

The Owner's Manual is an important component of the vehicle and must be handed over to the new owner if the vehicle is sold.

The Owner's Manual is also available for download from your authorized KTM dealer and on the KTM website. International KTM Website: http://www.ktm.com

3 IMPORTANT NOTES

3.1 Manufacturer and implied warranty

The work specified in the service schedule may only be performed in an authorized KTM workshop and must be recorded in both the Service & Warranty Booklet and in the **KTM Dealer.net**, otherwise any warranty coverage will become void. Damage or secondary damage caused by tampering with and/or conversions on the vehicle is not covered by the manufacturer warranty.

Additional information on the manufacturer or manufacturer warranty and the procedures involved can be found in the Service & Warranty Booklet.

3.2 Fuel, auxiliary substances



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.

Use fuels and auxiliary substances in accordance with the Owner's Manual and specification.

3.3 Spare parts, accessories

For your own safety, only use spare parts and accessory products that are approved and/or recommended by KTM and have them installed by an authorized KTM workshop. KTM accepts no liability for other products and any resulting damage or loss.

Certain spare parts and accessory products are specified in parentheses in the descriptions. Your authorized KTM dealer will be glad to advise you.

The current **KTM PowerParts** for your vehicle can be found on the KTM website. International KTM Website: http://www.ktm.com

3.4 Service

A prerequisite for perfect operation and prevention of premature wear is that the service, care, and tuning work on the engine and chassis is properly carried out as described in the Owner's Manual. Incorrect adjustment and tuning of the engine and chassis can lead to damage and breakage of components.

Use of the vehicle under difficult conditions, such in rain, high heat or with a heavy load, can lead to considerably more rapid wear of components such as the drive train, brake system, or suspension components. For this reason, it may be necessary to inspect or replace parts before the next scheduled service.

It is imperative that you adhere to the stipulated run-in times and service intervals. If you observe these exactly, you will ensure a much longer service life for your motorcycle.

3.5 Figures

The figures contained in the manual may depict special equipment.

In the interest of clarity, some components may be shown disassembled or may not be shown at all. It is not always necessary to disassemble the component to perform the activity in question. Please follow the instructions in the text.

3.6 Customer service

Your authorized KTM dealer will be happy to answer any questions you may have on your vehicle and KTM.

3 IMPORTANT NOTES

A list of authorized KTM dealers can be found on the KTM website. International KTM Website: http://www.ktm.com

4 VIEW OF VEHICLE

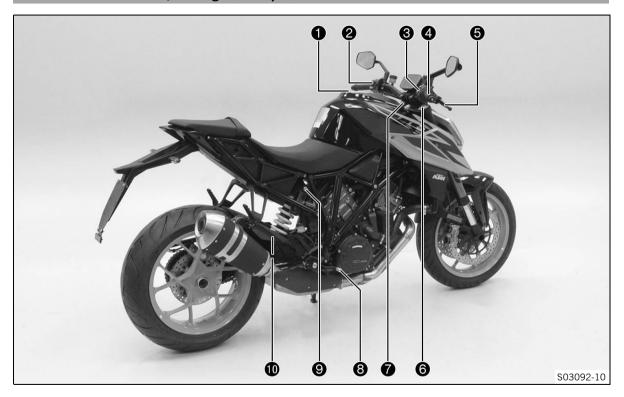
4.1 View of vehicle, front left (example)



- 1 Clutch lever (p. 30)
- 2 Supporting strap (p. 51)
- **3** Tool set (p. 49)
- 4 Seat lock (p. 48)
- **6** Passenger foot pegs (p. 51)
- **6** Rider footrests
- 7 Shift lever (p. 52)
- 8 Side stand (p. 53)
- **9** Cooling system compensating tank
- Engine oil level viewer

4 VIEW OF VEHICLE

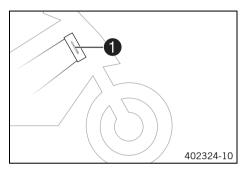
4.2 View of vehicle, rear right (example)



- Fuel tank filler cap
- 2 Combination switch, left side (p. 31)
- 3 Emergency OFF switch/electric starter button (₽ p. 41)
- Race-on tip switch (p. 42)
- **3** Hazard warning flasher switch (p. 40)
- 4 Throttle grip (p. 31)
- **5** Hand brake lever (p. 30)
- 6 Fork compression adjuster
- **7** Fork rebound adjustment
- 8 Foot brake lever (p. 53)
- **9** Compression damping of the shock absorber (p. 148)
- 10 Shock absorber rebound damping

5 SERIAL NUMBERS

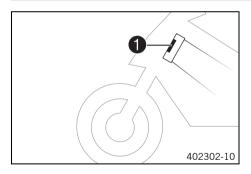
5.1 Vehicle identification number



The vehicle identification number **1** is stamped on the right side of the steering head.

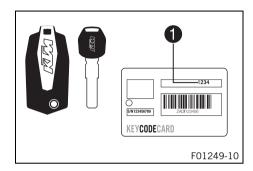
The vehicle identification number is also shown on the type label.

5.2 Type label



The type label 1 is located on the steering head.

5.3 Key number



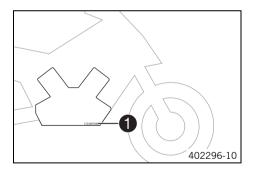
The key number **Code number 1** can be found on the **KEYCODECARD**.



Info

You need the key number to order a spare key. Keep the **KEYCODECARD** in a safe place.

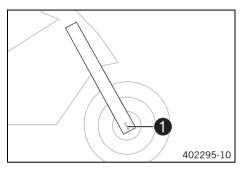
5.4 Engine number



The engine number 1 is stamped on the right side of the engine.

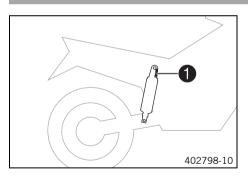
5 SERIAL NUMBERS

5.5 Fork part number



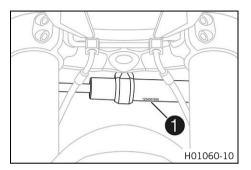
The fork part number **1** is stamped on the inside of the axle clamp.

5.6 Shock absorber article number



The shock absorber article number **1** is stamped on the top of the shock absorber above the adjusting ring towards the engine side.

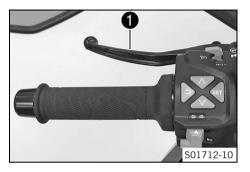
5.7 Steering damper article number



Steering damper item number **1** is embossed on the underside of the steering damper.

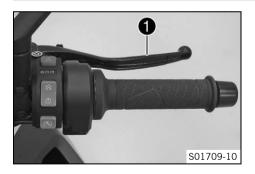
6 CONTROLS

6.1 Clutch lever



Clutch lever **1** is fitted on the handlebar on the left. The clutch is activated hydraulically and adjusts itself automatically.

6.2 Hand brake lever



The hand brake lever **1** is fitted on the right side of the handlebar.

The front brake is engaged using the hand brake lever.

6.3 Throttle grip

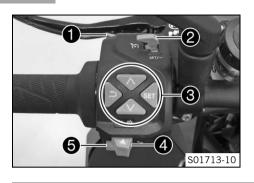


The throttle grip **1** is fitted on the right side of the handlebar.

6.4 Combination switch, left side

The left combination switch is fitted on the left side of the handle-bar.

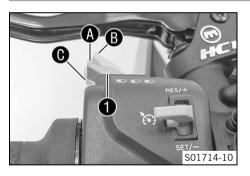
6 CONTROLS



Overview of the left combination switch

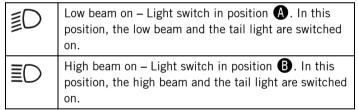
- 1 Light switch (p. 32)
- 2 Cruise control system tip switch (🕮 p. 35)
- 3 Menu switch (p. 33)
- 4 Turn signal switch (p. 34)
- 6 Horn button (p. 35)

6.5 Light switch



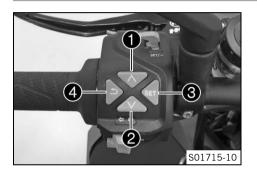
The light switch **1** is fitted on the combination switch on the left.

Possible states



Headlight flasher – Light switch in position **()**. The headlight flasher is operated in this position. The light switch returns automatically to the position **(A)** after use.

6.6 Menu switch



The menu switch is fitted in the middle of the left combination switch.

The menu buttons are used to control the display on the combination instrument.

Button **1** is the **UP** button.

Button **2** is the **DOWN** button.

Button 3 is the SET button.

Button 4 is the **BACK** button.

6 CONTROLS

6.7 Turn signal switch



Turn signal switch **1** is fitted on the combination switch on the left.

Possible states

Δ	Turn signal off – Turn signal switch pushed toward the switch housing.
4	Left turn signal, on – Turn signal switch pressed to the left. The turn signal switch returns automatically to the central position after use.
\Rightarrow	Right turn signal, on – Turn signal switch pressed to the right. The turn signal switch returns automatically to the central position after use.



Info

An automatic turn signal switch-off function ($\underline{\textbf{ATIR}}$) is available as a software feature.

The **ATIR** function uses a time and distance counter. If the turn signal has been on for at least 10 seconds and 150 meters of riding distance, the turn signal is switched off.

If the vehicle is stationary, both counters are stopped. If the turn signal switch is reactivated, both counters are reset.



The horn button is fitted on the combination switch on the left

Possible states

- Horn button

 in basic position.
- Horn button
 pressed The horn is operated in this position.

6.9 Cruise control system tip switch



The ① cruise control system tip switch is fitted on the left side of the combination switch.

- Cruise control system tip switch \(\infty \) in the basic position.
- Cruise control system tip switch opressed to the left. In this position, the cruise control system function is switched on and off. The operating mode is displayed in the combination instrument.
- Briefly press cruise control system tip switch 'o in position **RES/+**. − The last saved speed is reapplied. Every subsequent brief pressing increases the target speed by 1 km/h or 1 mph.

- Press and hold cruise control system tip switch in position RES/+. – The target speed increases in increments of 5 km/h or 5 mph.
- Briefly press cruise control system tip switch in position
 SET/-. The cruise control system function is activated and the current speed is maintained. Every subsequent brief press reduces the target speed by 1 km/h or 1 mph.
- Press and hold cruise control system tip switch in position
 SET/-. The target speed decreases in increments of 5 km/h or 5 mph.



Info

After activation of the cruise control system function, the throttle grip can be turned back to the home position. The selected speed will be maintained.

If the target speed is exceeded for less than 30 seconds when turning the throttle grip, the cruise control system remains activated.

To switch off the cruise control system function, press the cruise control system tip switch to the left.

In addition, the cruise control system function is deactivated when one of the following events occurs:

- Operating the hand brake lever
- Operating the foot brake lever
- Operating the clutch lever
- Shifting gears
- Turning the throttle grip beyond the home position
- Control of the motorcycle traction control (MTC)
- Slip at the rear wheel or lifting front wheel
- A fault occurring, which impairs the cruise control system function
- Exceeding the target speed for more than 30 seconds when overtaking



Warning

Danger of accidents The cruise control system function is not suitable for all driving situations.

The selected target speed will not be reached, if the engine power is not sufficient for a gradient.

The selected target speed will be exceeded if the engine braking effect is not sufficient on a decline.

- Do not use the cruise control systems function on winding roads.
- Do not use the cruise control systems on slippery road surfaces (e.g. rain, ice or snow) or unpaved surfaces (e.g. sand, stones or gravel).
- Do not use the cruise control systems function if the traffic does not permit a constant speed.

The cruise control system function is only available when motorcycle traction control (MTC) is activated.

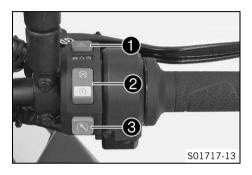
When motorcycle traction control (MTC) is switched off, the cruise control system function is also switched off.

The cruise control system function cannot be activated during rapid acceleration.

The cruise control system function can only be activated in 3rd, 4th, 5th and 6th gear.

The control range is from 40 to 200 km/h or from 25 to 125 mph.

6.10 Combination switch, right



The right combination switch is fitted on the right side of the handlebar.

Overview of the right combination switch

- 1 Hazard warning flasher switch (p. 40)
- 2 Emergency OFF switch/electric starter button (p. 41)
- Race-on tip switch (p. 42)

6.11 Hazard warning flasher switch



The hazard warning flasher switch **1** is fitted on the right side of the combination switch.

The hazard warning flasher is used to indicate emergency situations.



Info

The hazard warning flasher can be activated or deactivated while the ignition is switched on or up to 60 seconds after the ignition is switched off.

Only keep the hazard warning flasher activated as long as necessary as it depletes the 12-V battery.

Possible states

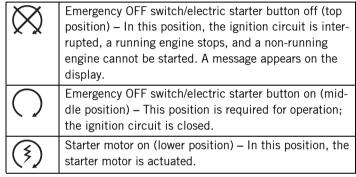


Hazard warning flasher on – All four turn signals and the green turn signal indicator lights in the combination instrument flash.

6.12 Emergency OFF switch/electric starter button



The emergency OFF switch/electric starter button **1** is fitted on the right side of the combination switch.



6.13 Race-on tip switch



The <u>Race-on tip switch</u> is fitted on the right side of the combination switch.



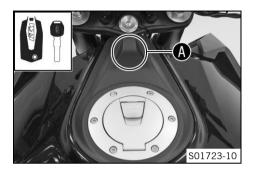
Info

The Race-on tip switch performs the ignition lock function on this vehicle.

The steering can only be locked if the handlebar is turned to the left.

- Race-on tip switch ® pressed briefly Pressing briefly switches the ignition on and unlocks the steering lock or switches the ignition off. The Race-on indicator lamp lights up briefly once for confirmation.
- Race-on tip switch © pressed and held Pressing and holding switches the ignition off and locks the steering lock.

6.14 Steering lock



On this vehicle, the ignition/steering lock is replaced by a remote key with transponder (Race-on key (p. 44)).

In order to activate the steering lock, the handlebar must be turned fully to the left.

The steering is locked and unlocked electromechanically via the Race-on tip switch \circ (\bowtie p. 42).

If the battery voltage of the Race-on key is too low, place either the Race-on key or the black Race-on key in area (A) and repeat starting.

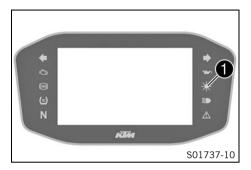


Info

Store the ignition key safely again as soon as the engine has been started.

- Ignition off, steering locked In this operating mode, the ignition circuit is interrupted and the steering locked.
- Ignition off, steering unlocked In this operating mode, the ignition circuit is interrupted and the steering unlocked.
- Ignition on, steering unlocked In this operating mode, the ignition circuit is closed and the steering unlocked.

6.15 Immobilizer

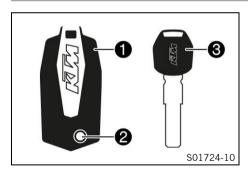


The electronic immobilizer secures the vehicle against unauthorized use.

The immobilizer is activated and the engine electronics are locked as soon as the ignition is switched off via the Race-on button \bigcirc (\bigcirc p. 42).

The Race-on indicator lamp ① can indicate errors by flashing. If the optional alarm system is installed, the Race-on indicator lamp ① flashes when the ignition is switched off and the alarm system is switched on.

6.16 Race-on key



In this vehicle, the <u>Race-on key</u> **1** performs all the functions of the conventional ignition key.

Press the **2** button to fold out the key bit. The key bit it is only used for unlocking the seat lock and for opening the cases (optional).

The black ignition key **3** is only intended for situations in which the Race-on key is not available or is not functional.

The black Race-on spare key can be used to start the vehicle if the Race-on key battery voltage is too low and the transponder is not recognized by the vehicle. The black Race-on key can also be used to unlock the seat lock and open the cases (optional).

Info

The ignition keys contain electronic components. Always maintain a distance of several centimeters to other devices with electronic components.

A lost ignition key must be deactivated by an authorized KTM workshop to prevent unauthorized persons from operating the vehicle.

The ignition keys supplied are activated when delivered. Up to four ignition keys in total can be activated by an authorized KTM workshop. The key number must be provided in each case.

6.17 Opening 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 refuel 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 poisonous and a health hazard.

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

Condition

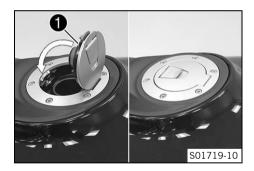
The motorcycle is stationary.

The engine is switched off.

The ignition has been switched on or off for less than 1 minute.

- - ✓ The fuel tank filler cap is unlocked.
- Fold up fuel tank filler cap 2.

6.18 Closing the fuel tank filler cap





Warning

Fire hazard Fuel is highly flammable, toxic 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.
- Fold down fuel tank filler cap and push it down.
 - ✓ The fuel tank filler cap locks audibly in place.

6.19 Seat lock



Seat lock 1 is located on the left side of the vehicle under the seat.

It can be unlocked using the Race-on key or the black Race-on key.

6.20 Baggage lugs



The baggage lugs **1** are located on the underside of the passenger seat.



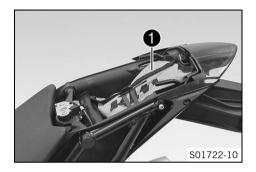
Info

When the passenger seat is mounted, the lugs are accessible if they are turned outward.

No more than one small piece of luggage with the specified weight may be attached to the turned-out baggage lugs.

Maximum luggage	5 kg (11 lb.)
weight	

6.21 Tool set



The tool set 1 is located under the passenger seat.

6.22 Opening storage compartment



Info

A storage compartment, in which objects can be stowed, is located under the passenger seat. Electronic devices can be charged via USB in the storage compartment. Always secure stowed objects additionally against moisture.

Preparatory work

- Remove the passenger seat. (p. 166)



Main work

- Press in area f A to open the storage compartment.
- Take off storage compartment.
- Open rubber catch and place item in storage compartment.

6.23 Closing storage compartment

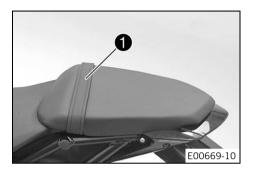


Main work

- Close rubber catch 1.
- Mount storage compartment on seat.
 - ✓ Holding lugs ② engage in recesses ③.

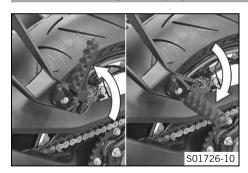
Finishing work

50



The supporting strap **1** is attached to the passenger seat. The supporting strap is provided for the passenger to hold on to.

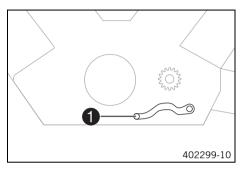
6.25 Passenger foot pegs



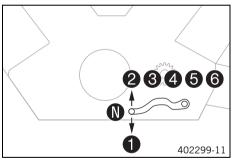
The passenger foot pegs can be folded up and down.

- Passenger foot pegs folded up For operation without a passenger.
- Passenger foot pegs folded down For operation with a passenger.

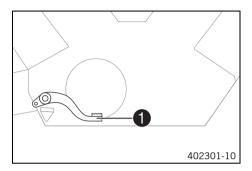
6.26 Shift lever



The shift lever 1 is fitted on the left side of the engine.

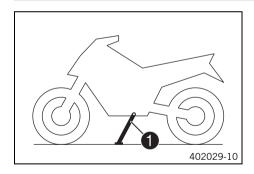


The gear positions can be seen in the figure. The idle position is between first and second gears.



Foot brake lever **1** is located in front of the right footrest. The rear brake is engaged with the foot brake lever.

6.28 Side stand



Side stand **1** is located on the left of the vehicle. The side stand is used for parking the motorcycle.



Info

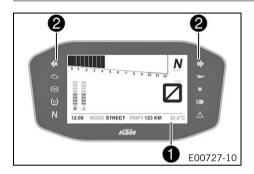
The side stand must be folded up during motorcycle use. The side stand is coupled with the safety starting system; see the instructions in the "Stopping, parking" chapter.

Possible states

 Side stand folded out – The vehicle can be supported on the side stand. The safety starting system is active.

• Side stand folded in – This position is mandatory when riding the motorcycle. The safety starting system is inactive.

7.1 Combination instrument



The combination instrument is attached in front of the handlebar. The combination instrument is divided into two function areas.

Display 1

2 Indicator lamps (p. 58)

7.2 Activation and test



Activation

The combination instrument is activated when the ignition is switched on.



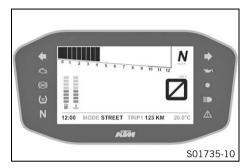
Info

The brightness of the displays is controlled by an ambient light sensor in the combination instrument.

Test

The welcome text appears on the display and the indicator lamps are briefly activated for a function check.

7.3 Day-Night mode



Day mode is shown in a bright color.



Night mode is shown in a dark color.

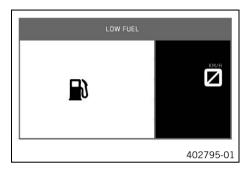


Info

The ambient light sensor in the combination instrument measures the brightness of the environment and automatically switches the display to day or night mode. The display is brightened, darkened or switched to the other mode depending on the brightness measured by the ambient light sensor.

The display mode cannot be changed manually.

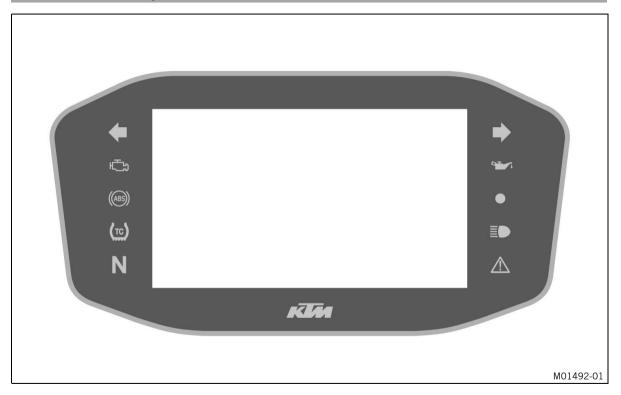
7.4 Warnings



If the general warning lamp lights up among the indicator lamps (p. 58), the corresponding message appears in the display. The SET button is used to confirm receipt of the information and the message is cleared.

All the existing warnings are displayed in the **Warning** menu until they are no longer active.

7.5 Indicator lamps



The indicator lamps offer additional information about the operating state of the motorcycle. When the ignition is switched on, all indicator lamps light up briefly.



Info

The malfunction indicator lamp always lights up as long as the engine is not running. If the engine is running and the malfunction indicator lamp lights up, stop (taking care not to endanger yourself or other road users in the process) and contact an authorized KTM workshop.

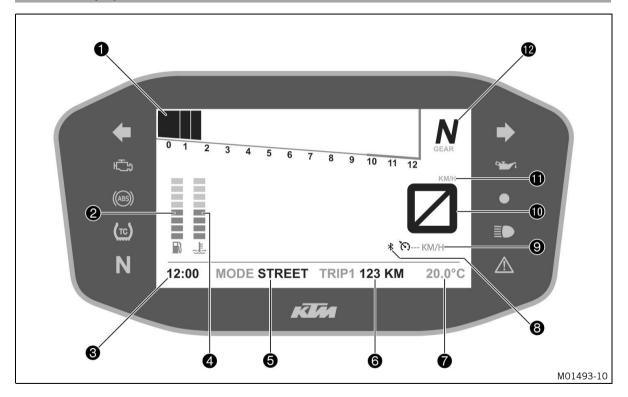
The oil pressure warning lamp always lights up as long as the engine is not running. If the engine is running and the oil pressure warning lamp lights up, stop immediately (taking care not to endanger yourself or other road users in the process) and switch off the engine.

The ABS warning lamp and TC indicator lamp light up until a speed of approx. 6 km/h (approx. 4 mph) or more has been reached

+	The left turn signal indicator lamp flashes green with a steady rhythmic flash – The left turn signal is switched on.
J.	Malfunction indicator lamp lights up yellow – The <u>OBD</u> has detected an error in the vehicle electronics. Come safely to a halt, and contact an authorized KTM workshop.
(ABS)	ABS warning lamp lights up/flashes yellow – Status or error messages relating to <u>ABS</u> . The ABS warning lamp flashes if the ABS mode SM0T0 is enabled.
(<u>10</u>)	TC indicator lamp lights up/flashes yellow – MTC (p. 252) is not enabled or is currently intervening. The TC indicator lamp also lights up if an error is detected. Contact an authorized KTM workshop. The TC indicator lamp flashes if MTC actively engages or if the launch control (p. 123) (optional) is activated.

N	The idle indicator lamp lights up green – The transmission is in neutral.
→	The right turn signal indicator lamp flashes green with a steady rhythmic flash – The right turn signal is switched on.
47	The oil pressure warning lamp lights up red – The oil pressure is too low. Stop immediately, taking care not to endanger yourself or other road users in the process, and switch off the engine.
	Race-on indicator lamp lights up/flashes yellow/orange/red — Status or error messages relating to KTM RACE ON /alarm system.
	The high beam indicator lamp lights up blue – The high beam is switched on.
<u> </u>	The general warning lamp lights up yellow – A note/warning note on operating safety was detected. This is also shown on the combination instrument.

7.6 Display



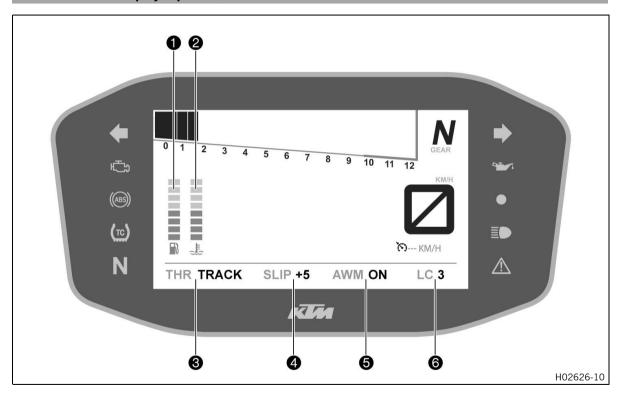


Info

The figure shows the start screen of the combination instrument. If the menu is opened, the speed is still displayed.

- Tachometer
- Shift warning light (p. 66)
- The shift warning light is integrated in the tachometer display.
- 2 Fuel level display (🕮 p. 67)
- 3 Time (p. 68)
- 4 Coolant temperature indicator (p. 68)
- **6** Ride Mode (p. 251)
- **6** Trip distance counter (p. 69)
- Ambient temperature
- 8 Bluetooth® (optional)
- 9 Cruise control indicator (🕮 p. 69)
- 10 Speed
- Unit for the speedometer
- 12 Gear display

7.7 TRACK Display (optional)





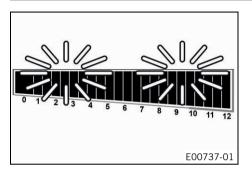
Info

The figure shows the start screen of the combination instrument in active drive mode **TRACK** (optional). If the menu is opened, the speed is still displayed.

Fuel level display (
p. 67)

- 1 If the slip adjustment changes, this indicator is replaced by the slip adjustment indicator for a few seconds.
 - Coolant temperature indicator (p. 68)
- If the slip adjustment changes, this indicator is replaced by the slip adjustment indicator for a few seconds.
- **3** Throttle Response (optional) (p. 254)
- 4 Slip adjustment (optional) (p. 253)
- **6** Anti Wheelie Mode (optional)
- 6 Launch Control (optional) (p. 123)

7.8 Shift warning light



The shift warning light is integrated in the tachometer display. In the **Shift Light** menu, the engine speed for the shift warning light can be set. The shift warning light is always active during the running-in phase (up to 1,000 km / 600 mi). The shift warning light can only be deactivated, and the values for **RPM1** and **RPM2** can only be adjusted after this. The shift warning light lights up red at **RPM1** and flashes red at **RPM2**.

Coolant temperature	> 35 °C (> 95 °F)
RPM1 shift warning light	lights up red
RPM2 shift warning light	flashes red

Coolant temperature	≤ 35 °C (≤ 95 °F)
The shift warning light always lights up at	6,500 rpm

7.9 Fuel level display



The fuel level indicator consists of bars. The more bars are lit, the more fuel is in the fuel tank.



Info

If the fuel level is getting low, the last two segments light up and the following warning also appears **LOW FUEL**. Refuel at the next possible opportunity when the last bar lights up red.

The fuel level is displayed with a slight delay to prevent the indicator from constantly moving while riding.

The fuel level display is not updated while the side stand is folded out or the emergency off switch is switched off. Once the side stand is folded up and the emergency OFF switch is switched on, the fuel level display is next updated after 2 minutes.

The fuel level display flashes if the combination instrument does not receive a signal from the fuel level sensor.

7.10 Time

12:00

E00730-01

The time is displayed in 24 hour format in all languages except for EN-US. The time is displayed in 12 hour format if the language is set to EN-US.

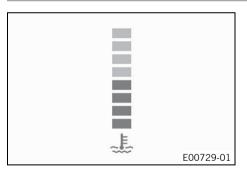
The time can be configured in the Clock/Date menu.



Info

The time must be reset if the 12-V battery was disconnected from the vehicle or the fuse was removed.

7.11 Coolant temperature indicator



The coolant temperature indicator consists of bars. The more bars that light up, the hotter the coolant.



Info

When all the bars light up, the warning **ENGINE TEMP HIGH** also appears.

- The engine is cold Up to three bars light up.
- Engine warm Four to five bars light up.
- Engine hot Six to eight bars light up.
- Engine very hot All eight bars light up red.

7.12 Trip distance counter

TRIP1 123 KM

E00731-01

F00732-01

Trip 1 is displayed in the start screen as a trip distance counter. This cannot be changed.

Information about the total riding distance covered can be accessed in the **General Info** menu under menu item **ODO**.

The trip distance counter can be configured in the **Trip 1** menu. Information about other distances traveled can be accessed and configured in the **Trip 2** menu.

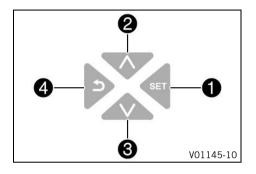
7.13 Cruise control indicator



When cruise control is activated, the operating mode is shown on the combination instrument display.

Cruise control is operated using the cruise control tip switch to (E) p. 35).

7.14 Menu





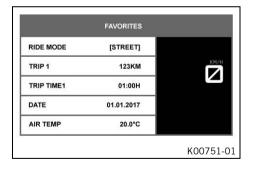
Info

Press the **SET** button **1** to open the menu.

Navigate through the menu using the **UP** button **2** or the **DOWN** button **3**.

Press the **BACK** button **4** to close the current menu or the menu overview.

7.14.1 Favorites

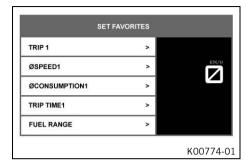


- Press the **SET** button when the menu is closed.
- Pressing the **SET** button again opens the menu.
- Press the UP or DOWN button to activate the menu item and select it with the SET button.

You can directly open five freely configurable menus in the **Favorites** menu.

The Favorites menu is configured in the Set Favorites menu.

7.14.2 Set Favorites

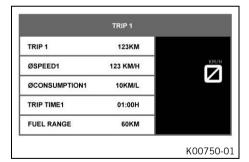


Condition

- The motorcycle is stationary.
- Press the SET button when the menu is closed.
- Press the UP or DOWN button until the Set Favorites menu is marked on the display. Press the SET button to open the menu.
- Press the **UP** or **DOWN** button to select the menu. Press the **SET** button to set the menu for quick selection.

The Favorites menu is configured in the Set Favorites menu.

7.14.3 Trip 1



- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until the **Trip 1** menu is marked on the display. Press the **SET** button to open the menu.

Trip 1 shows the distance since the last reset, such as between two refueling stops. **Trip 1** is running and counts up to **9999**.

 \emptyset Speed 1 indicates the average speed based on Trip 1 and Trip Time 1.

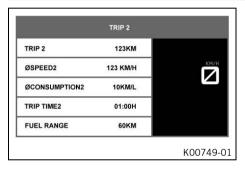
 $\ensuremath{\mbox{\emptyset}}$ Consumption 1 indicates the average fuel consumption based on Trip 1.

Trip Time 1 shows the journey time on the basis of **Trip 1** and runs as soon as a speed signal is received.

Fuel Range indicates the possible distance you can cover with the fuel reserve.

Press and	In the Trip 1 menu all entries apart from
hold the SET	Fuel Rangeare deleted.
button for 3-5	
seconds.	

7.14.4 Trip 2



- Press the SET button when the menu is closed.
- Press the UP or DOWN button until Trip 2 menu is marked on the display. Press the SET button to open the menu.

Trip 2 shows the distance since the last reset, such as between two refueling stops. **Trip 2** is running and counts up to **9999**.

Ø Speed 2 indicates the average speed based on Trip 2 and Trip Time 2.

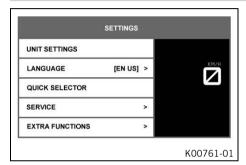
 \emptyset Consumption 2 indicates the average fuel consumption based on Trip 2.

Trip Time 2 shows the journey time on the basis of **Trip 2** and runs as soon as there is a speed signal.

Fuel Range indicates the possible distance you can cover with the fuel reserve.

Press and	In the Trip 2 menu all entries apart from
hold the SET	Fuel Rangeare deleted.
button for 3-5	
seconds.	

7.14.5 Settings

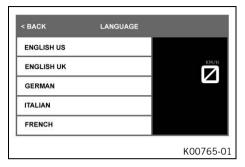


Condition

- The motorcycle is stationary.
- Press the SET button when the menu is closed.
- Press the UP or DOWN button until the Settings menu is marked on the display. Press the SET button to open the menu.

Settings for units or various values are made in the **Settings** menu. Several functions can be enabled or disabled.

7.14.6 Language

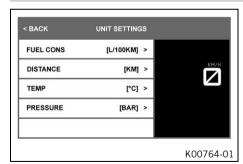


Condition

- The motorcycle is stationary.
- Press the SET button when the menu is closed.
- Press the UP or DOWN button until the Settings menu is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until the Language menu is marked on the display. Press the SET button to open the menu.
- Press the **UP** or **DOWN** button until the desired language is marked. Select the language using the **SET** button.

The menu languages are US English, UK English, German, Italian, French and Spanish.

7.14.7 Unit settings

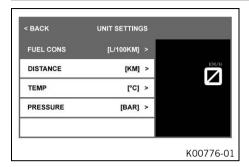


Condition

- The motorcycle is stationary.
- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until the **Settings** menu is marked on the display. Press the **SET** button to open the menu.
- Press the **SET** button.
- Press the UP or DOWN button until the Unit settings menu is marked on the display. Press the SET button to open the menu.

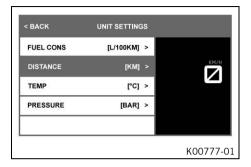
The settings for the units are displayed in the **Unit settings** menu.

7.14.8 **Fuel Cons**



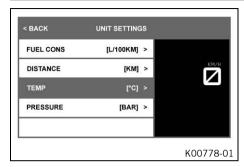
- The motorcycle is stationary.
- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until the **Settings** menu is marked on the display. Press the **SET** button to open the menu.
- Press the **UP** or **DOWN** button until **Unit settings** is marked on the display. Press the **SET** button to open the menu.
- Press the UP or DOWN button until Fuel Cons is marked on the display. Press the **SET** button to open the menu.
- Press the **UP** or **DOWN** button until the desired unit is marked on the display. Press the SET button to confirm the desired unit.

7.14.9 Distance



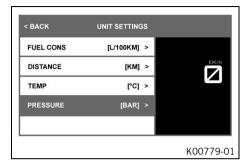
- The motorcycle is stationary.
- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until the **Settings** menu is marked on the display. Press the **SET** button to open the menu.
- Press the UP or DOWN button until Unit settings is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until Distance is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until the desired unit is marked on the display. Press the SET button to confirm the desired unit.

7.14.10 Temp



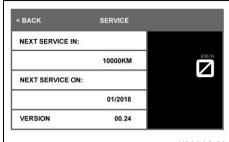
- The motorcycle is stationary.
- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until the **Settings** menu is marked on the display. Press the **SET** button to open the menu.
- Press the **UP** or **DOWN** button until the **Unit Settings** menu is marked on the display. Pressing the SET button opens the menu.
- Press the **UP** or **DOWN** button until **Temp** is marked on the display. Pressing the **SET** button opens the menu.
- Press the **UP** or **DOWN** button until the desired unit is marked on the display. Press the SET button to confirm the desired unit.

7.14.11 Pressure



- The motorcycle is stationary.
- Press the SET button when the menu is closed.
- Press the **UP** or **DOWN** button until the **Settings** menu is marked on the display. Press the **SET** button to open the menu.
- Press the UP or DOWN button until the Unit Settings menu is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until Pressure is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until the desired unit is marked on the display. Press the SET button to confirm the desired unit.

7.14.12 Service



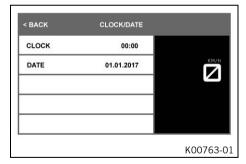
V01146-01

Condition

- The motorcycle is stationary.
- Press the SET button when the menu is closed.
- Press the **UP** or **DOWN** button until the **Settings** menu is marked on the display. Press the **SET** button to open the menu.
- Press the UP or DOWN button until the Service menu is marked on the display. Press the SET button to open the menu.

The next service due is shown in the **Service** menu.

7.14.13 Clock/Date



- The motorcycle is stationary.
- Press the SET button when the menu is closed.
- Press the **UP** or **DOWN** button until the **Settings** menu is marked on the display. Press the **SET** button to open the menu.
- Press the UP or DOWN button until Clock/Date is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button to set the clock and confirm with the SET button.
- Press the UP or DOWN button to set the date and confirm with the SET button.

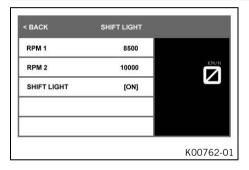
If the 12-V battery has been disconnected, the time and date must be set.



Info

If the 12-V battery has been disconnected, the software version is also displayed.

7.14.14 Shift Light



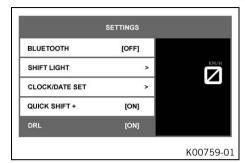
Condition

- The motorcycle is stationary.
- **0D0** > 1000 km (600 mi).
- Press the SET button when the menu is closed.
- Press the UP or DOWN button until the Settings menu is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until Shift Light is marked on the display. Press the SET button to open the menu.
- Press the **UP** or **DOWN** button to select the function. Use the
 SET button to set the engine speed for the shift warning light.

When the engine speed reaches **RPM 1**, the shift warning light lights up red.

When the engine speed reaches **RPM 2**, the shift warning light flashes red.

7.14.15 DRL



Condition

- The motorcycle is stationary.
- Press the SET button when the menu is closed.
- Press the UP or DOWN button until the Settings menu is marked on the display. Press the SET button to open the menu.



Warning

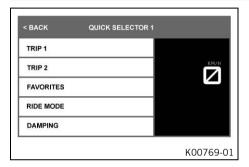
snow or rain.

Danger of accidents When visibility is poor, the daytime running light is not a substitute for the low beam. Automatic switching between the daytime running light and low beam may only be partially available when visibility is significantly impaired due to fog,

- Ensure that the appropriate type of lighting is always selected.
- If necessary switch off the daytime running lights using the menu before going on a ride or when stopped so that the low beam is switched on permanently.
- Note the legal regulations regarding the daytime running light.

Press the **UP** or **DOWN** button until <u>DRL</u> is marked on the display. Press the **SET** button to switch the daytime running light on or off.

7.14.16 Quick Selector 1



Condition

- The motorcycle is stationary.
- Press the SET button when the menu is closed.
- Press the UP or DOWN button until the Settings menu is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until the Quick Selector menu is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until the Quick Selector 1 menu is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until the desired menu is marked.
- Press the SET button to confirm the selection.

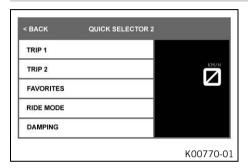
A menu can be defined for direct selection in the **Quick Selector 1** menu.

When the menu is closed, the menu defined in ${\bf Quick\ Selector\ 1}$ is opened by pressing the ${\bf UP}$ button.

Info

In drive mode **TRACK** (optional), the **UP** button can be used to set the slip adjustment.

7.14.17 Quick Selector 2



Condition

- The motorcycle is stationary.
- Press the SFT button when the menu is closed
- Press the **UP** or **DOWN** button until the **Settings** menu is marked on the display. Press the **SET** button to open the menu.
- Press the UP or DOWN button until the Quick Selector menu is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until the Quick Selector 2 menu is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until the desired menu is marked.
- Press the SET button to confirm the selection.

A menu can be defined for direct selection in the **Quick Selector 2** menu.

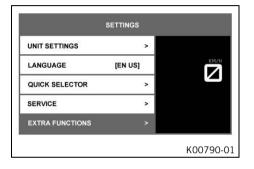
When the menu is closed, the menu defined in **Quick Selector 2** is opened by pressing the **DOWN** button.



Info

In drive mode ${\bf TRACK}$ (optional), the ${\bf DOWN}$ button can be used to set the slip adjustment.

7.14.18 Extra Functions



Condition

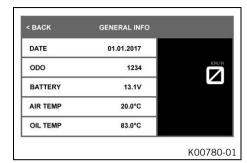
- The motorcycle is stationary.
- Press the SET button when the menu is closed.
- Press the UP or DOWN button until the Settings menu is marked on the display. Press the SET button to open the menu.
- Press the **UP** or **DOWN** button until **Extra Functions** is marked on the display. Press the **SET** button to open the menu.
- Use the UP or DOWN button to navigate through the extra functions.



Info

The optional extra functions are listed in **Extra Functions**. The current **KTM PowerParts** and the available software for your vehicle can be found on the KTM website.

7.14.19 General Info



- Press the **SFT** button when the menu is closed
- Press the **UP** or **DOWN** button until the **General Info** menu is marked on the display. Press the **SET** button to open the menu.

Date shows the date.

ODO shows the total distance covered.



Info

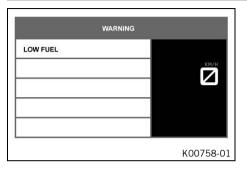
The value **0D0** is retained, even if the 12-V battery is disconnected from the vehicle and/or the fuse blows.

Battery indicates the battery voltage.

Air Temp indicates the ambient temperature.

Oil Temp indicates the engine oil temperature.

7.14.20 Warning

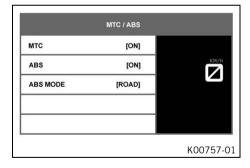


Condition

- At least one warning present.
- Press the SET button when the menu is closed.
- Press the **UP** or **DOWN** button until **Warning** menu is marked on the display. Press the **SET** button to open the menu.
- Use the **UP** or **DOWN** button to navigate through the warnings.

In the **Warning** menu, warnings that occurred are displayed and stored until they are no longer enabled.

7.14.21 MTC/ABS



Condition

The motorcycle is stationary.

Note

Voiding of the government approval for road use and the insurance coverage
If the ABS is switched off completely, the vehicle's approval for road use is invalidated.

- Only operate the vehicle in closed-off areas remote from public road traffic if the ABS is switched off completely.
- Press the **SET** button when the menu is closed.

- Press the UP or DOWN button until the MTC/ABS menu is marked on the display. Press the SET button to open the menu.
- Press the **UP** or **DOWN** button to navigate to the required menu item.
- Press and hold the SET button for 3-5 seconds.
 The commands Keep pressed and Release button are displayed on the combination instrument.

In the MTC/ABS menu, MTC and ABS can be switched off. In ABS Mode you can select between ROAD and SMOTO.



Info

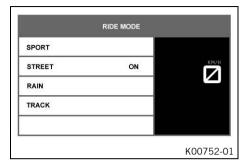
MTC can also be deactivated during the ride. Do not open the throttle when doing so.

After the ignition is switched on, motorcycle traction control and ABS are enabled again.

In the **ROAD** ABS mode, the ABS controls both wheels. In the **SMOTO** ABS mode, the ABS only controls the front wheel. There is no ABS intervention on the rear wheel. The ABS warning lamp flashes slowly to remind you that the **SMOTO** ABS mode is enabled.

In the **SMOTO** ABS mode, the rear wheel may lock and there is a risk of falling.

7.14.22 Ride Mode



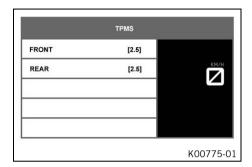
- Press the SET button when the menu is closed.
- Press the UP or DOWN button until the Ride Mode menu is marked on the display. Press the SET button to open the menu.
- Use the UP or DOWN button to navigate through the menu. The SET button can be used to select engine and motorcycle traction control settings that are coordinated with each other.
 - ✓ SPORT homologated performance with very direct response; the motorcycle traction control allows greater slip on the rear wheel.
 - ✓ STREET homologated performance with balanced response; the motorcycle traction control allows normal slip on the rear wheel.
 - ✓ RAIN reduced homologated performance for better ridability; the motorcycle traction control allows normal slip on the rear wheel.
 - ✓ TRACK Optional setting available with homologated performance and extremely direct response. The motorcycle traction control and the characteristic map of the throttle response can be individually set.



Info

Do not open the throttle during the selection.

7.15 TPMS



Condition

Model with TPMS.



Warning

Danger of accidents The tire pressure monitoring system does not eliminate the necessity to check the tires before going on a ride.

To avoid false alarms, the tire pressure values are evaluated over a period of several minutes.

- Check the tire pressure before every ride.
- Correct the tire pressure if the tire pressure deviates from the specified value.
- Even if the tire pressure values are correct, stop the vehicle immediately if its behavior indicates a loss of pressure in the tires.
- Press the SET button when the menu is closed.
- Press the **UP** or **DOWN** button until the <u>TPMS</u> menu is marked on the display.

Guideline

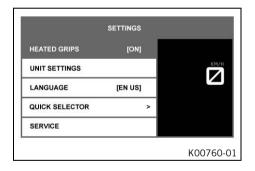
Tire pressure when solo		
front: with cold tires	2.5 bar (36 psi)	
rear: with cold tires	2.5 bar (36 psi)	

The **TPMS** menu displays the tire pressure of the front and rear tires.

FRONT indicates the tire pressure at the front.

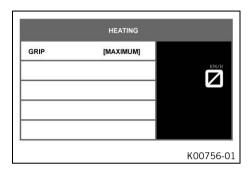
REAR indicates the tire pressure at the rear.

7.16 Heated grips (optional)



- The motorcycle is stationary.
- Press the SET button.
- Press the **UP** or **DOWN** button until **Heated grips** is marked on the display. Pressing the **SET** button switches the heated grips menu on or off.

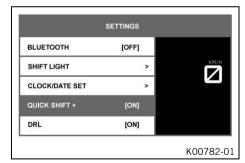
7.17 Heating (optional)



Condition

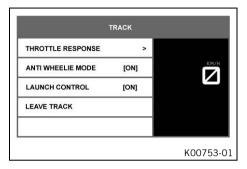
- The **Heated grips** menu is activated.
- Press the SET button when the menu is closed.
- Press the **UP** or **DOWN** button until the **Heating** menu is marked on the display.
- Select a heating level for the heated grips or switch off the heated grips with the SET button.

7.18 Quick Shift + (optional)



- The motorcycle is stationary.
- Press the **SET** button when the menu is closed.
- Press the UP or DOWN button until the Settings menu is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until Quick Shift + is marked on the display.
- Switch Quickshifter+ (
 p. 125) on and off using the SET button.

7.19 Track (optional)



Condition

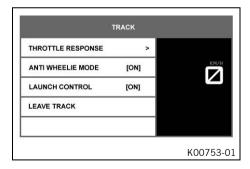
- The drive mode **TRACK** (optional) is activated.
- Press the SET button when the menu is closed.
- Use the UP or DOWN button to navigate through the menu.
 Use the SETbutton to adjust the individual settings of the TRACK PACK.



Info

The **TRACK**drive mode is ended via **Leave Track** and automatically switches to the **STREET**drive mode. Do not open the throttle when doing so.

7.20 Launch Control (optional)



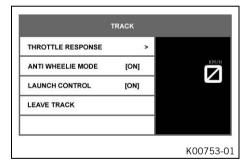
- The drive mode **TRACK** (optional) is activated.
- Press the **SET** button when the menu is closed.
- Press the UP or DOWN button until the menu item Launch Control is marked on the display.

Warning

Danger of accidents When Anti Wheelie Mode is disabled, the motorcycle traction control no longer counteracts the raising of the front wheel.

- Only switch off the Anti Wheelie Mode if you have the appropriate experience.
- Switch the launch control on and off using the **SET** button.

7.21 Anti Wheelie Mode (optional)



Condition

- The drive mode TRACK (optional) is activated.
- Press the **SET** button when the menu is closed.
- Press the UP or DOWN button until the menu item Anti Wheelie Mode is marked on the display.

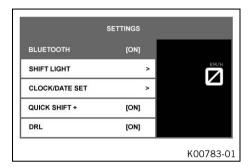


Warning

Danger of accidents When Anti Wheelie Mode is disabled, the motorcycle traction control no longer counteracts the raising of the front wheel.

- Only switch off the Anti Wheelie Mode if you have the appropriate experience.
- Switch Anti Wheelie Mode on and off using the **SET** button.

7.22 Bluetooth® (optional)



Condition

- The motorcycle is stationary.
- Function KTM MY RIDE (optional) activated.
- Press the SET button when the menu is closed.
- Press the UP or DOWN button until the Settings menu is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until Bluetooth® is marked on the display.
- Switch the **Bluetooth®** on and off using the **SET** button.

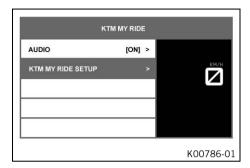


Info

The **Bluetooth®** function can only be used in conjunction with **KTM MY RIDE** (optional).

When the **Bluetooth®** function is switched on, the **Bluetooth®** symbol appears and flashes in the display of the combination instrument. The **Bluetooth®** symbol lights up as soon as the device is connected.

7.23 KTM MY RIDE (optional)



Condition

- The motorcycle is stationary.
- Function KTM MY RIDE (optional) activated.
- Function **Bluetooth®** (optional) activated.
- Press the SET button when the menu is closed.
- Press the UP or DOWN button until the KTM MY RIDE menu is marked on the display. Press the SET button to open the menu.

In **KTM MY RIDE**, an appropriate cellphone or headset can be paired via **Bluetooth®** with the **KTM MY RIDE** control unit.

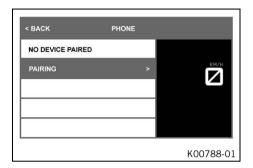


Info

Not every cellphone and headset is suitable for pairing with the \mbox{KTM} \mbox{MY} \mbox{RIDE} control unit.

The standard **Bluetooth®** 2.1 must be supported.

7.24 Pairing (optional)



Condition

- The motorcycle is stationary.
- Function KTM MY RIDE (optional) activated.
- Function **Bluetooth®** (optional) activated.
- The **Bluetooth**® function should also be activated in the device to be paired.
- The Bluetooth®visibility must be activated on the device that is to be paired.
- Press the SET button when the menu is closed.
- Press the UP or DOWN button until the <u>KTM MY RIDE</u> menu is marked on the display. Press the SET button to open the menu.
- Press the UP or DOWN button until KTM MY RIDE Setup is marked on the display. Press the SET button to open the menu.
- Press the UP or the DOWN button until the menu item PHONE or HEADSET is marked.



Info

Two cellphones or headsets can not be paired simultaneously with the **KTM MY RIDE** control unit. Only one cellphone and one headset can be paired with the **KTM MY RIDE** control unit at the same time.

- In the submenu PHONE, a suitable cellphone can be paired with the KTM MY RIDE control unit.
- In the submenu HEADSET, a suitable headset can be paired with the KTM MY RIDE control unit.
- Press the **SET** button to open the menu.
- When pairing the device for the first time, press the UP or DOWN button until Pairing is marked. Press the SET button to open the menu.
- Navigate to the device required using the UP or DOWN button.
 Confirm the selection using the SET button.



Info

The headset pairing is now finished.

 Confirmation of the **Passkey** successfully completes the cellphone pairing.

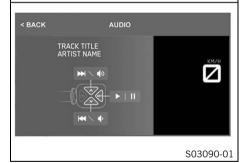


Info

When a suitable device has been successfully paired, the name of the paired cellphone or headset appears in each case in the **PHONE** or **HEADSET** menu. Press the **UP** or **DOWN** button until paired device is marked on the display. The paired device can be deleted by pressing the **SET** button. The device most recently linked is automatically paired with the **KTM MY RIDE** control unit when **Bluetooth®** is switched on and as soon as this device is in range and has not been previously deleted.

7.25 Audio (optional)





Condition

- Function KTM MY RIDE (optional) activated.
- Function **Bluetooth®** (optional) activated.
- Similarly, the Bluetooth® function is also activated when devices are paired.
- Headset connected to a suitable audio device.
- Press the SET button when the menu is closed.
- Press the UP or DOWN button until the KTM MY RIDE menu is marked on the display. Press the SET button to open the menu.



Warning

Danger of accidents Headphone volume which is too high distracts attention from traffic activity.

- Always select headphone volume which is low enough for you to still clearly hear acoustic signals.
- Press the UP or DOWN button until Audio is marked on the display. Press the SET button to open the menu.
- Press and hold the **UP** button to increase the audio volume.
- Press and hold the **DOWN** button to reduce the audio volume.
- Press the **UP** button briefly to change to the next audio track.

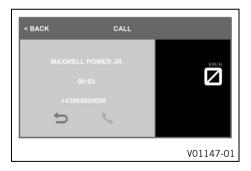
- Press the **DOWN** button briefly to play the audio track from the beginning.
- Press the **DOWN** button twice to change to the previous audio track.
- Press the **SET** button to play or pause the audio track.



Tip

With some cellphones, the cellphone audio player needs to be started before a playback is possible. The audio function can be added to **Quick Selector 1** or **Quick Selector 2** for easier operation.

7.26 Telephony (optional)



- KTM MY RIDE Function activated (optional).
- Function Bluetooth® activated.
- Similarly, the Bluetooth® function is also activated when devices are paired.
- Headset linked with appropriate cellphone.

Warning

Danger of accidents Headphone volume which is too high distracts attention from traffic activity.

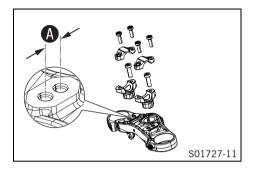
- Always select headphone volume which is low enough for you to still clearly hear acoustic signals.
- Press the **SET** button to accept an incoming call.
- Press the BACK button to reject an incoming call.
- Press and hold the **UP** button to increase the audio volume.
- Press and hold the **DOWN** button to reduce the audio volume.



Info

The call duration and contact are displayed. Depending on the cellphone settings, the contact is shown by name.

8.1 **Handlebar** position



On the upper triple clamp there are two holes at a distance of **A** apart.



Hole distance **A**

15 mm (0.59 in)

The handlebar can be mounted in two different positions. In this way, the handlebar can be mounted in the most comfortable position for the rider



Info

KTM recommends the front handlebar position when using the vehicle on a race track.

8.2 Adjusting the handlebar position 3

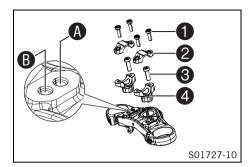


Warning

Danger of accidents A repaired handlebar poses a safety risk.

If the handlebar is bent or straightened, the material becomes fatigued. The handlebar may break as a result.

Change the handlebar if the handlebar is damaged or bent.



Remove screws **1**. Take off the handlebar clamps **2**. Position the handlebar so that screws **3** are accessible.



Info

Cover the components to protect them against damage. Do not kink the cables and lines.

- Remove screws 3. Take off handlebar supports 4.
- Move the handlebar supports into the desired position (A) or (B). Mount and tighten screws (3).

Guideline

Mount the left and right handlebar supports in the same position.

Screw, handle-	M10	40 Nm (29.5 lbf ft)
bar support		Loctite®243™

Position the handlebar.



Info

Make sure the cables and wiring are positioned correctly.

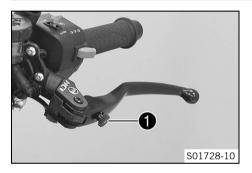
Position the handlebar clamp. Mount screws 1 and tighten evenly.

8 ERGONOMICS

Guideline

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

8.3 Adjusting the basic position of the clutch lever



- Push the clutch lever forward.
- Adjust the basic position of the clutch lever to your hand size by turning adjusting screw 1.



Info

Turn the adjusting screw clockwise to increase the distance between the clutch lever and the handlebar. Turn the adjusting screw counterclockwise to decrease the distance between the clutch lever and the handlebar.

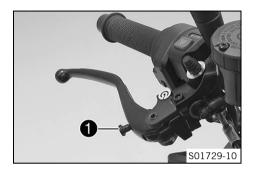
The range of adjustment is limited.

Only turn the adjusting screw by hand, and do not use force.

Do not make any adjustments while riding.

.

8.4 Adjusting the basic position of the hand brake lever



- Push the hand brake lever forward.
- Adjust the basic position of the hand brake lever to your hand size by turning adjusting screw ①.



Info

Turn the adjusting screw clockwise to increase the distance between the hand brake lever and the handlebar.

Turn the adjusting screw counterclockwise to decrease the distance between the hand brake lever and the handlebar.

The range of adjustment is limited.

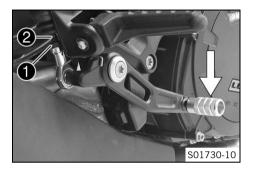
Only turn the adjusting screw by hand, and do not use force.

Do not make any adjustments while riding.

•

8 ERGONOMICS

8.5 Adjusting the basic position of the foot brake lever &



- Loosen nut 1.
- Press the foot brake lever down to be able to turn push rod more easily.
- Turn the push rod until the foot brake lever is in the desired position.



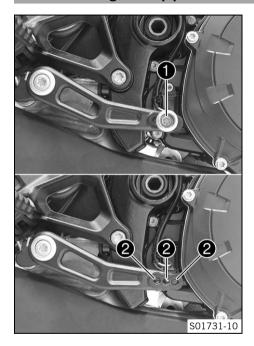
Info

The range of adjustment is limited.

The screw must be screwed into the ball joint by at least five turns.

Lock nut 1.

8.6 Setting the step plate of the foot brake lever



- Remove screw 1 together with the step plate of the foot brake lever.
- To adjust the length of the foot brake lever, position the step plate of the foot brake lever using screw 1 in a drill hole 2. Guideline

	Middle hole
--	-------------

Tighten screw 1.

Guideline

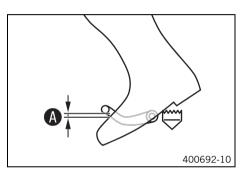
Screw, step	M6	10 Nm (7.4 lbf ft)
plate for foot		Loctite®243™
brake lever		

8.7 Checking the basic position of the shift lever



Info

When driving, the shift lever must not touch the rider's boot when in the basic position. If the shift lever is permanently touching the boot, the transmission will be subject to excessive load; this can cause a malfunction of the quickshifter.



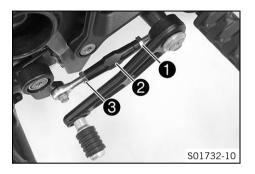
 Sit on the vehicle in the riding position and determine distance between the upper edge of your boot and the shift lever.

Distance between shift lever	10 20 mm (0.39
and upper edge of boot	0.79 in)

- » If the distance does not meet specifications:

•

8.8 Adjusting the basic position of the shift lever &



Loosen nut 1, holding threaded rod 2.



Info

Nut 1 has a left-handed thread.

- Loosen nut **3**, holding threaded rod **2**.
- Turn threaded rod **2** to adjust the shift lever.



Info

The range of adjustment is limited.
The shift lever must not come into contact with any other vehicle components during the shift procedure.

Tighten nut **3** while holding threaded rod **2**.
 Guideline

Nut, shift rod	M8	12 Nm (8.9 lbf ft)

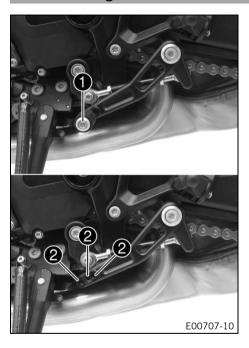
- Tighten nut 1 while holding threaded rod 2.
Guideline

Nut, shift rod	M8LH	12 Nm (8.9 lbf ft)

4

8 ERGONOMICS

8.9 Setting the shift lever stub



- Remove screw along with the shift lever stub.
- Position the shift lever stub with the screw in one of the drilled holes 2 depending on the desired lever length.

Guideline

Standard	Middle hole

- Tighten the screw.

Guideline

Screw, shift	M6	10 Nm (7.4 lbf ft)
lever stub		Loctite®243™

•

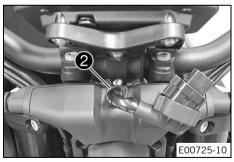


Info

The tilt of the combination instrument can be continuously adjusted using clamping on the handlebar.



Unplug connector 1 with sleeve.



Remove cable guide 2 from the turn signal bracket cover.

8 ERGONOMICS



 Loosen screw 3 using the hexagon socket wrench from the tool set.

Hexagon socket wrench with ball head (61329099200)

Adjust the tilt of the combination instrument.



Info

The combination instrument must also not touch any other components following completion of the work.

 Tighten screw 3 using the hexagon socket wrench from the tool set.

Guideline

Screw, combination	M6	2 Nm (1.5 lbf ft)
instrument clamping		

E00725-10

Mount cable guide 2 in the turn signal bracket cover.



Plug in connector **1** with sleeve.

9 PREPARING FOR USE

9.1 Advice on preparing for first use



Danger

Danger of accidents A rider who is not fit to ride poses a danger to him or herself and others.

- Do not operate the vehicle if you are not fit to ride due to alcohol, drugs or medication.
- Do not operate the vehicle if you are physically or mentally impaired.



Warning

Risk of injury Missing or poor protective clothing presents an increased safety risk.

- Wear appropriate protective clothing such as helmet, boots, gloves as well as trousers and a jacket with protectors on all rides.
- Always wear protective clothing that is in good condition and meets the legal regulations.



Warning

Danger of crashing Different tire tread patterns on the front and rear wheel impair the handling characteristic.

Different tire tread patterns can make the vehicle significantly more difficult to control.

- Make sure that only tires with a similar tire tread pattern are fitted to the front and rear wheel.



Warning

Danger of accidents Non-approved or non-recommended tires and wheels impact the handling characteristic.

Only use tires/wheels approved by KTM with the corresponding speed index.

Warning

Danger of accidents New tires have reduced road grip.

The contact surface on new tires is not yet roughened.

Run in new tires with moderate riding at alternating angles.
 Running-in phase
 200 km (124 mi)



Warning

Danger of accidents The brake system fails in the event of overheating.

If the foot brake lever is not released, the brake linings drag continuously.

- Take your foot off the foot brake lever when you are not braking.



Info

When using your vehicle, remember that others may feel disturbed by excessive noise.

- Make sure that the pre-sales inspection work has been carried out by an authorized KTM workshop.
 - ✓ You receive a delivery certificate and the Service & Manufacturer Warranty Booklet at vehicle handover.
- Before riding for the first time, read the entire Owner's Manual carefully.
- Get to know the controls.
- Adjust the motorcycle to your requirements, as described in the "Ergonomics" chapter.
- Get used to handling the motorcycle in a suitable area before making a longer trip. Try also to ride as slowly
 as possible to get a better feel for the motorcycle.
- Hold the handlebar firmly with both hands and keep your feet on the footrests when riding.

9 PREPARING FOR USE

Run the engine in.

9.2 Running in the engine

During the running-in phase, do not exceed the specified engine speed.

Guideline

Maximum engine speed	
During the first: 1,000 km (620 mi) 6,500 rpm	
After the first: 1,000 km (620 mi)	10,250 rpm

Avoid fully opening the throttle!

9.3 Loading the vehicle



Warning

Danger of accidents Total weight and axle loads influence the handling characteristic.

The total weight consists of: motorcycle ready for operation and with a full tank, driver and passenger with protective clothing and helmet, and luggage.

- Do not exceed the maximum permissible overall weight or the axle loads.

.



Warning

Danger of accidents Improper mounting of cases or the tank rucksack impairs the handling characteristic.

Mount and secure cases and tank rucksack according to the manufacturer's instructions.



Warning

Danger of accidents Unstable handling characteristics at high speed.

 Adapt your speed according to your payload. Ride more slowly if your motorcycle is loaded with cases or other baggage.

Maximum speed with luggage 130 km/h (80.8 mph)



Warning

Danger of accidents Destruction of luggage carrier system.

 If the motorcycle is fitted with luggage cases, note the manufacturer's specifications concerning the maximum payload.



Warning

Danger of accidents Luggage which has slipped impairs visibility.

If the tail light is covered, you are less visible to traffic behind you, especially when it is dark.

- Check that your luggage is fixed properly at regular intervals.

9 PREPARING FOR USE



Warning

Danger of accidents A high payload alters the handling characteristic and increases the stopping distance.

Adapt your speed to your payload.



Warning

Danger of accidents Pieces of luggage which have slipped impair the handling characteristic.

- Check that your luggage is fixed properly at regular intervals.



Warning

Fire hazard The hot exhaust system may burn luggage.

- Fasten your luggage in such a way that it cannot be burned or singed by the hot exhaust system.
- If you carry luggage, make sure you secure it firmly as close as possible to the center of the vehicle and
 ensure even weight distribution between the front and rear wheels.
- Do not exceed the maximum permissible weight and the maximum permissible axle loads.
 Guideline

Maximum permissible overall weight	418 kg (922 lb.)
Maximum permissible front axle load	160 kg (353 lb.)
Maximum permissible rear axle load	260 kg (573 lb.)

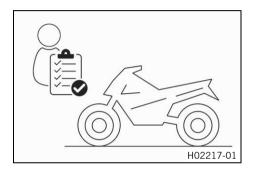
•

10.1 Checks and maintenance measures when preparing for use



Info

Before every trip, check the condition of the vehicle and ensure that it is roadworthy. The vehicle must be in perfect technical condition when it is being operated.



- Check the front brake fluid level. (
 p. 191)
- Check the rear brake fluid level. (p. 196)
- Check the brake linings of the rear brake. (p. 199)
- Check that the brake system is functioning properly.
- Check the coolant level in the compensating tank. (

 p. 246)
- Check the chain for dirt. (p. 173)
- Check the tire condition. (

 p. 211)
- Check tire pressure. (p. 213)
- Check the settings of all controls and ensure that they can be operated smoothly.
- Check that the electrical system is functioning properly.
- Check that luggage is properly secured.
- Check the setting of the rear mirror.
- Check the fuel level.

•

10.2 Starting the vehicle



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.



Caution

Danger of accidents Electronic components and safety devices will be damaged if the 12-V battery is discharged or missing.

Never operate the vehicle with a discharged 12-V battery or without a 12-V battery.

Note

Engine damage High revving speed with a cold engine negatively impacts the lifespan of the engine.

Always run the engine warm at a low speed.



- Take the motorcycle off side stand and sit in the motorcycle.
- Bring the Race-on key within range of the steering lock.
- Ensure that the Race-on key stays in range while riding.
 Guideline

Maximum range of the Race-	1.5 m (4.9 ft)
on key around the steering	
lock	



Info

The range may be reduced by decreases in battery voltage of the Race-on key and interfering radio waves. If the battery voltage of the Race-on key is too low, one of the ignition keys must be placed in the area of the steering lock (p. 43) and must be safely stored again after starting.

- Make sure that the emergency OFF switch/electric starter button is in the middle position ○.
- Switch on ignition; to do this, briefly press the Race-on tip switch

 (maximum of 1 second).
 - ✓ The steering is unlocked.
 - ✓ The function check of the combination instrument is run.
 - ✓ The ABS indicator lamp goes out when you start off.





Info

If the handlebar does not unlock, move the handlebar slightly.

- Shift the transmission into neutral N.
 - ✓ The green idle indicator lamp

 N lights up.
- Turn the emergency OFF switch/electric starter button to the lower position ③.

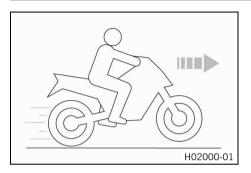


Info

Do not press the emergency off switch/electric starter button into the lower position ③ until the combination instrument function check has been completed. When starting, **DO NOT** open the throttle. If you open the throttle during the starting procedure, fuel is not injected by the engine management system and the engine cannot start.

Press the emergency OFF switch/electric starter button into the lower position ③ for a maximum of 5 seconds. Wait for a least 5 seconds before trying again. This motorcycle is equipped with a safety starting system. You can only start the engine if the transmission is in neutral or if the clutch lever is pulled when a gear is engaged. If the side stand is folded out and you shift into gear, the engine stops.

10.3 Launch Control (optional)



<u>Launch Control</u> is an optional vehicle electronics function. <u>Launch control</u> adjusts the engine speed in order to achieve the best possible acceleration.

Launch control can be used for starting off for a maximum of three times in succession. Launch control is temporarily deactivated after the third starting off in order to protect the engine, transmission and cooling system from overloading.

Launch control is also deactivated if all conditions for activation are no longer met.

Launch control is enabled again in the following cases: the engine runs for at least three minutes, the engine is switched off for 20 minutes or a distance of 1.5 km (0.93 mi) has been covered.

10.4 Starting off

 Pull the clutch lever, shift into first gear, release the clutch lever slowly and at the same time open the throttle gently.

123

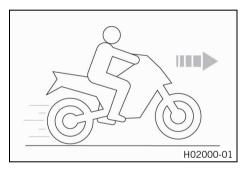
10.5 Starting off with launch control (optional)



Warning

Danger of accidents Launch control enables very powerful acceleration which may ask too much of a novice rider.

- Only use the launch control if you have the appropriate experience.
- Do not use launch control on public roads.



Condition

The drive mode **TRACK** (optional) is activated.

First gear is engaged.

TC indicator lamp does not light up.

Coolant temperature: > 60 °C (> 140 °F)

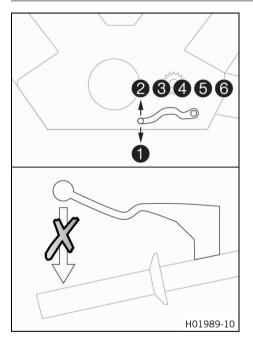
Total riding distance covered: > 1,000 km (> 620 mi)

- Activate launch control in the combination instrument.
 - ✓ The TC indicator lamp flashes quickly.
- Apply full throttle with the clutch lever pulled.
 - ✓ The engine speed is adjusted.

6,500 rpm

Release the clutch lever quickly but in a controlled manner.

10.6 Quickshifter+ (optional)



If the <u>Quickshifter+</u> (optional) is activated, you can shift up and down without actuating the clutch.

Because there is no need to close the throttle grip, uninterrupted gear shifts are possible.

The quickshifter+ uses the shifter shaft position to check whether or not a shift should be initiated, and sends a corresponding signal to the engine control.

If the quickshifter+ is disabled in the combination instrument, the clutch needs to be actuated in the normal way for each shift.

10.7 Shifting, riding



Warning

Danger of accidents Abrupt load alterations can cause the vehicle to get out of control.

- Avoid abrupt load alterations and sudden braking actions.
- Adapt your speed to the road conditions.



Warning

Danger of accidents If you change down at high engine speed, the rear wheel blocks and the engine races.

Do not change into a low gear at high engine speed.



Warning

Danger of accidents Adjustments to the vehicle distract attention from traffic activity.

Make all adjustments when the vehicle is at a standstill.



Warning

Risk of injury The passenger may fall from the motorcycle if they conduct themselves incorrectly.

- Ensure that the passenger sits correctly on the passenger seat, places his or her feet on the passenger foot pegs and holds on to the rider or the grab handles.
- Note the regulations governing the minimum age of passengers in your country.



Warning

Danger of accidents A risky riding style constitutes a major risk.

 Comply with traffic regulations and ride defensively and with foresight to detect sources of danger as early as possible.



Warning

Danger of accidents Cold tires have reduced road grip.

- Ride the first miles carefully on every journey at moderate speed until the tires reach operating temperature.



Warning

Danger of accidents New tires have reduced road grip.

The contact surface on new tires is not yet roughened.

Run in new tires with moderate riding at alternating angles.
 Running-in phase
 200 km (124 mi)



Warning

Danger of accidents Total weight and axle loads influence the handling characteristic.

The total weight consists of: motorcycle ready for operation and with a full tank, driver and passenger with protective clothing and helmet, and luggage.

Do not exceed the maximum permissible overall weight or the axle loads.



Warning

Danger of accidents Pieces of luggage which have slipped impair the handling characteristic.

Check that your luggage is fixed properly at regular intervals.



Warning

Danger of accidents A fall can damage the vehicle more seriously than it may first appear.

- Check the vehicle after a fall as you do when preparing for use.

Note

Engine damage Unfiltered intake air has a negative effect on the service life of the engine.

Dust and dirt will enter the engine without an air filter.

Never start to use the vehicle without an air filter.

Note

Engine failure Overheating damages the engine.

- If the coolant temperature warning is displayed, stop immediately and take care not to endanger yourself or other traffic participants in the process.
- Allow the engine and cooling system to cool down.
- Check and, if necessary, correct the coolant level on the cooling system while it is in a cooled state.

Note

Transmission damage Incorrect use of the quickshifter+ will damage the transmission.

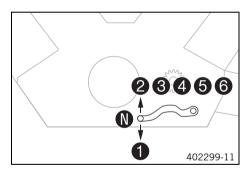
The quickshifter+ can only be used if the function is enabled in the combination instrument. The quickshifter+ is not active if you pull the clutch lever.

- Only use the quickshifter+ in the permitted speed range shown.



Info

If you hear unusual noises while riding, stop immediately, switch off the engine, and contact an authorized KTM workshop.



- Shift into a higher gear when conditions allow (incline, road situation, etc.).
- Release the throttle while simultaneously pulling the clutch lever, shift into the next gear, release the clutch lever, and open the throttle.



Info

You can see the positions of the 6 forward gears in the figure. The idle position is between the first and second gears. First gear is used for starting off or for steep inclines.

 After reaching maximum speed by fully opening the throttle grip, turn the throttle back so it is ³/₄ open. This will barely

- reduce the speed but fuel consumption will be considerably lower.
- Accelerate only up to a speed suitable for the road surface and weather conditions. Particularly in bends, do not shift, and accelerate very carefully.
- Brake if necessary and close the throttle at the same time in order to shift down.
- Pull the clutch lever and shift into a lower gear, release the clutch lever slowly, and open the throttle or shift again.
- If the engine stalls (e.g. at a crossroads), just pull the clutch lever and press the emergency OFF switch/electric starter button into the lower position ③. The transmission must not be shifted into neutral.
- Switch off the engine if running at idle speed or stationary for a long time.
- If the oil pressure warning lamp lights up during a trip, stop immediately and switch off the engine. Contact an authorized KTM workshop.
- If the malfunction indicator lamp lights up during a trip, please contact an authorized KTM workshop as soon as possible.

Info

Very important messages are stored in the **Warning** menu.

 If the ice warning appears in the combination instrument, the roads may be icy. Adjust your speed to the road conditions.

Condition

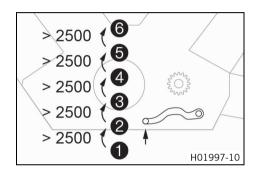
The quickshifter + (optional) is enabled.

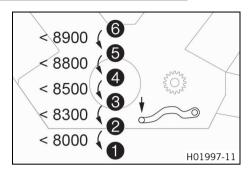
If the <u>quickshifter +</u> is enabled in the combination instrument, you can shift up in the speed range shown without pulling the clutch lever.



Info

The minimum engine speed before shifting up in revolutions per minute is shown in the figure. Pull the shift lever quickly back to the stop without changing the throttle twist grip position.





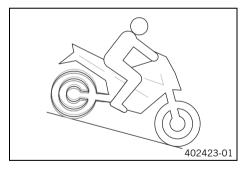
If the quickshifter + is enabled in the combination instrument, you can shift down in the speed range shown without pulling the clutch lever.



Info

The maximum engine speed before shifting down in revolutions per minute is shown in the figure. Depress the shift lever quickly back to the stop without changing the throttle twist grip position.

10.8 MSR (optional)



The <u>MSR</u> is an optional auxiliary function of the engine control. If the engine braking effect is too great, the **MSR** prevents the rear wheel from locking or sliding away on a sloping position.

To avoid slip of the rear wheel, the **MSR** only opens the throttle valve as far as absolutely necessary.

The **MSR** is applied on surfaces, where the friction is to low to open the slipper clutch.

To further increase ride safety, the **MSR** is slope dependent.



Info

If <u>ABS</u> is disabled, <u>MTC</u> is disabled or ABS Mode **SMOTO** is enabled, the **MSR** is not active.

132

10.9 Applying the brakes



Warning

Danger of accidents Moisture and dirt impair the brake system.

Brake carefully several times to dry out and remove dirt from the brake linings and the brake discs.



Warning

Danger of accidents A spongy pressure point on the front or rear brake reduces braking efficiency.

 Check the brake system and do not continue riding until the problem is eliminated. (Your authorized KTM workshop will be glad to help.)



Warning

Danger of accidents The brake system fails in the event of overheating.

If the foot brake lever is not released, the brake linings drag continuously.

- Take your foot off the foot brake lever when you are not braking.



Warning

Danger of accidents Higher total weight increases the stopping distance.

Take the longer stopping distance into account when carrying a passenger or luggage with you.



Warning

Danger of accidents Salt on the roads impairs the brake system.

Brake carefully several times to remove salt from the brake linings and the brake discs.



Warning

Danger of accidents ABS may increase the stopping distance in certain situations.

Adjust application of the brakes to the respective riding situation and riding surface conditions.



Warning

Danger of accidents Excessively forceful application of the brakes blocks the wheels.

The ABS effectiveness is only ensured if it is switched on.

- Leave the ABS switched on in order to benefit from the protective effect.



Warning

Danger of accidents Driving aids can only prevent a rollover within the physical limitations.

It is not always possible to compensate for extreme riding situations, for example with luggage loaded with a high center of gravity, varying road surfaces, steep descents or full braking without disengaging the gear.

- Adapt your riding style to the road conditions and your driving ability.
- When braking, release the throttle and apply the front and rear brakes at the same time.



Info

When the \overline{ABS} is enabled, you can achieve maximum braking power even on low grip surfaces such as sandy, wet, or slippery terrain without locking of the wheels.



Warning

Danger of accidents The rear wheel can lock due to the engine braking effect.

- Pull in the clutch, if you perform emergency or full braking, or if you brake on a slippery ground.



Warning

Danger of accidents Banked or laterally sloping ground reduces the maximum possible delay.

- If possible finish braking before going into a bend.
- Always finish braking before you go into a bend. Change down to a lower gear appropriate to your road speed.
- Use the braking effect of the engine on long downhill stretches. Change down one or two gears, but do not
 over-rev the engine. In this way, you have to brake far less and the brakes do not overheat.

10.10 Stopping, parking



Warning

Risk of injury People who act without authorization endanger themselves and others.

If a valid transponder is in range, the vehicle can be started.

- Do not leave the vehicle unattended if the engine is running.
- Never leave the vehicle unattended if the Race-on key or the black Race-on key are close the the vehicle.
- Protect the vehicle against access by unauthorized persons.
- Lock the steering if you leave the vehicle unattended.



Warning

Danger of burns Some vehicle components become very hot when the vehicle is operated.

- Do not touch any parts such as the exhaust system, radiator, engine, shock absorber, or brake system before the vehicle parts have cooled down.
- Let the vehicle parts cool down before you perform any work on the vehicle.

Note

Material damage The vehicle may be damaged by incorrect procedure when parking.

Significant damage may be caused if the vehicle rolls away or falls over.

The components for parking the vehicle are designed only for the weight of the vehicle.

- Park the vehicle on a firm and level surface.
- Ensure that nobody sits on the vehicle when the vehicle is parked on a stand.

Note

Fire hazard Hot vehicle components pose a fire hazard and explosion risk.

- Do not park the vehicle near to materials which are highly flammable or explosive.
- Allow the vehicle to cool down before covering it.
- Apply the brakes on the motorcycle.
- Shift the transmission into neutral N.
- Switch off ignition to do this briefly press the Race-on button (maximum of 1 second) with the ignition switched on.

Info

If the engine is switched off with the emergency OFF switch and the ignition remains switched on at the Race-on tip switch, the power supply to most power consumers remains unbroken. This discharges the 12-V battery. You should therefore always switch off the engine with the Race-on tip switch – the emergency OFF switch is intended for emergencies only.

- Park the motorcycle on a firm surface.
- Swing the side stand forward with your foot as far as it will go and lean the vehicle on it.
- Move handlebar fully to the left and press and hold the Race-on button \circ (for at least 2 seconds).
 - ✓ The steering is locked.



Info

If the steering lock does not engage, move the handlebar slightly.

10.11 Transporting

Note

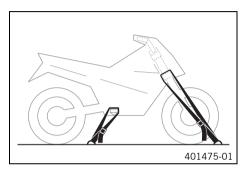
Danger of damage The parked vehicle can roll away or fall over.

- Park the vehicle on a firm and level surface.

Note

Fire hazard Hot vehicle components pose a fire hazard and explosion risk.

- Do not park the vehicle near to materials which are highly flammable or explosive.
- Allow the vehicle to cool down before covering it.



- Switch off the engine.
- Use tension belts or other suitable devices to secure the motorcycle against falling over or rolling away.

10.12 Refueling



Danger

Fire hazard Fuel is highly flammable.

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

- Do not refuel 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 poisonous and a health hazard.

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

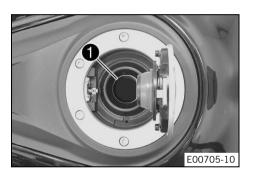
 Refuel only with clean fuel that meets the specified standards. (Your authorized KTM workshop will be glad to help.)



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.
- Fill the fuel tank with fuel up to the lower edge of the filler neck.

Total fuel tank	18	Super unleaded
capacity, approx.	(4.8 US gal)	(ROZ 95/RON
		95/PON 91)
		(🕮 p. 306)

Close the fuel tank filler cap. (p. 47)

11.1 Additional information

Any further work that results from the compulsory work or from the recommended work must be ordered separately and invoiced separately.

Different service intervals may apply in your country, depending on the local operating conditions. Individual service intervals and scopes may change in the course of technical developments. The most up-to-date service schedule can always be found on KTM Dealer.net. Your authorized KTM dealer will be happy to advise you.

11.2 Required work

		Ev	ery t	vo ye	ears
	Every year				
every 30,000 kr) km (18,600 mi)				
every 15,000 km (9	m (9,300 mi)				
after 1,000 km (620	mi)				
Read out the fault memory using the KTM diagnostics tool.	0	•	•	•	•
Check the exhaust valve control unit with the KTM diagnostics tool.		•	•	•	•
Check that the electrical system is functioning properly.	0	•	•	•	•
Change the engine oil and oil filter and clean the oil screens. 🌂 🕮 p. 256)	0	•	•	•	•
Check the front brake linings. (🕮 p. 194)	0	•	•	•	•
Check the brake linings of the rear brake. (🕮 p. 199)	0	•	•	•	•
Check the brake discs. (🕮 p. 189)	0	•	•	•	•
Check the brake lines for damage and leakage.	0	•	•	•	•

11 SERVICE SCHEDULE

	Every two years				ears
	Every year				
every 30,000 kr	km (18,600				
every 15,000 km (9					
after 1,000 km (620					
Change the front brake fluid. 🌂					•
Change the rear brake fluid. 🔏					•
Change the hydraulic clutch fluid.					•
Check the front brake fluid level. (🕮 p. 191)	0	•	•	•	
Check the rear brake fluid level. (🕮 p. 196)	0	•	•	•	
Check/correct the fluid level of the hydraulic clutch. (@ p. 183)		•	•	•	
Check the shock absorber and fork for leaks. Perform service as needed and depending	0	•	•	•	•
on how the vehicle is used.					
Clean the dust boots of the fork legs. 🔌 🕮 p. 165)		•	•		
Check steering head bearing play.	0	•	•	•	•
Check the tire condition. (🕮 p. 211)	0	•	•	•	•
Check tire pressure. (@ p. 213)	0	•	•	•	•
Check the chain, rear sprocket, engine sprocket, and chain guide. (p. 178)		•	•	•	•
Check the chain tension. (🕮 p. 175)	0	•	•	•	•
Measure the wheel bearing play and grease the rear hub.			•		
Check that the rear wheel nut (right side) is tightened to the specified torque.	0	•	•	•	•
Change the spark plugs (air filter removed). 🌂			•		

		Ev	ery t	wo ye	ars
		E۱	ery y	/ear	
every 30,000 k	m (18	,600	mi)		
every 15,000 km (9,300	mi)			
after 1,000 km (62	0 mi)				
Check the valve clearance (air filter and spark plugs removed). ◀			•		
Change the SAS diaphragm valves. ◀			•		
Check the cables for damage and routing without sharp bends (fuel tank removed). 🌂		•	•	•	•
Check the coolant level in the compensating tank. (p. 246)	0	•	•	•	•
Change the air filter. Clean the air filter box. ◀		•	•		
Check the fuel pressure. ◀		•	•	•	•
Check the headlight setting. (@ p. 238)	0	•	•		
Check that the radiator fan is functioning properly.	0	•	•	•	•
Final check: Check the vehicle is roadworthy and take a test ride.	0	•	•	•	•
Read out the error memory after the test ride using the KTM diagnostics tool.	0	•	•	•	•
Reset the service display using the KTM diagnostics tool.	0	•	•	•	•
Make the service entry in KTM Dealer.net and in the Service & Manufacturer Warranty Booklet. ❖	0	•	•	•	•

- One-time interval
- Periodic interval

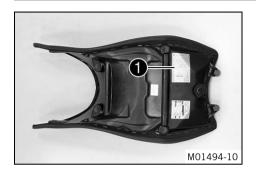
11 SERVICE SCHEDULE

11.3 Recommended work

		Ev	ery fo	ur ye	ars
		E۱	ery y	ear/	
every 30,000 k	m (18	,600	mi)		
every 15,000 km (9,300	mi)			
after 1,000 km (62	O mi)				
Check the frame.			•		
Check the link fork. ◀			•		
Check/clean the oil nozzle for clutch lubrication. ◀	0	•	•		
Check the fork bearing. ◀		•	•		
Check the wheel bearings.		•	•		
Clean the drain hole of the shock absorber support.		•	•	•	•
Grease all moving parts (e.g., side stand, hand lever, chain,) and check for smooth	0	•	•	•	•
operation. 🌂					
Empty the drainage hoses. 🔏	0	•	•	•	•
Check all hoses (e.g. fuel, cooling, bleeder, drainage, etc.) and sleeves for cracking, leaks, and incorrect routing. ◀		•	•	•	•
Check the antifreeze.	0	•	•	•	
Check the screws and nuts for tightness. 🌂	0	•	•	•	•
Change the coolant.					•

- One-time interval
- Periodic interval

12.1 Fork/shock absorber



The fork and the shock absorber offer many options of adapting the suspension to the riding style and the payload.



Info

The recommendations for the suspension setting are shown in Table 1. The table is located on the underside of the front rider's seat.

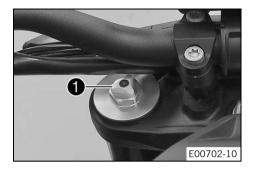
These adjustments are guidelines and should always be the basis for a suspension setting. If the guidelines are not adhered to, the riding characteristics could deteriorate, particularly at high speeds.

12.2 Adjusting the compression damping of the fork



Info

The hydraulic compression damping determines the fork suspension behavior.



- Turn white adjusting screw 1 clockwise as far as it will go.



Info

Adjusting screw 1 is located at the upper end of the left fork leg.

The compression damping is located in left fork leg **COMP** (white adjusting screw). The rebound damping is located in right fork leg **REB** (red adjusting screw).

 Turn counterclockwise by the number of clicks corresponding to the fork type.

Guideline

Compression damping	
Comfort	15 clicks
Standard	12 clicks
Sport	9 clicks
Full payload	9 clicks



Info

Turn clockwise to increase damping; turn counterclockwise to reduce damping.

12.3 Adjusting the rebound damping of the fork



Info

The hydraulic rebound damping determines the fork suspension behavior.



- Turn red adjusting screw 1 clockwise as far as it will go.



Info

Adjusting screw 1 is located at the upper end of the right fork leg.

The rebound damping is located in right fork leg **REB** (red adjusting screw). The compression damping is located in left fork leg **COMP** (white adjusting screw).

 Turn counterclockwise by the number of clicks corresponding to the fork type.

Guideline

Rebound damping	
Comfort	15 clicks
Standard	12 clicks
Sport	9 clicks
Full payload	9 clicks



Info

Turn clockwise to increase damping; turn counterclockwise to reduce damping.

12.4 Compression damping of the shock absorber



The compression damping of the shock absorber is divided into two ranges: high-speed and low-speed.

High-speed and low-speed refer to the compression speed of the rear wheel suspension and not to the vehicle speed.

The high-speed setting, for example, has an effect when riding over an asphalt edge: the rear wheel suspension compresses quickly.

The low-speed setting, for example, has an effect when riding over long ground swells: the rear wheel suspension compresses slowly. These two ranges can be adjusted separately, although the transition between high-speed and low-speed is gradual. Thus, changes in the high-speed range affect the compression damping in the low-speed range and vice versa.

12.5 Adjusting the low-speed compression damping of the shock absorber



Caution

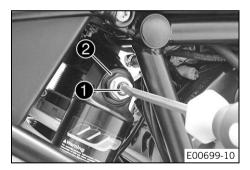
Risk of injury Parts of the shock absorber will move around if the shock absorber is detached incorrectly. The shock absorber is filled with highly compressed nitrogen.

- Please follow the description provided. (Your authorized KTM workshop will be glad to help.)



Info

The low-speed setting takes effect during slow to normal compression of the shock absorber.



 Turn adjusting screw ① clockwise with a screwdriver as far as the last perceptible click.



Info

Do not loosen fitting 2!

 Turn counterclockwise by the number of clicks corresponding to the shock absorber type.

Guideline

Low-speed compression damping		
Comfort	20 clicks	
Standard	15 clicks	
Sport	12 clicks	
Full payload	12 clicks	



Info

Turn clockwise to increase damping; turn counterclockwise to reduce damping.

12.6 Adjusting the high-speed compression damping of the shock absorber



Caution

Risk of injury Parts of the shock absorber will move around if the shock absorber is detached incorrectly. The shock absorber is filled with highly compressed nitrogen.

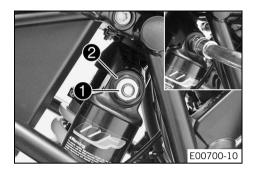
Please follow the description provided. (Your authorized KTM workshop will be glad to help.)



Info

The high-speed setting takes effect during fast compression of the shock absorber.

150



Turn adjusting screw **1** all the way clockwise with a socket wrench.



Info

Do not loosen fitting **2**!

 Turn counterclockwise by the number of turns corresponding to the shock absorber type.

Guideline

High-speed compression damping		
Comfort	1.5 turns	
Standard	1.5 turns	
Sport	1.5 turns	
Full payload	1 turn	



Info

Turn clockwise to increase damping; turn counterclockwise to reduce damping.

•

12.7 Adjusting the rebound damping of the shock absorber



Caution

Risk of injury Parts of the shock absorber will move around if the shock absorber is detached incorrectly. The shock absorber is filled with highly compressed nitrogen.

- Please follow the description provided. (Your authorized KTM workshop will be glad to help.)



- Turn adjusting screw 1 clockwise up to the last perceptible click.
- Turn counterclockwise by the number of clicks corresponding to the shock absorber type.

Guideline

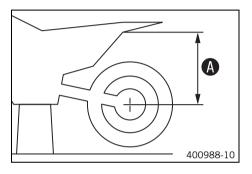
Rebound damping	
Comfort	15 clicks
Standard	12 clicks
Sport	10 clicks
Full payload	10 clicks



Info

Turn clockwise to increase damping; turn counterclockwise to reduce damping.

12.8 Measuring the rear wheel dimension unloaded



Preparatory work

Raise the motorcycle with the work stand (inserted).
 p. 161)

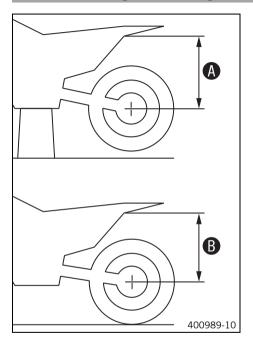
Main work

- Measure the distance as vertical as possible between the rear axle and a fixed point, for example, a mark on the rear fairing.
- Note down the value as dimension **A**.

Finishing work

Remove the motorcycle from the work stand (inserted).
 p. 163)

12.9 Checking the static sag of the shock absorber



- Measure dimension ♠ of rear wheel unloaded. (♠ p. 153)
- Hold the motorcycle upright with the aid of an assistant.
- Measure the distance between the rear axle and the fixed point again.
- Note down the value as dimension **B**.



Info

The static sag is the difference between measurements $\bf A$ and $\bf B$.

- Check the static sag.

Full fuel tank (standard)	20 mm (0.79 in)
Full fuel tank (race track mode)	14 mm (0.55 in)

- » If the static sag is less or more than the specified value:
 - Adjust the spring preload of the shock absorber.
 p. 155)

12.10 Adjusting the spring preload of the shock absorber &



Warning

Danger of accidents Modifications to the suspension setting may seriously alter the handling characteristic.

- Ride slowly to start with after making adjustments to get the feel of the new handling characteristic.

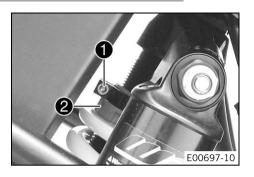


Info

The spring preload defines the initial status of the spring operation on the shock absorber. The best spring preload setting is achieved when it is set for the weight of the rider and that of any luggage and a passenger, thus ensuring an ideal compromise between handling and stability.

Preparatory work Condition

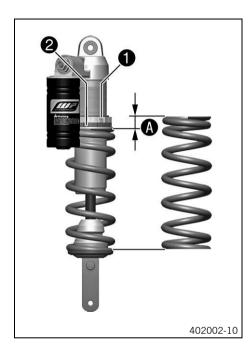
- The link fork is relieved of weight.



Main work

- Loosen screw 1.
- Turn adjusting ring 2 counterclockwise with the hook wrench from the tool set until the spring is no longer under tension.

Hook wrench, shock absorber (61329083000)



 Tighten the spring by turning adjusting ring 2 to specified measurement A.

Guideline

Spring preload	
Comfort	8 mm (0.31 in)
Standard	8 mm (0.31 in)
Sport	8 mm (0.31 in)
Full payload	9 mm (0.35 in)



Info

Turn clockwise to increase the preload; turn counterclockwise to reduce the spring preload. For race track mode, increased preload should be selected as appropriate.

– Tighten screw 1.

Guideline

Screw, shock	M5	5 Nm (3.7 lbf ft)
absorber adjusting		
ring		

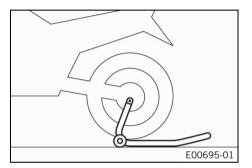
_

13.1 Lifting the motorcycle with the rear lifting gear

Note

Danger of damage The parked vehicle can roll away or fall over.

Park the vehicle on a firm and level surface.



- Place the adapter into the rear lifting gear.

Rear wheel work stand for single-sided swing arm (61329955000)

- Position the motorcycle upright, place the lifting gear in the axle, and raise the motorcycle.

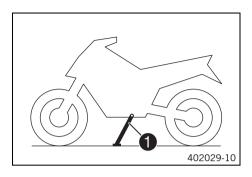
13.2 Removing the rear of motorcycle from the lifting gear

Note

Danger of damage The parked vehicle can roll away or fall over.

Park the vehicle on a firm and level surface.

158



- Secure the motorcycle against falling over.
- Remove the rear wheel stand and lean the vehicle on side stand 1.

13.3 Lifting the motorcycle with the front lifting gear

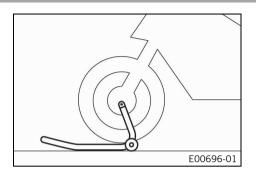
Note

Danger of damage The parked vehicle can roll away or fall over.

Park the vehicle on a firm and level surface.

Preparatory work

- Lift the motorcycle with the rear lifting gear. (
p. 158)



Main work

 Move the handlebar to the straight-ahead position. Align the front lifting gear with the fork legs.

Front wheel work stand, small (61129965000)



Info

Always raise the motorcycle at the rear first.

Lift the motorcycle at the front.

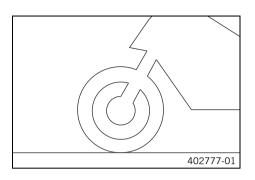
13.4 Taking the motorcycle off the front lifting gear

Note

Danger of damage The parked vehicle can roll away or fall over.

Park the vehicle on a firm and level surface.

•



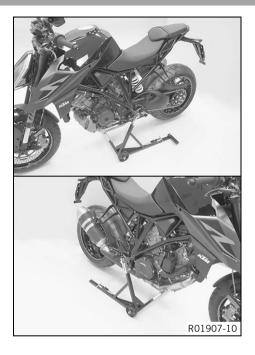
- Secure the motorcycle against falling over.
- Remove the front lifting gear.

13.5 Raising the motorcycle with the work stand (inserted)

Note

Danger of damage The parked vehicle can roll away or fall over.

Park the vehicle on a firm and level surface.



 The plastic bushing of the work stand should engage in the opening of the fork pivot. Select the right height and width of the work stand.

Work stand (62529055200)

Raise the motorcycle.



Info

Check that the work stand is properly seated.

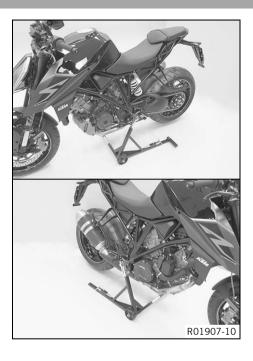
•

13.6 Removing the motorcycle from the work stand (inserted)

Note

Danger of damage The parked vehicle can roll away or fall over.

- Park the vehicle on a firm and level surface.

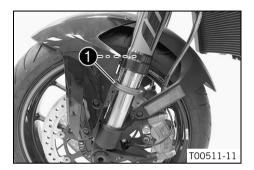


- Remove the motorcycle from the work stand and rest it on the side stand.
- Remove the work stand.

Work stand (62529055200)

•

13.7 Cleaning the dust boots of the fork legs &



Push dust boots 1 of both fork legs downward.



Info

The dust boots remove dust and coarse dirt particles from the inside fork tubes. Over time, dirt can accumulate behind the dust boots. If this dirt is not removed, the oil seals behind can start to leak.



Warning

Danger of accidents Oil or grease on the brake discs reduces the braking effect.

- Always keep the brake discs free of oil and grease.
- Clean the brake discs with brake cleaner when necessary.
- Clean and oil the dust boots and inner fork tubes of both fork legs.

Universal oil spray (🕮 p. 308)

- Press the dust boots back into their installation position.
- Remove excess oil.

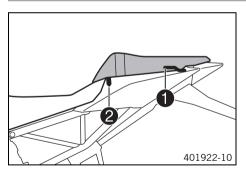
•

13.8 Removing the passenger seat



- Insert the Race-on key or the black ignition key into the seat lock 1 and turn clockwise.
- Lift the passenger seat at the front and pull it out of the bracket toward the front.
- Remove the passenger seat.
- Remove the ignition key.

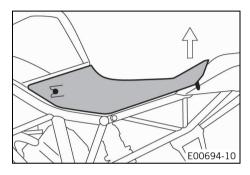
13.9 Mounting the passenger seat



- Attach the recesses of the passenger seat in guides

 and lower the front of the seat while pushing it back.
- Position locking pin 2 in the lock housing and push the passenger seat down at the front.
 - ✓ The locking pin engages with an audible click.
- Check that the passenger seat is mounted correctly.

13.10 Removing the front rider's seat



Preparatory work

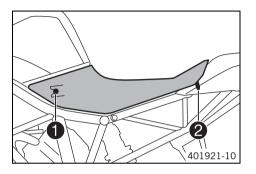
Remove the passenger seat. (
p. 166)

Main work

- Lift the rear of the front rider's seat.
- Detach the front of the front rider's seat and take it off.

167

13.11 Mounting the front rider's seat



Main work

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

Finishing work

- Mount the passenger seat. (p. 166)

13.12 Mounting the helmet lock on the vehicle



Warning

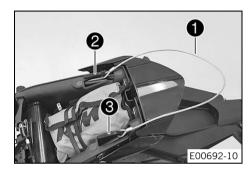
Danger of accidents An attached helmet lock or an attached helmet impair the handling characteristic.

- Do not use the helmet lock to attach a helmet or another object while riding.
- Remove the helmet lock before starting off.



Info

The steel cable in the tool set can be used to lock a helmet to the vehicle to prevent it from being stolen.



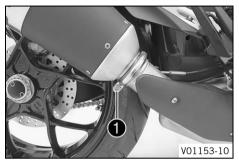
- Remove the passenger seat. (p. 166)
- Position steel cable 1 from the tool set with the loop around holding lug 2.

Steel cable (60012015000)

- Pass the steel cable through the helmet opening.
- Position the other loop of the steel cable around holding lug 3.
- Carefully position the helmet on the rear of the vehicle.

•

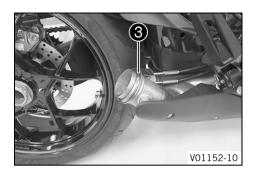
13.13 Removing the main silencer &



- Remove screw 1.
- Take off the exhaust clamp.

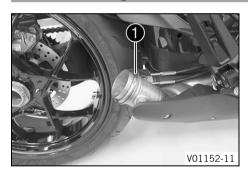


- Remove screw 2 with the washer.
- Take off the main silencer.



Remove seal ring **3**.

13.14 Installing the main silencer 🔏



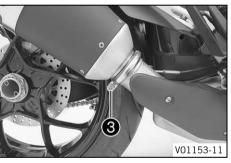
- Mount seal ring **1**.





Mount screw 2 with the washer but do not tighten yet.
 Guideline

Remaining screws,	M8	25 Nm (18.4 lbf ft)
chassis		



- Position the exhaust clamp.
- Mount and tighten screw 3.
 Guideline

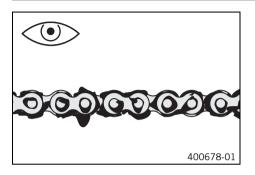
Screw, exhaust	M6	8 Nm (5.9 lbf ft)
clamp on main		
silencer		

- Tighten screw 2.

Guideline

Remaining screws,	M8	25 Nm (18.4 lbf ft)
chassis		

13.15 Checking the chain for dirt



- Check the chain for coarse dirt accumulation.
 - » If the chain is very dirty:
 - Clean the chain. (p. 173)

13.16 Cleaning the chain



Warning

Danger of accidents Lubricants on the tires reduces the road grip.

- Remove lubricants from the tires using a suitable cleaning agent.



Warning

Danger of accidents Oil or grease on the brake discs reduces the braking effect.

- Always keep the brake discs free of oil and grease.
- Clean the brake discs with brake cleaner when necessary.



Note

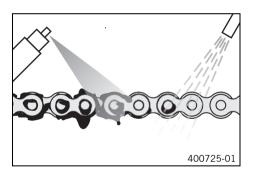
Environmental hazard Hazardous substances cause environmental damage.

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



Info

The service life of the chain depends largely on its maintenance. Regular cleaning increases the service life of the chain.



Preparatory work

- Lift the motorcycle with the rear lifting gear. (Q p. 158)

Main work

- Rinse off loose dirt with a soft jet of water.
- Remove old grease residue with chain cleaner.

Chain cleaner (🕮 p. 307)

- After drying, apply chain spray.

Street chain spray (p. 308)

Finishing work

Remove the rear of the motorcycle from the lifting gear.
 p. 158)

13.17 Checking the chain tension



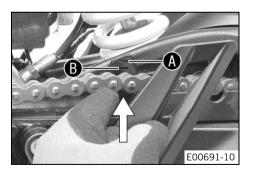
Warning

Danger of accidents Incorrect chain tension damages components and results in accidents.

If the chain is tensioned too much, the chain, engine sprocket, rear sprocket, transmission and rear wheel bearings wear more quickly. Some components may break if overloaded.

If the chain is too loose, the chain may fall off the engine sprocket or the rear sprocket. As a result, the rear wheel locks or the engine will be damaged.

- Check the chain tension regularly.
- Set the chain tension in accordance with the specification.



Preparatory work

Main work

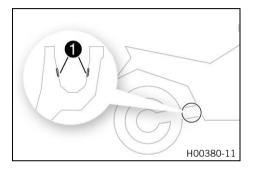
- Shift the transmission into neutral N
- At the chain sliding guard in the area of markings **A** and **B**, push the chain upward and determine the chain tension.



Info

The lower chain section must be taut.

Chain wear is not always even, so you should repeat this measurement at different chain positions.



The upper edge of the chain is located between markings $\bf A$ and $\bf B$.

- » If the chain tension does not meet the specification:
- Check protection caps 1 for damage and tightness.
 - » If the protection caps are damaged or loose:
 - Replace the protection caps.

Link fork protection cap (61304041100)

Finishing work

- Remove the rear of the motorcycle from the lifting gear. (I) p. 158)

176

13.18 Adjusting the chain tension



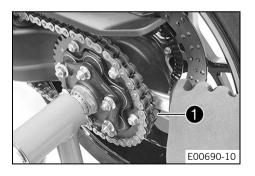
Warning

Danger of accidents Incorrect chain tension damages components and results in accidents.

If the chain is tensioned too much, the chain, engine sprocket, rear sprocket, transmission and rear wheel bearings wear more quickly. Some components may break if overloaded.

If the chain is too loose, the chain may fall off the engine sprocket or the rear sprocket. As a result, the rear wheel locks or the engine will be damaged.

- Check the chain tension regularly.
- Set the chain tension in accordance with the specification.



Preparatory work

- Lift the motorcycle with the rear lifting gear. (

 p. 158)
- Check the chain tension. (🕮 p. 175)

Main work

- Loosen screw 1.
- Set the chain tension by turning the hub housing.

Holding wrench (61329085000)

Handle for holding wrench (60012060000)



Info

Turn clockwise to increase the chain tension; turn counterclockwise to reduce the chain tension. The tool required is in the tool set.

- Check the chain tension. (

 p. 175)
 - ✓ The chain tension matches the specified value.



Info

Chain wear is not always even, so you should repeat this measurement at different chain positions.

– Tighten screw **1**.

Guideline

Screw, eccentric	M16	70 Nm (51.6 lbf ft)
------------------	-----	---------------------

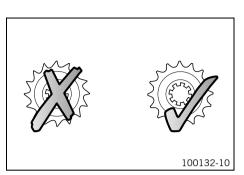
Remove the rear of the motorcycle from the lifting gear.
 p. 158)

13.19 Checking the chain, rear sprocket, engine sprocket, and chain guide

Preparatory work

Lift the motorcycle with the rear lifting gear. (

p. 158)



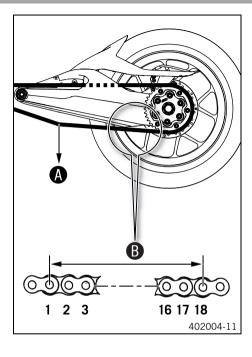
Main work

- Check the chain, rear sprocket and engine sprocket for wear.
 - » If the chain, rear sprocket or engine sprocket is worn:
 - Change the drivetrain kit. 🔦



Info

The engine sprocket, rear sprocket and chain should always be replaced together.



- Shift the transmission into neutral N.
- Pull on the lower chain section with the specified weight A.
 Guideline

Weight, chain wear measure-	15 kg (33 lb.)
ment	



Info

Chain wear is not always even, so you should repeat this measurement at different chain positions.

Maximum distance B from 18 chain rollers at the	272 mm (10.71 in)
longest chain section	

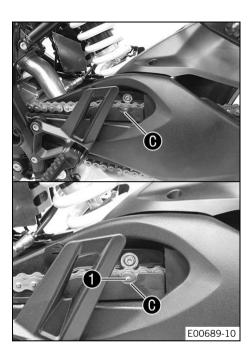
- » If distance **B** is greater than the specified measurement:
 - Change the drivetrain kit. 🔦



Info

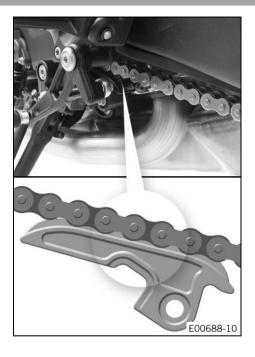
When a new chain is mounted, the rear sprocket and engine sprocket should also be changed. New chains wear out faster on an old, worn rear sprocket or engine sprocket.

For safety reasons, the chain has no chain joint.



- Check the chain sliding guard for wear at the recess.
 - If chain rivet 1 is no longer visible at bottom edge 0 of the recess of the chain sliding guard:
 - Change the chain sliding guard.
- Check that the chain sliding guard is firmly seated.
 - » If the chain sliding guard is loose:
 - Tighten the screws on the chain sliding guard.
 Guideline

Screw, chain slid-	M5	5 Nm (3.7 lbf ft)
ing guard		



- Check the chain sliding piece for wear.
 - » If the lower edge of the chain is in line with or below the chain sliding piece:
 - Change the chain sliding piece.
- Check that the chain sliding piece is firmly seated.
 - » If the chain sliding piece is loose:
 - Tighten the screw on the chain sliding piece.
 Guideline

Remaining screws,	M8	25 Nm
chassis		(18.4 lbf ft)

Finishing work

Remove the rear of the motorcycle from the lifting gear.
 p. 158)

13.20 Checking/correcting the fluid level of the hydraulic clutch



Warning

Skin irritation Brake fluid causes skin irritation.

- Keep brake fluid out of the reach of children.
- Wear suitable protective clothing and safety glasses.
- Do not allow brake fluid to come into contact with the skin, the eyes or clothing.
- Consult a doctor immediately if brake fluid has been swallowed.
- Rinse the affected area with plenty of water in the event of contact with the skin.
- Rinse eyes thoroughly with water immediately and consult a doctor if brake fluid comes into contact with the eyes.
- If brake fluid spills on to your clothing, change the clothing.



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.



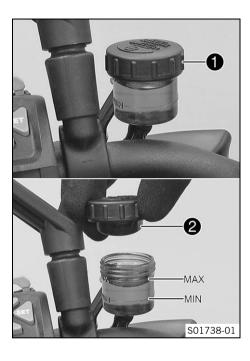
Info

The fluid level rises with increasing wear of the clutch facing discs.

Never use DOT 5 brake fluid. It is silicone-based and purple in color. Oil seals and clutch lines are not designed for DOT 5 brake fluid.

Avoid contact between brake fluid and painted parts. Brake fluid attacks paint.

Only use clean brake fluid from a sealed container.



- Move the clutch fluid reservoir mounted on the handlebar to a horizontal position.
- Check the fluid level.

The fluid level must be between MIN and MAX markings.

- » If the fluid level does not meet specifications:
 - Remove screw cap with membrane and the shim.
 - Correct the fluid level of the hydraulic clutch.

Brake fluid DOT 4 / DOT 5.1 (p. 303)

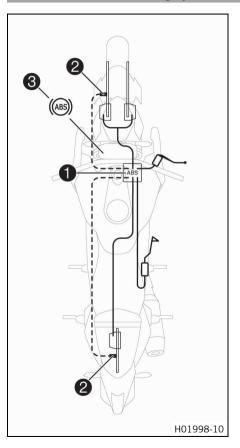
Mount and tighten screw cap with membrane and the shim.



Info

Clean up overflowed or spilled brake fluid immediately with water.

14.1 Anti-lock braking system (ABS)



The <u>ABS</u> unit **1**, which consists of a hydraulic unit, ABS control unit, and return pump, is installed on the right vehicle side below the fuel tank. One wheel speed sensor **2** is located in each case on the front and the rear wheel.



Warning

Danger of accidents Changes to the vehicle impair the function of the ABS.

- Only allow the rear wheel to spin with the front brake applied away from public road traffic if the ABS is switched off.
- Do not make any changes to the suspension travel.
- Only use spare parts on the brake system which have been approved and recommended by KTM.
- Only use tires/wheels approved by KTM with the corresponding speed index.
- Maintain the specified tire pressure.
- Service work and repairs must be performed professionally. (Your authorized KTM workshop will be glad to help.)

Note

Voiding of the government approval for road use and the insurance coverage If the ABS is switched off completely, the vehicle's approval for road use is invalidated.

 Only operate the vehicle in closed-off areas remote from public road traffic if the ABS is switched off completely.

The <u>ABS</u> is a safety system that, within physical limitations, can prevent locking and slipping of the wheels during braking.



Warning

Danger of accidents Driving aids can only prevent a rollover within the physical limitations.

It is not always possible to compensate for extreme riding situations, for example with luggage loaded with a high center of gravity, varying road surfaces, steep descents or full braking without disengaging the gear.

 Adapt your riding style to the road conditions and your driving ability.

ABS has two operating modes: the **ROAD** and **SMOTO**ABS modes. In the **ROAD** ABS mode, the ABS controls both wheels. In the **SMOTO** ABS mode, the ABS only controls the front wheel. There is no ABS intervention on the rear wheel. The ABS warning

lamp **3** flashes slowly to remind you that the **SM0T0** ABS mode is enabled.



Info

In the **SM0T0** ABS mode, the rear wheel may lock and there is a risk of falling.

The <u>ABS</u> operates with two independent brake circuits (front and rear brakes). When the ABS control unit detects a locking tendency in a wheel, ABS begins regulating the brake pressure. The control function causes a slight pulsing of the hand and foot brake levers.

The ABS warning lamp 3 must light up after the ignition is switched on and go out after starting off. If it does not go out after starting off or if it is lit while riding, this indicates a fault in the ABS system. In this case, the ABS is no longer enabled and the wheels may lock during braking. The brake system itself stays functional; only ABS control is not available.

The ABS warning lamp may also light up if the rotating speeds of the front and rear wheels differ greatly under extreme riding conditions, for example when making "wheelies" or if the rear wheel spins. This causes the ABS to switch off.

To reactivate the ABS, stop the vehicle and switch off the ignition. The ABS is reactivated when the vehicle is switched on again. The ABS warning lamp goes out after starting off.

MSC

The <u>MSC</u> is a supplementary function for the ABS that can prevent blocking and slipping of the wheels during braking when the vehicle is inclined (riding in curves) within the physical limitations. By means of the 5-D sensor, the ABS control is now dependent on the inclination and pitch angle.



Info

The MSC is only active in ROAD ABS mode.

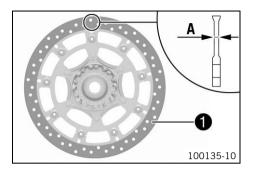
14.2 Checking the brake discs



Warning

Danger of accidents Worn-out brake discs reduce the braking effect.

 Make sure that worn-out brake discs are replaced immediately. (Your authorized KTM workshop will be glad to help.)



- Check the front and rear brake disc thickness at multiple points for the dimension **A**.



Info

Wear will reduce the thickness of the brake disc at contact surface **1** of the brake linings.

Brake discs - wear limit	
front	4.5 mm (0.177 in)
rear	4.5 mm (0.177 in)

- » If the brake disc thickness is less than the specified value:
 - Change the front brake discs.
 - Change the rear brake disc.
- Check the front and rear brake discs for damage, cracking, and deformation.
 - » If the brake disc exhibits damage, cracking, or deformation:
 - Change the front brake discs.
 - Change the rear brake disc.

14.3 Checking the front brake fluid level



Warning

Danger of accidents An insufficient brake fluid level will cause the brake system to fail.

If the brake fluid level drops below the MIN marking, the brake system is leaking or the brake linings are worn down.

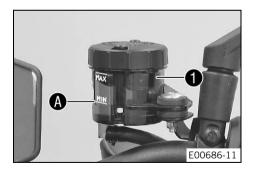
Check the brake system and do not continue riding until the problem is eliminated. (Your authorized KTM workshop will be glad to help.)



Warning

Danger of accidents Old brake fluid reduces the braking effect.

Make sure that brake fluid for the front and rear brake is changed in accordance with the service schedule. (Your authorized KTM workshop will be glad to help.)



- Move the brake reservoir mounted on the handlebar to a horizontal position.
- Check the brake fluid level in brake fluid reservoir 1.



- If the brake fluid level has dropped below MIN marking A:
 - Add front brake fluid. 4 (p. 192)

14.4 Adding front brake fluid 3



Warning

Danger of accidents
An insufficient brake fluid level will cause the brake system to fail.

If the brake fluid level drops below the **MIN** marking, the brake system is leaking or the brake linings are worn down.

 Check the brake system and do not continue riding until the problem is eliminated. (Your authorized KTM workshop will be glad to help.)



Warning

Skin irritation Brake fluid causes skin irritation.

- Keep brake fluid out of the reach of children.
- Wear suitable protective clothing and safety glasses.
- Do not allow brake fluid to come into contact with the skin, the eyes or clothing.
- Consult a doctor immediately if brake fluid has been swallowed.
- Rinse the affected area with plenty of water in the event of contact with the skin.
- Rinse eyes thoroughly with water immediately and consult a doctor if brake fluid comes into contact with the eyes.
- If brake fluid spills on to your clothing, change the clothing.



Warning

Danger of accidents Old brake fluid reduces the braking effect.

 Make sure that brake fluid for the front and rear brake is changed in accordance with the service schedule. (Your authorized KTM workshop will be glad to help.)



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.



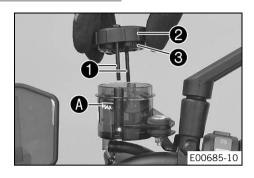
Info

Never use DOT 5 brake fluid. It is silicone-based and purple in color. Oil seals and brake lines are not designed for DOT 5 brake fluid.

Avoid contact between brake fluid and painted parts. Brake fluid attacks paint. Only use clean brake fluid from a sealed container.

Preparatory work

Check the front brake linings. (
 p. 194)



Main work

- Move the brake reservoir mounted on the handlebar to a horizontal position.
- Remove screws 1.
- Take off cover **2** with membrane **3**.
- $-\hspace{0.1cm}$ Add brake fluid up to ${ t MAX}$ marking $oldsymbol{f A}$.

Brake fluid DOT 4 / DOT 5.1 (p. 303)

- Position cover **2** with membrane **3**.
- Mount and tighten screws ①.



Info

Clean up overflowed or spilled brake fluid immediately with water.

14.5 Checking the front brake linings



Warning

Danger of accidents Worn-out brake linings reduce the braking effect.

 Ensure that worn-out brake linings are replaced immediately. (Your authorized KTM workshop will be glad to help.)

194



Warning

Danger of accidents Damaged brake discs reduce the braking effect.

If the brake linings are not changed in time, the brake lining carriers grind against the brake disc. As a consequence, the braking effect is greatly reduced and the brake discs are destroyed.

Check the brake linings regularly.



Check all brake linings on both brake calipers to ensure they have the minimum thickness **A**.

Minimum thickness (A)



 $\geq 1 \text{ mm } (\geq 0.04 \text{ in})$

- If the minimum thickness is less than specified:
 - Change the front brake linings.
- Check all brake linings on both brake calipers for damage and cracking.
 - If there is damage or cracking:
 - Change the front brake linings.

14.6 Checking the rear brake fluid level



Warning

Danger of accidents An insufficient brake fluid level will cause the brake system to fail.

If the brake fluid level drops below the **MIN** marking, the brake system is leaking or the brake linings are worn down.

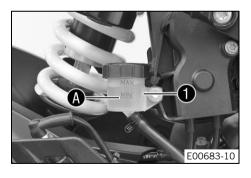
 Check the brake system and do not continue riding until the problem is eliminated. (Your authorized KTM workshop will be glad to help.)



Warning

Danger of accidents Old brake fluid reduces the braking effect.

 Make sure that brake fluid for the front and rear brake is changed in accordance with the service schedule. (Your authorized KTM workshop will be glad to help.)



- Stand the vehicle upright.
- Check the brake fluid level in brake fluid reservoir 1.
 - » If the fluid level reaches the MIN marking (A):
 - Add rear brake fluid. ◀ (ՀՀ p. 197)

14.7 Adding rear brake fluid 🔌



Warning

Danger of accidents An insufficient brake fluid level will cause the brake system to fail.

If the brake fluid level drops below the **MIN** marking, the brake system is leaking or the brake linings are worn down.

 Check the brake system and do not continue riding until the problem is eliminated. (Your authorized KTM workshop will be glad to help.)



Warning

Skin irritation Brake fluid causes skin irritation.

- Keep brake fluid out of the reach of children.
- Wear suitable protective clothing and safety glasses.
- Do not allow brake fluid to come into contact with the skin, the eyes or clothing.
- Consult a doctor immediately if brake fluid has been swallowed.
- Rinse the affected area with plenty of water in the event of contact with the skin.
- Rinse eyes thoroughly with water immediately and consult a doctor if brake fluid comes into contact with the eyes.
- If brake fluid spills on to your clothing, change the clothing.



Warning

Danger of accidents Old brake fluid reduces the braking effect.

 Make sure that brake fluid for the front and rear brake is changed in accordance with the service schedule. (Your authorized KTM workshop will be glad to help.)



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.



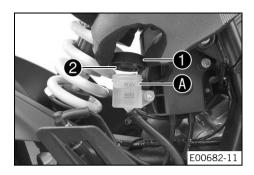
Info

Never use DOT 5 brake fluid. It is silicone-based and purple in color. Oil seals and brake lines are not designed for DOT 5 brake fluid.

Avoid contact between brake fluid and painted parts. Brake fluid attacks paint. Only use clean brake fluid from a sealed container.

Preparatory work

- Check the brake linings of the rear brake. (p. 199)



Main work

- Stand the vehicle upright.
- Remove screw cap 1 with the washer and membrane 2.
- Add brake fluid up to MAX marking $oldsymbol{A}$.

Brake fluid DOT 4 / DOT 5.1 (p. 303)

Mount and tighten screw cap with shim and membrane .



Info

Clean up overflowed or spilled brake fluid immediately with water.

14.8 Checking the brake linings of the rear brake



Warning

Danger of accidents Worn-out brake linings reduce the braking effect.

 Ensure that worn-out brake linings are replaced immediately. (Your authorized KTM workshop will be glad to help.)

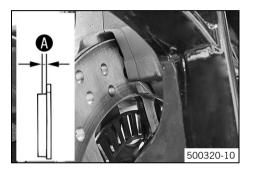


Warning

Danger of accidents Damaged brake discs reduce the braking effect.

If the brake linings are not changed in time, the brake lining carriers grind against the brake disc. As a consequence, the braking effect is greatly reduced and the brake discs are destroyed.

Check the brake linings regularly.



Check the brake linings for minimum thickness **A**.

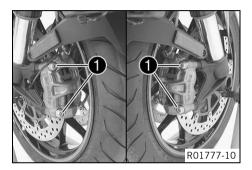


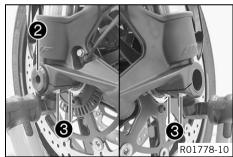
Minimum thickness A

 $\geq 1 \text{ mm } (\geq 0.04 \text{ in})$

- If the minimum thickness is less than specified:
 - Change the rear brake linings.
- Check the brake linings for damage and cracking.
 - If there is damage or cracking:
 - Change the rear brake linings.

15.1 Removing the front wheel 🔍





Preparatory work

- Lift the motorcycle with the front lifting gear. (IP p. 159)

Main work

- Remove screws 1 from both brake calipers.
- Press back the brake linings by slightly tilting the brake calipers laterally on the brake disc. Pull the brake calipers carefully back from the brake discs and hang to the side.



Info

Do not operate the hand brake lever if the brake calipers have been removed.

- Loosen screw 2 and screws 3.
- Unscrew screw 2 about six turns and press your hand on the screw to push the wheel spindle out of the axle clamp. Remove screw 2.

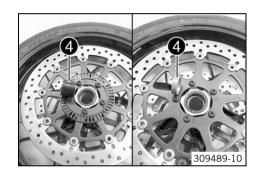
15 WHEELS, TIRES



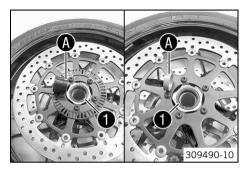
Warning

Danger of accidents Damaged brake discs reduce the braking effect.

- Always lay the wheel down in such a way that the brake discs are not damaged.
- Hold the front wheel and remove the wheel spindle. Take the front wheel out of the fork.
- Remove spacers **4**.



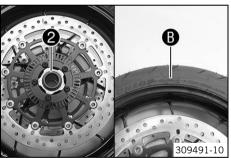
15.2 Installing the front wheel 3





- » If the wheel bearing is damaged or worn:
 - Change front wheel bearing.
- Clean and grease shaft seal rings and contact surfaces of the spacers.

Long-life grease (p. 307)



Insert wide spacer 2 on the left in the direction of travel.



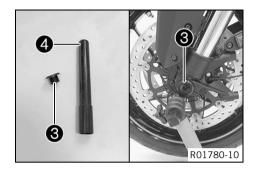
Info

Arrow **B** indicates the direction of travel of the front wheel.

The ABS sensor wheel is on the left viewed in the direction of travel.

Insert the narrow spacer on the right in the direction of travel.

15 WHEELS, TIRES





Warning

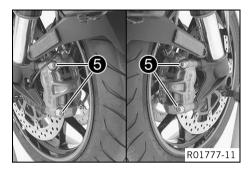
Danger of accidents Oil or grease on the brake discs reduces the braking effect.

- Always keep the brake discs free of oil and grease.
- Clean the brake discs with brake cleaner when necessary.
- Clean screw 3 and wheel spindle 4.
- Grease wheel spindle 4 lightly.

Long-life grease (p. 307)

- Jack up the front wheel into the fork, position it, and insert the wheel spindle.
- Mount and tighten screw 3.
 Guideline

Screw, front	M25x1.5	45 Nm (33.2 lbf ft)
wheel spindle		Thread greased



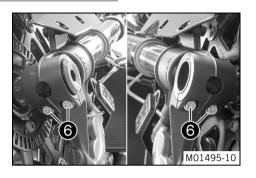
- Position the brake calipers and check that the brake linings are seated correctly.
- Mount screws **6** on both brake calipers but do not tighten yet.
- Operate the hand brake lever repeatedly until the brake linings are in contact with the brake disc and there is a pressure point. Fix the hand brake lever in the activated position.
 - ✓ The brake calipers straighten.
- Tighten screws 5 on both brake calipers.

Guideline

Screw, front	M10	45 Nm (33.2 lbf ft)
brake caliper		Loctite®243™

- Remove the locking piece of the hand brake lever.
- Take the motorcycle off the front lifting gear. (🕮 p. 160)
- Remove the rear of the motorcycle from the lifting gear.
 p. 158)

15 WHEELS, TIRES



- Operate the front brake and compress the fork a few times firmly.
 - ✓ The fork legs straighten.
- Tighten screws **6**.

Guideline

Screw, axle clamp	M8	15 Nm (11.1 lbf ft)

•

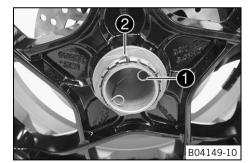
15.3 Removing the rear wheel

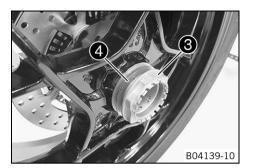
Preparatory work

- Lift the motorcycle with the rear lifting gear. (🕮 p. 158)
- Remove the main silencer. 📤 (🕮 p. 170)

Main work

- Remove the inside locking wire 1.
- Remove the outside locking wire 2.





- Have an assistant operate the rear brake.
- Loosen nut 3 and remove it with washer 4.



Take off the rear wheel.

15 WHEELS, TIRES

15.4 Installing the rear wheel 4

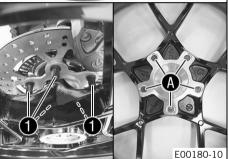


Warning

Danger of accidents Oil or grease on the brake discs reduces the braking effect.

- Always keep the brake discs free of oil and grease.
- Clean the brake discs with brake cleaner when necessary.





Main work

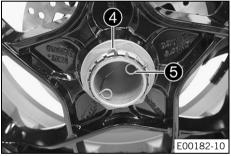
- Check the rear wheel bearing for damage and wear.
 - » If the rear wheel bearing is damaged or worn:
 - Change the rear wheel bearing.
- Clean and grease the threads of the wheel axle and axle nut.

Long-life grease (p. 307)

- Slide the rear wheel onto the axle.
 - ✓ Driving pins engage in drilled holes of the rim.

15 WHEELS, TIRES





- Mount washer 2 and nut 3.
- Have an assistant operate the rear brake.
- Tighten nut **3**.
 Guideline

Nut, rear axle	M50x1.5	250 Nm (184.4 lbf ft)
		Thread greased/lock
		locking wire with locking
		varnish

- Mount outside locking wire 4.
- Mount inside locking wire **5**.
 - The pins of the locking wires engage in the drilled holes of the wheel axle.

Finishing work

- Remove the rear of the motorcycle from the lifting gear.
 p. 158)
- Install the main silencer. ◀ (學 p. 171)

15.5 Checking the tire condition



Warning

Danger of accidents If a tire bursts while riding, the vehicle becomes uncontrollable.

 Ensure that damaged or worn tires are replaced immediately. (Your authorized KTM workshop will be glad to help.)



Warning

Danger of crashing Different tire tread patterns on the front and rear wheel impair the handling characteristic.

Different tire tread patterns can make the vehicle significantly more difficult to control.

Make sure that only tires with a similar tire tread pattern are fitted to the front and rear wheel.



Warning

Danger of accidents Non-approved or non-recommended tires and wheels impact the handling characteristic.

Only use tires/wheels approved by KTM with the corresponding speed index.



Warning

Danger of accidents New tires have reduced road grip.

The contact surface on new tires is not yet roughened.

Run in new tires with moderate riding at alternating angles.
 Running-in phase
 200 km (124 mi)

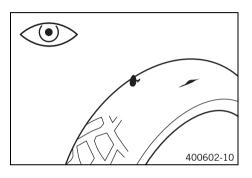
15 WHEELS, TIRES



Info

Tire type, tire condition, and tire pressure influence the braking and handling characteristics of the vehicle.

Worn tires are particularly unfavorable on wet surfaces.



- Check the front and rear tires for cuts, run-in objects, and other damage.
 - » If the tires have cuts, run-in objects, or other damage:
 - Change the tires.
- Check the tread depth.

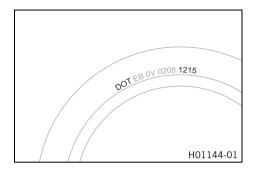


Info

Adhere to the legally required minimum tread depth.

Minimum tread depth	≥ 2 mm (≥ 0.08 in)

- » If the tread depth is less than the minimum tread depth:
 - Change the tires.



Check the tire age.



Info

The tire date of manufacture is usually contained in the tire label and is indicated by the last four digits of the **DOT** number. The first two digits indicate the week of manufacture and the last two digits the year of manufacture.

KTM recommends that the tires be changed after 5 years at the latest, regardless of the actual state of wear.

- » If the tires are more than 5 years old:
 - Change the tires.

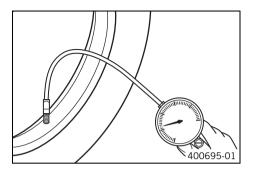
15.6 Checking tire pressure



Info

Low tire pressure leads to abnormal wear and overheating of the tire. Correct tire pressure ensures optimal riding comfort and maximum tire service life.

15 WHEELS, TIRES



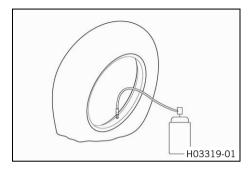
- Remove the protection cap.
- Check the tire pressure when the tires are cold.

Tire pressure when solo	
front: with cold tires	2.5 bar (36 psi)
rear: with cold tires	2.5 bar (36 psi)

Tire pressure with passenger / full payload	
front: with cold tires 2.5 bar (36 psi)	
rear: with cold tires	2.9 bar (42 psi)

- » If the tire pressure does not meet specifications:
 - Correct the tire pressure.
- Mount the protection cap.

15.7 Using tire repair spray





№ Warning

Danger of accidents Incorrect use of tire repair spray will result in the repaired tire losing pressure.

Tire repair spray cannot be used for all types of damage.

- Observe the instructions and specifications of the manufacturer of the tire repair spray.
- After repairing a tire with tire repair spray, ride slowly and carefully.
- Ride no further than to the nearest workshop and have the tire changed.

Tire repair spray should only be used in an emergency. We recommend transporting the broken down vehicle to the nearest workshop instead of using tire repair spray.

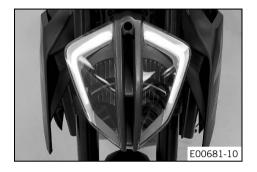
(1290 Super Duke R EU)

Note

Material damage Tire repair spray damages the tire pressure sensor.

 Note that after using tire repair spray, the tire pressure sensor may need to be replaced.

16.1 Daytime running light (DRL)





Warning

Danger of accidents When visibility is poor, the daytime running light is not a substitute for the low beam.

Automatic switching between the daytime running light and low beam may only be partially available when visibility is significantly impaired due to fog, snow or rain.

- Ensure that the appropriate type of lighting is always selected.
- If necessary switch off the daytime running lights using the menu before going on a ride or when stopped so that the low beam is switched on permanently.
- Note the legal regulations regarding the daytime running light.

The daytime running (<u>DRL</u>)/position light is integrated in the main headlight. The daytime running light is brighter than the position light.

The daytime running light must only be switched on when visibility conditions are good.

This is controlled by the ambient light sensor in the combination instrument. When visibility conditions are good, the low beam

with position light is switched off and the daytime running light is switched on.

When the daytime running light is switched off, the low beam with position light lights up.

On high beam or headlight flasher, the daytime running light changes automatically to the position light.

16.2 Removing the 12-V battery 3



Warning

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

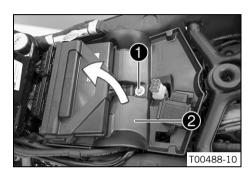
- Keep 12 V batteries out of the reach of children.
- Wear suitable protective clothing and safety glasses.
- Avoid contact with battery acid and battery gases.
- Keep sparks or open flames away from the 12 V battery.
- Only charge 12 V batteries in well-ventilated rooms.
- Rinse the affected area immediately 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.

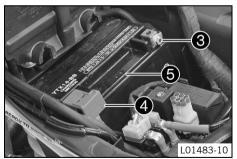


Caution

Danger of accidents Electronic components and safety devices will be damaged if the 12-V battery is discharged or missing.

Never operate the vehicle with a discharged 12-V battery or without a 12-V battery.





Preparatory work

- Switch off ignition to do this briefly press the Race-on button (s) (maximum of 1 second) with the ignition switched on.

Main work

- Remove screw 1.
- Lift cover 2 at the rear and pull toward the rear.
- Fold up the cover.

- Disconnect negative cable 3 from the 12-V battery.
- Remove positive terminal cover 4 and disconnect the positive cable from the 12-V battery.
- Take the 12-V battery **6** out of the battery compartment.

16.3 Installing the 12-V battery 3



Warning

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

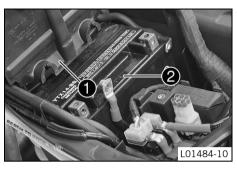
- Keep 12 V batteries out of the reach of children.
- Wear suitable protective clothing and safety glasses.
- Avoid contact with battery acid and battery gases.
- Keep sparks or open flames away from the 12 V battery.
- Only charge 12 V batteries in well-ventilated rooms.
- Rinse the affected area immediately 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.



Caution

Danger of accidents Electronic components and safety devices will be damaged if the 12-V battery is discharged or missing.

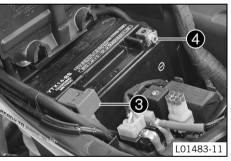
Never operate the vehicle with a discharged 12-V battery or without a 12-V battery.



Main work

- Fold up cover 1.
- Insert 12-V battery **2** into the battery compartment.

12-V battery (YTX14-BS) (p. 287)

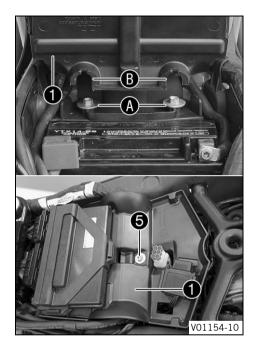


Position the positive cable and mount and tighten the screw.
 Guideline

Screw, battery termi-	M6	4.5 Nm
nal		(3.32 lbf ft)

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

Screw, battery termi-	M6	4.5 Nm
nal		(3.32 lbf ft)



- Position cover 1.
 - ✓ Screw heads **A** engage in recesses **B**.
- Mount and tighten screw 6.

Finishing work

- Mount the passenger seat. (🕮 p. 166)
- Adjust the time and date.

•

16.4 Charging the 12-V battery 4



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

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.

16



Info

Even when there is no load on the 12-V battery, it discharges steadily.

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, and charging time are exceeded, electrolyte escapes through the safety valves. This reduces the capacity of the 12-V battery.

If the 12-V battery is depleted from starting the vehicle repeatedly, the battery must be charged immediately.

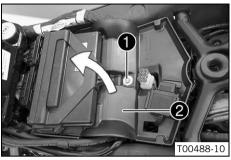
If the 12-V battery is left in a discharged state for an extended period, it will become deeply discharged and sulfating occurs, destroying the battery.

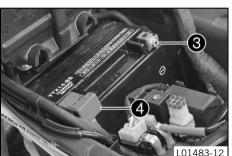
The 12-V battery is maintenance-free. The acid level does not have to be checked.

If the 12-V battery is not charged by the KTM battery charger, the 12-V battery must be removed for charging. Otherwise, overvoltage may damage electronic components. Charge the 12-V battery according to the instructions on the battery housing.

Preparatory work

- Switch off ignition to do this briefly press the Race-on button (maximum of 1 second) with the ignition switched on.





Main work

- Remove screw 1.
- Lift cover **2** at the rear and pull toward the rear.
- Fold up the cover.

- Disconnect negative cable 3 of the 12-V battery to avoid damaging the onboard electronics.
- Remove positive terminal cover 4.



 Connect the battery charger to the 12-V battery. Switch on the battery charger.

Battery charger (58429074000)

You can also use the battery charger to test the open-circuit voltage and starting ability of the 12-V battery, and to test the alternator. In addition, you cannot overcharge the 12-V battery with this device.



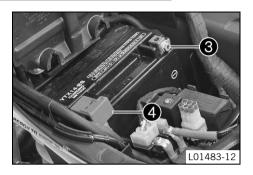
Info

Charge the 12-V battery to a maximum of 10 % of the capacity specified on the battery housing.

- Switch off the battery charger after charging and disconnect from the 12-V battery.

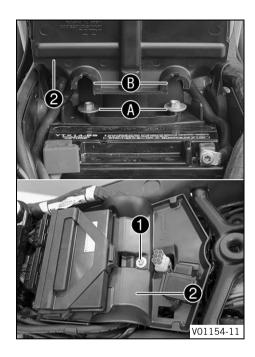
Guideline

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	3 months	



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

Screw, battery termi-	M6	4.5 Nm
nal		(3.32 lbf ft)



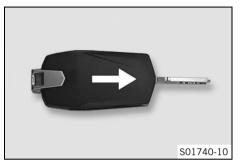
- Position cover 2.
 - ✓ Screw heads **A** engage in recesses **B**.
- Mount and tighten screw 1.

Finishing work

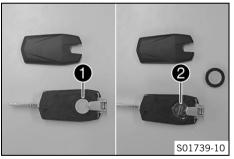
- Mount the passenger seat. (🕮 p. 166)
- Adjust the time and date.

•

16.5 Changing the Race-on key battery



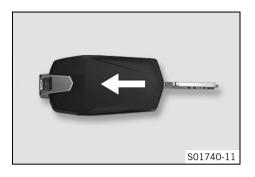
- Fold out the key bit of the Race-on key.
- Push the lower half of the Race-on key in the direction of the arrow and take off.



- Remove battery cover 1.
- Remove the Race-on key battery 2.
- Insert a new Race-on key battery with the label facing upward.

Race-on key battery (CR 2032) (
p. 287)

- Mount battery cover 1.



 Fit lower half of the Race-on key and snap into place in the direction of the arrow.

16.6 Changing the main fuse



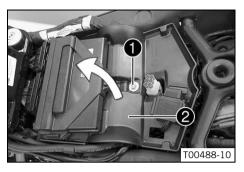
Warning

Fire hazard Incorrect fuses overload the electrical system.

- Only use fuses with the required ampere value.
- Do not bypass or repair fuses.

Preparatory work

- Switch off ignition to do this briefly press the Race-on button \$ (maximum of 1 second) with the ignition switched on.
- Remove the passenger seat. (p. 166)

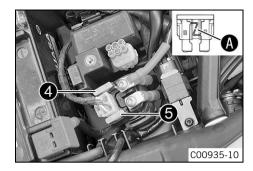




Main work

- Remove screw 1.
- Lift cover 2 at the rear and pull toward the rear.
- Fold up the cover.

Take off protection caps 3.



Remove faulty main fuse $oldsymbol{4}$.



Info

A faulty fuse has a burned-out fuse wire **A**. A spare fuse **5** is located in the starter relay. The main fuse protects all power consumers of the vehicle.

Insert a new main fuse.

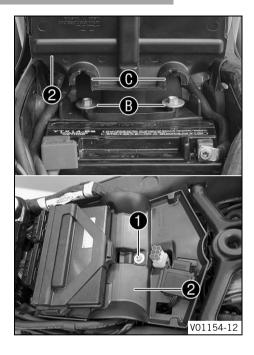
Fuse (58011109130) (p. 287)

- Check that the electrical system is functioning properly.
- Mount the protection caps.



Tip

Insert a new spare fuse into the starter relay to have it available when needed.



- Position cover **2**.
 - ✓ Screw heads **B** engage in recesses **C**.
- Mount and tighten screw 1.

Finishing work

- Mount the passenger seat. (🕮 p. 166)
- Adjust the time and date.

16.7 Changing the fuses in the fuse box



Warning

Fire hazard Incorrect fuses overload the electrical system.

- Only use fuses with the required ampere value.
- Do not bypass or repair fuses.

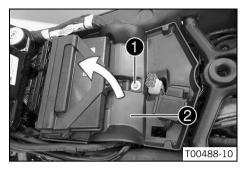


Info

The fuse box containing the fuses of individual power consumers is located under the seat.

Preparatory work

- Switch off ignition to do this briefly press the Race-on button \circ (maximum of 1 second) with the ignition switched on.
- Remove the passenger seat. (p. 166)

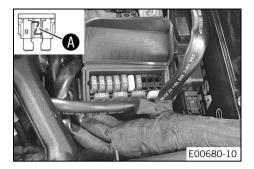




Main work

- Remove screw 1.
- Lift cover 2 at the rear and pull toward the rear.
- Fold up the cover.

- Open fuse box cover **3**.



Check the fuses.



Info

A faulty fuse has a burned-out fuse wire **A**.



Remove the faulty fuse.

Guideline

Fuse 1 - 10 A - power supply for control units and components

Fuse **2** - 10 A - permanent positive for auxiliary equipment

Fuse **3** - 10 A - permanent positive for headlight

Fuse 4 - 10 A - permanent positive for headlight

Fuse 5 - 10 A - control unit

Fuse 6 - 25 A - ABS return pump

Fuse 7 - 15 A - ABS hydraulic unit

Fuse 8 - not assigned

Fuse 9 - not assigned

Fuse 10 - not assigned

Fuse res - 10 A - spare fuses

Fuse res - 15 A - spare fuse

Fuse res - 25 A - spare fuse

Insert a spare fuse with the correct rating.

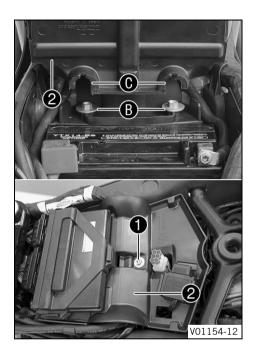
Fuse (58011109110) (p. 287)
Fuse (58011109115) (p. 287)
Fuse (58011109125) (p. 287)



Tip

Insert a spare fuse so that it is available if needed.

- Check that the power consumer is functioning properly.
- Close the fuse box cover.

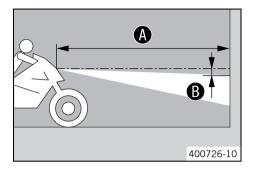


- Position cover 2.
 - ✓ Screw heads **B** engage in recesses **C**.
- Mount and tighten screw 1.

Finishing work

•

16.8 Checking the headlight setting



- Park the vehicle on a horizontal surface in front of a lightcolored wall and make a mark at the height of the center of the low beam headlight.
- Make another mark at a distance
 • under the first marking.

 Guideline

Distance B	5 cm (2 in)

Position the vehicle perpendicular to the wall at a distance **A** from the wall and switch on the low beam.

Guideline

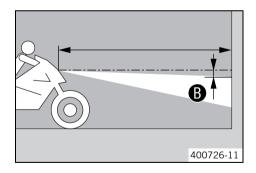
- The rider now mounts the motorcycle with luggage and passenger if applicable.
- Check the headlight setting.

The light-dark boundary must be exactly on the lower marking when the motorcycle is ready to be operated with the rider mounted along with any luggage and a passenger if applicable.

- » If the boundary between light and dark does not meet specifications:

16.9 Adjusting the headlight range





Preparatory work

Check the headlight setting. (
 p. 238)

Main work

Turn adjusting screw 1 to adjust the headlight range.



Info

Turn clockwise to increase the headlight range; turn counterclockwise to reduce the headlight range. If you have a payload, you may have to correct the headlight range.

Screw **1** also secures the headlight. Ensure the screw is always screwed in far enough.

- Set the headlight to marking $oldsymbol{\mathbb{B}}$.

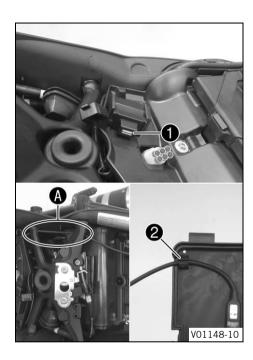
Guideline

The light-dark boundary must lie exactly on lower marking **B** when the motorcycle is ready to operate with the rider mounted along with any luggage and a passenger if applicable.

16.10 Connecting the USB cable

Preliminary work

- Open storage compartment. (□ p. 49)



Main work

- Connect a suitable USB cable to the USB socket 1.
- Route USB cable to the rear in the $oldsymbol{A}$ area.
- Connect USB cable to the device and secure in the pracket.



Info

Depending on the size, an angled plug is advantageous. Always secure stowed objects additionally against moisture.

Stow cables so that no damage can result.

Final steps

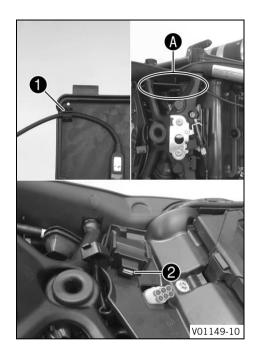
- Mount the front rider's seat. (p. 168)

•

16.11 Disconnecting the USB cable

Preliminary work

- Open storage compartment. (□ p. 49)



Main work

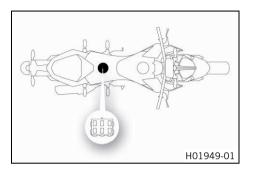
- Remove USB cable from the bracket and disconnect from the device.
- Carefully pull out the USB cable forwards in the A area.
- Disconnect USB cable from the USB socket 2.

Final steps

- Mount the passenger seat. (🕮 p. 166)

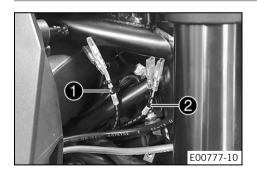
•

16.12 Diagnostics connector



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

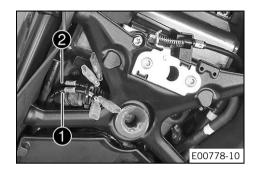
16.13 Front ACC1 and ACC2



Installation location

Power supplies ACC1 1 and ACC2 2 front are located behind the right cover between the triple clamps.

16.14 ACC1 and ACC2 rear



Installation location

Power supplies ACC1 and ACC2 rear are located under the seat.

17 COOLING SYSTEM

17.1 Checking the coolant level in the compensating tank



Warning

Danger of scalding During motorcycle operation, the coolant gets very hot and is under pressure.

- Do not open the radiator, the radiator hoses or other cooling system components if the engine or the cooling system are at operating temperature.
- Allow the cooling system and the engine to cool down before you open the radiator, the radiator hoses or other components of the cooling system.
- In the event of scalding, rinse the area affected immediately with lukewarm water.



Warning

Danger of poisoning Coolant is toxic and a health hazard.

- Keep coolant out of the reach of children.
- Do not allow coolant to come into contact with the skin, the eyes and clothing.
- Consult a doctor immediately if coolant is swallowed.
- Rinse the affected area immediately with plenty of water in the event of contact with the skin.
- Rinse eyes thoroughly with water and consult a doctor immediately if coolant gets into the eyes.
- Change clothing if coolant spills onto your clothing.

Condition

The engine is cold.

The radiator is completely full.



- Park the motorcycle on a horizontal surface.
- Check the coolant level in the compensating tank 1.

The coolant level must be between MIN and MAX.

- » If there is no coolant in the compensating tank:
 - Check the cooling system for leaks. 🔌



Info

Do not start up the motorcycle!

- Add coolant/bleed the cooling system.
- » If the coolant in the compensating tank is not at the required level, but the tank is not empty:
 - Correct the coolant level in the compensating tank.
 p. 248)

247

17 COOLING SYSTEM

17.2 Correcting the coolant level in the compensating tank



Warning

Danger of scalding During motorcycle operation, the coolant gets very hot and is under pressure.

- Do not open the radiator, the radiator hoses or other cooling system components if the engine or the cooling system are at operating temperature.
- Allow the cooling system and the engine to cool down before you open the radiator, the radiator hoses or other components of the cooling system.
- In the event of scalding, rinse the area affected immediately with lukewarm water.



Warning

Danger of poisoning Coolant is toxic and a health hazard.

- Keep coolant out of the reach of children.
- Do not allow coolant to come into contact with the skin, the eyes and clothing.
- Consult a doctor immediately if coolant is swallowed.
- Rinse the affected area immediately with plenty of water in the event of contact with the skin.
- Rinse eyes thoroughly with water and consult a doctor immediately if coolant gets into the eyes.
- Change clothing if coolant spills onto your clothing.

Condition

The engine is cold.

The radiator is completely full.

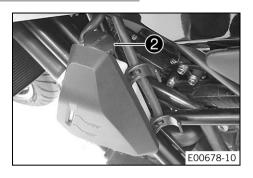
Preparatory work



Main work

- Pull and take off the compensating tank from the side with the holding lug 1.

17 COOLING SYSTEM



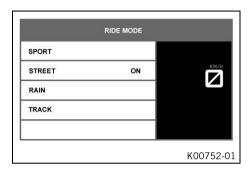
- Remove cover 2 of the compensating tank.
- Add coolant to the MAX marking.

Coolant (p. 303)

- Mount cover **2** of the compensating tank.
- Mount compensating tank and snap into place with the holding lug 1.

_

18.1 Ride Mode



Possible states

- SPORT Homologated performance with very direct response; the motorcycle traction control allows greater slip on the rear wheel.
- STREET Homologated performance with balanced response; the motorcycle traction control allows normal slip on the rear wheel.
- RAIN Homologated performance with soft response for improved rideability; the motorcycle traction control allows normal slip on the rear wheel
- TRACK Optional setting available with homologated performance and extremely direct response. The motorcycle traction control and the characteristic map of the throttle response can be individually set.

Various vehicle tunings can be selected in the **Ride Mode** menu. **SPORT**, **STREET**, **RAIN** and **TRACK** are available (optional). The drive mode selected last is displayed in the display. The drive mode can also be changed while riding with a closed throttle grip and deactivated speed sensor.

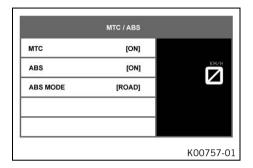


Info

The drive mode selection has no influence on the ABS.

18 ENGINE TUNING

18.2 Motorcycle traction control (MTC)



The motorcycle traction control (<u>MTC</u>) lowers the engine torque in case of loss of traction in the rear wheel.



Info

When motorcycle traction control is switched off, the rear wheel may spin during strong acceleration and on surfaces with low grip, resulting in a risk of crashing.

After the ignition is switched back on, motorcycle traction control is enabled again.

The motorcycle traction control is controlled via the **Ride Mode** (p. 251) menu on the combination instrument. The motorcycle traction control can be switched off in the **MTC/ABS** menu.

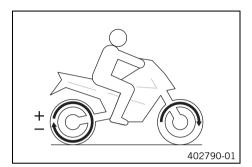


Info

When the motorcycle traction control is active, the TC indicator lamp [3] flashes.

When motorcycle traction control is switched off, the TC indicator lamp lights up.

18.3 Slip adjustment (optional)



The slip adjustment is an optional motorcycle traction control function.

The slip adjustment allows the motorcycle traction control to be tuned through nine levels to the desired characteristic map. Level 1 allows the maximum slip on the rear wheel, and level 9 the minimum.

The slip adjustment can be set while riding with a closed menu using the **UP** or **DOWN** button.

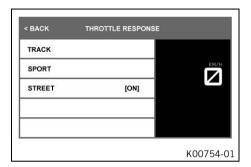


Info

The slip adjustment is only available if $\underline{\text{drive mode TRACK}}$ (\mathbb{Q} p. 251) (optional) is active.

18 ENGINE TUNING

18.4 Throttle Response (optional)



Possible states

- TRACK Extremely direct response
- SPORT Very direct response
- STREET Balanced response

The characteristic map of the throttle response can be adjusted in the **Throttle Response** menu.

The **Throttle Response** can also be set while riding with a closed throttle grip and deactivated speed sensor.



Info

Throttle Response is only available if $\underline{\text{drive mode TRACK}}$ (\mathbb{Q} p. 251) (optional) is active.

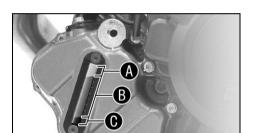
19.1 Checking the engine oil level



Info

Oil consumption depends on the riding style and the operating conditions.

E00670-11



Condition

The engine is at operating temperature.

Preparatory work

- Stand the motorcycle upright on a horizontal surface.

Main work

Check the engine oil level in the engine oil level viewer.



Info

After switching off the engine, wait one minute before checking the level.

The engine oil level should be in the upper area **B** of the engine oil level viewer.

- When the engine oil level is in area of the engine oil level viewer:
 - Do not add engine oil.
- When the engine oil level is in area **B** of the engine oil level viewer:
 - Engine oil can be added.

- When the engine oil level is in area of the engine oil level viewer:
 - Add engine oil. (
 p. 263)

19.2 Changing the engine oil and oil filter, cleaning the oil screens



Warning

Danger of scalding Engine and gear oil get very hot when the motorcycle is ridden.

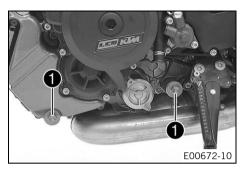
- Wear suitable protective clothing and safety gloves.
- In the event of scalding, rinse the area affected immediately with lukewarm water.



Note

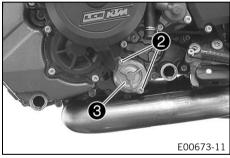
Environmental hazard Hazardous substances cause environmental damage.

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

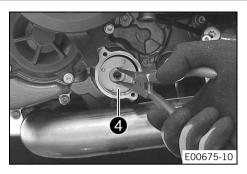


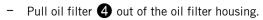
Main work

- Stand the motorcycle on its side stand on a horizontal surface.
- Place an appropriate container under the engine.
- Remove oil drain plugs with the magnet, O-rings, and oil screen.



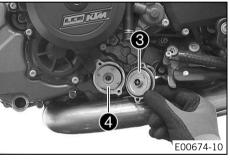
Remove screws 2. Take off oil filter cover 3 with the 0-ring.





Lock ring plier (51012011000)

- Completely drain the engine oil.
- Thoroughly clean the parts and sealing surfaces.



Insert new oil filter 4.



Info

Only insert the oil filter by hand.

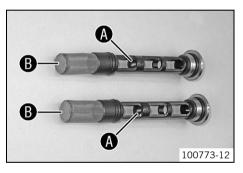
Oil the O-ring of the oil filter cover. Mount oil filter cover 3.



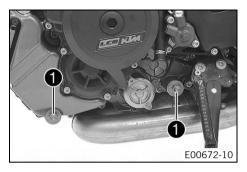


Mount and tighten screws **2**. Guideline

Remaining engine	M5	6 Nm (4.4 lbf ft)
screws		

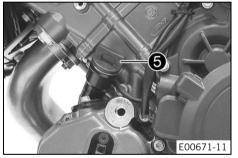


 Thoroughly clean magnets (A) and oil screens (B) of the oil drain plugs.



Mount and tighten oil drain plugs with the magnets, O-rings, and oil screens.

Guideline



Have the entire filling quantity available.

Engine oil	3.50	Engine oil
Ambient	(3.7 qt.)	(SAE 10W/50)
temperature: ≥ 0 °C		(🕮 p. 304)
(≥ 32 °F)		
Engine oil		Engine oil (SAE
Ambient		5W/40) (🕮 p. 305)
temperature: < 0 °C		
(< 32 °F)		

- Add the oil quantity quantity in two separate operations.
- Remove filler plug **5** with the O-ring and fill with the initial partial quantity.

Engine oil (1st partial quantity) approx. Ambient temperature: ≥ 0 °C (≥ 32 °F)	3.0 I (3.2 qt.)	Engine oil (SAE 10W/50) (Pp. 304)
Engine oil (1st partial quantity) approx. Ambient temperature: < 0 °C (< 32 °F)		Engine oil (SAE 5W/40) (p. 305)

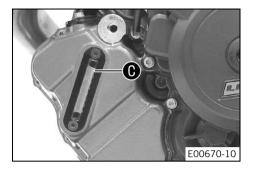
- Mount filler plug **5** with the O-ring.



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 check for tightness.
- Switch off the engine.



Remove the filler plug with the O-ring and add the second partial quantity up to the upper marking on the engine oil level viewer.

Engine oil (2nd partial quantity) approx. Ambient temperature: ≥ 0 °C (≥ 32 °F)	0.50 l (0.53 qt.)	Engine oil (SAE 10W/50) (p. 304)
Engine oil (2nd partial quantity) approx. Ambient temperature: < 0 °C (< 32 °F)		Engine oil (SAE 5W/40) (🕮 p. 305)

Mount the filler plug with the O-ring.



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 check for tightness.

Finishing work

19.3 Adding engine oil



Info

Too little engine oil or poor-quality engine oil results in premature wear to the engine. The engine may be damaged if the engine oil level is too high.

Condition

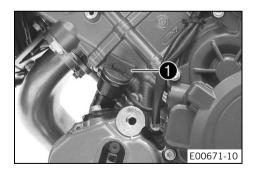
The engine is at operating temperature.

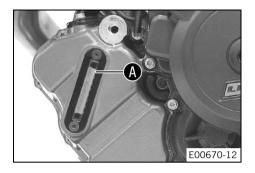
Preparatory work

- Stand the motorcycle upright on a horizontal surface.

Main work

Remove filler plug with the O-ring.





Condition

Ambient temperature: ≥ 0 °C (≥ 32 °F)

Engine oil (SAE 10W/50) (p. 304)

Condition

Ambient temperature: < 0 °C (< 32 °F)

Engine oil (SAE 5W/40) (p. 305)



Info

In order to achieve optimal engine oil performance, it is not advisable to mix different engine oils.

KTM recommends changing the engine oil.

Mount the filler plug with the O-ring.



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 check for tightness.

Finishing work

- Check the engine oil level. (p. 255)

•

20.1 Cleaning the motorcycle

Note

Material damage Components become damaged or destroyed if a pressure cleaner is used incorrectly.

The high pressure forces water into the electrical components, connectors, throttle cables, and bearings, etc. Pressure which is too high causes malfunctions and destroys components.

- Do not direct the water jet directly on to electrical components, connectors, throttle cables or bearings.
- Maintain a minimum distance between the nozzle of the pressure cleaner and the component.
 Minimum clearance
 60 cm (23.6 in)



Note

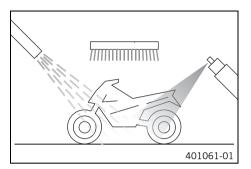
Environmental hazard Hazardous substances cause environmental damage.

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



Info

To maintain the value and appearance of the motorcycle over a long period, clean it regularly. Avoid direct sunshine when cleaning the motorcycle.



- Close off the exhaust system to keep water from entering.
- Remove loose dirt first with a soft jet of water.
- Spray dirty parts with a normal commercial engine cleaner and then brush off with a soft brush.

Motorcycle cleaner (🕮 p. 307)



Info

Use warm water containing normal motorcycle cleaner and a soft sponge.

Never apply motorcycle cleaner to a dry vehicle; always rinse the vehicle with water first.

If the vehicle was operated in road salt, clean it with cold water. Warm water would enhance the corrosive effects of salt.

- After rinsing the motorcycle with a gentle spray of water, allow it to dry thoroughly.
- Remove the closure of the exhaust system.



Warning

Danger of accidents Moisture and dirt impair the brake system.

 Brake carefully several times to dry out and remove dirt from the brake linings and the brake discs.

20 CLEANING, CARE

 After cleaning, ride the vehicle a short distance until the engine warms up.



Info

The heat produced causes water at inaccessible locations in the engine and on the brake system to evaporate.

- After the motorcycle has cooled off, lubricate all moving parts and bearings.
- Clean the chain. (p. 173)
- Treat bare metal (except for brake discs and the exhaust system) with a corrosion inhibitor.

Preserving materials for paints, metal and rubber (p. 308)

- Treat the painted parts with a mild paint polish.

Perfect finish and high gloss polish for paints (p. 307)



Info

Do not polish parts that were matte when delivered as this would strongly impair the material quality.

 Treat the plastic parts and powder-coated parts with a mild cleaning and care product. Special cleaner for glossy and matte paint finishes, metal and plastic surfaces (p. 308)

Oil steering lock and seat lock.

Universal oil spray (🕮 p. 308)

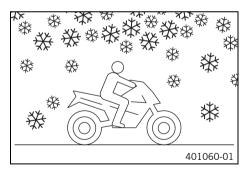
20.2 Checks and maintenance steps for winter operation



Info

If you use the motorcycle in winter, you must expect salt on the roads. You should therefore take precautions against aggressive road salt.

If the vehicle has been used on salted roads, use cold water for cleaning after riding. Warm water enhances the corrosive effects of salt.



- Clean the motorcycle. (IP p. 266)
- Clean the brakes.



Info

After **EVERY** trip on salted roads, thoroughly clean the brake calipers and brake linings, after they have cooled down and without removing them, with cold water and dry them carefully.

After riding on salted roads, thoroughly clean the motorcycle with cold water and dry it well.

20 CLEANING, CARE

 Treat the engine, the link fork, and all other bare or zinc-plated parts (except the brake discs) with a wax-based corrosion inhibitor.



Info

Corrosion inhibitor must not come into contact with the brake discs. This would severely lower the braking effect.

- Clean the chain. (p. 173)

•

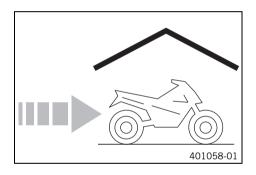
21.1 Storage



Info

If you plan to garage the motorcycle for a longer period, perform the following steps or have them performed.

Before storing the motorcycle, check all parts for function and wear. If service, repairs, or replacements are necessary, you should do this during the storage period (less workshop overload). In this way, you can avoid long workshop waiting times at the start of the new season.



 When refueling for the last time before taking the motorcycle out of service, add fuel additive.

Fuel additive (🕮 p. 307)

- Refuel. (🕮 p. 139)
- Clean the motorcycle. (p. 266)
- Check the coolant fill level and antifreeze.

Storage temperature of the	0 35 °C (32 95 °F)
12-V battery without direct	
sunlight	

21 STORAGE

 Store the vehicle in a dry location that is not subject to large fluctuations in temperature.



Info

KTM recommends jacking up the motorcycle.

- Lift the motorcycle with the front lifting gear. (p. 159)
- Cover the vehicle with a tarp or similar cover that is permeable to air.

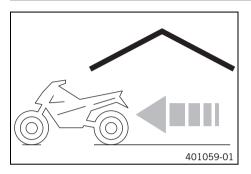


Info

Do not use non-porous materials since they prevent humidity from escaping, thus causing corrosion. Avoid running the engine for a short time only. Since the engine cannot warm up properly, the water vapor produced during combustion condenses and causes valves and the exhaust system to rust.

a

21.2 Preparing for use after storage



- Take the motorcycle off the front lifting gear. (p. 160)
- Remove the rear of the motorcycle from the lifting gear.
 p. 158)



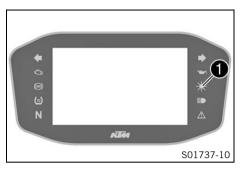
Info

If the 12-V battery was removed, the time and date must be set.

- Take a test ride.

_

22 TROUBLESHOOTING



The Race-on indicator lamp ① can indicate errors by flashing. These are indicated up to five seconds after the Race-on tip switch is actuated.



Info

Blink codes referring to **KTM RACE ON** are only displayed once and not repeated.

Faults	Possible cause	Action
No response if the Race-on tip switch is pressed	Race-on tip switch faulty	Check Race-on tip switch for damage.Check cable and plug of Race-on tip switch for damage.

Faults	Possible cause	Action
Race-on indicator lamp flashes twice	No response signal from the Race-on key	 Ensure that the Race-on key is in range. Remove other electronic devices from the vicinity of the Race-on antenna. Check battery compartment in the Race-on key for correct locking. Check the battery compartment of the Race-on key for corrosion. Change the Race-on key battery. (♠ p. 228) Use black ignition key.
Race-on indicator lamp flashes three times	12-V battery discharged	 Charge the 12-V battery. ▲ (□ p. 222) Check the open-circuit current. ▲
Race-on indicator lamp flashes four times	Steering lock bolt locked or tense	- Move handlebar slightly.
Race-on indicator lamp flashes five times	Race-on antenna faulty	Check Race-on antenna for damage.
The combination instrument shows nothing on the display	Fuse 1 is blown	- Change the fuses in the fuse box. (@ p. 233)
	The main fuse is blown	- Change the main fuse. (🕮 p. 229)
	12-V battery discharged	 Charge the 12-V battery. ◄ (♣ p. 222)
		 Check the open-circuit current.

22 TROUBLESHOOTING

Faults	Possible cause	Action
The engine does not turn if the emergency OFF switch/electric	Operating error	Carry out the start procedure. (p. 120)
starter button is pressed into	12-V battery discharged	 Charge the 12-V battery. ◀ (♠ p. 222)
the lower position		 Check the open-circuit current.
	Faulty safety starting system	 Read out the fault memory using the KTM diagnostics tool.
	Electronic fault	 Read out the fault memory using the KTM diagnostics tool.
The engine only turns if the	The vehicle is in gear	 Shift the transmission into neutral N.
clutch lever is drawn	Faulty safety starting system	 Read out the fault memory using the KTM diagnostics tool.
The engine turns although a gear is engaged	Faulty safety starting system	 Read out the fault memory using the KTM diagnostics tool.
The engine turns but does not start	The coupling of the fuel hose connection is not connected	Reconnect the coupling of the fuel hose connection.
	Error in the electronic fuel injection	 Read out the fault memory using the KTM diagnostics tool.
	The fuel quality is insufficient	Add suitable fuel.
The engine dies during the trip	Lack of fuel	- Refuel. (₩ p. 139)
	Error in the electronic fuel injection	 Read out the fault memory using the KTM diagnostics tool.

Faults	Possible cause	Action
Malfunction indicator lamp lights up or flashes	Error in the electronic fuel injection	 Read out the fault memory using the KTM diagnostics tool. <
The ABS warning lamp lights up	The ABS fuse is blown	- Change the fuses in the fuse box. (@ p. 233)
	Large difference in wheel speeds of the front and rear wheels	Stop the vehicle, switch off the ignition, and start it again.
	Malfunction in ABS	 Read out the fault memory using the KTM diagnostics tool. <
High oil consumption	The engine oil level is too high	- Check the engine oil level. (🕮 p. 255)
	The engine oil is too thin (low viscosity)	Change the engine oil and oil filter and clean the oil screens. (
12-V battery discharged	The hazard warning flasher is	- Switch off the hazard warning flasher.
	switched on	– Charge the 12-V battery. 🔌 🕮 p. 222)
	The 12-V battery is not being charged by the alternator	- Check the charging voltage
	The ignition was not switched off while the vehicle was parked	- Charge the 12-V battery. ▲ (의 p. 222)

23.1 Engine

Design	2-cylinder 4-stroke Otto engine, 75° V arrangement,
	water-cooled
Displacement	1,301 cm ³ (79.39 cu in)
Stroke	71 mm (2.8 in)
Bore	108 mm (4.25 in)
Compression ratio	13.6:1
Idle speed	1,400 1,600 rpm
Control	DOHC, 4 valves per cylinder, chain-driven
Valve - valve plate diameter	·
Intake	42 mm (1.65 in)
Exhaust	34 mm (1.34 in)
Valve clearance	
Exhaust at: 20 °C (68 °F)	0.25 0.30 mm (0.0098 0.0118 in)
Intake at: 20 °C (68 °F)	0.10 0.15 mm (0.0039 0.0059 in)
Crankshaft bearing	Sleeve bearing
Conrod bearing	Sleeve bearing
Piston	Forged light alloy
Piston ring	1 upper compression (rectangular) ring, 1 lower compression ring, 1 oil scraper ring
Engine lubrication	Dry sump lubrication system with three rotor pumps

Primary transmission	40:76	
Clutch	Antihopping clutch in oil bath/hydraulically operated	
Transmission	6-gear transmission, claw shifted	
Transmission ratio		
1st gear	12:35	
2nd gear	15:32	
3rd gear	18:30	
4th gear	20:27	
5th gear	24:27	
6th gear	27:26	
Mixture preparation	Electronic fuel injection	
Ignition system	Contactless controlled fully electronic ignition with digital ignition adjustment	
Alternator	12 V, 450 W	
Spark plug		
Inside spark plug	NGK LKAR9BI-10	
Outside spark plug	NGK LMAR7DI-10	
Electrode gap, spark plug	1 mm (0.04 in)	
Cooling	Water cooling, permanent circulation of coolant by water pump	
Cold start device	Starter motor	

23.2 Engine tightening torques

Screw, damping plate	EJOT ALtracs® M6x14	10 Nm (7.4 lbf ft)	Loctite®243™
Screw, retaining bracket, valve cover, rear	EJOT ALtracs® M6x10	10 Nm (7.4 lbf ft)	Luctile 243 ····
Hose clip, intake flange	M4	1.5 Nm (1.11 lbf ft)	
Oil nozzle	M5	2 Nm (1.5 lbf ft)	Loctite®243™
Remaining engine screws	M5	6 Nm (4.4 lbf ft)	
Screw, bearing retainer	M5	6 Nm (4.4 lbf ft)	Loctite®243™
Screw, bearing shells retaining bracket	M5	6 Nm (4.4 lbf ft)	Loctite®243™
Screw, crankshaft speed sensor	M5	6 Nm (4.4 lbf ft)	Loctite®243™
Screw, engine oil level viewer	M5	4 Nm (3 lbf ft)	
Screw, gear sensor	M5	6 Nm (4.4 lbf ft)	Loctite®243™
Screw, resonator	M5	8 Nm (5.9 lbf ft)	Loctite®243™
Bleeder screw, water pump cover	M6	10 Nm (7.4 lbf ft)	
Coolant connection screw on the cylinder head	M6	8 Nm (5.9 lbf ft)	Loctite®243™

Freewheel ring bolt	M6 – 10.9	15 Nm (11.1 lbf ft)	
			Loctite® 648™
Nut, cylinder head	M6	9 Nm (6.6 lbf ft)	
Remaining engine screws	M6	10 Nm (7.4 lbf ft)	
Screw, camshaft bearing support	M6 – 10.9	10 Nm (7.4 lbf ft)	
Screw, clutch cover	M6	10 Nm (7.4 lbf ft)	
Screw, clutch spring	M6	12 Nm (8.9 lbf ft)	
Screw, engine case	M6x60	10 Nm (7.4 lbf ft)	
Screw, engine case	M6x80	10 Nm (7.4 lbf ft)	
Screw, engine case	M6x90	10 Nm (7.4 lbf ft)	
Screw, freewheel holder	M6	10 Nm (7.4 lbf ft)	
			Loctite®243™
Screw, locking lever	M6	10 Nm (7.4 lbf ft)	
			Loctite®243™
Screw, oil pump cover	M6	10 Nm (7.4 lbf ft)	80 40714
			Loctite®243™
Screw, shift drum locating	M6 – 12.9	18 Nm (13.3 lbf ft)	
			Loctite®243™
Screw, shift lever	M6	15 Nm (11.1 lbf ft)	
			Loctite®243™
Screw, starter motor	M6	10 Nm (7.4 lbf ft)	
Screw, stator	M6	10 Nm (7.4 lbf ft)	
			Loctite®243™

Screw, valve cover	M6	10 Nm (7.4 lbf ft)
Screw, water pump cover	M6	10 Nm (7.4 lbf ft)
Screw, water pump wheel	M6	10 Nm (7.4 lbf ft)
		Loctite®243™
Stud, timing chain shaft	M6	8 Nm (5.9 lbf ft)
Vacuum connection	M6	5 Nm (3.7 lbf ft)
		Loctite®243™
Nozzle 100	M6x0.75	4 Nm (3 lbf ft)
		Loctite®243™
Plug, crankshaft retainer	M8	15 Nm (11.1 lbf ft)
Screw, camshaft bearing support	M8 – 10.9	Step 1
		10 Nm (7.4 lbf ft)
		Step 2 18 Nm (13.3 lbf ft)
Communication and the second and the	MO 10.0	
Screw, camshaft bearing support	M8 – 10.9	Step 1 8.5 Nm (6.27 lbf ft)
		Step 2
		14.5 Nm (10.7 lbf ft)
		Only applies when using:
		Hexagon socket bit
		(61229025000)
Screw, engine case	M8	18 Nm (13.3 lbf ft)
Screw, timing chain guide rail	M8	15 Nm (11.1 lbf ft)
		Loctite®243™

Screw, timing chain tensioning rail	M8	15 Nm (11.1 lbf ft) Loctite®243™
Stud, exhaust flange	M8	10 Nm (7.4 lbf ft)
Screw, engine bearer	M10	45 Nm (33.2 lbf ft)
Oil pressure sensor	M10x1	10 Nm (7.4 lbf ft)
Plug, cam lever axis	M10x1	15 Nm (11.1 lbf ft)
Plug, clutch lubrication	M10x1	10 Nm (7.4 lbf ft)
Screw plug, spreading transmission lock	M10x1	12 Nm (8.9 lbf ft)
Screw, conrod bearing	M10x1	Step 1 25 Nm (18.4 lbf ft) Step 2 30 Nm (22.1 lbf ft) Step 3 90°
Screw, timing chain tensioner release	M10x1	10 Nm (7.4 lbf ft)
Spark plug	M10x1	11 Nm (8.1 lbf ft)

Cylinder head screw	M11x1.5	Tightening sequence: Using a crisscross pattern Step 1 15 Nm (11.1 lbf ft) Step 2 30 Nm (22.1 lbf ft) Step 3
		90° Step 4 90°
Coolant tomporature concer	M12x1.5	Lubricated with engine oil 12 Nm (8.9 lbf ft)
Coolant temperature sensor		
Rotor screw	M12x1.5	115 Nm (84.8 lbf ft)
Spark plug	M12x1.5	18 Nm (13.3 lbf ft)
Nut of engine sprocket	M20x1.5	100 Nm (73.8 lbf ft)
		Loctite®243™
Oil drain plug	M20x1.5	20 Nm (14.8 lbf ft)
Nut, inner clutch hub	M22x1.5	120 Nm (88.5 lbf ft)
		Loctite®243™
Plug, timing-chain tensioner	M24x1.5	25 Nm (18.4 lbf ft)
Screw in alternator cover	M24x1.5	8 Nm (5.9 lbf ft)
Nut, primary gear wheel	M33LHx1.5	130 Nm (95.9 lbf ft)
		Loctite®243™

23.3 Capacities

23.3.1 Engine oil

Engine oil Ambient temperature: ≥ 0 °C (≥ 32 °F)	3.50 I (3.7 qt.)	Engine oil (SAE 10W/50) (🕮 p. 304)
Engine oil Ambient temperature: < 0 °C (< 32 °F)		Engine oil (SAE 5W/40) (🕮 p. 305)

23.3.2 Coolant

Coolant	3.20 l (3.38 qt.)	Coolant (🕮 p. 303)

23.3.3 Fuel

Total fuel tank capacity, approx.	18 I (4.8 US gal)		Super unleaded (ROZ 95/RON 95/PON 91) (🕮 p. 306)
Fuel reserve, approx.		3.6 l (3.8 qt.)	

23.4 Chassis

Frame	Lattice frame made of chrome molybdenum steel tub-	
	ing, powder-coated	
Fork	WP Suspension 4860 ROTA SPLIT	
Shock absorber	WP Suspension 4618 BAVP DCC	
Suspension travel		
front	125 mm (4.92 in)	
rear	156 mm (6.14 in)	
Brake system		
front	Double disc brake with radially mounted four-piston	
	brake calipers, floating brake discs	
rear	Single disc brake with dual-piston brake caliper, fixed	
	brake disc	
Brake discs - diameter		
front	320 mm (12.6 in)	
rear	240 mm (9.45 in)	
Brake discs - wear limit		
front	4.5 mm (0.177 in)	
rear	4.5 mm (0.177 in)	
Tire pressure when solo		
front: with cold tires	2.5 bar (36 psi)	

2.5 bar (36 psi)
17:38
5/8 x 5/16" (525) X-ring
65.1°
1,482 mm (58.35 in)
835 mm (32.87 in)
141 mm (5.55 in)
203 kg (448 lb.)
160 kg (353 lb.)
260 kg (573 lb.)
418 kg (922 lb.)

23.5 Electrical system

12-V battery	YTX14-BS	Battery voltage: 12 V Nominal capacity: 12 Ah Maintenance-free
Race-on key battery	CR 2032	3 V
Fuse	58011109110	10 A
Fuse	58011109115	15 A
Fuse	58011109125	25 A
Fuse	58011109130	30 A

Low beam/high beam	LED
Daytime running light/position light	LED
Combination instrument lighting and indicator lamps	LED
Turn signal	LED
Tail light	LED
Brake light	LED
License plate lamp	LED

23.6 Tires

Front tire	Rear tire
120/70 ZR 17 M/C (58W) TL	190/55 ZR 17 M/C (75W) TL
Metzeler Sportec M7 RR	Metzeler Sportec M7 RR

The tires specified represent one of the possible series production tires. Additional information is available in the Service section under:

http://www.ktm.com

23.7 Fork

Fork article number	14.18.8Q.22		
Fork	WP Suspension 4860 ROTA SPLIT		
Compression damping			
Comfort	15 clicks		

Standard	12 clicks	
Sport	9 clicks	
Full payload	9 clicks	
Rebound damping		
Comfort	15 clicks	
Standard	12 clicks	
Sport	9 clicks	
Full payload	9 clicks	
Spring length with preload spacer(s)	255 mm (10.04 in)	
Spring rate		
Medium (standard)	10 N/mm (57 lb/in)	
Fork length	776 mm (30.55 in)	
Air chamber length	110 ± 10 mm (4.33 ± 0.39 in)	

Fork oil per fork leg	680 ml (22.99 fl. oz.)	Fork oil (SAE 4) (48601166S1)
		(🕮 p. 305)

23.8 Shock absorber

Shock absorber article number	15.18.7Q.22
Shock absorber	WP Suspension 4618 BAVP DCC
Low-speed compression damping	
Comfort	20 clicks

Standard	15 clicks	
Sport	12 clicks	
Full payload	12 clicks	
High-speed compression damping		
Comfort	1.5 turns	
Standard	1.5 turns	
Sport	1.5 turns	
Full payload	1 turn	
Rebound damping		
Comfort	15 clicks	
Standard	12 clicks	
Sport	10 clicks	
Full payload	10 clicks	
Spring preload		
Comfort	8 mm (0.31 in)	
Standard	8 mm (0.31 in)	
Sport	8 mm (0.31 in)	
Full payload	9 mm (0.35 in)	
Spring rate		
Medium (standard)	170 N/mm (971 lb/in)	
Spring length	185 mm (7.28 in)	

Gas pressure	10 bar (145 psi)
Static sag	
Standard	20 mm (0.79 in)
Race track mode	14 mm (0.55 in)
Fitted length	384 mm (15.12 in)
Shock absorber fluid (Q p. 305)	SAE 2.5

23.9 Chassis tightening torques

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)
Remaining screws, chassis	EJOT PT® K45x12	1 Nm (0.7 lbf ft)
Screw, air filter box cover	EJOT PT® K60	2 Nm (1.5 lbf ft)
Screw, combination switch, left		5 Nm (3.7 lbf ft)
Screw, exhaust valve cover fastening	EJOT SF® M4x6-K	4 Nm (3 lbf ft)
Screw, quick release nipple of fuel tank cover	EJOT PT® K60	2 Nm (1.5 lbf ft)
Screw, tail light	EJOT PT® K50x14	2.5 Nm (1.84 lbf ft)
Screw, fixed grip, left	M4	2 Nm (1.5 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 for throttle grip	M5	3.5 Nm (2.58 lbf ft)
screw, absorbing element, combination instrument	M5	2 Nm (1.5 lbf ft) Loctite®243 TM
Screw, cable channel	M5	5 Nm (3.7 lbf ft)
Screw, chain sliding guard	M5	5 Nm (3.7 lbf ft)
Screw, combination instrument	M5	3.5 Nm (2.58 lbf ft)
Screw, combination switch, right	M5	5 Nm (3.7 lbf ft)
Screw, front turn signal bracket	M5	3 Nm (2.2 lbf ft)
Screw, fuel level sensor	M5	3 Nm (2.2 lbf ft)
Screw, fuel tank filler cap	M5	3 Nm (2.2 lbf ft)
Screw, rear turn signal bracket	M5	3 Nm (2.2 lbf ft)
Screw, shock absorber adjusting ring	M5	5 Nm (3.7 lbf ft)
Screw, trim	M5x12	3.5 Nm (2.58 lbf ft)
Cable disk nut, exhaust valve control unit	M6	14 Nm (10.3 lbf ft)
Ground fitting on frame	M6	10 Nm (7.4 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, ABS module fastening	M6	5 Nm (3.7 lbf ft)
Screw, angle sensor cover	M6	6 Nm (4.4 lbf ft)
		Loctite®243™
Screw, ball joint of push rod on	M6	5 Nm (3.7 lbf ft)
foot brake cylinder		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	M6	10 Nm (7.4 lbf ft)
brake line		Loctite®243™
Screw, cooler retaining bracket	M6	7 Nm (5.2 lbf ft)
Screw, exhaust clamp on main	M6	8 Nm (5.9 lbf ft)
silencer		
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, front wheel speed sensor	M6	4 Nm (3 lbf ft)
Screw, fuel pump	M6	6 Nm (4.4 lbf ft)
Screw, instrument support	M6	2 Nm (1.5 lbf ft)
Screw, license plate holder on	M6	12 Nm (8.9 lbf ft)
lower rear panel		
Screw, radiator hose clip	M6	3 Nm (2.2 lbf ft)

M6	4 Nm (3 lbf ft)	
M6	10 Nm (7.4 lbf ft)	
		Loctite®243™
M6	5 Nm (3.7 lbf ft)	
		Loctite®243™
M6	18 Nm (13.3 lbf ft)	
		Loctite®243™
M6	6 Nm (4.4 lbf ft)	
		Loctite®243™
M6	8 Nm (5.9 lbf ft)	
		Loctite®243™
M6	10 Nm (7.4 lbf ft)	
		Loctite®243™
M6x1	5 Nm (3.7 lbf ft)	
M8	7 Nm (5.2 lbf ft)	
M8	36 Nm (26.6 lbf ft)	
M8	12 Nm (8.9 lbf ft)	
M8	4 Nm (3 lbf ft)	
M8	6 Nm (4.4 lbf ft)	
M8	25 Nm (18.4 lbf ft)	
M8	25 Nm (18.4 lbf ft)	
	M6 M6 M6 M6 M6 M6 M6 M8 M8 M8 M8 M8 M8	M6 10 Nm (7.4 lbf ft) M6 5 Nm (3.7 lbf ft) M6 18 Nm (13.3 lbf ft) M6 6 Nm (4.4 lbf ft) M6 8 Nm (5.9 lbf ft) M6 10 Nm (7.4 lbf ft) M6 10 Nm (7.4 lbf ft) M8 7 Nm (5.2 lbf ft) M8 36 Nm (26.6 lbf ft) M8 12 Nm (8.9 lbf ft) M8 4 Nm (3 lbf ft) M8 6 Nm (4.4 lbf ft) M8 25 Nm (18.4 lbf ft)

Screw, axle clamp	M8	15 Nm (11.1 lbf ft)
Screw, bottom triple clamp	M8	15 Nm (11.1 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	M8	25 Nm (18.4 lbf ft)
screw)		
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	M8	20 Nm (14.8 lbf ft)
bracket		Loctite®243™
Screw, shift shaft deflector on	M8	10 Nm (7.4 lbf ft)
frame		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	M8	8 Nm (5.9 lbf ft)	
clamp			Loctite®243™
Screw, steering stem clamp	M8	20 Nm (14.8 lbf ft)	
			Loctite®243™
Screw, top triple clamp	M8	18 Nm (13.3 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, handlebar 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 holder	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	M10x1	15 Nm (11.1 lbf ft)	
piece, rear			

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, fork pivot	M19x1.5	130 Nm (95.9 lbf ft) Thread greased
Nut, seat lock	M22x1.5	6 Nm (4.4 lbf ft)
Screw, front wheel spindle	M25x1.5	45 Nm (33.2 lbf ft) Thread greased
Screw, steering head, top	M25x1.5	18 Nm (13.3 lbf ft)
Nut, rear axle, shock absorber side	M35x1.5	200 Nm (147.5 lbf ft) Loctite® 262 TM /lock the locking wire with locking varnish
Nut, rear axle	M50x1.5	250 Nm (184.4 lbf ft) Thread greased/lock locking wire with locking varnish

24.1 Declarations of conformity



Info

The functional and equipment scope is model-dependent and may not include all wireless systems and application areas referred to.

COBO SpA hereby declares that the **BT-ROUTER** wireless system conforms with the relevant guidelines. The full text of the Declaration of Conformity is available at the following Internet address.

Certification website: http://www.ktm.com/btrouter

JNS Instruments Ltd. hereby declares that the 210M1100 wireless system conforms with the relevant guidelines. The full text of the Declaration of Conformity is available at the following Internet address. Certification website: http://www.ktm.com/210m1100

KTM AG hereby declares that the **Immo641** wireless system conforms with the relevant guidelines. The full text of the Declaration of Conformity is available at the following Internet address.

Certification website: http://www.ktm.com/immo641

KTM AG hereby declares that the **KTM RACE ON system** wireless system conforms with the relevant guidelines. The full text of the Declaration of Conformity is available at the following Internet address. Certification website: http://www.ktm.com/ktm-race-on-system

KTM AG hereby declares that the **LC8 DASHBOARD** wireless system conforms with the relevant guidelines. The full text of the Declaration of Conformity is available at the following Internet address. Certification website: http://www.ktm.com/lc8-dashboard

Schrader Electronics Ltd hereby declares that the **Tyre Pressure Monitoring System** wireless system conforms with the relevant guidelines. The full text of the Declaration of Conformity is available at the following Internet address.

Certification website: http://www.ktm.com/tpms

210M1100

FCC ID: 2AKR7-210M1100 IC: 22291-210M1100

BT-ROUTER

FCC ID: Z64-2564N IC: 451I-2564N

Immo641

FCC ID: 2AKP9IMM0641 IC: 22273-IMM0641

KTM RACE ON system - Active Key

FCC ID: VFZKLGKZADI01 IC: 22239-KLGKZADI01

KTM RACE ON system - Main Unit

FCC ID: VFZKLGMZADI01 IC: 22239-KLGMZADI01

LC8 DASHBOARD

FCC ID: 2AKP9-LC8CLUSTER1 IC: 22273-LC8CLUSTER1

Tyre Pressure Monitoring System - Receiver "MC34MA4"

FCC ID: MRXMC34MA4 IC: 2546A-MC34MA4

24 DECLARATIONS OF CONFORMITY

Tyre Pressure Monitoring System - Sensor "BC5A4"

FCC ID: MRXBC5A4 IC: 2546A-BC5A4

Tyre Pressure Monitoring System - Sensor "RDC3"

FCC ID: MRXRDC3 IC: 2546A-RDC3

Declaration regarding modifications

Alterations and modifications not expressly approved by the relevant authority may result in the user being prohibited from operating the equipment.

Declaration regarding interference

This device fulfills Part 15 of the FCC regulations as well as the license-free RSS standards of the Canadian Government Department **Industry Canada**.

Operation is subject to the following two conditions:

- 1 This device must not cause interference.
- 2 This device must be able to absorb any interference, including interference that potentially causes undesirable operation of the device.

Note on radio transmissions

This device corresponds to the FCC limit values for radiation exposure, which have been determined for a non-controlled environment, and fulfills the FCC guidelines for the load from radio frequencies.

The transmitter must not be set up near to other antennas or transmitters or operated in conjunction with other antennas or transmitters.

To meet the **ISED Canada** requirements, a minimum distance of 1 cm should be maintained between the antenna of this device and persons during operation. To ensure that there is compliance with the regulations, operation at shorter distances is not recommended.

Note on digital devices of Class B according to the FCC regulations

This device has been tested and fulfills the limit values for digital devices of Class B according to the FCC regulations, Part 15.

These limit values are designed so as to provide sufficient protection from harmful interference in residential areas.

Devices of this type generate and use high frequencies and can also emit these. Therefore, if they are not installed and operated in accordance with the instructions, they may cause harmful interference to radio reception. However, there is no guarantee that interference will not occur in certain cases of application. Should this device cause harmful interference to radio or television reception, (check this by switching the device on and off), you can potentially eliminate this interference as follows:

- Re-align the receiving antenna.
- Increase the separation between device and radio receiver.
- Connect the device and the radio receiver to separate electric circuits.
- Consult your dealer or a radio/TV technician.

CAN ICES-3 (B) / NMB-3 (B)

This digital device of Class B fulfills the regulations in accordance with the Canadian Interference-Causing Equipment Standard ICES-003 / NMB-003.

DECLARATIONS OF CONFORMITY

24.2 **Country-specific declarations of conformity**

KTM RACE ON system



CNE COMISIÓN NACIONAL DE COMUNICACIONES H-20232

Complies with

IMDA Standards DA107682



AGREE PAR L'ANRT MAROC

Numéro d'agrément : MR 14688 ANRT 2017 Date d'agrément : 31/08/2017



AGREE PAR L'ANRT MAROC

Numéro d'agrément : MR 14690 ANRT 2017



Date d'agrément : 31/08/2017

Model: XCB0307



Model: K0349-0



06880-17-08714

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário."

F01503-01





07026-17-08714

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial. mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário."

Brake fluid DOT 4 / DOT 5.1

Standard/classification

- DOT

Guideline

 Use only brake fluid that complies with the specified standard (see specifications on the container) and that exhibits the corresponding properties.

Recommended supplier

Castrol

REACT PERFORMANCE DOT 4

MOTOREX®

Brake Fluid DOT 5.1

Coolant

Guideline

- Only use high-grade, silicate-free coolant with corrosion inhibitor additive for aluminum motors. Low grade and unsuitable antifreeze causes corrosion, deposits and frothing.
- Do not use pure water as only coolant is able to meet the requirements needed in terms of corrosion protection and lubrication properties.
- Only use coolant that complies with the requirements stated (see specifications on the container) and that has the relevant properties.

Antifreeze protection to at least	
-----------------------------------	--

25 SUBSTANCES

The mixture ratio must be adjusted to the necessary antifreeze protection. Use distilled water if the coolant needs to be diluted.

The use of premixed coolant is recommended.

Observe the coolant manufacturer specifications for antifreeze protection, dilution and miscibility (compatibility) with other coolants.

Recommended supplier MOTOREX®

COOLANT M3.0

Engine oil (SAE 10W/50)

Standard/classification

- SAE (♠ p. 309) (SAE 10W/50)

Guideline

 Use only engine oils that comply with the specified standards (see specifications on the container) and that possess the corresponding properties.

Fully synthetic engine oil

Recommended supplier MOTOREX®

Power Synt 4T

Engine oil (SAE 5W/40)

Standard/classification

- JASO T903 MA2 (≅ p. 309)
- SAE (IP p. 309) (SAE 5W/40)

Guideline

 Use only engine oils that comply with the specified standards (see specifications on the container) and that possess the corresponding properties.

Fully synthetic engine oil

Recommended supplier

MOTOREX®

- Power Synt 4T

Fork oil (SAE 4) (48601166S1)

Standard/classification

- SAE (♀ p. 309) (SAE 4)

Guideline

 Use only oils that comply with the specified standards (see specifications on the container) and that exhibit the corresponding properties.

Shock absorber fluid (SAE 2.5) (50180751S1)

Standard/classification

- SAE (₩ p. 309) (SAE 2.5)

25 SUBSTANCES

Guideline

 Use only oils that comply with the specified standards (see specifications on the container) and that exhibit the corresponding properties.

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 **not** use fuel containing methanol (e. g. M15, M85, M100) or more than 10 % ethanol (e. g. E15, E25, E85, E100).

Chain cleaner

Recommended supplier MOTOREX®

- Chain Clean

Fuel additive

Recommended supplier MOTOREX®

Fuel Stabilizer

Long-life grease

Recommended supplier MOTOREX®

- Bike Grease 2000

Motorcycle cleaner

Recommended supplier MOTOREX®

- Moto Clean

Perfect finish and high gloss polish for paints

Recommended supplier MOTOREX®

Moto Shine

26 AUXILIARY SUBSTANCES

Preserving materials for paints, metal and rubber

Recommended supplier MOTOREX®

Moto Protect

Special cleaner for glossy and matte paint finishes, metal and plastic surfaces

Recommended supplier MOTOREX®

- Quick Cleaner

Street chain spray

Guideline

 $\begin{array}{l} \textbf{Recommended supplier} \\ \textbf{MOTOREX}^{\text{\tiny{\$}}} \end{array}$

- Chainlube Road Strong

Universal oil spray

Recommended supplier MOTOREX®

- Joker 440 Synthetic

JASO T903 MA2

Different technical development directions required a separate specification for motorcycles – the **JASO T903 MA2** standard.

Earlier, engine oils from the automobile industry were used for motorcycles because there was no separate motorcycle specification.

Whereas long service intervals are demanded for automobile engines, the focus for motorcycle engines is on high performance at high engine speeds.

In most motorcycle engines, the transmission and clutch are lubricated with the same oil.

The JASO T903 MA2 standard meets these special requirements.

SAE

The SAE viscosity classes were defined by the Society of Automotive Engineers and are used for classifying oils according to their viscosity. The viscosity describes only one property of oil and says nothing about quality.

28 INDEX OF SPECIAL TERMS

Anti-lock braking system	Safety system that prevents locking of the wheels when driving straight ahead without the influence of lateral forces
Automatic Turn Indicator Reset	Software, which automatically switches the indicator off according to a time or travel distance counter
Daytime Running Light	Light, which enhances the visibility of the vehicle dur- ing the day but is not focused, and in contrast to low beam does not illuminate the road surface
Engine traction torque control	Auxiliary function of the engine control, which prevents rear wheel locking with excessive engine braking effect, by lightly opening the throttle valve
KTM MY RIDE	System for wireless communication with appropriate cellphones and headsets for telephony and audio
KTM RACE ON	System that releases the ignition, steering lock, and fuel tank filler cap via a remote key with a transponder
Launch control	Vehicles electronics functions for achieving the best possible acceleration from a standing position
Motorcycle Stability Control	The is an auxiliary function for the ABS, which can prevent blocking and slipping of the wheels during braking on an inclined position, within the physical limitations
Motorcycle Traction Control	Auxiliary function of the motor control that reduces engine torque with spinning rear wheel
	Automatic Turn Indicator Reset Daytime Running Light Engine traction torque control KTM MY RIDE KTM RACE ON Launch control Motorcycle Stability Control

OBD	On-board diagnosis	Vehicle system, which monitors the specified parameters of the vehicle electronics
-	Quickshifter +	Engine electronics function for shifting up and down without clutch actuation
TPMS	Tire pressure monitoring system	A safety system that monitors the tire pressure with the assistance of sensors in the tires and displays it to the rider

29 LIST OF ABBREVIATIONS

Art. no.	Article number
ca.	circa
cf.	compare
e.g.	for example
etc.	et cetera
i.a.	inter alia
no.	number
poss.	possibly

30.1 Red symbols

Red symbols indicate an error condition that requires immediate intervention.



The oil pressure warning lamp lights up red – The oil pressure is too low. Stop immediately, taking care not to endanger yourself or other road users in the process, and switch off the engine.

30.2 Yellow and orange symbols

Yellow and orange symbols indicate an error condition that requires prompt intervention. Active driving aids are also represented by yellow or orange symbols.

£ 3	Malfunction indicator lamp lights up yellow – The OBD has detected an error in the vehicle electronics. Come safely to a halt, and contact an authorized KTM workshop.
(ABS))	ABS warning lamp lights up/flashes yellow – Status or error messages relating to ABS. The ABS warning lamp flashes if the ABS mode SMOTO is enabled.
<u>(TC)</u>	TC indicator lamp lights up/flashes yellow – MTC (p. 252) is not enabled or is currently intervening. The TC indicator lamp also lights up if an error is detected. Contact an authorized KTM workshop. The TC indicator lamp flashes if MTC actively engages or if the launch control (p. 123) (optional) is activated.
	Race-on indicator lamp lights up/flashes yellow/orange/red – Status or error messages relating to KTM RACE ON /alarm system.
<u></u> ♠	The general warning lamp lights up yellow – A note/warning note on operating safety was detected. This is also shown on the combination instrument.

30 LIST OF SYMBOLS

30.3 Green and blue symbols

Green and blue symbols reflect information.

(The left turn signal indicator lamp flashes green with a steady rhythmic flash – The left turn signal is switched on.
N	The idle indicator lamp lights up green – The transmission is in neutral.
→	The right turn signal indicator lamp flashes green with a steady rhythmic flash – The right turn signal is switched on.
	The high beam indicator lamp lights up blue – The high beam is switched on.

	Brake fluid
1	adding rear brake fluid
12-V battery	front brake, adding
charging 222 installing 219 removing 217	Brake fluid level front brake, checking
A	Brake linings
ABS	front brake, checking
ACC1	rear brake, checking
front	Brake system
rear 245	Brakes
ACC2	C
front 244	Capacity
rear 245	Coolant
Accessories	engine oil 260, 285
Anti-lock braking system	fuel 140, 285
Applying the brakes	Chain
Auxiliary substances	checking 178
В	cleaning
Baggage lugs	dirt, checking for 173
Brake discs	Chain guide checking

Chain tension	General Info
adjusting	Heated grips
checking 175	Heating
Clutch	indicator lamps
fluid level, checking/correcting 183	KTM MY RIDE
Clutch lever	Language
basic position, adjusting	Launch Control
	menu 70
Combination instrument	MTC 86
ABS	overview
Activation and test	Pairing
adjusting tilt	Pressure
Anti Wheelie Mode	Quick Shift +
Audio	Quick Selector 1
Bluetooth®94	Quick Selector 2
Clock/Date	Ride Mode
coolant temperature indicator 68	Service
cruise control indicator	Set Favorites
day-night mode	Settings
display62	shift warning light 66
Distance	Shift Light
DRL 81	slip adjustment
Extra Functions	telephony 100
Favorites 70	Temp
fuel level display	Throttle Response
Fuel Cons	•

time 68	Diagnostics connector
TPMS 89	DRL 216
Track 92	E
TRACK Display (optional) 64	Electric starter button
trip distance counter	Emergency OFF switch
Trip 1	• •
Trip 2 72	Engine
Unit settings	running in
Warning	Engine number
warnings 57	Engine oil
Combination switch	adding 263
left side	changing
right	Engine oil level
Coolant level	checking
compensating tank, checking 246	
correcting in the compensating tank 248	Engine sprocket
	checking 178
Cruise control system operation	Engine traction torque control
·	Environment
Customer service	F
D	Figures
Daytime running light	Foot brake lever
Declarations of conformity 298-302	basic position, adjusting
country-specific	Setting the step plate
33411.1, 50501110 1111111111111111111111111111	octing the step plate

Fork	Hazard warning flasher
Fork legs dust boots, cleaning	daytime running light
Fork part number	Headlight setting checking
mounting 168 removing 167	Helmet lock mounting on the vehicle
Front wheel installing	Horn button
Fuel tank filler cap closing	Immobilizer 44 Implied warranty 18 Intended use 12
Fuel, oils, etc	K Key number
Н	Launch Control
Hand brake lever	Luggage
Handlebar position 102 adjusting 102	

M	Oil screens
Main fuse changing	cleaning 256 Owner's Manual 17
Main silencer	P
installing	Parking
Manufacturer warranty 18 Menu switch 33 Misuse 12	Passenger seat mounting 166 removing 166
Motorcycle cleaning	Preparing for use advice on preparing for first use
Motorcycle traction control 252 MSR 132	Quickshifter+
MTC	Race-on key
Oil filter changing 256	Race-on tip switch

Rear sprocket	high-speed compression damping, adjusting . 150
checking	low-speed compression damping, adjusting . 149
Rear wheel installing	rebound damping, adjusting
Refueling	Shock absorber article number
fuel 139	Side stand
Riding 126 starting off 123 starting off with launch control 124	Slip adjustment253Spare parts18Starting120
s	Steering damper article number
Safe operation	Steering lock
Seat lock	Stopping 135 Storage 27
Service 19 Service schedule 141-144	Storage compartment closing
Shift lever	opening
basic position, adjusting	Supporting strap
Shift lever stub	T
setting	Technical data
Shock absorber	capacities 285 chassis 286 chassis tightening torques 297

electrical system	V
engine 278 engine tightening torques 280 fork 288 shock absorber 289 tires 288 Throttle grip 31 Tire condition 211	Vehicle loading
	Winter energtion
Tire pressure checking	Winter operation checks and maintenance steps
Tire repair spray using	Work rules
Tool set 49 Transporting 137 Troubleshooting 274-277 Turn signal switch 34 Type label 26	
U	
USB cable USB cable, connecting	





3213927en 07/2018







