OWNER'S MANUAL 2015

WWW.KTM.COM

350 EXC-F EU 350 EXC-F Six Days EU 350 EXC-F Factory Edition EU 350 EXC-F AU 350 EXC-F BR 350 XCF-W US 350 XCF-W Six Days US

Art. no. 3213235en



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 accordingly.

We wish you a lot of enjoyment in riding this vehicle.

Please enter the serial number of your vehicle below.

Chassis number (p. 12)	Stamp of dealer
Engine number (🕈 p. 12)	
Key number (All EXC-F models) (* p. 12)	

The Owner's Manual contained the latest information for this model series at the time of going to print. Slight deviations resulting from continuing development and design of the motorcycles can, however, not be completely excluded.

All specifications are non-binding. KTM Motorrad AG specifically reserves the right to modify or delete technical specifications, prices, colors, forms, materials, services, designs, equipment, etc., without prior notice and without specifying reasons, to adapt these to local conditions, as well as to stop production of a particular model without prior notice. KTM accepts no liability for delivery options, deviations from illustrations and descriptions, misprints, and other errors. The models portrayed partly contain special equipment that does not belong to the regular scope of supply.

© 2014 KTM Motorrad AG, Mattighofen Austria

All rights reserved

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)

According to the international quality management standard ISO 9001, KTM uses quality assurance processes that lead to the maximum possible quality of the products. Issued by: TÜV Management Service

^{REG.NO. 12 100 6061} KTM Motorrad AG 5230 Mattighofen, Austria

TABLE OF CONTENTS

1	MEANS	OF REPRESENTATION 5
	1.1	Symbols used 5
	1.2	Formats used 5
2	SAFETY	(ADVICE 6
	2.1	Use definition - intended use 6
	2.2	Safety advice
	2.3	Degrees of risk and symbols
	2.4	Tampering warning
	2.5	Safe operation
	2.6	Protective clothing 7
	2.7	Work rules
	2.8	Environment
	2.9	Owner's Manual
3		TANT NOTES
5	3.1	Guarantee, warranty
	3.2	
		Operating and auxiliary substances
	3.3	Spare parts, accessories
	3.4	Service
	3.5	Figures
	3.6	Customer service
4		F VEHICLE 10
	4.1	View of vehicle, front left (example) 10
	4.2	View of vehicle, rear right (example) 11
5	SERIAL	NUMBERS 12
	5.1	Chassis number 12
	5.2	Type label 12
	5.3	Key number (All EXC-F models) 12
	5.4	Engine number 12
	5.5	Fork part number 12
	5.6	Shock absorber part number 13
6	CONTR	OLS 14
•	6.1	Clutch lever
	6.2	Hand brake lever
	6.3	Throttle grip
	6.4	Kill switch (EXC-F EU/AU/BR,
	0.4	EXC-F Factory Edition)
	6.5	Kill switch (EXC-F Six Days)
	6.6	Kill switch (All XCF-W models)
	6.7	Horn button (EXC-F EU/AU/BR,
	6.7	EXC-F Factory Edition)
	6.8	
		Horn button (EXC-F Six Days)
	6.9	Light switch (EXC-F EU/AU/BR,
	6.10	EXC-F Factory Edition)
		Light switch (EXC-F Six Days)
	6.11	Light switch (All XCF-W models)
	6.12	Turn signal switch (EXC-F EU/AU/BR,
	C 1 2	EXC-F Factory Edition)
	6.13	Turn signal switch (EXC-F Six Days)
	6.14	Emergency OFF switch (EXC-F AU)
	6.15	Electric starter button (EXC-F EU,
		EXC-F Factory Edition, EXC-F BR, All XCF-W models. All Six Days models)
	C 1 C	, , , , , , , , , , , , , , , , , , , ,
	6.16	Electric starter button (EXC-F AU) 17
	6.17	Overview of indicator lamps (All EXC-F models)
	6 10	
	6.18	Overview of indicator lamps (All XCF-W models)
	6 10	
	6.19	Opening filler cap
	6.20	Closing filler cap
	6.21	Idle speed adjusting screw
	6.22	Shift lever
	6.23	Kick starter 19

	6.24	Foot brake lever	19
	6.25	Side stand	19
	6.26	Steering lock (All EXC-F models)	
	6.27	-	
		Locking the steering (All EXC-F models)	
_	6.28	Unlocking the steering (All EXC-F models)	
7	SPEED	OMETER	
	7.1	Speedometer overview	21
	7.2	Activation and test	21
	7.3	Setting kilometers or miles	
	7.4	Setting the speedometer functions	
	7.5		
		Setting the clock	
	7.6	Viewing the lap time	
	7.7	Display mode SPEED (speed)	23
	7.8	Display mode SPEED/H (service hours)	23
	7.9	Setup menu	
	7.10	Setting the unit of measurement	
	7.11	Display mode SPEED/CLK (time)	
	7.12	Setting the clock	
	7.13	Display mode SPEED/LAP (lap time)	25
	7.14	Viewing the lap time	25
	7.15	Display mode SPEED/ODO (odometer)	26
	7.16	Display mode SPEED/TR1 (trip master 1)	
	7.17	Display mode SPEED/TR2 (trip master 2)	
	7.18	Setting TR2 (trip master 2)	
	7.19	Display mode SPEED/A1 (average speed 1)	27
	7.20	Display mode SPEED/A2 (average speed 2)	27
	7.21	Display mode SPEED/S1 (stop watch 1)	28
	7.22	Display mode SPEED/S2 (stop watch 2)	
	7.23	Table of functions	
~	7.24	Table of conditions and menu activation	
8		RING FOR USE	
	8.1	Advice on first use	30
	8.2	Running-in the engine	31
	0 0		
	8.3	Preparing the vehicle for difficult riding	
	8.3	Preparing the vehicle for difficult riding conditions	31
		conditions	
	8.4	conditions Preparing for rides on dry sand	32
	8.4 8.5	conditions Preparing for rides on dry sand Preparing for rides on wet sand	32
	8.4	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy	32 32
	8.4 8.5 8.6	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces	32 32
	8.4 8.5	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and	32 32 33
	8.4 8.5 8.6	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed	32 32 33
	8.4 8.5 8.6	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and	32 32 33
	8.4 8.5 8.6 8.7 8.8	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow	 32 32 33 33 33
9	8.4 8.5 8.6 8.7 8.8	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in	 32 32 33 33 33
9	8.4 8.5 8.6 8.7 8.8	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow	 32 32 33 33 33
9	8.4 8.5 8.6 8.7 8.8 RIDING	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow A INSTRUCTIONS	32 32 33 33 33 33 34
9	8.4 8.5 8.6 8.7 8.8 RIDING 9.1	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow A INSTRUCTIONS Checks and maintenance work when preparing for use	32 32 33 33 33 34 34
9	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow G INSTRUCTIONS Checks and maintenance work when preparing for use Starting	32 32 33 33 33 34 34 34
9	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow A INSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off	32 32 33 33 33 34 34 34 35
9	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow GINSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off Shifting, riding	 32 32 33 33 33 34 34 34 35 35
9	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4 9.5	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow G INSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off Braking	 32 32 33 33 34 34 35 35 35
9	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow GINSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off Shifting, riding	 32 32 33 33 34 34 35 35 35
9	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4 9.5	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow G INSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off Braking	 32 32 33 33 33 34 34 35 35 36
9	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4 9.5 9.6	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow GINSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off Shifting, riding Braking Stopping, parking Transport	 32 32 33 33 33 34 34 35 35 36 36 36
-	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4 9.5 9.6 9.7 9.8	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow G INSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off Starting off Starting Stopping, parking Transport Refueling	 32 32 33 33 34 34 35 35 36 36 37
9	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4 9.5 9.6 9.7 9.8 SERVIC	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow INSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off Starting off Starting Starting Starting Stopping, parking Refueling CE SCHEDULE	 32 32 33 33 34 34 35 35 36 37 38
-	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4 9.5 9.6 9.7 9.8 SERVIC 10.1	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow G INSTRUCTIONS Checks and maintenance work when preparing for use Starting off Starting off Starting off Starting off Stopping, parking Transport Refueling Service schedule	 32 32 33 33 34 34 35 35 36 36 37 38 38
10	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4 9.5 9.6 9.7 9.8 SERVIC 10.1 10.2	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow G INSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off Starting off Shifting, riding Braking Stopping, parking Transport Refueling CE SCHEDULE Service schedule Service work (as additional order)	 32 32 33 33 34 34 35 35 36 36 37 38 39
-	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4 9.5 9.6 9.7 9.8 SERVIC 10.1 10.2	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow G INSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off Starting off Starting dif Starting Stopping, parking Transport Refueling CE SCHEDULE Service schedule G THE CHASSIS	 32 32 33 33 34 34 35 35 36 36 37 38 39
10	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4 9.5 9.6 9.7 9.8 SERVIC 10.1 10.2	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow G INSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off Starting off Shifting, riding Braking Stopping, parking Transport Refueling CE SCHEDULE Service schedule Service work (as additional order)	 32 32 33 33 34 34 35 35 36 36 37 38 39
10	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4 9.5 9.6 9.7 9.8 SERVIC 10.1 10.2 TUNING	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow G INSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off Starting off Starting dif Starting Stopping, parking Transport Refueling CE SCHEDULE Service schedule G THE CHASSIS	 32 32 33 33 34 34 35 35 36 36 37 38 39 40
10	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4 9.5 9.6 9.7 9.8 SERVIC 10.1 10.2 TUNING	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow G INSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off Starting off Starting dif Stopping, parking Transport Refueling CE SCHEDULE Service schedule Service work (as additional order) G THE CHASSIS Checking the basic suspension setting against	 32 32 33 33 34 34 35 35 36 36 37 38 39 40 40
10	8.4 8.5 8.6 8.7 8.8 RIDING 9.1 9.2 9.3 9.4 9.5 9.6 9.7 9.8 SERVIC 10.1 10.2 TUNING 11.1	conditions Preparing for rides on dry sand Preparing for rides on wet sand Preparing for rides on wet and muddy surfaces Preparing for rides at high temperature and slow speed Preparing for rides at low temperature or in snow G INSTRUCTIONS Checks and maintenance work when preparing for use Starting Starting off Starting off Starting dif Stopping, parking Transport Refueling CE SCHEDULE Service schedule Service work (as additional order) G THE CHASSIS Checking the basic suspension setting against the rider's weight	 32 32 33 33 34 34 35 35 36 36 37 38 39 40 40

TABLE OF CONTENTS

	11.4	Adjusting the high-speed compression	
		damping of the shock absorber	41
	11.5	Adjusting the rebound damping of the shock	
		absorber	
	11.6	Measuring rear wheel sag unloaded	
	11.7	Checking the static sag of the shock absorber	
	11.8	Checking the riding sag of the shock absorber	42
	11.9	Adjusting the spring preload of the shock	
		absorber 🔧	
	11.10	Adjusting the riding sag 🔌	
	11.11	Checking basic setting of fork	44
	11.12	Adjusting the compression damping of the fork	лл
	11.13	Adjusting the rebound damping of the fork	
	11.13	Adjusting the spring preload of the fork	40
	11.14	(EXC-F EU/AU/BR, EXC-F Factory Edition,	
		XCF-W)	46
	11.15	Handlebar position	
	11.16	Adjusting handlebar position 🌂	
12		E WORK ON THE CHASSIS	
	12.1	Raising the motorcycle with the lift stand	
	12.2	Removing the motorcycle from the lift stand	
	12.3	Bleeding the fork legs	
	12.4	Cleaning the dust boots of the fork legs	
	12.5	Loosening the fork protector	
	12.6	Positioning the fork protector	
	12.7	Removing the fork legs \	
	12.7	Installing the fork legs 4	
	12.8	Removing the fork protector	
	12.9	Installing the fork protector	
			52
	12.11	Removing the lower triple clamp ▲ (EXC-F EU/AU/BR, XCF-W)	52
	12.12	Removing the lower triple clamp ◀ (EXC-F Factory Edition, All Six Days models)	53
	12.13	Installing the lower triple clamp (EXC-F EU/AU/BR, XCF-W)	
	12.14	Installing the lower triple clamp 🔌	
		(EXC-F Factory Edition, All Six Days models)	
	12.15	Checking the steering head bearing play	58
	12.16	Adjusting the play of the steering head	50
	12.17	bearing \checkmark (EXC-F EU/AU/BR, XCF-W) Adjusting the play of the steering head	59
	12.17	bearing 🍓 (EXC-F Factory Edition, All Six Days	
		models)	59
	12.18	Greasing the steering head bearing 4	
	12.19	Removing the front fender	
	12.20	Installing the front fender	
	12.21	Removing the shock absorber &	
	12.22	Installing the shock absorber 4	
	12.23	Removing the seat	
	12.24	Mounting the seat	
	12.25	Removing the air filter box lid	
	12.26	Installing the air filter box lid	
	12.27	Removing the air filter \	
	12.28	Installing the air filter	
	12.20	Cleaning the air filter and air filter box -	
	12.29	Sealing the air filter box	
	12.30	Removing main silencer	
	12.31	Installing the main silencer	
	12.32	Changing the glass fiber yarn filling of the	04
	12.00	main silencer	64
	12.34	Removing the fuel tank 🌂	
	12.35	Installing the fuel tank 4	

	12.36	Checking for chain dirt accumulation	68
	12.37	Cleaning the chain	68
	12.38	Checking the chain tension	69
	12.39	Adjusting the chain tension	69
	12.40	Checking the chain, rear sprocket, engine	
		sprocket and chain guide	
	12.41	Checking the frame	
	12.42	Checking the swingarm 4	
	12.43	Checking the throttle cable routing	
	12.44 12.45	Checking the rubber grip Additionally securing the rubber grip	
	12.45	Adjusting the basic position of the clutch	/5
	12.40	lever	73
	12.47	Checking/correcting the fluid level of the	
		hydraulic clutch	
	12.48	Changing the hydraulic clutch fluid A	74
	12.49	Removing the engine guard (EXC-F Factory Edition, EXC-F AU, All Six Days models)	74
	12.50	Installing the engine guard	/4
	12.00	(EXC-F Factory Edition, EXC-F AU, All Six Days	
		models)	
13		SYSTEM	
	13.1	Checking free travel of hand brake lever	/5
	13.2	Adjusting free travel of hand brake lever (All EXC-F models)	75
	13.3	Adjusting the basic position of the hand brake	75
		lever (All XCF-W models)	75
	13.4	Checking the brake discs	76
	13.5	Checking the brake fluid level of the front	
		brake	
	13.6	Adding front brake fluid A	
	13.7	Checking the front brake linings	
	13.8 13.9	Changing the front brake linings ◀ Checking the free travel of foot brake lever	
	13.10	Adjusting the basic position of the foot brake	19
	10.10	lever 4	79
	13.11	Checking the rear brake fluid level	80
		Adding rear brake fluid 🔌	
		Checking the rear brake linings	
		Changing the rear brake linings 4	
14		S, TIRES	
	14.1	Removing the front wheel	
	14.2	Installing the front wheel	
	14.3 14.4	Removing the rear wheel A	
	14.4	Checking the tire condition	
	14.5	Checking the tire air pressure	
	14.7	Checking spoke tension	
15		RICAL SYSTEM	
	15.1	Removing the battery 🌂	89
	15.2	Installing the battery 🔧	89
	15.3	Charging the battery \blacktriangleleft	
	15.4	Changing the main fuse	91
	15.5	Changing the fuses of individual power consumers	a 2
	15.6	Removing headlight mask with headlight	
	15.7	Refitting the headlight mask with the	52
		headlight	93
	15.8	Changing the headlight bulb	
	15.9	Changing the turn signal bulb (All EXC-F	
	1 - 1 -	models)	
	15.10	Checking the headlight setting	95

TABLE OF CONTENTS

	15.11	Adjusting the headlight range	. 95
	15.12	Changing the speedometer battery	. 95
16	COOLIN	NG SYSTEM	. 97
	16.1	Cooling system	. 97
	16.2	Checking the antifreeze and coolant level	. 97
	16.3	Checking the coolant level	. 98
	16.4	Draining the coolant 🔧	. 98
	16.5	Refilling coolant 🔌	. 99
17	TUNIN	G THE ENGINE	100
	17.1	Checking the play in the throttle cable	100
	17.2	Adjusting the play in the throttle cable 4	100
	17.3	Adjusting the idle speed A	101
	17.4	Checking the basic position of the shift lever	101
	17.5	Adjusting the basic position of the shift lever	101
18	SERVIC	E WORK ON THE ENGINE	102
10	18.1	Changing the fuel screen A	102
	18.2	Checking the engine oil level	102
	18.3	Changing the engine oil and oil filter,	102
	10.0	cleaning the oil screen A	103
	18.4	Adding engine oil	105
19	CLEAN	ING, CARE	106
	19.1	Cleaning the motorcycle	106
	19.2	Checks and maintenance steps for winter	
		operation	107
20		GE	108
	20.1	Storage	108
	20.2	Preparing for use after storage	108
21		LESHOOTING	109
22		CODE	111
23		ICAL DATA	113
	23.1	Engine	113
	23.2	Engine tightening torques	113
	23.3	Capacities	115
	23.3.1	Engine oil	115
	23.3.2	Coolant	115
	23.3.3	Fuel	115
	23.4	Chassis	115
	23.5 23.6	Electrical system	116 116
	23.6	Tires Fork	116
	23.7.1	EXC-F EU/AU/BR, EXC-F Factory Edition,	110
	23.7.1	XCF-W	116
	23.7.2	All Six Days models	117
	23.8	Shock absorber	117
	23.9	Chassis tightening torques	118
24	SUBST	ANCES	120
25	AUXILI	ARY SUBSTANCES	122
26	STAND	ARDS	124
IND	EX		125

1 MEANS OF REPRESENTATION

/ X	Indicates an expected reaction (e.g. of a work step or a function).
X	Indicates on unavageted reaction (e.g. of a work step or a function)
	Indicates an unexpected reaction (e.g. of a work step or a function).
2	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. There, your motorcycle will be optimally cared for by specially trained experts using the specialist tools required.
r	Indicates a page reference (more information is provided on the specified page).

Specific name	Identifies a proprietary name.
Name®	Identifies a protected name.
Brand™	Identifies a brand available on the open market.

2 SAFETY ADVICE

2.1 Use definition - intended use

(All EXC-F models)

KTM sport motorcycles are designed and built to withstand the normal stresses and strains of competitive use. The motorcycles comply with currently valid regulations and categories of the top international motorsport organizations.

• Info

The vehicle should only be used by trained persons. The motorcycle is authorized for public road traffic in the homologous (reduced) version only.

In the derestricted version, the motorcycle must be used only on closed off property remote from public road traffic. This motorcycle is designed for use in offroad endurance competition and not primarily for use in motocross.

(All XCF-W models)

KTM sport motorcycles are designed and built to withstand the normal stresses and strains of competitive use. The motorcycles comply with currently valid regulations and categories of the top international motorsport organizations.

Info

This motorcycle is designed for use in offroad endurance competition and not primarily for use in motocross.

A number of safety instructions need to be followed to operate the vehicle safely. Therefore, read this manual carefully. The safety instructions are highlighted in the text and are referred to at the relevant passages.

lnfo

The vehicle has various information and warning labels at prominent locations. Do not remove information/warning labels. If they are missing, you or others may not recognize dangers and may therefore be injured.

2.3 Degrees of risk and symbols

Danger

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



Warning

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



Caution

Warning

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

Note

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

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



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 maintenance, 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
- 2 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:

2 SAFETY ADVICE

- 1 Removal or puncturing of the main silencer, 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 part of the vehicle, or parts of the exhaust or intake system, with parts other than those specified by the manufacturer.

2.5 Safe operation

Danger

Danger of accidents Danger arising from the rider's judgement being impaired.

 Do not operate the vehicle while under the influence of alcohol, drugs and certain medications or physically or mentally impaired.



Danger

Danger of poisoning Exhaust gases are toxic and inhaling them may result in unconsciousness and/or death.

 When running the engine, always make sure there is sufficient ventilation, and do not start or run the engine in an enclosed space without an effective exhaust extraction system.



Warning

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

Do not touch hot components such as exhaust system, radiator, engine, shock absorber, and the brake system. Allow these
components to cool down before starting work on them.

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.

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.

2.6 Protective clothing

Warning

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

- Wear protective clothing (helmet, boots, gloves, pants and jacket with protectors) every time you ride the vehicle. Always wear protective clothing that is in good condition and meets the legal requirements.

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

2.7 Work rules

Special tools are necessary for certain tasks. The tools are not contained in the vehicle but can be ordered under the number in parentheses. E.g.: bearing puller (15112017000)

During assembly, non-reusable parts (e.g. self-locking screws and nuts, seals and seal rings, O-rings, pins, lock washers) must be replaced by new parts.

In some instances, a thread locker (e.g. **Loctite**[®]) is required. The manufacturer instructions for use must be followed. After disassembly, clean the parts that are to be reused and check them for damage and wear. Change damaged or worn parts. After you complete the repair or service work, check the operating safety of the vehicle.

2.8 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 SAFETY ADVICE

2.9 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 maintain 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 should be handed over to the new owner if the vehicle is sold.

3 IMPORTANT NOTES

3.1 Guarantee, warranty

The work prescribed in the service schedule must be carried out by an authorized KTM workshop only and confirmed in the customer's Service & Warranty Booklet and in the **KTM Dealer.net**; otherwise, all warranty claims will be void. No warranty claims can be considered for damage resulting from manipulations and/or alterations to the vehicle.

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

3.2 Operating and auxiliary substances

A Warning

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

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

Use operating and auxiliary substances (such as fuel and lubricants) as specified in the Owner's Manual.

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 as on sand or on wet and muddy surfaces, 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.

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

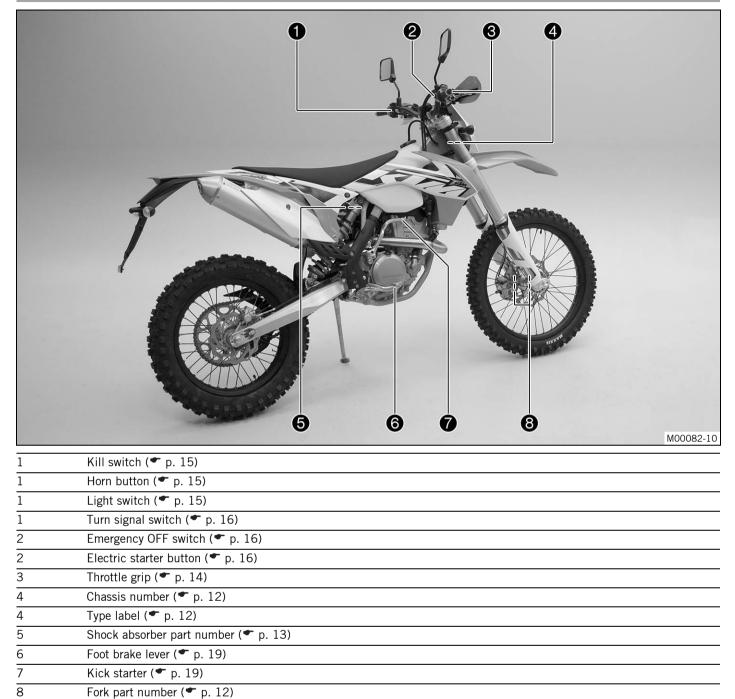
4 VIEW OF VEHICLE

4.1 View of vehicle, front left (example)

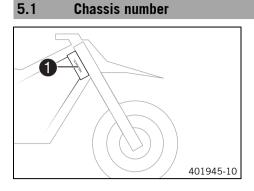
	<image/>
1	Hand brake lever (p. 14)
2	Clutch lever (* p. 14)
	Filler cap
	Shift lever (* p. 18)
	Engine number (* p. 12)
6	Side stand (* p. 19)

4 VIEW OF VEHICLE

4.2 View of vehicle, rear right (example)

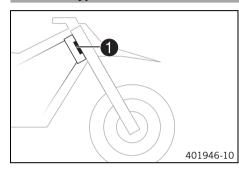


5 SERIAL NUMBERS



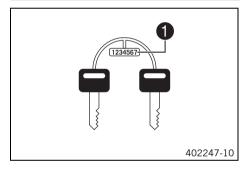
The chassis number **1** is stamped on the steering head on the right.

5.2 Type label



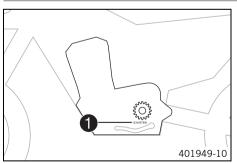
The type label 1 is fixed to the front of the steering head.

5.3 Key number (All EXC-F models)



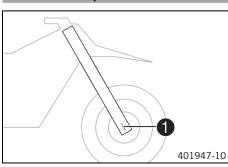
The key number **1** for the steering lock is stamped onto the key connector.

5.4 Engine number



The engine number **1** is stamped on the left side of the engine under the engine sprocket.

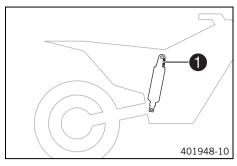
5.5 Fork part number



The fork part number **①** is stamped on the inner side of the fork stub.

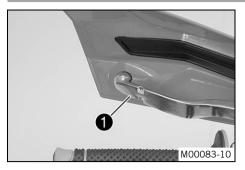
5 SERIAL NUMBERS

5.6 Shock absorber part number



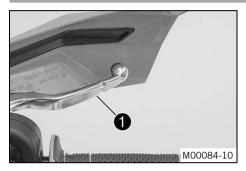
The shock absorber part number **1** is stamped on the top of the shock absorber above the adjusting ring on the engine side.

6.1 Clutch lever



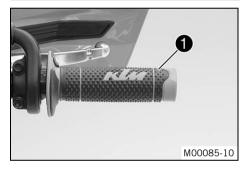
The clutch lever **1** is fitted on the left side of the handlebar. The clutch is hydraulically operated and self-adjusting.

6.2 Hand brake lever



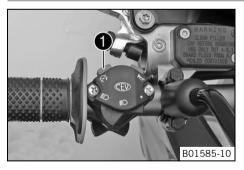
Hand brake lever ① is located on the right side of the handlebar. The hand brake lever is used to activate the front brake.

6.3 Throttle grip



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

6.4 Kill switch (EXC-F EU/AU/BR, EXC-F Factory Edition)



Kill switch **1** is fitted on the left side of the handlebar.

Possible states

- Kill switch ⊗ in basic position the ignition circuit is closed in this position and the engine can be started.
- Kill switch ⊗ pressed the ignition circuit is open in this position, the engine goes out if it was running, or does not start if it was off.

6.5 Kill switch (EXC-F Six Days)

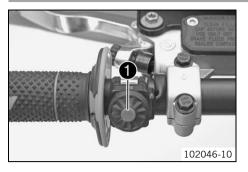


Kill switch **1** is fitted on the left side of the handlebar.

Possible states

- Kill switch ⊗ in basic position In this position, the ignition circuit is closed and the engine can be started.
- Kill switch ⊗ is pressed In this position, the ignition circuit is interrupted, a running engine stops, and a non-running engine will not start.

6.6 Kill switch (All XCF-W models)

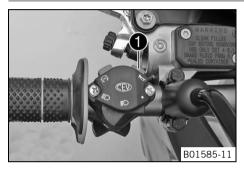


Kill switch **①** is fitted on the left side of the handlebar.

Possible states

- Kill switch ⊗ in basic position the ignition circuit is closed in this position and the engine can be started.
- Kill switch ⊗ pressed the ignition circuit is open in this position, the engine goes out if it was running, or does not start if it was off.

6.7 Horn button (EXC-F EU/AU/BR, EXC-F Factory Edition)

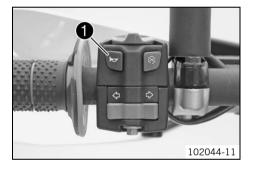


The horn button **1** is fitted on the left side of the handlebar.

Possible states

- Horn button \bowtie pressed the horn is actuated in this position.

6.8 Horn button (EXC-F Six Days)

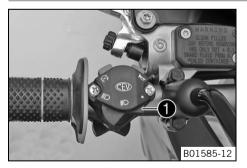


The horn button **1** is fitted on the left side of the handlebar.

Possible states

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

6.9 Light switch (EXC-F EU/AU/BR, EXC-F Factory Edition)



The light switch **1** is fitted on the left side of the handlebar.

Possible states

•	Light off – Light switch is turned to the right. In this position, the light is switched off.
≣D	Low beam on – Light switch is in the central position. In this position, the low beam and tail light are switched on.
ΞD	High beam on – Light switch is turned to the left. In this position, the high beam and the tail light are switched on.

6.10 Light switch (EXC-F Six Days)

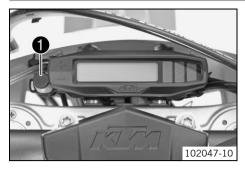


The light switch **1** is fitted on the left side of the handlebar.

Possible states

≣D	Low beam on – Light switch is in the central position. In this position, the low beam and tail light are switched on.
ΞD	High beam on – The light switch is turned counterclockwise. In this position, the high beam and the tail light are switched on.

6.11 Light switch (All XCF-W models)



The light switch **1** is located to the left of the speedometer.

Possible states

.

- Light off Light switch is pressed in up to the stop. In this position, the light is switched off.
- Light on Light switch is pulled out to the stop. In this position, the low beam • and tail light are switched on.

6.12 Turn signal switch (EXC-F EU/AU/BR, EXC-F Factory Edition)



Turn signal switch **1** is fitted on the left side of the handlebar.

Possible state	S
	Turn signal light off – Turn signal switch is in the central position.
Ŧ	Turn signal light, left, on – Turn signal switch is turned to the left.
	Turn signal light, right, on – Turn signal switch is turned to the right.

Turn signal switch (EXC-F Six Days) 6.13



The turn signal switch $lacksquare$ is fitted on the left side of the handlebar.		
Possible state	25	
	Turn signal off – Turn signal switch is in the central position.	
+	Turn signal, left, on – Turn signal switch is turned to the left.	
	Turn signal, right, on – Turn signal switch is turned to the right.	

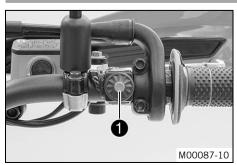
Emergency OFF switch (EXC-F AU)



The emergency OFF switch **1** is fitted on the right side of the handlebar. Possible states

	-
\bigotimes	Ignition off – the ignition circuit is open in this position, the engine goes out if it was running, or does not start if it was off.
\bigcirc	Ignition on – the ignition circuit is closed in this position and the engine can be started.

6.15 Electric starter button (EXC-F EU, EXC-F Factory Edition, EXC-F BR, All XCF-W models, All Six Days models)

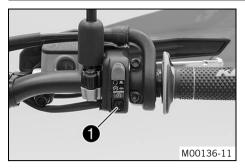


The electric starter button **()** is fitted on the right side of the handlebar.

Possible states

- Electric starter button ③ in basic position
- Electric starter button ③ pressed the electric starter is actuated in this position.

6.16 Electric starter button (EXC-F AU)



The electric starter button **1** is fitted on the right side of the handlebar.

Possible states

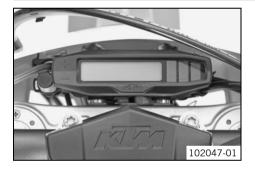
- Electric starter button ③ in basic position
- Electric starter button (3) pressed the electric starter is actuated in this position.

6.17 Overview of indicator lamps (All EXC-F models)



Possible states	
≣D	The high beam indicator lamp lights up blue – The high beam is switched on.
EFI	EFI warning lamp (MIL) lights up/flashes orange – The OBD has detected an emission- or safety-critical fault.
	The low fuel warning lamp lights up orange – The fuel level has reached the reserve mark.
	Turn signal indicator light flashes green – The turn signal is switched on.

6.18 Overview of indicator lamps (All XCF-W models)



EFI warning lamp (MIL) lights up/flashes orange – The OBD has de	ataatad
EFI an emission- or safety-critical fault.	elected
The low fuel warning lamp lights up orange – The fuel level has return the reserve mark.	eached

6.19 Opening filler cap

Danger

Fire hazard Fuel is highly flammable.

- Never refuel the vehicle near open flames or burning cigarettes, and always switch off the engine first. Be careful that no
 fuel is spilt, especially on hot vehicle components. Clean up spilt fuel immediately.
- The fuel in the fuel tank expands when warm and may emerge if overfilled. Follow the instructions on refueling.



Warning

Danger of poisoning Fuel is poisonous and a health hazard.

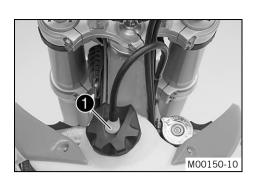
Fuel must not come into contact with the skin, eyes, or clothing. Do not breathe in the fuel vapors. If contact occurs with
the eyes, rinse with water immediately and contact a physician. Immediately clean contaminated areas on the skin with
soap and water. If fuel is swallowed, contact a physician immediately.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



Warning

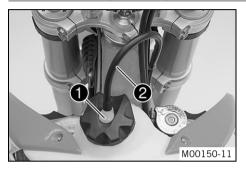
Environmental hazard Improper handling of fuel is a danger to the environment.

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

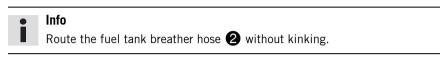


Press release button (1), turn filler cap counterclockwise and lift it upwards and remove.

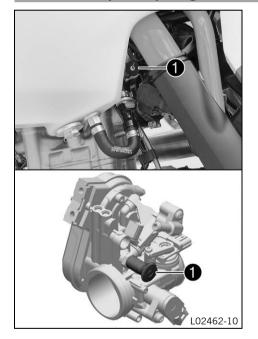
6.20 Closing filler cap



Replace the filler cap and turn clockwise until the release button 1 locks in place.



6.21 Idle speed adjusting screw



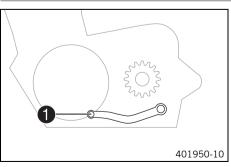
Idle speed adjusting screw **①** is located at the top left of the throttle valve body. The idle speed adjusting screw has two functions. Turning it controls the idle speed.

Pulling it out all the way raises the idle speed during a cold start.

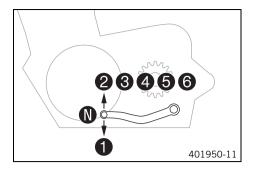
Possible states

- RPM increase activated Idle speed adjusting screw is pulled out all the way.
- RPM increase deactivated Idle speed adjusting screw is pushed in all the way.

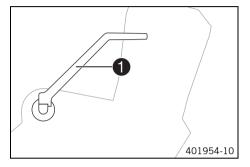
6.22 Shift lever



Shift lever **1** is mounted on the left side of the engine.



6.23 Kick starter

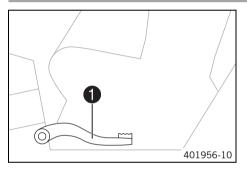


The kick starter ① is fitted on the right of the engine. The engine can be started with either the kick starter or the electric starter. The upper part of the kick starter can be swung out.

Info

Before riding, swing the upper part of the kick starter inwards towards the engine.

6.24 Foot brake lever

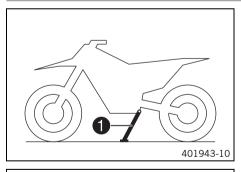


Foot brake lever **1** is located in front of the right footrest. The foot brake lever is used to activate the rear brake.

The gear positions can be seen in the photograph.

The neutral or idle position is between the first and second gears.

6.25 Side stand



401944-10

The side stand **()** is on the left side of the vehicle.

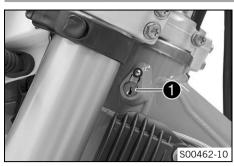
The side stand is used to park the motorcycle.

Info

When you are riding, the side stand **1** must be folded up and secured with the rubber band **2**.

19

6.26 Steering lock (All EXC-F models)



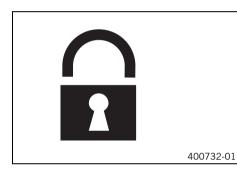
Steering lock **1** is fitted on the left side of the steering head. The steering lock is used to lock the steering. Steering, and therefore riding, is no longer possible.

6.27 Locking the steering (All EXC-F models)

Note

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

- Always place the vehicle on a firm and even surface.

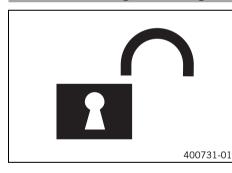


- Park the vehicle.
- Turn the handlebar as far as possible to the right.
- Insert the key in the steering lock, turn it to the left, press it in and turn it to the right. Remove the key.
 - ✓ Steering is no longer possible.



Never leave the key in the steering lock.

6.28 Unlocking the steering (All EXC-F models)

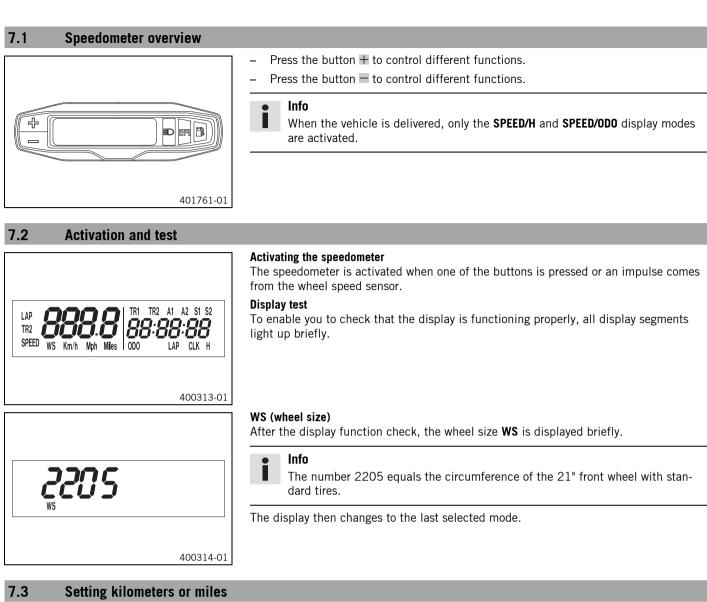


- Insert the key in the steering lock, turn it to the left, pull it out and turn it to the right. Remove the key.
 - You can now steer the bike again.



Never leave the key in the steering lock.





•

Info

If you change the unit, the value **ODO** is retained and converted accordingly.

The values TR1, TR2, A1, A2 and S1 are cleared when the unit of measure is changed.

	TR1	TR2 A1 A2 S1 S2
$\stackrel{\text{if}}{\Rightarrow} \underset{\text{Km/h}}{\operatorname{Km/h}} \underset{\text{Mph}}{\operatorname{Mph}} \stackrel{\text{if}}{=}$	ODO	LAP CLK H
		400329-01

Condition

The motorcycle is stationary.

- Repeatedly press the button + briefly until H appears at the bottom right of the display.
- Press the button + for 2–3 seconds.
 - ✓ The Setup menu is displayed and the active functions are shown.
 - Repeatedly press the button H briefly until **Km/h/Mph** flashes.

Setting the Km/h

Press the button +.

Setting the Mph

- Press the button —.
- Wait 3–5 seconds
 - ✓ The settings are stored.

• Info

If no button is actuated for 10–12 seconds or there is no signal from the wheel speed sensor, then the settings are automatically stored and the Setup menu is closed.

7.4 Setting the speedometer functions

Info

When the vehicle is delivered, only the SPEED/H and SPEED/ODO display modes are activated.

∋TŘ1∈TR2 A1 A2 S1 S2 000 LAP CLK H Km/h Mph 400318-01

Condition

The motorcycle is stationary.

- Repeatedly press the button H briefly until H appears at the bottom right of the display.
- Press the button + for 2–3 seconds.
 - The Setup menu is displayed and the active functions are shown.



If no button is pressed for 10-12 seconds, the settings are automatically stored.

If no button is actuated for 20 seconds or there is no signal from the wheel speed sensor, then the settings are automatically stored and the Setup menu is closed.

- Repeatedly press the button \pm briefly until the desired function flashes.
 - ✓ The selected function flashes.

Activating the function

- Press the button \pm .
 - The symbol continues to appear in the display and the next function appears.

Deactivating a function

- Press the button —.
 - The symbol disappears in the display and the next function appears.

7.5 Setting the clock

0-24 400330-01

Condition

The motorcycle is stationary.

- Repeatedly press the button H briefly until **CLK** appears at the bottom right of the display.
- Press the button \pm for 2–3 seconds.
 - ✓ The hour display flashes.
- Set the hour display with the button + and/or button -.
- Wait 3-5 seconds
- \checkmark The next segment of the display flashes and can be set.
- You can set the following segments in the same way as the hours by pressing the button + and the button -.



Info

The seconds can only be set to zero. If no button is actuated for 15-20 seconds or there is no signal from the wheel speed sensor, then the settings are automatically stored and the Setup menu is closed.

7.6 Viewing the lap time

- Info
- This function can only be opened if lap times have actually been timed.

Condition

The motorcycle is stationary.

LAP ! 400321-01

- Repeatedly press the button **H** briefly until **LAP** appears at the bottom right of the display.
- ✓ LAP 1 appears on the left side of the display.
- The laps 1–10 can be viewed with the button
 .
- - Briefly press the button +.
 - Next display mode



When a signal from the wheel speed sensor arrives, the left side of the display changes back to the **SPEED** mode.

7.7 Display mode SPEED (speed) - Repeatedly press the button it briefly until SPEED appears on the left side of the display. The current speed is displayed in the SPEED display mode. The current speed can be displayed in Km/h or Mph. Info Making the setting according to the country. When an impulse comes from the front wheel, the left side of the speedometer display changes to the SPEED mode and the current speed is shown.

7.8 Display mode SPEED/H (service hours)

The motorcycle is stationary.
 Repeatedly press the button + briefly until H

Repeatedly press the button \blacksquare briefly until **H** appears at the bottom right of the display.

In display mode **H**, the service hours of the engine are displayed. The service hour counter stores the total traveling time.

Info

Condition

The service hour counter is necessary for ensuring that service work is carried out at the right intervals.

If the speedometer is in ${\bf H}$ display mode at the start of the journey, it automatically changes to the ${\bf 0D0}$ display mode.

The ${\bf H}$ display mode is suppressed during the journey.

Press the button $+$ for 2–3 seconds.	The display changes to the Setup menu of the speedometer functions.
Briefly press the button +.	Next display mode
Press the button – for 2–3 seconds.	No function
Briefly press the button –.	No function

7.9 Setup menu

TR1 TR2 A1 A2 S1 S2 Km/h Mph ODO LAP CLK H 400344-01

Condition

- The motorcycle is stationary.

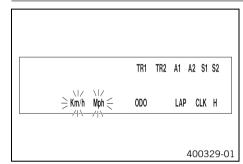
The Setup menu displays the active functions.

Info

Repeatedly press the button \pm briefly until the desired function is opened. If no button is pressed for 20 seconds, the settings are automatically stored.

Briefly press the button +.	Activates the flashing display and changes to the next display
Press the button \pm for 2–3 seconds.	No function
Briefly press the button .	Deactivates the flashing display and changes to the next display
Press the button – for 2–3 seconds.	No function
Wait 3–5 seconds	Changes to the next display without changes
Wait 10–12 sec- onds	Setup menu starts, stores the settings, and changes to H or ODO .

7.10 Setting the unit of measurement



Condition

- The motorcycle is stationary.
- Press the button \pm for 2–3 seconds.

In measurement unit mode, you can change the unit of measurement.

Info

If no button is pressed for 5 seconds, the settings are automatically stored.

Briefly press the button +.	Starts selection, activates Km/h display
Press the button \pm for 2–3 seconds.	No function
Briefly press the button .	Activates Mph display
Press the button – for 2–3 seconds.	No function
Wait 3–5 seconds	Changes to the next display, changes from selection to the Setup menu
Wait 10–12 sec- onds	Saves and closes the Setup menu

7.11 Display mode SPEED/CLK (time)



The time is shown in display mode **CLK**.

Press the button \pm for 2–3 seconds.	The display changes to the Setup menu of the clock.
Briefly press the button +.	Next display mode
Press the button – for 2–3 seconds.	No function
Briefly press the button .	No function

7.12 Setting the clock

SPEED Km/h 12:08:54

400319-01

Condition

_

- The motorcycle is stationary.
- Press the button \pm for 2–3 seconds.

Press the button + for 2–3 seconds.	Increases the value
Briefly press the button +.	Increases the value
Press the button – for 2–3 seconds.	Reduces the value
Briefly press the button	Reduces the value
Wait 3–5 seconds	Changes to the next value
Wait 10–12 sec- onds	Closes the SETUP menu

7.13 Display mode SPEED/LAP (lap time)



In the $\ensuremath{\textbf{LAP}}$ display mode, up to 10 lap times can be timed with the stop watch.

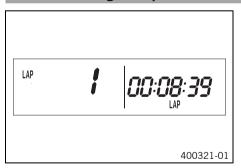
Info

If the lap time continues running after the button = is pressed, 9 memory locations are occupied.

Lap 10 must be timed using the button \pm .

Press the button \pm for 2–3 seconds.	The stop watch and the lap time are reset.
Briefly press the button +.	Next display mode
Press the button – for 2–3 seconds.	Stops the clock.
Briefly press the button –.	Starts the stop watch or stop the current lap time measure- ment, stores it and the stop watch starts the next lap.

7.14 Viewing the lap time



- Condition
- The motorcycle is stationary.
- Briefly press the button +.

Press the button $+$ for 2–3 seconds.	The stop watch and the lap time are reset.
Briefly press the button +.	Select a lap from 1–10
Press the button for 2–3 seconds.	No function
Briefly press the button	View the next lap time.

7.15 Display mode SPEED/ODO (odometer)



Repeatedly press the button H briefly until **ODO** appears at the bottom right of the display.

The total traveled distance is shown in display mode **ODO**.

Press the button $+$ for 2–3 seconds.	No function
Briefly press the button +.	Next display mode
Press the button – for 2–3 seconds.	No function
Briefly press the button .	No function

7.16 Display mode SPEED/TR1 (trip master 1)



TR1 (trip master 1) runs constantly and counts up to 999.9. You can use it to measure trips or the distance between refueling stops. **TR1** is coupled with **A1** (average speed 1) and **S1** (stop watch 1).



■ If 99

Press the button \pm for 2–3 seconds.	Displays of TR1 , A1 and S1 are reset to 0,0.
Briefly press the button +.	Next display mode
Press the button – for 2–3 seconds.	No function
Briefly press the button .	No function

7.17 Display mode SPEED/TR2 (trip master 2)



-	Repeatedly press the button ${\mathbb H}$ briefly until TR2 appears at the top right of the dis	-
	ılay.	

TR2 (trip master 2) runs constantly and counts up to 999.9.

Press the button + for 2–3 seconds.	Clears the values TR2 and A2.
Briefly press the button +.	Next display mode
Press the button – for 2–3 seconds.	Reduces value of TR2.
Briefly press the button –.	Reduces value of TR2.

7.18 Setting TR2 (trip master 2)

SPEED 500 TR2 SPEED 500 TR2 38.4 400324-01

Condition

- The motorcycle is stationary.
- Repeatedly press the button H briefly until TR2 appears at the top right of the display.
- Press the button for 2–3 seconds until TR2 flashes.

The displayed value can be set manually with the button + and the button -. This is a very practical function when riding using the road book.

I	r	h	f	1
•	•	•	•	

Π

0

The TR2 value can also be corrected manually during the journey with the button + and the button -.

If 999.9 is exceeded, the value of **TR2** is automatically reset to 0.0.

Press the button \pm for 2–3 seconds.	Increases value of TR2.
Briefly press the button +.	Increases value of TR2.
Press the button – for 2–3 seconds.	Reduces value of TR2.
Briefly press the button –.	Reduces value of TR2.
Wait 10–12 sec- onds	Saves and closes the Setup menu

7.19 Display mode SPEED/A1 (average speed 1)



Repeatedly press the button + briefly until A1 appears at the top right of the dis-_ play.

A1 (average speed 1) shows the average speed calculated using TR1 (trip master 1) and S1 (stop watch 1).

The calculation of this value is activated by the first impulse of the wheel speed sensor and ends 3 seconds after the last impulse.

Press the button \pm for 2–3 seconds.	Displays of TR1, A1 and S1 are reset to 0,0.
Briefly press the button +.	Next display mode
Press the button – for 2–3 seconds.	No function
Briefly press the button —.	No function

7.20 Display mode SPEED/A2 (average speed 2)



Repeatedly press the button H briefly until A2 appears at the top right of the dis-_ play.

A2 (average speed 2) shows the average speed on the basis of the current speed if the stop watch S2 (stop watch 2) is running.

Info

The displayed value can differ from the actual average speed if S2 was not stopped after the ride.

Briefly press the button +.	Next display mode
Press the button \pm for 2–3 seconds.	No function
Press the button – for 2–3 seconds.	No function
Briefly press the button –.	No function

7.21 Display mode SPEED/S1 (stop watch 1)

00: 18:52 Km/h SPEED 400327-01

 ${\bf S1}$ (Stop watch 1) shows the riding time based on ${\bf TR1}$ and continues running as soon as an impulse arrives from the wheel speed sensor.

The calculation of this value starts with the first impulse from the wheel speed sensor and ends 3 seconds after the last impulse.

Press the button \pm for 2–3 seconds.	Displays of TR1, A1 and S1 are reset to 0,0.
Briefly press the button +.	Next display mode
Press the button – for 2–3 seconds.	No function
Briefly press the button .	No function

7.22 Display mode SPEED/S2 (stop watch 2)

	ככ	
SPEED	Km/h	רו :00:06
		400328-

-	Repeatedly press the button H briefly until S2 appears at the top right of the dis-
	play.

S2 (Stop watch 2) is a manual stop watch.

If S2 is running in the background, the display S2 flashes on the speedometer.

Press the button $+$ for 2–3 seconds.	The displays of S2 and A2 are set to 0,0.
Briefly press the button +.	Next display mode
Press the button – for 2–3 seconds.	No function
Briefly press the button –.	Starts or stops S2.

Display	Press the but- ton	Briefly press the button ➡.	Press the but- ton — for 2–3 seconds.	Briefly press the button —.	Wait 3–5 sec- onds	Wait 10–12 sec- onds
Display mode SPEED/H (service hours)	The display changes to the Setup menu of the speedome- ter functions.	Next display mode	No function	No function		
Setup menu	No function	Activates the flashing display and changes to the next display	No function	Deactivates the flashing display and changes to the next display	Changes to the next display without changes	Setup menu starts, stores the settings, and changes to H or 0D0 .
Setting the unit of measurement	No function	Starts selection, activates Km/h display	No function	Activates Mph display	Changes to the next display, changes from selection to the Setup menu	Saves and closes the Setup menu
Display mode SPEED/CLK (time)	The display changes to the Setup menu of the clock.	Next display mode	No function	No function		
Setting the clock	Increases the value	Increases the value	Reduces the value	Reduces the value	Changes to the next value	Closes the SETUP menu

Display	Press the but- ton	Briefly press the button <i></i> <i></i> <i></i> <i></i>	Press the but- ton — for 2–3 seconds.	Briefly press the button .	Wait 3–5 sec- onds	Wait 10–12 sec- onds
Display mode SPEED/LAP (lap time)	The stop watch and the lap time are reset.	Next display mode	Stops the clock.	Starts the stop watch or stop the current lap time measure- ment, stores it and the stop watch starts the next lap.		
Viewing the lap time	The stop watch and the lap time are reset.	Select a lap from 1–10	No function	View the next lap time.		
Display mode SPEED/0D0 (odometer)	No function	Next display mode	No function	No function		
Display mode SPEED/TR1 (trip master 1)	Displays of TR1 , A1 and S1 are reset to 0,0.	Next display mode	No function	No function		
Display mode SPEED/TR2 (trip master 2)	Clears the val- ues TR2 and A2 .	Next display mode	Reduces value of TR2 .	Reduces value of TR2 .		
Setting TR2 (trip master 2)	Increases value of TR2 .	Increases value of TR2 .	Reduces value of TR2 .	Reduces value of TR2 .		Saves and closes the Setup menu
Display mode SPEED/A1 (average speed 1)	Displays of TR1, A1 and S1 are reset to 0,0.	Next display mode	No function	No function		
Display mode SPEED/A2 (average speed 2)	No function	Next display mode	No function	No function		
Display mode SPEED/S1 (stop watch 1)	Displays of TR1, A1 and S1 are reset to 0,0.	Next display mode	No function	No function		
Display mode SPEED/S2 (stop watch 2)	The displays of S2 and A2 are set to 0,0.	Next display mode	No function	Starts or stops S2 .		

7.24 Table of conditions and menu activation

Display	The motorcycle is stationary.	Menu can be acti- vated
Display mode SPEED/H (service hours)	•	
Setup menu	•	
Setting the unit of measurement	•	
Setting the clock	•	
Display mode SPEED/LAP (lap time)		•
Viewing the lap time	•	
Display mode SPEED/TR1 (trip master 1)		•
Display mode SPEED/TR2 (trip master 2)		•
Setting TR2 (trip master 2)	•	
Display mode SPEED/A1 (average speed 1)		•
Display mode SPEED/A2 (average speed 2)		•
Display mode SPEED/S1 (stop watch 1)		•
Display mode SPEED/S2 (stop watch 2)		•

8.1 Advice on first use

Danger

Danger of accidents Danger arising from the rider's judgement being impaired.

 Do not operate the vehicle while under the influence of alcohol, drugs and certain medications or physically or mentally impaired.



Warning

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

Wear protective clothing (helmet, boots, gloves, pants and jacket with protectors) every time you ride the vehicle. Always
wear protective clothing that is in good condition and meets the legal requirements.

Warning

Danger of crashing Poor vehicle handling due to different tire tread patterns on front and rear wheels.

- The front and rear wheels must be fitted with tires with similar tread patterns to prevent loss of control over the vehicle.



Warning

Danger of accidents Critical riding behavior due to inappropriate riding.

- Adapt your riding speed to the road conditions and your riding ability.



Danger of accidents Accident risk caused by presence of a passenger.

- Your vehicle is not designed to carry passengers. Do not ride with a passenger.



Danger of accidents Failure of brake system.

- If the foot brake lever is not released, the brake linings drag continuously. The rear brake may fail due to overheating. Take your foot off the foot brake lever when you are not braking.



Warning

Danger of accidents Unstable riding behavior.

- Do not exceed the maximum permissible weight and axle loads.



Warning

Risk of misappropriation Usage by unauthorized persons.

- Never leave the vehicle while the engine is running. Secure the vehicle against use by unauthorized persons.

Info

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

- Make sure that the pre-delivery inspection work has been carried out by an authorized KTM workshop.
- ✓ You receive a delivery certificate and the Service and Warranty Booklet at vehicle handover.
- Before your first trip, read the entire operating instructions carefully.
- Get to know the controls.

(All EXC-F models)

– Adjust the free travel of the hand brake lever. (* p. 75)

(All XCF-W models)

- Adjust the basic position of the hand brake lever. (* p. 75)
- Adjust the basic position of the foot brake lever. 🔌 (🕶 p. 79)
- Adjust the basic position of the shift lever. ◄ (♥ p. 101)
- Get used to handling the motorcycle on a suitable piece of land before making a longer trip.

Info

i

When offroad, being accompanied by another person on another vehicle so that you can help each other is recommended.

- Try also to ride as slowly as possible and in a standing position to get a better feeling for the vehicle.

- Do not make any offroad trips that over-stress your ability and experience.

- Hold the handlebar firmly with both hands and keep your feet on the footrests when riding.
- If you carry any baggage, make sure it is fixed firmly as close as possible to the center of the vehicle and ensure even weight distribution between the front and rear wheels.

Info

Motorcycles react sensitively to any changes of weight distribution.

- Do not exceed the overall maximum permitted weight and the axle loads.

Guideline

Maximum permissible overall weight	335 kg (739 lb.)
Maximum permissible front axle load	145 kg (320 lb.)
Maximum permissible rear axle load	190 kg (419 lb.)

• Info

The spoke tension must be checked after half an hour of operation.

– Run in the engine. (🕶 p. 31)

8.2 Running-in the engine

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

Guideline

Maximum engine speed		
During the first operating hour	7,000 rpm	
Maximum engine performance		
During the first 3 operating hours	≤ 75 %	

- Avoid fully opening the throttle!

8.3 Preparing the vehicle for difficult riding conditions

• Info

Use of the vehicle under difficult conditions, such as on sand or on wet and muddy surfaces, 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.

- KTM recommends that you use the specified engine oil for difficult riding conditions and to increase performance.

Engine oil (SAE 10W/60) (00062010035) (* p. 120)

- Clean the air filter and air filter box. \checkmark (\checkmark p. 63)

• Info Che

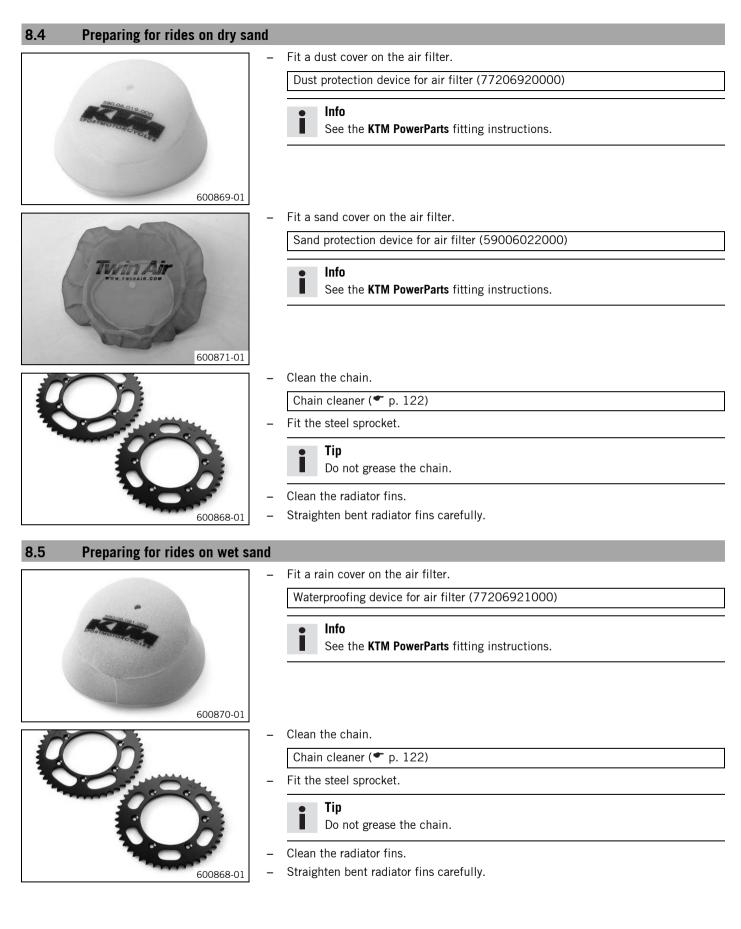
Check the air filter approx. every 30 minutes.

- Seal the air filter box. 🔌 (🕶 p. 64)
- Additionally secure the rubber grip. (
 p. 73)
- Check the connector for humidity and corrosion and to ensure it is firmly seated.
 - » If humidity, corrosion or damage is found:
 - Clean and dry the connector, or change it if necessary.

Difficult riding conditions are:

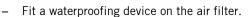
- Rides on dry sand. (* p. 32)
- Rides on wet sand. (
 p. 32)

- Rides at low temperature or in snow. (* p. 33)



8.6 Preparing for rides on wet and muddy surfaces





Waterproofing device for air filter (77206921000)

Info

- See the KTM PowerParts fitting instructions.
- Fit the steel sprocket. _
- Clean the motorcycle. (* p. 106) _
- Straighten bent radiator fins carefully.



- Adjust the secondary drive to the road conditions. _
 - Info
 - The engine oil heats up quickly when the clutch is operated frequently due to an excessively high secondary drive.
- Clean the chain.

_

_

Chain cleaner (* p. 122)

Clean the radiator fins.

Info

- Straighten bent radiator fins carefully. _
 - Check the coolant level. (p. 98)

8.8 Preparing for rides at low temperature or in snow

600868-01



Fit a waterproofing device on the air filter. Waterproofing device for air filter (77206921000)

See the KTM PowerParts fitting instructions.

RIDING INSTRUCTIONS 9

34

9.1 Checks and maintenance work when preparing for use

Info

Before riding the vehicle, always check its condition and operating safety. The vehicle must be in perfect technical condition when used.

- Check the engine oil level. (* p. 102)
- Check the electrical system.
- Check the brake fluid level of the front brake. (* p. 76)
- Check the rear brake fluid level. (***** p. 80)
- Check the front brake linings. (p. 77)
- Check the rear brake linings. (* p. 81)
- Check that the brake system is functioning properly.
- Check the coolant level. (* p. 98)
- Check for chain dirt accumulation. (* p. 68)
- Check the chain, rear sprocket, engine sprocket and chain guide. (p. 70)
- Check the chain tension. (p. 69)
- Check the tire condition. (***** p. 86)
- Check the tire air pressure. (p. 87)
- Check the spoke tension. (p. 87)
- Clean the dust boots of the fork legs. (* p. 49)
- Bleed the fork legs. (
 p. 48)
- Check the air filter.
- Check the settings of all controls and ensure that they can be operated smoothly.
- Check all screws, nuts, and hose clamps regularly for tightness.
- Check the fuel supply.

9.2 Starting

Danger

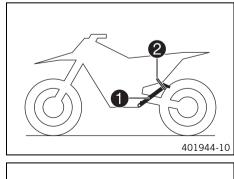
Danger of poisoning Exhaust gases are toxic and inhaling them may result in unconsciousness and/or death.

When running the engine, always make sure there is sufficient ventilation, and do not start or run the engine in an enclosed space without an effective exhaust extraction system.

Note

Engine failure High engine speeds in cold engines have a negative effect on the service life of the engine.

Always warm up the engine at low engine speeds.





Take the motorcycle off of side stand 1 and secure the side stand with rubber band **2**.

Shift transmission to neutral.

(EXC-F AU)

- Turn the emergency OFF switch to the position \bigcirc .

Condition

Ambient temperature: < 20 °C (< 68 °F)

- Pull the idle speed adjusting screw all the way out.
- Press the electric starter button or press the kick starter robustly through its full range.



Press the electric starter button for at most 5 seconds. Wait for a least 5 seconds before trying again. Warning lamp FI lights up briefly as a functional control when starting.

9 RIDING INSTRUCTIONS

9.3 Starting off

• Info

9

If your bike has lights, switch them on before riding. You will then be seen earlier by other motorists. When you are riding, the side stand must be folded up and secured with the rubber band.

- Pull the clutch lever, engage 1st gear, release the clutch lever slowly and simultaneously open the throttle carefully.

A	Shifting,	
.4	Nnitting	riding
	Juniung,	IIUIIIg

Warning

Danger of accidents If you change down at high engine speed, the rear wheel can lock up.

- Do not change into a low gear at high engine speed. The engine races and the rear wheel can lock up.

Info

If you hear unusual noises while riding, stop immediately, switch off the engine, and contact an authorized KTM workshop. First gear is used for starting off or for steep inclines.

- When conditions allow (incline, road situation, etc.), you can shift into a higher gear. To do so, release the throttle while simultaneously pulling the clutch lever, shift into the next gear, release the clutch, and open the throttle.
- 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.
- Always open the throttle only as much as the engine can handle abrupt throttle opening increases fuel consumption.
- To shift down, apply the brakes and close the throttle at the same time.
- Pull the clutch lever and shift into a lower gear, release the clutch lever slowly, and open the throttle or shift again.
- Switch off the engine if you expect to be standing for a long time.

Guideline

≥ 2 min

- Avoid frequent and longer slipping of the clutch. This heats the engine oil, the engine, and the cooling system.
- Ride with a lower engine speed instead of with a high engine speed and a slipping clutch.

9.5 Braking

Warning

Danger of accidents If you brake too hard, the wheels can lock.

- Adapt your braking to the traffic situation and the road conditions.



Warning

- **Danger of accidents** Reduced braking efficiency caused by spongy pressure point of front or rear brake.
- Check the brake system and do not continue riding. (Your authorized KTM workshop will be glad to help.)



Warning

Danger of accidents Reduced braking efficiency due to a wet or dirty brake system.

- · Clean or dry a dirty or wet brake system by riding and braking gently.
- On sandy, wet or slippery surfaces, use the rear brake.
- Braking should always be completed before you go into a bend. Change down to a lower gear appropriate to your road speed.
- Make use of the braking effect of the engine when driving down long downhill stretches. To do so, shift back one or two gears, but
 do not overrev the engine. You will need to apply the brakes far less often and the brake system will not overheat.

9 RIDING INSTRUCTIONS

9.6 Stopping, parking

Warning

Warning

Risk of misappropriation Usage by unauthorized persons.

- Never leave the vehicle while the engine is running. Secure the vehicle against use by unauthorized persons.

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

- Do not touch hot components such as exhaust system, radiator, engine, shock absorber, and the brake system. Allow these components to cool down before starting work on them.

Note

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

- Always place the vehicle on a firm and even surface.

Note

Fire hazard Some vehicle components become very hot when the vehicle is operated.

 Do not park the vehicle near flammable or explosive substances. Do not place objects on the vehicle while it is still warm from being run. Always let the vehicle cool first.

Note

Material damage Damage to or destruction of components due to excessive load.

- The side stand is only designed for the weight of the motorcycle. Do no sit on the motorcycle when it is resting on the side stand. The side stand or the frame may become damaged and the motorcycle may fall over.
- Brake the motorcycle.
- Shift transmission to neutral.

(EXC-F EU/AU/BR, EXC-F Factory Edition)

– Press and hold the kill switch \otimes while the engine is idling until the engine stops.

(EXC-F Six Days)

– Press and hold the kill switch \otimes while the engine is idling until the engine stops.

(All XCF-W models)

- Press and hold the kill switch \otimes while the engine is idling until the engine stops.
- Park the motorcycle on firm ground.

9.7 Transport

Note

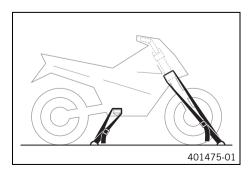
Danger of damage The parked vehicle may roll away or fall over.

- Always place the vehicle on a firm and even surface.

Note

Fire hazard Some vehicle components become very hot when the vehicle is operated.

 Do not park the vehicle near flammable or explosive substances. Do not place objects on the vehicle while it is still warm from being run. Always let the vehicle cool first.



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



RIDING INSTRUCTIONS 9

Refueling 9.8

Danger

Fire hazard Fuel is highly flammable.

- Never refuel the vehicle near open flames or burning cigarettes, and always switch off the engine first. Be careful that no fuel is spilt, especially on hot vehicle components. Clean up spilt fuel immediately.
- The fuel in the fuel tank expands when warm and may emerge if overfilled. Follow the instructions on refueling.

Warning

Danger of poisoning Fuel is poisonous and a health hazard.

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

Note

Material damage Premature clogging of the fuel filter.

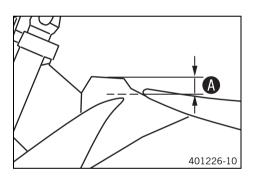
- In some countries and regions, the available fuel quality and cleanliness may not be sufficient. This will result in problems with the fuel system. (Your authorized KTM workshop will be glad to help.)
- Only refuel with clean fuel that meets the specified standards.



Warning

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

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



- Switch off engine.
- _ Open the filler cap. (* p. 17)
- Fill the fuel tank with fuel up to measurement \mathbf{A} . G

àuic	lel	ine	
àuic	lel	ine	

Measurement of A		35 mm (1.38 in)
Total fuel tank capacity, approx. (All EXC-F mod- els)	9 (2.4 US gal)	Super unleaded (ROZ 95/RON 95/PON 91) (p. 121)
Total fuel tank capacity, approx. (All XCF-W mod- els)	8.5 (2.25 US gal)	Super unleaded (ROZ 95/RON 95/PON 91) (• p. 121)

Close the filler cap. (* p. 18)

10 SERVICE SCHEDULE

10.1 Service schedule

Every 30 operating hours/after ev Every 15 operating hours/after ev		-	race
Once after 1 opera			
Read out the fault memory using the KTM diagnostics tool. 🔌	0	٠	•
Check that the electrical equipment is functioning properly.	0	•	•
Check and charge the battery.		•	•
Check the front brake linings. (* p. 77)		•	•
Check the rear brake linings. (* p. 81)		٠	•
Check the brake discs. (* p. 76)		٠	•
Check the brake lines for damage and leakage.		٠	•
Check the rear brake fluid level. (* p. 80)		٠	•
Check the free travel of the foot brake lever. (* p. 79)		•	•
Check the frame and swingarm. 🔌		•	•
Check the swingarm bearing.			•
Check the heim joints at the top and bottom of the shock absorber. 🔌		٠	•
Check the tire condition. (* p. 86)	0	•	•
Check the tire air pressure. (p. 87)	0	٠	•
Check the wheel bearing for play.		•	•
Check the wheel hubs.		•	•
Check the rim run-out. 🔦	0	•	•
Check the spoke tension. (* p. 87)	0	•	•
Check the chain, rear sprocket, engine sprocket and chain guide. (* p. 70)		•	•
Check the chain tension. (* p. 69)	0	•	•
Grease all moving parts (e.g., side stand, hand lever, chain,) and check for smooth operation. 🔌		•	•
Check/correct the fluid level of the hydraulic clutch. (* p. 73)		•	•
Check the brake fluid level of the front brake. (p. 76)		•	•
Check the free travel of the hand brake lever. (p. 75)		•	•
Check the steering head bearing play. (p. 58)	0	•	•
Check the valve clearance.	0		•
Check the clutch.	_		•
Change the shaft seal rings of the water pump. A			•
Change the engine oil and oil filter, clean the oil screen. ◀ (♥ p. 103)	0	•	•
Check all hoses (e. g., fuel, cooling, bleeding, drainage) and sleeves for cracking, leaks, and incorrect routing.	0	•	•
Check the antifreeze and coolant level. (* p. 97)	0	•	•
Check the cables for damage and routing without sharp bends.		•	•
Check that the cables are undamaged, routed without sharp bends and set correctly.	0	•	•
Clean the air filter and air filter box.	_	•	•
Change the glass fiber yarn filling of the main silencer. \checkmark (\checkmark p. 64)			•
Check the screws and nuts for tightness.	0	•	•
Check the headlight setting. (* p. 95)	0	•	•
Change the fuel screen. \checkmark (* p. 102)	0	•	•
Check the fuel pressure.		•	•
Adjust the idle speed. \blacktriangleleft (\checkmark p. 101)	0	•	•
Check that the radiator fan is functioning properly.	0	•	•
Final check: Check the vehicle for roadworthiness and take a test ride.	0	•	
Read out the fault memory using the KTM diagnostics tool after a test ride.	0	•	
Make the service entry in KTM Dealer.net and in the service record.	0	•	-
	0		

• One-time interval

• Periodic interval

10 SERVICE SCHEDULE

10.2 Service work (as additional order)

			Ann	ually
Every 135 operating hours/every 70 operating hours when used	l for m	otors	ports	
Every 45 opera	ating h	ours		
Once after 15 operating I	nours			
Change the front brake fluid. 🔌				•
Change the rear brake fluid. 🔧				•
Change the hydraulic clutch fluid. 🔌 (🕶 p. 74)				•
Grease the steering head bearing. 🔌 (🕶 p. 60)				٠
Clean the spark arrestor. 🔌 (All XCF-W models)				•
Perform a fork service. (All Six Days models) 🔧	0	٠	•	
Perform a fork service. (EXC-F EU/AU/BR, EXC-F Factory Edition, XCF-W) 🔌	0	٠	•	
Service the shock absorber.		٠	•	
Change the spark plug and spark plug connector. 🔧			•	
Change the piston. 🔦			•	
Check/measure the cylinder. 🔧			•	
Check the cylinder head. 🔌			•	
Change the valves, valve springs and valve spring seats. 🔦			•	
Check the camshaft and cam lever. 🔌			•	
Change the connecting rod, conrod bearing, and crank pin. 🔧			•	
Check the transmission and shift mechanism. 🔌			•	
Check the oil pressure regulator valve. 🔌			•	
Change the suction pump. 🔦			•	
Check the pressure pump and lubrication system. 🔌			•	
Replace the timing chain. 🔌			•	
Check the timing assembly.			•	
Change all engine bearings. 🔦			•	

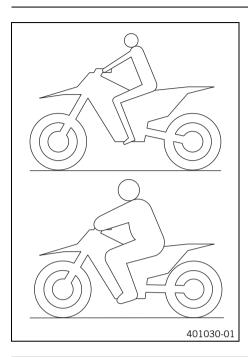
• One-time interval

• Periodic interval

11.1 Checking the basic suspension setting against the rider's weight

Info

When adjusting the basic suspension setting, first adjust the shock absorber and then the fork.



- For optimal motorcycle riding characteristics and to avoid damage to forks, shock absorbers, swingarm and frame, the basic settings of the suspension components must match the rider's weight.
- As delivered, KTM offroad motorcycles are adjusted for a standard rider weight (with full protective clothing).

Guideline

Standard rider weight	75 85 kg (165 187 lb.)
	/ 0 00 Ng (100 10/ 10.)

- If the rider's weight is above or below the standard range, the basic setting of the suspension components must be adjusted accordingly.
- Small weight differences can be compensated by adjusting the spring preload, but in the case of large weight differences, the springs must be replaced.

11.2 Compression damping of 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 on the landing after a jump: the rear wheel suspension compresses more quickly. The low-speed setting, for example, has an effect when riding over long ground swells: the rear wheel suspension compresses more 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.

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

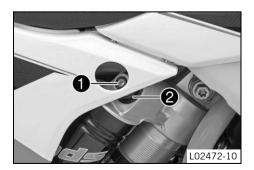
Caution

Danger of accidents Disassembly of pressurized parts can lead to injury.

- The shock absorber is filled with high density nitrogen. Adhere to the description provided. (Your authorized KTM workshop will be glad to help.)

• Info

The low-speed setting can be seen during the slow to normal compression of the shock absorber.



Turn adjusting screw ① clockwise with a screwdriver up to the last perceptible click.

• Info

Do not loosen nut 2!

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

Guideline

Compression damping, low-speed

1 6, 1	
Comfort	25 clicks
Standard	20 clicks
Sport	15 clicks

Info

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

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

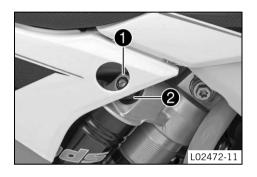
Caution

Danger of accidents Disassembly of pressurized parts can lead to injury.

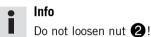
 The shock absorber is filled with high density nitrogen. Adhere to the description provided. (Your authorized KTM workshop will be glad to help.)

Info

The high-speed setting can be seen during the fast compression of the shock absorber.



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



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

Guideline

Compression damping, high-speed

Comfort	2 turns
Standard	1.5 turns
Sport	1.25 turns

Info

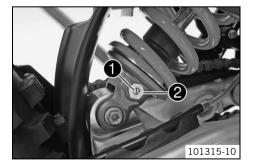
Turn clockwise to increase damping; turn counterclockwise to reduce damping.

11.5 Adjusting the rebound damping of the shock absorber

Caution

Danger of accidents Disassembly of pressurized parts can lead to injury.

 The shock absorber is filled with high density nitrogen. Adhere to the description provided. (Your authorized KTM workshop will be glad to help.)



- Turn adjusting screw 1 clockwise up to the last perceptible click.



Do not loosen nut **2**!

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

Guideline

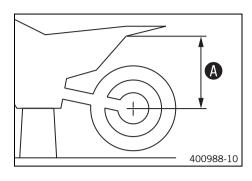
Rebound damping

Comfort	28 clicks
Standard	24 clicks
Sport	22 clicks

lnfo

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

11.6 Measuring rear wheel sag unloaded



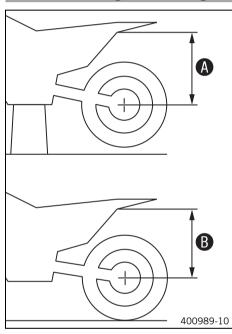
Preparatory work

Main work

- Measure the distance as vertically as possible between the rear axle and a fixed point such as a mark on the side cover.
- Make note of the value as measurement A.

Finishing work

11.7 Checking the static sag of the shock absorber



- 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.



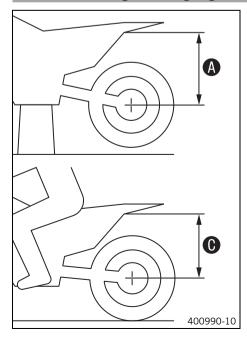
The static sag is the difference between measurements (A) and (B).

33... 35 mm (1.3... 1.38 in)

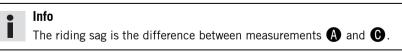
Check the static sag.

- Static sag
- If the static sag is less or more than the specified value:

11.8 Checking the riding sag of the shock absorber



- Measure distance \Lambda of rear wheel unloaded. (🕶 p. 42)
- With another person holding the motorcycle, the rider, wearing full protective clothing, sits on the seat in a normal sitting position (feet on footrests) and bounces up and down a few times.
 - ✓ The rear wheel suspension levels out.
- Another person now measures the distance between the rear axle and a fixed point.
- Note down the value as dimension O.



Check the riding sag.

Riding sag	105 115 mm (4.13 4.53 in)
	100 110 mm (1.10 1.00 m)

- » If the riding sag differs from the specified measurement:
 - Adjust the riding sag. 🔌 (🕶 p. 43)

11.9 Adjusting the spring preload of the shock absorber 🔌

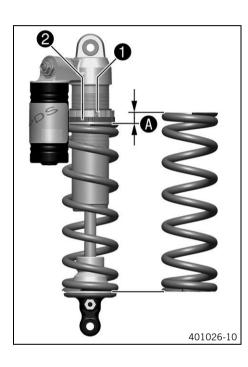
Caution

Danger of accidents Disassembly of pressurized parts can lead to injury.

 The shock absorber is filled with high density nitrogen. Adhere to the description provided. (Your authorized KTM workshop will be glad to help.)

Info

Before changing the spring preload, make a note of the present setting, e.g., by measuring the length of the spring.



Preparatory work

- Remove shock absorber. 🔧 (🕶 p. 61)
- After removing the shock absorber, clean it thoroughly.

Main work

- Loosen screw 🚺.
- Turn adjusting ring 2 until the spring is no longer under tension.

Hook wrench	(T106S)
-------------	---------

- Measure the overall spring length while the spring is not under tension.
- Tighten the spring by turning adjusting ring $oldsymbol{2}$ to measurement $oldsymbol{A}$.

Guideline Spring preload

• Info

Depending on the static sag and/or the riding sag, it may be necessary to increase or decrease the spring preload.

8 mm (0.31 in)

Tighten screw 1.

Guideline

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

Finishing work

- Install the shock absorber. 🔌 (🕶 p. 61)
- Remove the motorcycle from the lift stand. (* p. 48)

11.10 Adjusting the riding sag 🔧

Preparatory work

- Remove shock absorber. 🔌 (🕶 p. 61)
- After removing the shock absorber, clean it thoroughly.

Main work

Choose and mount a suitable spring.

-	choose and mount a suitable spring.		
	Guideline		
	Spring rate		
	Weight of rider: 65… 75 kg (143… 165 lb.)	66 N/mm (377 lb/in)	
	Weight of rider: 75… 85 kg (165… 187 lb.)	69 N/mm (394 lb/in)	
	Weight of rider: 85 95 kg (187 209 lb.)	72 N/mm (411 lb/in)	



The spring rate is shown on the outside of the spring. Smaller weight differences can be compensated by changing the spring preload.

MMMMMMM	B00292-10

r 4

43

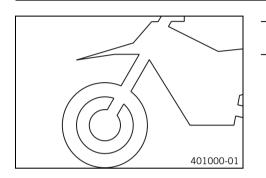
Finishing work

- Install the shock absorber. A (* p. 61)
- Remove the motorcycle from the lift stand. (* p. 48)

11.11 Checking basic setting of fork

• Info

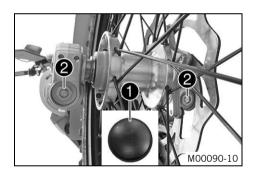
For various reasons, no exact riding sag can be determined for the forks.



- As with the shock absorber, smaller differences in the rider's weight can be compensated by the spring preload.
- However, if the fork is often overloaded (hard end stop on compression), harder springs must be fit to avoid damage to the fork and frame.

11.12 Adjusting the compression damping of the fork

- Info
- The hydraulic compression damping determines the fork suspension behavior.



(EXC-F EU/AU/BR, EXC-F Factory Edition, XCF-W)

- Remove protection caps **1**.
- Turn adjusting screws 2 clockwise all the way.

Info

Adjusting screws **2** are located at the bottom end of the fork legs. Make the same adjustment on both fork legs.

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

Guideline

Compression damping		
Comfort	22 clicks	
Standard	20 clicks	
Sport	18 clicks	

Info

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

Mount protection caps 1.

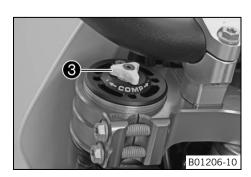
(All Six Days models)

- Turn the white adjusting screw 3 all the way clockwise.

Info

Adjusting screw ③ is located at the upper end of the left fork leg. The compression damping is located in the left fork leg **COMP** (white adjusting screw). The rebound damping is located in the right fork leg **REB** (red adjusting screw).

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



Guideline

Compression damping	
Comfort	15 clicks
Standard	13 clicks
Sport	11 clicks

Info

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

11.13 Adjusting the rebound damping of the fork

• Info

The hydraulic rebound damping determines the fork suspension behavior.



(EXC-F EU/AU/BR, XCF-W)

Turn adjusting screws ① clockwise all the way.

• Info

Adjusting screws **1** are located at the top end of the fork legs. Make the same adjustment on both fork legs.

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

Guideline

Rebound damping	
Comfort	20 clicks
Standard	18 clicks
Sport	16 clicks

Info

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

(EXC-F Factory Edition)

Turn adjusting screws ① clockwise all the way.



Adjusting screws **1** are located at the top end of the fork legs. Make the same adjustment on both fork legs.

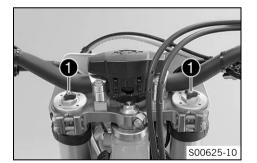
Turn back counterclockwise by the number of clicks corresponding to the fork type.

Guideline

Rebound damping	ound damping	
Comfort	20 clicks	
Standard	18 clicks	
Sport	16 clicks	

• Info

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





(All Six Days models)

- Turn the red adjusting screw **2** all the way clockwise.

Info

Adjusting screw **2** is located at the upper end of the right fork leg. The rebound damping is located in the right fork leg **REB** (red adjusting screw). The compression damping is located in the left fork leg **COMP** (white adjusting screw).

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

Guideline

Rebound damping		
Comfort	15 clicks	
Standard	13 clicks	
Sport	11 clicks	

Info

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

11.14 Adjusting the spring preload of the fork (EXC-F EU/AU/BR, EXC-F Factory Edition, XCF-W)



(EXC-F EU/AU/BR, XCF-W)

- Turn the adjusting screws counterclockwise all the way.
 - Info Mak

Make the same adjustment on both fork legs.

Turn clockwise by the number of turns corresponding to the fork type.

Guideline

Spring preload - Preload Adjuster	
Comfort	1 turn
Standard	2 turns
Sport	2 turns

Info

Turn clockwise to increase the spring preload; turn counterclockwise to reduce the spring preload.

Adjusting the spring preload has no influence on the absorption setting of the rebound damping.

Basically, however, you should set the rebound damping higher with a higher spring preload.



(EXC-F Factory Edition)

- Turn the adjusting screws counterclockwise all the way.
 - Info Mak
 - Make the same adjustment on both fork legs.
- Turn clockwise by the number of turns corresponding to the fork type.

Guideline

Spring preload - Preload Adjuster	
Comfort	1 turn
Standard	2 turns
Sport	2 turns

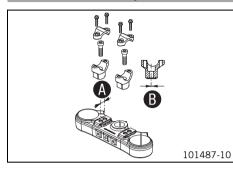
Info

Turn clockwise to increase the spring preload; turn counterclockwise to reduce the spring preload.

Adjusting the spring preload has no influence on the absorption setting of the rebound damping.

Basically, however, you should set the rebound damping higher with a higher spring preload.

11.15 Handlebar position



On the upper triple clamp, there are two holes at a distance of (A) to each other.

Hole distance	15 mm (0.59 in)		
The holes on the handlebar supports are placed at a distance of $oldsymbol{B}$ from the center.			
Hole distance B	3.5 mm (0.138 in)		

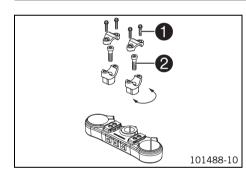
The handlebar supports can be mounted in four different positions.

11.16 Adjusting handlebar position 🔦

Warning

Danger of accidents Handlebar breakage.

 If the handlebar is bent or straightened it will cause material fatigue, and the handlebar can break. Always replace handlebar.



 Remove screws ①. Take off the handlebar clamps. Remove the handlebar and lay it to one side.

Info

Protect the motorcycle and its attachments from damage by covering them. Do not bend the cables and lines.

- Remove screws **2**. Take off the handlebar supports.
- Place the handlebar supports in the required position. Mount and tighten screws 2.

-			
Gu	idel	ine	

Screw, handlebar holder	M10	40 Nm (29.5 lbf ft)	Loctite [®] 243™
-------------------------	-----	------------------------	---------------------------

lnfo

Position the left and right handlebar supports evenly.

- Position the handlebar.

• Info

Make sure the cables and wiring are positioned correctly.

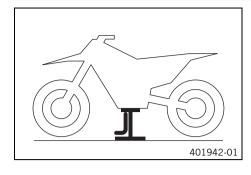
- Position the handlebar clamps. Mount and tighten screws 🕕 evenly.

Guideline

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

Make sure the gap width is even.

12.1 Raising the motorcycle with the lift stand



Note

Danger of damage The parked vehicle may roll away or fall over. - Always place the vehicle on a firm and even surface.

Raise the motorcycle at the frame underneath the engine.

Lift stand (54829055000)

Neither wheel is in contact with the ground.

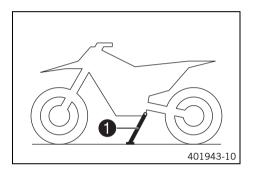
Secure the motorcycle against falling over.

12.2 Removing the motorcycle from the lift stand

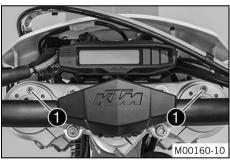
Note

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

- Always place the vehicle on a firm and even surface.



12.3 Bleeding the fork legs





Remove the motorcycle from the lift stand.

- Remove the lift stand.
- To park the motorcycle, press side stand 1 to the ground with your foot and lean the motorcycle on it.

• Info While riding, the side stand must be folded up and secured with the rubber band.

Preparatory work

- Raise the motorcycle with the lift stand. (* p. 48)

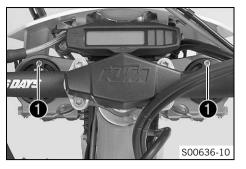
Main work

(EXC-F EU/AU/BR, XCF-W)

- Release bleeder screws 1.
 - \checkmark Any excess pressure escapes from the interior of the fork.
- Tighten the bleeder screws.

(EXC-F Factory Edition)

- Release bleeder screws ①.
 - ✓ Any excess pressure escapes from the interior of the fork.
- Tighten the bleeder screws.



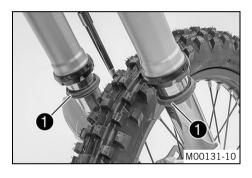
(All Six Days models)

- Release bleeder screws ①.
 - \checkmark Any excess pressure escapes from the interior of the fork.
 - Tighten the bleeder screws.

Finishing work

- Remove the motorcycle from the lift stand. (* p. 48)

12.4 Cleaning the dust boots of the fork legs



Preparatory work

- Raise the motorcycle with the lift stand. (* p. 48)
- Loosen the fork protector. (* p. 50)

Main work

(All EXC-F models)

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 penetrate behind the dust boots. If this dirt is not removed, the oil seals behind can start to leak.



Warning

Danger of accidents Reduced braking efficiency due to oil or grease on the brake discs.

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

Universal oil spray (🕶 p. 123)

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

(All XCF-W models)

- 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 penetrate behind the dust boots. If this dirt is not removed, the oil seals behind can start to leak.

Warning

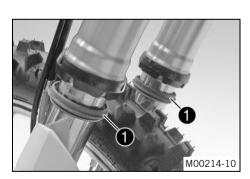
Danger of accidents Reduced braking efficiency due to oil or grease on the brake discs.

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

Universal oil spray (* p. 123)

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

Finishing work



_

12.5 Loosening the fork protector



- Remove screws **1** and take off the clamp.
- \sim Remove screws 2 on the left fork leg. Push the fork protection downwards.
- Remove the screws on the right fork leg. Push the fork protection downwards.

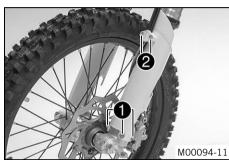
Position the fork protector on the left fork leg. Mount and tighten screws 1.

Position the brake line, wiring harness, and clamp. Mount and tighten screws **2**. Position the fork protector on the right fork leg. Mount and tighten the screws.

Μ6

Μ6

12.6 Positioning the fork protector



M00094-11

12.7 Removing the fork legs 🔌

Preparatory work

Guideline

Guideline

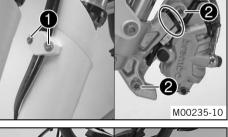
Remaining screws, chassis

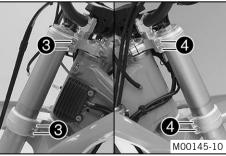
Remaining screws, chassis

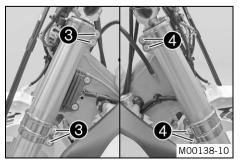
- Remove the headlight mask with the headlight. (* p. 92)

Main work

- Remove screws **1** and take off the clamp.
- Remove the cable binder(s).
- Remove screws 2 and take off the brake caliper.
- Allow the brake caliper and brake line to hang tension-free to the side.







(EXC-F EU/AU/BR, XCF-W)

- Release screws 3. Take out the left fork leg.
- Release screws 4. Take out the right fork leg.

(EXC-F Factory Edition, All Six Days models)

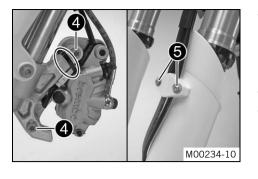
- Release screws **3**. Take out the left fork leg.
- Release screws 4. Take out the right fork leg.

10 Nm (7.4 lbf ft)

10 Nm (7.4 lbf ft)

12.8

Installing the fork legs 🔌 Main work (EXC-F EU/AU/BR. XCF-W) Position the fork legs. Bleeder screws ① are positioned toward the front. Info Grooves are milled into the side of the upper end of the fork legs. The second milled groove (from the top) must be flush with the top edge of the upper triple clamp. M00095-10 Tighten screws **2**. Guideline 2 Screw, top triple clamp Μ8 20 Nm (14.8 lbf ft) Tighten screws **3**. Guideline Screw, bottom triple clamp Μ8 15 Nm (3)3 (11.1 lbf ft) M00145-11 (EXC-F Factory Edition) Position the fork legs. Bleeder screws ① are positioned toward the front. Info Grooves are milled into the side of the upper end of the fork legs. The second milled groove (from the top) must be flush with the top edge of the upper triple clamp. S00640-10 Tighten screws **2**. Guideline Screw, top triple clamp Μ8 17 Nm (12.5 lbf ft) Tighten screws **3**. Guideline Screw, bottom triple clamp Μ8 15 Nm (11.1 lbf ft) M00138-11 (All Six Days models) Position the fork legs. \checkmark Bleeder screws **1** are positioned toward the front. Info The rebound damping is located in the right fork leg **REB** (red adjusting (1)screw). The compression damping is located in the left fork leg COMP (white adjusting screw). Grooves are milled into the side of the upper end of the fork legs. The second milled groove (from the top) must be flush with the top edge of M00137-10 the upper triple clamp. Tighten screws **2**. Guideline 17 Nm Screw, top triple clamp Μ8 (12.5 lbf ft) Tighten screws **3**. Guideline 15 Nm 8 Screw, bottom triple clamp Μ8 3 (11.1 lbf ft) M00138-11



Position the brake caliper and mount and tighten screws 4.
 Guideline

Screw, front brake caliper	M8	25 Nm (18.4 lbf ft)	Loctite [®] 243™

- Mount cable binder.
- \cdot Position the brake line, wiring harness, and clamp. Mount and tighten screws $oldsymbol{6}$.

Finishing work

- − Install the front wheel. ◀ (♥ p. 84)

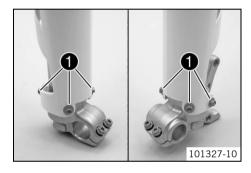
12.9 Removing the fork protector 🔦

Preparatory work

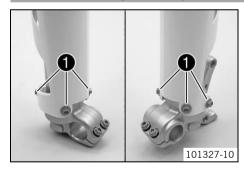
- Remove the headlight mask with the headlight. (* p. 92)
- Remove the front wheel. 🔌 (🕶 p. 84)
- Remove the fork legs. A (* p. 50)

Main work

- Remove screws ① on the left fork leg. Remove the fork protector upwards.
- Remove the screws on the right fork leg. Remove the fork protector upwards.



12.10 Installing the fork protector 🔦



Main work

_

Position the fork protector on the left fork leg. Mount and tighten screws igoplus. Guideline

Remaining screws, chassis	М	6	10 Nm (7.4 lbf	ft)

Position the fork protector on the right fork leg. Mount and tighten the screws.
 Guideline

Remaining screws, chassis M6 10 Nm (7.4 lbf ft)

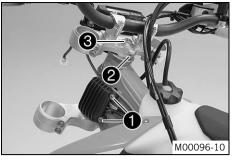
Finishing work

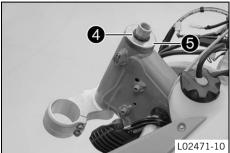
- Install the fork legs. 🔌 (🕶 p. 51)
- Install the front wheel. 🔌 (🕶 p. 84)
- Check the headlight setting. (* p. 95)

12.11 Removing the lower triple clamp 🔌 (EXC-F EU/AU/BR, XCF-W)

Preparatory work

- Remove the front wheel. A (* p. 84)
- Remove the fork legs. \checkmark (* p. 50)
- Remove the handlebar cushion.





Main work

- Open the cable holder in front of the right radiator and detach the wiring harness.
- Remove screws **1** and hang the voltage regulator to one side.
- Release screw **2** and remove screw **3**. Take off the upper triple clamp with the handlebar and set it aside.



Protect the components against damage by covering them. Do not bend the cables and lines.

- Remove O-ring **4**. Remove protective ring **5**.
 - Take off the lower triple clamp with the steering stem.
- Remove the upper steering head bearing.

12.12 Removing the lower triple clamp \land (EXC-F Factory Edition, All Six Days models)

_

Preparatory work

- Remove the headlight mask with the headlight. (* p. 92)
- Raise the motorcycle with the lift stand. (* p. 48)
- Remove the fork legs. A (* p. 50)
- Remove the handlebar cushion.

Main work

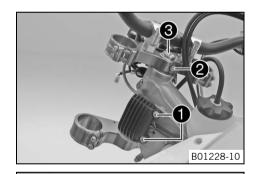
- Open the cable holder in front of the right radiator and detach the wiring harness.
- Remove screws **1** and hang the voltage regulator to the side.
- Remove screw **2**. Remove screw **3**. Take off the upper triple clamp with the handlebar and set it aside.

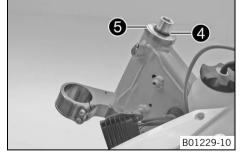
Info

Γ

Protect the components against damage by covering them. Do not bend the cables and lines.

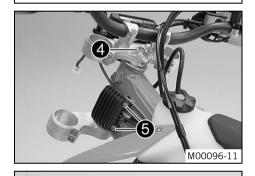
- Remove O-ring **4**. Remove protective ring **5**.
- Take off the lower triple clamp with the steering stem.
- Remove the upper steering head bearing.



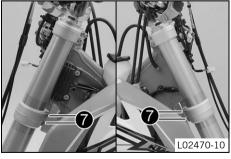


12.13 Installing the lower triple clamp ~ (EXC-F EU/AU/BR, XCF-W)

B 3 2 61 B01605-10









Main work

- Clean the bearing and sealing elements, check for damage, and grease. _
 - High viscosity grease (* p. 122)
- Insert the lower triple clamp with the steering stem. Mount the upper steering head _ bearing.
- Check whether the upper steering head seal **1** is correctly positioned. _
- Slide on protective ring **2** and O-ring **3**. _

- Position the upper triple clamp with the handlebar. _
- Mount screw **4** but do not tighten yet.
- Position the clutch line, wiring harness, and voltage regulator. Mount and tighten screws **5**. Guidali

Gul	deli	ne	

Pomaining scrows, chassis	MG	10 Nm (7 A lbf ft)
Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)

Position the fork legs. _

Bleeder screws 6 face forward.



Grooves are milled into the side of the upper end of the fork legs. The second milled groove (from the top) must be flush with the top edge of the upper triple clamp.

Tighten screws 7.

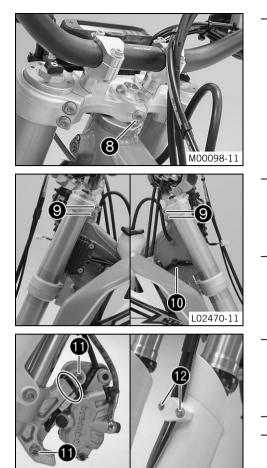
Guideline

Screw, bottom triple clamp	M8	15 Nm
		(11.1 lbf ft)

Tighten screw **4**.

Guideline

Screw, top steering head	M20x1.5	12 Nm (8.9 lbf ft)
--------------------------	---------	--------------------



M00234-11

Tighten screw **8**.

Gu	ide	line
Gu	lue	IIIIE

Screw, top steering	stem	M8	20 Nm (14.8 lbf ft)

Tighten screws **9**.

Gu

Guideline		
Screw, top triple clamp	M8	20 Nm (14.8 lbf ft)

Secure the wiring harness with cable holder **1**.

Position the brake caliper. Mount and tighten screws **()**. _

Guideline	Э
-----------	---

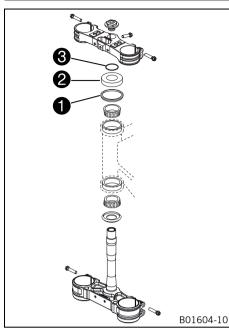
Screw, front brake caliper	M8	25 Nm (18.4 lbf ft)	Loctite [®] 243™
----------------------------	----	------------------------	---------------------------

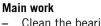
- Mount cable binder. _
- _ Position the brake line, wiring harness, and clamp. Mount and tighten screws 12.

Finishing work

- Mount the handlebar cushion. _
- Install the front fender. (p. 60) _
- Install the front wheel. 🔌 (* p. 84) _
- Refit the headlight mask with the headlight. (* p. 93) _
- Check that the wiring harness, throttle cables and brake and clutch lines can move _ freely and are routed correctly.
- Check the steering head bearing play. (* p. 58) _
- Remove the motorcycle from the lift stand. (* p. 48) _
- Check the headlight setting. (* p. 95) _

12.14 Installing the lower triple clamp 🔌 (EXC-F Factory Edition, All Six Days models)





- Clean the bearing and sealing elements, check for damage, and grease.
 - High viscosity grease (🕶 p. 122)
- Insert the lower triple clamp with the steering stem. Mount the upper steering head bearing.
- Check whether the upper steering head seal 1 is correctly positioned.
- Slide on protective ring **2** and O-ring **3**.

- Position the upper triple clamp with the handlebar.
- Mount screw 4 but do not tighten yet.
- Position the clutch line, wiring harness, and voltage regulator. Mount and tighten screws 6.

	-
Guideli	ne

Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)
---------------------------	----	--------------------

(EXC-F Factory Edition)

- Position the fork legs.
 - Position bleeder screws 6 toward the front.



Grooves are milled into the side of the upper end of the fork legs. The second milled groove (from the top) must be flush with the top edge of the upper triple clamp.

– Tighten screws 7.

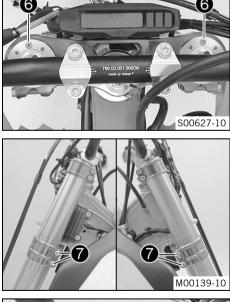
0	
Guid	enne

Screw, bottom triple clamp	M8	15 Nm
		(11.1 lbf ft)

- Tighten screw **4**.

Guideline

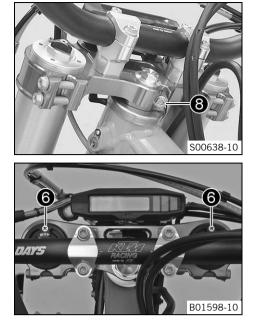
Screw, top steering head	M20x1.5	12 Nm (8.9 lbf ft)	
--------------------------	---------	-----------------------	--

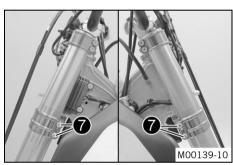


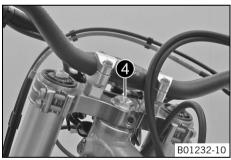
5

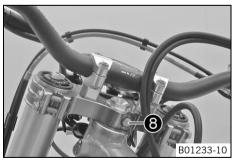
B01230-10

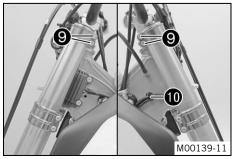












- Mount and tighten screw (8).

Guideline			
Screw, top steering stem	M8	17 Nm (12.5 lbf ft)	Loctite [®] 243™

(All Six Days models)

- Position the fork legs.
 - Position bleeder screws 6 toward the front.

Info

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

Grooves are milled into the side of the upper end of the fork legs. The second milled groove (from the top) must be flush with the top edge of the upper triple clamp.

– Tighten screws 7.

Guideline		
Screw, bottom triple clamp	M8	15 Nm
		(11.1 lbf ft)

- Tighten screw 4 .

Guideline		
Screw, top steering head	M20x1.5	12 Nm (8.9 lbf ft)

Mount and tighten screw 8.

Guideline

Screw, top steering stem	M8	17 Nm (12.5 lbf ft)	Loctite [®] 243™
		(1210 121 10)	

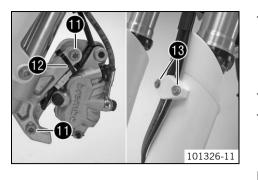
Tighten screws 🕑.

_

_

Guideline Screw, top triple clamp M8 17 Nm (12.5 lbf ft)

Secure the wiring harness with cable holder 🔟.



- Position the brake caliper. Mount and tighten screws 1.
 - Guideline

Screw, front brake caliper	M8	25 Nm (18.4 lbf ft)	Loctite [®] 243™
----------------------------	----	------------------------	---------------------------

- Mount cable binder 😰.
- Position the brake line, wiring harness, and clamp. Mount and tighten screws 🚯.

Finishing work

- Mount the handlebar cushion.
- Install the front wheel. 🔌 (🕶 p. 84)
- Check that the wiring harness, throttle cables and brake and clutch lines can move freely and are routed correctly.
- Check the steering head bearing play. (* p. 58)

12.15 Checking the steering head bearing play

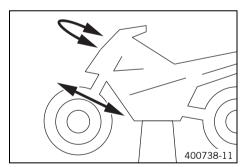
Warning

Danger of accidents Unstable vehicle handling from incorrect steering head bearing play.

- Adjust the steering head bearing play without delay. (Your authorized KTM workshop will be glad to help.)

Info

If the bike is ridden with play in the steering head bearing, the bearing and the bearing seats in the frame can become damaged over time.



Preparatory work

Main work

Move the handlebar to the straight-ahead position. Move the fork legs to and fro in the direction of travel.

No play should be noticeable in the steering head bearing.

- If there is noticeable play present:
- (EXC-F EU/AU/BR, XCF-W)
 - Adjust the play of the steering head bearing. 🔌 (👕 p. 59)
- (EXC-F Factory Edition, All Six Days models)
 - Adjust the play of the steering head bearing. A (* p. 59)
- Move the handlebar to and fro over the entire steering range.

The handlebar must be able to move easily over the entire steering range. No resting locations should be noticeable.

- » If click positions are noticeable:
 - (EXC-F EU/AU/BR, XCF-W)
 - Adjust the play of the steering head bearing. 🔌 (* p. 59)

(EXC-F Factory Edition, All Six Days models)

- Adjust the play of the steering head bearing. A (* p. 59)
- Check the steering head bearing and replace if required.

Finishing work

- Remove the motorcycle from the lift stand. (* p. 48)

M00099-10

12.16 Adjusting the play of the steering head bearing ~ (EXC-F EU/AU/BR, XCF-W)

_

Preparatory work

Guideline

- Raise the motorcycle with the lift stand. (* p. 48)

Main work

- Loosen screws **1** and **2**.
 - Loosen and retighten screw **3**.

Screw, top steering head	M20x1.5	12 Nm (8.9 lbf ft)

- Using a plastic hammer, tap lightly on the upper triple clamp to avoid strains.

– Tighten screws 🚺.

Guideline		
Screw, top triple clamp	M8	20 Nm (14.8 lbf ft)

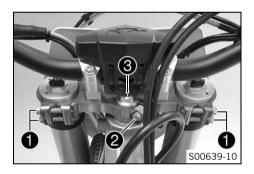
- Tighten screw 2.

Guideline		
Screw, top steering stem	M8	20 Nm (14.8 lbf ft)

Finishing work

- Check the steering head bearing play. (* p. 58)
- Remove the motorcycle from the lift stand. (* p. 48)

12.17 Adjusting the play of the steering head bearing 🔍 (EXC-F Factory Edition, All Six Days models)



Preparatory work

Main work

(EXC-F Factory Edition)

- Release screws **1**. Remove screw **2**.
- Loosen and retighten screw **3**.

Guideline

(8.9 lbf ft)	Screw, top steering head	M20x1.5	12 Nm (8.9 lbf ft)
--------------	--------------------------	---------	-----------------------

- Using a plastic hammer, tap lightly on the upper triple clamp to avoid strains.

- Tighten screws **1**.

Guideline

Screw, top triple clamp	M8	17 Nm (12.5 lbf ft)
-------------------------	----	------------------------

Mount and tighten screw 2.

Guideline

Screw, top steering stem	M8	17 Nm (12.5 lbf ft)	Loctite [®] 243™
--------------------------	----	------------------------	---------------------------

(All Six Days models)

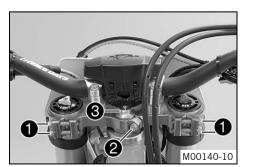
- Release screws 1. Remove screw 2.
- Loosen and retighten screw 3.
 Guideline

Screw, top steering head	M20x1.5	12 Nm
		(8.9 lbf ft)

- Using a plastic hammer, tap lightly on the upper triple clamp to avoid strains.

- Tighten screws 1.

Guideline Screw, top triple clamp M8 17 Nm (12.5 lbf ft)



Mount and tighten screw **2**.

Guideline

Screw, top steering stem	M8	17 Nm (12.5 lbf ft)	Loctite [®] 243™
--------------------------	----	------------------------	---------------------------

Finishing work

_

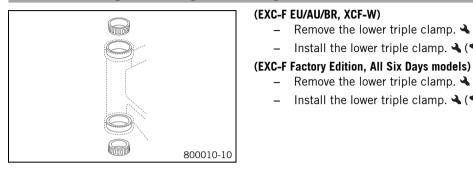
- Check the steering head bearing play. (* p. 58) _
 - Remove the motorcycle from the lift stand. (* p. 48)

- Remove the lower triple clamp. 🔦 (* p. 52) – Install the lower triple clamp. 🔧 (🕶 p. 54)

Remove the lower triple clamp. 🔌 (🕶 p. 53)

Install the lower triple clamp. \checkmark (* p. 56)

12.18 Greasing the steering head bearing &



12.19 **Removing the front fender**

L02485-10

Preparatory work

Remove the headlight mask with the headlight. (p. 92) _

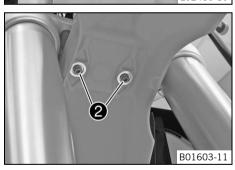
Main work

_

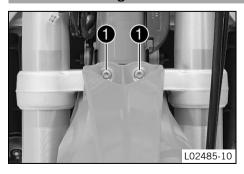
_ _

Remove screws 1. _

Remove screws **2**. Remove the front fender.



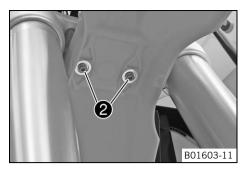
12.20 Installing the front fender



Main work

Position the front fender. Mount and tighten screws 1. Guideline

Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)



- Mount and tighten screws 2.
 - Guideline

Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)
---------------------------	----	--------------------

Finishing work

- Refit the headlight mask with the headlight. (* p. 93)
- Check the headlight setting. (* p. 95)

12.21 Removing the shock absorber 🔌

Preparatory work

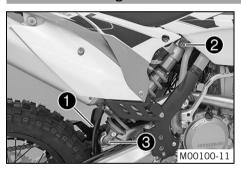
- Raise the motorcycle with the lift stand. (* p. 48)

Main work

- Remove screw **1** and lower the rear wheel with the swing arm as far as possible without blocking the rear wheel. Fix the rear wheel in this position.
- Remove screw **2**, push splash protector **3** to the side, and remove the shock absorber.

12.22 Installing the shock absorber 🔌

M00100-10



Main work

Push splash protector 1 to the side and position the shock absorber. Mount and tighten screw 2.

Guideline

Screw, top shock absorber	M12	80 Nm (59 lbf ft)	Loctite [®] 2701™

Mount and tighten screw 3.

Guideline

Screw, bottom shock absorber	M12	80 Nm (59 lbf ft)	Loctite [®] 2701™
------------------------------	-----	----------------------	----------------------------

Info

The heim joint for the shock absorber at the swing arm is Teflon coated. It must not be greased with grease or with other lubricants. Lubricants dissolve the Teflon coating, thereby drastically reducing the service life.

Finishing work

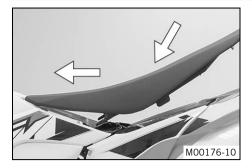
Remove the motorcycle from the lift stand. (* p. 48)

12.23 Removing the seat



- Remove screw 1.
- Lift up the seat at the rear, pull it back and then remove it from above.

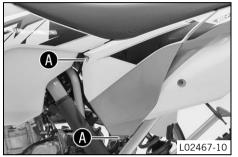
12.24 Mounting the seat



- Hook in the front of the seat at the collar sleeve of the fuel tank, lower it at the rear and simultaneously push it forward.
- Make sure that the seat is correctly locked in.
- Mount and tighten the screw of the seat fixing.
 Guideline

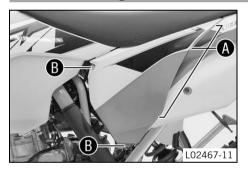
Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)
---------------------------	----	--------------------

12.25	Removing the air filter box lid



Pull off the air filter box lid in area (A) sideways and remove it toward the front.

12.26 Installing the air filter box lid



Insert the air filter box lid into rear area (\mathbf{A}) and clip it into front area (\mathbf{B}) .

12.27 Removing the air filter 🔌

Note

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

- Never operate the vehicle without an air filter as dust and dirt will enter the engine and lead to increased wear.



Environmental hazard Hazardous substances cause environmental damage.

- Oil, grease, filters, fuel, cleaners, brake fluid, etc., should be disposed of as stipulated in applicable regulations.

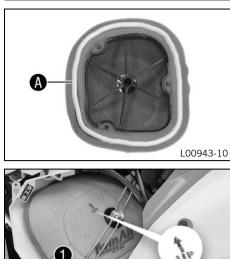


Preparatory work

Main work

- Detach air filter holder ① at the bottom and swing it to one side. Remove the air filter with the air filter support.
- Remove the air filter from the air filter support.

12.28 Installing the air filter 🔌



Main work

- Mount the clean air filter on the air filter support.
- Grease the air filter in area 🚯.

Long-life grease (🕶 p. 122)

Insert both parts together, position them and fasten them using air filter holder ①. ✓ The arrow of marking **UP** faces up.



If the air filter is not correctly mounted, dust and dirt can enter the engine and cause damage.

Finishing work

12.29 Cleaning the air filter and air filter box 🔌

🖌 Warning

Info

Environmental hazard Hazardous substances cause environmental damage.

L02468-11

- Oil, grease, filters, fuel, cleaners, brake fluid, etc., should be disposed of as stipulated in applicable regulations.

Do not clean the air filter with fuel or petroleum since these substances attack the foam.

Preparatory work

- Remove the air filter.

 (* p. 62)

Main work

Wash the air filter thoroughly in special cleaning liquid and allow it to dry properly.



Air filter cleaner (* p. 122)

Info Only

- Only press the air filter to dry it, never wring it out.
- Oil the dry air filter with a high quality filter oil.

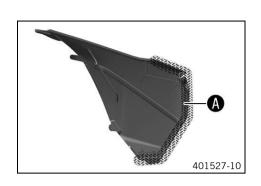
Oil for foam air filter (* p. 122)

- Clean the air filter box.
- Check the intake flange for damage and firm seating.

Finishing work

- Install the air filter. 🔌 (🕶 p. 63)

12.30 Sealing the air filter box 🔌



Preparatory work

Remove the air filter box lid. (* p. 62)

Main work

Seal the air filter box in the marked area (A).

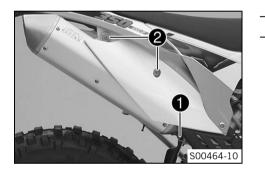
Finishing work – Install the air filter box lid. (* p. 62)



Warning

Danger of burns The exhaust system gets very hot when the vehicle is driven.

- Allow the exhaust system to cool down. Do not touch hot components.



- Disconnect spring 1.
- Remove screws 2 and take off main silencer.

	_
	-
S00466-10	

Installing the main silencer

- Mount the main silencer. Mount screws 🕦 but do not tighten yet.
- Reconnect spring **2**.
- Tighten screws **1**.

Guideline

Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)

12.33 Changing the glass fiber yarn filling of the main silencer 🔌

Warning

Danger of burns The exhaust system gets very hot when the vehicle is driven.

- Allow the exhaust system to cool down. Do not touch hot components.

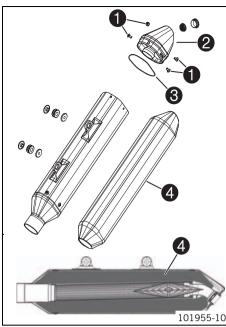
Info

12.32

Over time, the fibers of the glass fiber yarn escape and the damper "burns" out. Not only is the noise level higher, the performance characteristic changes.

Preparatory work

Remove the main silencer. (* p. 64)



Main work

(All EXC-F models)

- Remove screws ①.
- Take off silencer cap **2** with O-ring **3**.
- Remove the old glass fiber yarn filling.
- Clean the parts that need to be reinstalled and check for damage.
- Mount the new glass fiber yarn filling 4 into the main silencer.
- Mount the O-ring on the silencer cap.
- Position the silencer cap.
- Mount and tighten all of the screws.
 Guideline

Screws on the main silencer	M5	7 Nm (5.2 lbf ft)
-----------------------------	----	-------------------

(All XCF-W models)

- Remove screws **1** of connecting cap **2**.
- Remove connecting cap 2 with the perforated pipe, O-ring 3, and glass fiber yarn filling 4.
- Remove screws **(5)** and silencer cap **(6)** with O-ring **(7)**.
- Remove screws (3) and insert (9) together with insulating pad (10).
- Clean the parts that need to be reinstalled and check for damage.
- Mount the new insulating pad on the insert and fasten with adhesive tape.
- Position the insert with the insulating pad in outer tube.

Mount and tighten screws **8**. Guideline

Screws on the main silencer	M5	7 Nm (5.2 lbf ft)
-----------------------------	----	-------------------

- Mount O-ring **3** on the silencer cap.
- Mount new glass fiber yarn filling on the perforated pipe.
- Mount the connecting cap with the glass fiber yarn filling in the outer tube.

Info

Press the glass fiber yarn filling into the outer tube using a blunt tool.

Mount and tighten screws ①.

Gu	ide	line	

	Screws on the main silencer	M5	7 Nm (5.2 lbf ft)
--	-----------------------------	----	-------------------

- Mount O-ring 7 on the silencer cap.
- Position the silencer cap with O-ring 7 in the outer tube.
- Mount and tighten screws 6.
- Guideline

Screws on the main silencer	M5	7 Nm (5.2 lbf ft)
-----------------------------	----	-------------------

Finishing work

12.34 Removing the fuel tank 🔌

1 Danger

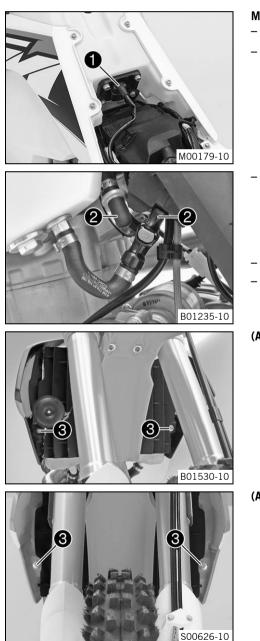
Fire hazard Fuel is highly flammable.

- Never refuel the vehicle near open flames or burning cigarettes, and always switch off the engine first. Be careful that no
 fuel is spilt, especially on hot vehicle components. Clean up spilt fuel immediately.
- The fuel in the fuel tank expands when warm and may emerge if overfilled. Follow the instructions on refueling.

Warning Danger of

Danger of poisoning Fuel is poisonous and a health hazard.

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



Preparatory work

- Remove the seat. (* p. 61)

Main work

- Detach connector **1** of the fuel pump.
- Remove the tube from the fuel tank breather.
- Thoroughly clean the plug-in connection of the fuel line using compressed air.

lnfo

Under no circumstances should dirt enter into the fuel line. Dirt in the fuel line clogs the injection valve.

- Disconnect the plug-in connection of the fuel line.
- Mount the wash cap set 2.

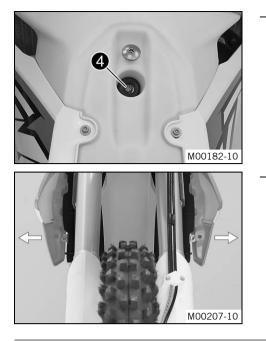
Wash cap set (81212016100)

(All EXC-F models)

- Disconnect the connector of the horn.
- Remove screws 3 with the collar bushings and horn.

(All XCF-W models)

- Remove screws **3** with the collar bushings.



Remove screw **4** with the rubber bushing.

Pull both spoilers off of the sides of the radiator bracket and lift off the fuel tank.

12.35 Installing the fuel tank 🔌

Danger

Fire hazard Fuel is highly flammable.

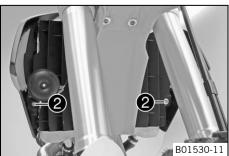
- Never refuel the vehicle near open flames or burning cigarettes, and always switch off the engine first. Be careful that no fuel is spilt, especially on hot vehicle components. Clean up spilt fuel immediately.
- The fuel in the fuel tank expands when warm and may emerge if overfilled. Follow the instructions on refueling.

Warning

Danger of poisoning Fuel is poisonous and a health hazard.

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





Main work

- Position the fuel tank and fit the two spoilers to the sides of the radiator bracket.
- Make sure that no cables are trapped or damaged.
- Mount the fuel tank breather.
- Mount and tighten screw 1 with the rubber bushing.
 - Guideline

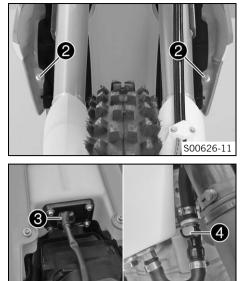
Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)
---------------------------	----	--------------------

(All EXC-F models)

Position the collar bushings and horn, and mount and tighten screws 2.
 Guideline

diffeine				
Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)		

- Connect the connector of the horn.

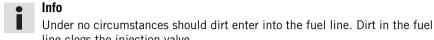


(All XCF-W models)

Position the collar bushings, and mount and tighten screws ②.
 Guideline

Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)	
---------------------------	----	-----------------------	--

- Plug in connector **3** of the fuel pump.
- Remove the wash cap set.
- Thoroughly clean the plug-in connection of the fuel line using compressed air.



line clogs the injection valve.

Lubricate the O-ring and connect plug-in connection ${f Q}$ of the fuel line.

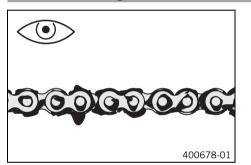


Route the cable and fuel line at a safe distance from the exhaust system.

Finishing work

Mount the seat. (🕶 p. 62)

12.36 Checking for chain dirt accumulation



- Check the chain for coarse dirt accumulation.
 - If the chain is very dirty:
 - Clean the chain. (* p. 68)

12.37 Cleaning the chain



Warning

Danger of accidents Oil or grease on the tires reduces their grip.

- Remove oil and grease with a suitable cleaning material.

B01533-10



Warning

Danger of accidents Reduced braking efficiency due to oil or grease on the brake discs.

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

Warning

Info

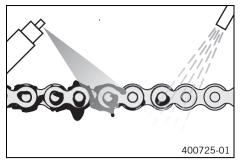
Environmental hazard Hazardous substances cause environmental damage.

- Oil, grease, filters, fuel, cleaners, brake fluid, etc., should be disposed of as stipulated in applicable regulations.



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

Preparatory work



Main work

- Clean the chain regularly and then treat with chain spray.

Chain cleaner (* p. 122) Off-road chain spray (* p. 122)

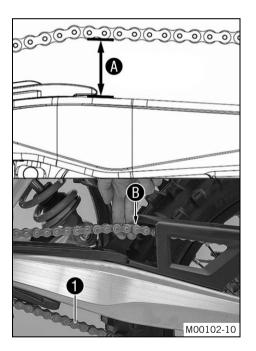
Finishing work

12.38 Checking the chain tension

Warning

Danger of accidents Danger caused by incorrect chain tension.

If the chain is too taut, the components of the secondary power transmission (chain, engine sprocket, rear sprocket, bearings in the transmission and in the rear wheel) will be under additional load. In addition to premature wear, this can cause the chain or the countershaft of the transmission to break in extreme cases. If the chain is too loose, however, it may fall off the engine sprocket or rear sprocket and block the rear wheel or damage the engine. Ensure that the chain tension is correct and adjust it if necessary.



Preparatory work

Main work

- Pull the chain at the end of the chain sliding component upwards to measure chain tension **A**.

Info

The lower chain section ① must be taut. When the chain guard is mounted, it must be possible to pull up the chain at least to the point where it makes contact with chain guard ③. Chain wear is not always even, so you should repeat this measurement at different chain positions.

55... 58 mm (2.17... 2.28 in)

Chain tension

- If the chain tension does not meet specifications:
 - Adjust the chain tension. (* p. 69)

Finishing work

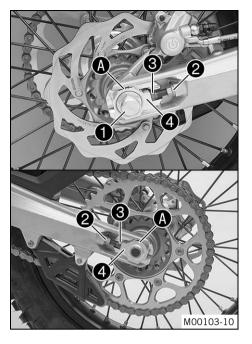
12.39 Adjusting the chain tension

Warning

Danger of accidents Danger caused by incorrect chain tension.

If the chain is too taut, the components of the secondary power transmission (chain, engine sprocket, rear sprocket, bearings in the transmission and in the rear wheel) will be under additional load. In addition to premature wear, this can cause the chain or the countershaft of the transmission to break in extreme cases. If the chain is too loose, however, it may fall off the engine sprocket or rear sprocket and block the rear wheel or damage the engine. Ensure that the chain tension is correct and adjust it if necessary.

Preparatory work



Main work

- Loosen nut 1.
 - Loosen nuts **2**.
- Adjust the chain tension by turning adjusting screws **3** left and right. Guideline

Chain tension

55... 58 mm (2.17... 2.28 in) Turn adjusting screws 3 on the left and right so that the markings on the left and right chain adjusters are in the same position relative to reference marks (A). The rear wheel is then correctly aligned.

- Tighten nuts 2. _
 - Make sure that the chain adjusters **4** are fitted correctly on the adjusting screws **3**.
- Tighten nut 1.

Guideline

_

Nut, rear wheel spindle	M20x1.5	80 Nm (59 lbf ft)

Info

The wide adjustment range of the chain adjusters (32 mm (1.26 in)) enables different secondary ratios with the same chain length. Chain adjusters $\mathbf{4}$ can be turned by 180°.

Finishing work

Remove the motorcycle from the lift stand. (* p. 48)

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



Raise the motorcycle with the lift stand. (* p. 48)

Main work

- Shift gear to neutral. _
- Check the rear sprocket and engine sprocket for wear. _
 - If the rear sprocket or engine sprocket is worn:
 - Change the power set. 🔧

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

Pull on the upper part of the chain with the specified weight **A**. Guideline

Weight of chain wear measurement	10 15 kg (22 33 lb.)
----------------------------------	----------------------

Measure the distance \mathbf{B} of 18 chain links in the lower chain section.

Info

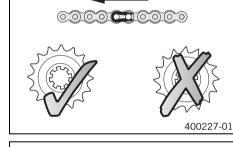
Chain wear is not always even, so you should repeat this measurement at different chain positions.

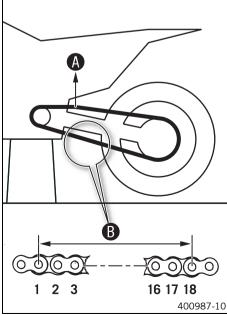
Maximum distance (b) at the longest 272 mm (10.71 in) chain section
--

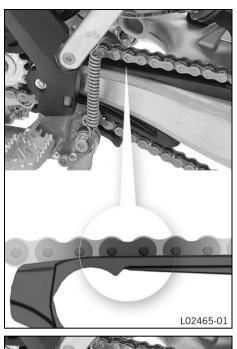
- If the distance **B** is greater than the specified measurement:
 - Change the power set. 🔦

Info

When the chain is replaced, the rear sprocket and engine sprocket should also be changed. New chains wear out faster on old, worn sprockets.









- Check the chain sliding guard for wear.
 - » If the bottom edge of the chain bolt is in line with or below 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 sliding guard	M6	6 Nm (4.4 lbf ft)	Loctite [®] 243™
----------------------------	----	----------------------	---------------------------

- Check the chain sliding piece for wear.
 - » If the bottom edge of the chain bolt 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 of the chain sliding piece.
 Guideline

Guideinie				
M8	15 Nm (11.1 lbf ft)			
	M8			

- Check the chain guide for wear.



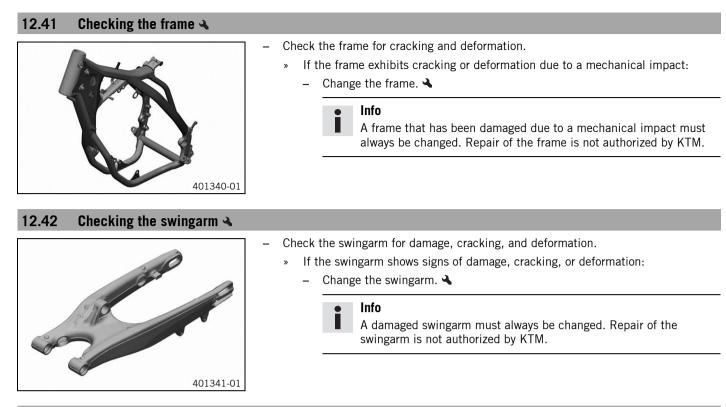
Wear is visible on the front of the chain guide.

- If the light part of the chain guide is worn:
 - Change the chain guide. 🔌
- Check that the chain guide is firmly seated.
 - » If the chain guide is loose:
 - Tighten the screws on the chain guide.
 Guideline

Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)	
Remaining nuts, chassis	M6	10 Nm (7.4 lbf ft)	

Finishing work

Remove the motorcycle from the lift stand. (* p. 48)



12.43 Checking the throttle cable routing

Preparatory work

- Remove the fuel tank. 🔧 (* p. 66)

Main work

Check the throttle cable routing.

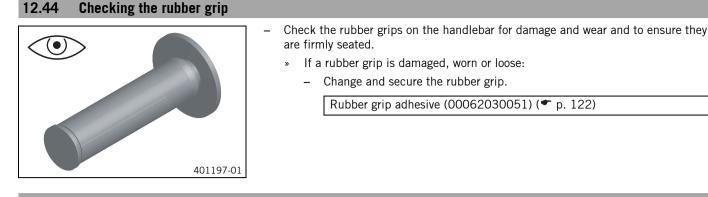
Both throttle cables must be routed to the throttle valve body side by side behind the handlebars and above the fuel tank bearing.

- » If the throttle cable is not routed as specified:
 - Correct the throttle cable routing.

Finishing work

- Install the fuel tank. 🔌 (🕶 p. 67)





12.45 Additionally securing the rubber grip



- 401198-01
- Check the rubber grip. (🕶 p. 73)

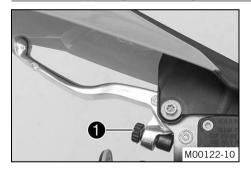
Main work

- Secure the rubber grip at two points using the securing wire.

Securing wire (54812016000)
Wire twister forceps (U6907854)

The twisted wire ends face away from the hands and are bent toward the rubber grip.

12.46 Adjusting the basic position of the clutch lever



 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.

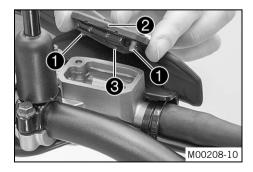
Adjust the basic setting of the clutch lever to your hand size by turning adjusting

- The range of adjustment is limited.
- Turn the adjusting screw by hand only, and do not apply any force.
- Do not make any adjustments while riding!

12.47 Checking/correcting the fluid level of the hydraulic clutch

• Info

The fluid level rises with increased wear of the clutch lining discs.



- Move the clutch fluid reservoir mounted on the handlebar to a horizontal position.
- Remove screws 1.
- Remove cover **2** with membrane **3**.
- Check the fluid level.

Fluid level below container rim	4 mm (0.16 in)
---------------------------------	----------------

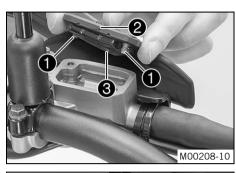
- » If the fluid level does not meet specifications:
 - Correct the fluid level of the hydraulic clutch.
 - Brake fluid DOT 4 / DOT 5.1 (* p. 120)
- Position the cover with the membrane. Mount and tighten the screws.
 - Info

Clean up overflowed or spilt brake fluid immediately with water.

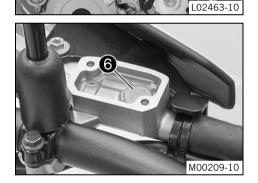
12.48 Changing the hydraulic clutch fluid 🔌

Warning

- Environmental hazard Hazardous substances cause environmental damage.
 - Oil, grease, filters, fuel, cleaners, brake fluid, etc., should be disposed of as stipulated in applicable regulations.







- Move the clutch fluid reservoir mounted on the handlebar to a horizontal position.
- Remove screws 1
- Remove cover 2 with membrane 3.

Bleed syringe (50329050000)
Brake fluid DOT 4 / DOT 5.1 (🕶 p. 120)

- On the clutch slave cylinder, remove bleeder screw (5) and mount bleeding syringe (4).
- Inject the liquid into the system until it escapes from openings (6) of the master cylinder without bubbles.
- To prevent overflow, drain fluid occasionally from the master cylinder reservoir.
- Remove the bleeding syringe. Mount and tighten screws bleeder screw.
- Correct the fluid level of the hydraulic clutch.
 Guideline

Fluid level below container rim	4 mm (0.16 in)

Position the cover with the membrane. Mount and tighten the screws.

12.49 Removing the engine guard (EXC-F Factory Edition, EXC-F AU, All Six Days models)



Turn quick release ① counterclockwise until it disengages. Remove the engine guard.

12.50 Installing the engine guard (EXC-F Factory Edition, EXC-F AU, All Six Days models)



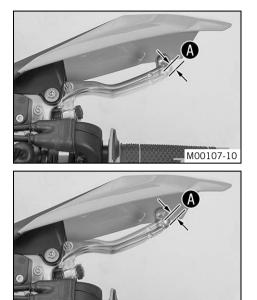
- Attach the engine guard on the frame at the rear and swing up at the front.
- Turn quick release ① clockwise all the way.

13.1 Checking free travel of hand brake lever

Warning

Danger of accidents Brake system failure.

 If there is no free travel on the hand brake lever, pressure builds up on the front brake circuit. The front brake can fail due to overheating. Adjust the free travel on hand brake lever according to specifications.



(All EXC-F models)

_	Push th	e hand	brake	to the	handlebar	and	check	free	travel	A).
---	---------	--------	-------	--------	-----------	-----	-------	------	--------	---	----

	Free travel of hand brake lever	≥ 3 mm (≥ 0.12 in)		
»	» If the free travel does not meet specifications:			

- Adjust the free travel of the hand brake lever. (* p. 75)

(All XCF-W models)

- Push the hand brake lever forwards and check free travel (A).

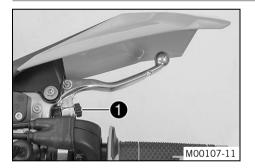
Free travel of hand brake lever	≥ 3 mm (≥ 0.12 in)

If the free travel does not meet specifications:

- Adjust the basic position of the hand brake lever. (p. 75)

13.2 Adjusting free travel of hand brake lever (All EXC-F models)

M00107-12

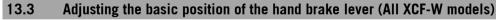


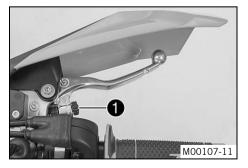
Check the free travel of the hand brake lever. (
 p. 75)

Adjust the free travel of the hand brake lever with adjusting screw $oldsymbol{0}$.

Info

- Turn the adjusting screw clockwise to reduce free travel. The pressure point moves away from the handlebar.
 - Turn the adjusting screw counterclockwise to increase free travel. The pressure point moves towards the handlebar.
 - The range of adjustment is limited.
 - Turn the adjusting screw by hand only, and do not apply any force.
 - Do not make any adjustments while riding!





- Check the free travel of the hand brake lever. (p. 75)
- Adjust the basic setting of the hand brake lever to your hand size by turning adjusting screw lacksquare.

lnfo

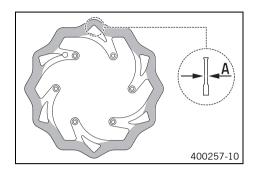
Turn the adjusting screw clockwise to increase the distance between the hand brake lever and the handlebar. Turn the adjusting screw counterclockwise to decrease the distance between the hand brake lever and the handlebar. The range of adjustment is limited. Turn the adjusting screw by hand only, and do not apply any force. Do not make any adjustments while riding!

13.4 Checking the brake discs

Warning

Danger of accidents Reduced braking efficiency due to worn brake disc(s).

Change the worn brake disc(s) without delay. (Your authorized KTM workshop will be glad to help.)



- Check the thickness of the front and rear brake discs at several places on the disk to see if it conforms to measurement **A**.

Info

Wear reduces the thickness of the brake disc around the area used by the brake linings.

Brake discs - wear limit	
Front	2.5 mm (0.098 in)
Rear	3.5 mm (0.138 in)

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

13.5 Checking the brake fluid level of the front brake

Warning

Danger of accidents Brake system failure.

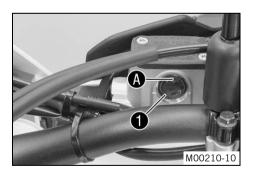
 If the brake fluid level drops below the specified marking or the specified value, this is an indication that the brake system is leaking or that the brake linings are completely worn down. Check the brake system and do not continue riding. (Your authorized KTM workshop will be glad to help.)



Warning

Danger of accidents Reduced braking efficiency due to old brake fluid.

 Change the brake fluid of the front and rear brake according to the service schedule. (Your authorized KTM workshop will be glad to help.)



- Move the brake fluid reservoir mounted on the handlebar to a horizontal position.
- Check the brake fluid level in level viewer ①.
 - If the brake fluid level has dropped below marking A:
 - Add front brake fluid. A (* p. 76)

13.6 Adding front brake fluid 🔧



Warning Danger of accidents Brake system failure.

 If the brake fluid level drops below the specified marking or the specified value, this is an indication that the brake system is leaking or that the brake linings are completely worn down. Check the brake system and do not continue riding. (Your authorized KTM workshop will be glad to help.)



Skin irritation Brake fluid can cause skin irritation on contact.

- Avoid contact with skin and eyes, and keep out of the reach of children.
- Wear suitable protective clothing and goggles.
- If brake fluid comes into contact with the eyes, flush the eyes thoroughly with water and consult a physician immediately.



Warning

Danger of accidents Reduced braking efficiency due to old brake fluid.

 Change the brake fluid of the front and rear brake according to the service schedule. (Your authorized KTM workshop will be glad to help.)



Warning

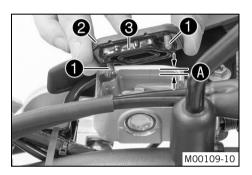
Environmental hazard Hazardous substances cause environmental damage.

- Oil, grease, filters, fuel, cleaners, brake fluid, etc., should be disposed of as stipulated in applicable regulations.

Info

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! Use only clean brake fluid from a sealed container.



Preparatory work

Main work

- Move the brake fluid reservoir mounted on the handlebar to a horizontal position.
- Remove screws 1.
- Remove cover **2** with membrane **3**.
- Add brake fluid to level 🚯.

Guideline

Level (brake fluid level below con- tainer rim)	5 mm (0.2 in)
Brake fluid DOT 4 / DOT 5.1 (* p. 120)	

Position the cover with the membrane. Mount and tighten the screws.

Info Clea

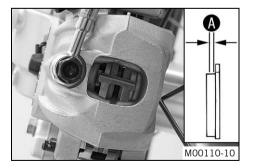
Clean up overflowed or spilt brake fluid immediately with water.

13.7 Checking the front brake linings

Warning

Danger of accidents Reduced braking efficiency caused by worn brake linings.

- Change worn brake linings immediately. (Your authorized KTM workshop will be glad to help.)



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

	Minimum thickness	≥ 1 mm (≥ 0.04 in)
»	If the minimum thickness is less than	specified:
		(= 70)

- Change the front brake linings. 🔌 (🖤 p. 78)
- Check the brake linings for damage and cracking.
- » If damage or cracking is visible:
 - Change the front brake linings. 🔌 (🕶 p. 78)

13.8 Changing the front brake linings 🔌

Warning

- Danger of accident Brake system failure.
- Maintenance work and repairs must be carried out professionally. (Your authorized KTM workshop will be glad to help.)

Warning

Skin irritation Brake fluid can cause skin irritation on contact.

- Avoid contact with skin and eyes, and keep out of the reach of children.
- Wear suitable protective clothing and goggles.
- If brake fluid comes into contact with the eyes, flush the eyes thoroughly with water and consult a physician immediately.

Warning

Danger of accidents Reduced braking efficiency due to old brake fluid.

 Change the brake fluid of the front and rear brake according to the service schedule. (Your authorized KTM workshop will be glad to help.)

Warning

Danger of accidents Reduced braking efficiency due to oil or grease on the brake discs.

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

Warning

Danger of accidents Reduced braking efficiency due to use of non-approved brake linings.

Brake linings available from accessory suppliers are often not tested and approved for use on KTM vehicles. The construction and friction factor of the brake linings and therefore the brake power can differ considerably from the original KTM brake linings. If brake linings are used that differ from the originals, there is no guarantee that they comply with the original license. The vehicle no longer corresponds to the condition at delivery, and the warranty is no longer valid.

🔏 Warning

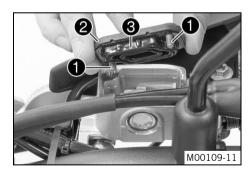
Environmental hazard Hazardous substances cause environmental damage.

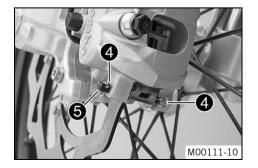
- Oil, grease, filters, fuel, cleaners, brake fluid, etc., should be disposed of as stipulated in applicable regulations.

Info

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! Use only clean brake fluid from a sealed container.





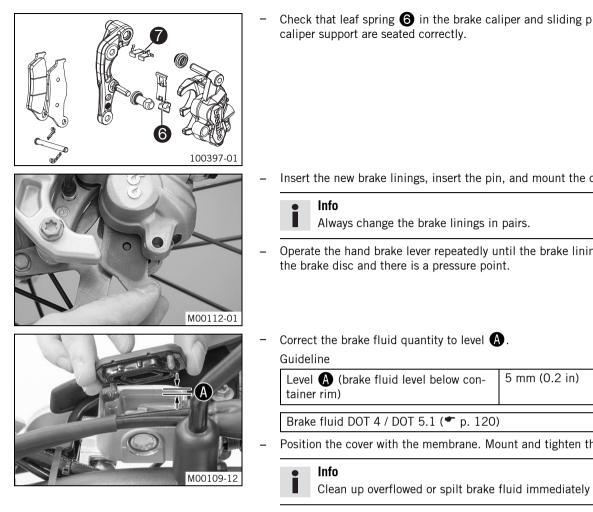
- Move the brake fluid reservoir mounted on the handlebar to a horizontal position.
- Remove screws 1.
- Remove cover 2 with membrane 3.
- Press the brake caliper onto the brake disc by hand in order to push back the brake pistons. Ensure that brake fluid does not flow out of the brake fluid reservoir, extracting it by suction if it does.



Make sure when pushing back the brake pistons that you do not press the brake caliper against the spokes.

- Remove cotter pins 4, pull out pin 5, and remove the brake linings.
- Clean the brake caliper and brake caliper support.



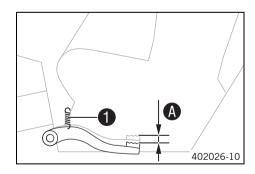


Checking the free travel of foot brake lever 13.9

Warning

Danger of accidents Brake system failure.

If there is no free travel on the foot brake lever, pressure builds up on the rear brake circuit. The rear brake can fail due to overheating. Adjust the free travel on foot brake lever according to specifications.



Disconnect spring 1.

Move the foot brake lever back and forth between the end stop and the contact to the foot brake cylinder piston and check free travel (A). Guideline

Free travel at foot brake lever	3 5 mm (0.12 0.2 in)
» If the free travel does not meet specif	ications:
 Adjust the basic position of the fo 	ot brake lever. 🔌 (🕶 p. 79)

Reconnect spring 1.

13.10 Adjusting the basic position of the foot brake lever A

Warning

Danger of accidents Brake system failure.

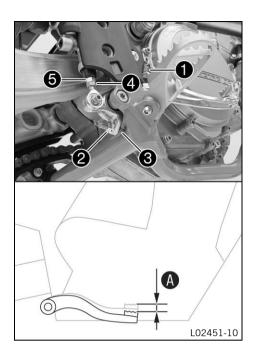
If there is no free travel on the foot brake lever, pressure builds up on the rear brake circuit. The rear brake can fail due to overheating. Adjust the free travel on foot brake lever according to specifications.

- 79
- Check that leaf spring **(6)** in the brake caliper and sliding plate **(7)** in the brake

- Insert the new brake linings, insert the pin, and mount the cotter pins.
- Operate the hand brake lever repeatedly until the brake linings are in contact with

Level (brake fluid level below con- tainer rim)	5 mm (0.2 in)
Brake fluid DOT 4 / DOT 5.1 (* p. 120))
Position the cover with the membrane. Mo	ount and tighten the screws.

Clean up overflowed or spilt brake fluid immediately with water.



- Disconnect spring 1.
- Loosen nut ④ and, with push rod ⑤, turn it back until you have maximum free travel.
- To adjust the basic position of the foot brake lever individually, loosen nut (2) and turn screw (3) accordingly.



The range of adjustment is limited.

- Turn push rod **(5)** accordingly until you have free travel **(A)**. If necessary, adjust the basic position of the foot brake lever.

Guideline

Free travel at foot brake lever	3 5 mm (0.12 0.2 in)

Hold screw 3 and tighten nut 2.

Guideline

Nut, foot brake lever stopM820 Nm
(14.8 lbf ft)Hold push rod **⑤** and tighten nut **④**.

Μ6

Guideline

- Remaining nuts, chassis
- Reconnect spring ①.

13.11 Checking the rear brake fluid level

Warning Danger of accidents Brake system failure.

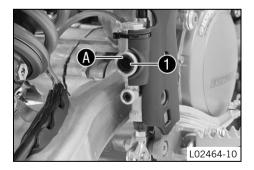
- If the brake fluid level drops below the specified marking or the specified value, this is an indication that the brake system is leaking or that the brake linings are completely worn down. Check the brake system and do not continue riding. (Your authorized KTM workshop will be glad to help.)



Warning

Danger of accidents Reduced braking efficiency due to old brake fluid.

 Change the brake fluid of the front and rear brake according to the service schedule. (Your authorized KTM workshop will be glad to help.)



- Stand the vehicle upright.
- Check the brake fluid level in level viewer $oldsymbol{1}$.
 - » If the brake fluid level has dropped below marking $oldsymbol{A}$:
 - Add rear brake fluid. 🔌 (🕶 p. 80)

13.12 Adding rear brake fluid 🔧



Warning

Danger of accidents Brake system failure.

 If the brake fluid level drops below the specified marking or the specified value, this is an indication that the brake system is leaking or that the brake linings are completely worn down. Check the brake system and do not continue riding. (Your authorized KTM workshop will be glad to help.)



Warning

Skin irritation Brake fluid can cause skin irritation on contact.

- Avoid contact with skin and eyes, and keep out of the reach of children.
- Wear suitable protective clothing and goggles.
- If brake fluid comes into contact with the eyes, flush the eyes thoroughly with water and consult a physician immediately.

10 Nm (7.4 lbf ft)



Warning

Danger of accidents Reduced braking efficiency due to old brake fluid.

 Change the brake fluid of the front and rear brake according to the service schedule. (Your authorized KTM workshop will be glad to help.)



Warning

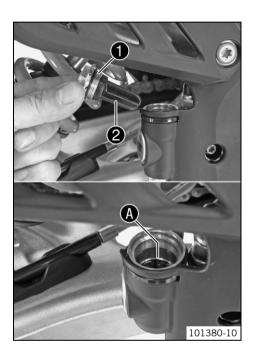
Environmental hazard Hazardous substances cause environmental damage.

- Oil, grease, filters, fuel, cleaners, brake fluid, etc., should be disposed of as stipulated in applicable regulations.

Info

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! Use only clean brake fluid from a sealed container.



Preparatory work

- Check the rear brake linings. (* p. 81)

Main work

- Stand the vehicle upright.
- Remove screw cap 🕦 with membrane 2 and the O-ring.
- Add brake fluid to level 🚯.

Brake fluid DOT 4 / DOT 5.1 (, 120)

- Mount the screw cap with the membrane and the O-ring.

• Info

Clean up overflowed or spilt brake fluid immediately with water.

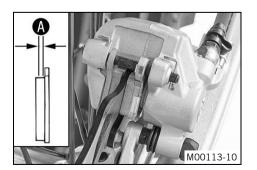
13.13 Checking the rear brake linings



Warning

Danger of accidents Reduced braking efficiency caused by worn brake linings.

- Change worn brake linings immediately. (Your authorized KTM workshop will be glad to help.)



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

Minimun	n thickı	ness 🗛		≥ 1 mm (≥ 0.04 in)	

- » If the minimum thickness is less than specified:
 Change the rear brake linings. ◄ (♥ p. 82)
- Check the brake linings for damage and cracking.
- If damage or cracking is visible:
 - Change the rear brake linings. 🔌 (* p. 82)

13.14 Changing the rear brake linings **4**

Warning

- Danger of accident Brake system failure.
- Maintenance work and repairs must be carried out professionally. (Your authorized KTM workshop will be glad to help.)

Warning

Skin irritation Brake fluid can cause skin irritation on contact.

- Avoid contact with skin and eyes, and keep out of the reach of children.
- Wear suitable protective clothing and goggles.
- If brake fluid comes into contact with the eyes, flush the eyes thoroughly with water and consult a physician immediately.

Warning

Danger of accidents Reduced braking efficiency due to old brake fluid.

 Change the brake fluid of the front and rear brake according to the service schedule. (Your authorized KTM workshop will be glad to help.)

Warning

Danger of accidents Reduced braking efficiency due to oil or grease on the brake discs.

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

Warning

Danger of accidents Reduced braking efficiency due to use of non-approved brake linings.

Brake linings available from accessory suppliers are often not tested and approved for use on KTM vehicles. The construction and friction factor of the brake linings and therefore the brake power can differ considerably from the original KTM brake linings. If brake linings are used that differ from the originals, there is no guarantee that they comply with the original license. The vehicle no longer corresponds to the condition at delivery, and the warranty is no longer valid.

g Warning

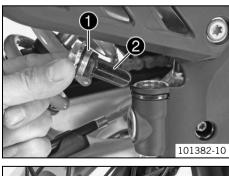
Environmental hazard Hazardous substances cause environmental damage.

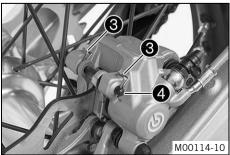
- Oil, grease, filters, fuel, cleaners, brake fluid, etc., should be disposed of as stipulated in applicable regulations.

Info

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! Use only clean brake fluid from a sealed container.





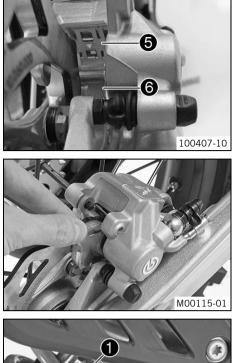
- Stand the vehicle upright.
- Remove screw cap ① with membrane ② and the O-ring.
- Press the brake piston back to its basic position and make sure that no brake fluid overflows from the brake fluid reservoir, extracting it if necessary.



Make sure when pushing back the brake piston that you do not press the brake caliper against the spokes.

- Remove cotter pins 3, pull out pin 4, and remove the brake linings.
- Clean the brake caliper and brake caliper support.





Check that leaf spring **5** in the brake caliper and sliding plate **6** in the brake caliper support are seated correctly.

Insert the new brake linings, insert the pin, and mount the cotter pins. _



_

- Always change the brake linings in pairs.
- Operate the foot brake lever repeatedly until the brake linings are in contact with _ the brake disc and there is a pressure point.
- _

		Brake fluid
	-	Mount screw
		• Info
		Clear
2 0		
D		
the loss		
A		

101380-10

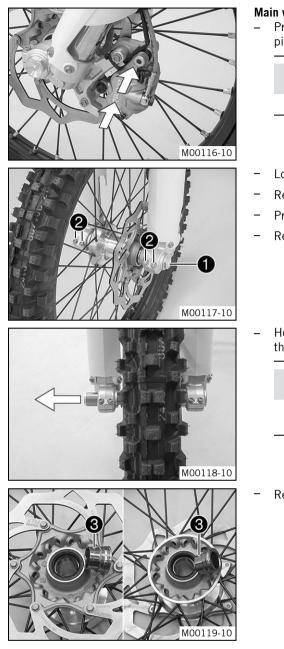
Add brake fluid to level **A**.

Brake fluid DOT 4 / DOT 5.1 (* p. 120)	

rew cap በ with membrane 2 and O-ring.

ean up overflowed or spilt brake fluid immediately with water.

14.1 Removing the front wheel 🔌



Preparatory work

Raise the motorcycle with the lift stand. (***** p. 48) _

Main work

Press the brake caliper onto the brake disc by hand in order to push back the brake pistons.



Make sure when pushing back the brake pistons that you do not press the brake caliper against the spokes.

- Loosen screw 1 by several turns.
- Release screws **2**.
- Press on screw 1 to push the wheel spindle out of the axle clamp.
- Remove screw 1.
- Holding the front wheel, withdraw the wheel spindle. Take the front wheel out of the fork.



Info Do not pull the hand brake lever when the front wheel is removed. Always lay the wheel down in such a way that the brake disc is not damaged.

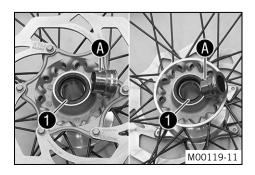
Remove spacers 3.

14.2 Installing the front wheel 🔌

Warning

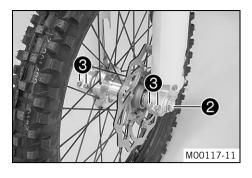
Danger of accidents Reduced braking efficiency due to oil or grease on the brake discs.

Always keep the brake discs free of oil and grease, and clean them with brake cleaner when necessary.



- Check the wheel bearing for damage and wear.
 - If the wheel bearing is damaged or worn: »
 - Change the wheel bearing.
- Clean and grease shaft seal rings 1 and bearing surface A of the spacers. Long-life grease (* p. 122)

Insert the spacers.



- Position the front wheel and insert the wheel spindle.
 - \checkmark The brake linings are correctly positioned.
- Mount and tighten screw **2**.

Guideline

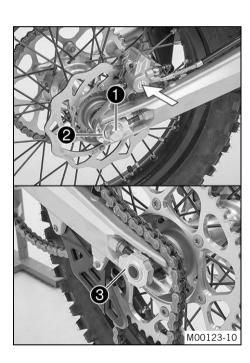
Screw, front wheel spindle	M24x1.5	45 Nm (33.2 lbf ft)	
----------------------------	---------	------------------------	--

- Activate the hand brake lever multiple times until the brake linings are in contact with the brake disc.
- Remove the motorcycle from the lift stand. (* p. 48)
- Pull the front wheel brake and push down hard on the fork several times to align the fork legs.
- Fully tighten screw 3.

Guideline

Screw, fork stub	M8	15 Nm
		(11.1 lbf ft)

14.3 Removing the rear wheel 🔌



Preparatory work

Main work

 Press the brake caliper by hand on to the brake disc in order to press back the brake piston.



Make sure when pushing back the brake piston that you do not press the brake caliper against the spokes.

- Remove nut 🕦.
- Remove chain adjuster 2. Withdraw wheel spindle 3 only enough to allow the rear wheel to be pushed forward.
- Push the rear wheel forward as far as possible. Remove the chain from the rear sprocket.

• Info

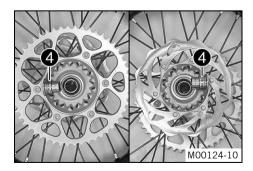
Cover the components to protect them against damage.

- Holding the rear wheel, withdraw the wheel spindle. Take the rear wheel out of the swingarm.

lnfo

Do not operate the foot brake when the rear wheel is removed. Always lay the wheel down in such a way that the brake disc is not damaged.

Remove spacers 4.

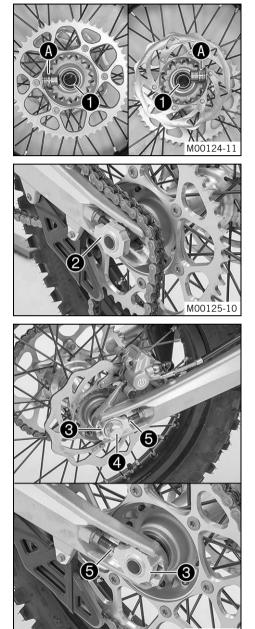


14.4 Installing the rear wheel -

Warning

Danger of accidents Reduced braking efficiency due to oil or grease on the brake discs.

Always keep the brake discs free of oil and grease, and clean them with brake cleaner when necessary.



Main work

»

- Check the wheel bearing for damage and wear.
 - If the wheel bearing is damaged or worn:
 - Change the wheel bearing. 🔌
- Clean and grease shaft seal rings 1 and bearing surface (A) of the spacers.

Long-life grease (* p. 122)

- Insert the spacers.
- Position the rear wheel and insert wheel spindle $oldsymbol{2}$.
 - The brake linings are correctly positioned.
- Attach the chain.
- Position chain adjuster 🕄 . Mount nut 4 but do not tighten it yet.
- Make sure that chain adjusters ③ are fitted correctly on adjusting screws ⑤.
- Check the chain tension. (* p. 69)
- Tighten nut 4.

Guideline

Nut, rear wheel spindleM20x1.580 Nm (59 lbf ft)

Info

The wide adjustment range of the chain adjusters (32 mm (1.26 in)) enables different secondary ratios with the same chain length. Chain adjusters (3) can be turned by 180°.

Operate the foot brake lever repeatedly until the brake linings are in contact with the brake disc and there is a pressure point.

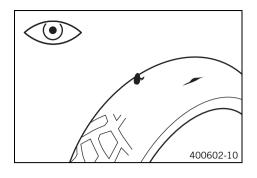
Finishing work

M00126-

14.5 Checking the tire condition

• Info

Only mount tires approved and/or recommended by KTM. Other tires could have a negative effect on handling characteristics. The type, condition, and air pressure of the tires all have a significant impact on the handling characteristics of the motorcycle. The tires mounted on the front and rear wheels must have a similar profile. Worn tires have a negative effect on handling characteristics, especially on wet surfaces.



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

Info

Note local national regulations concerning the minimum tread depth.

Minimum tread depth	≥ 2 mm (≥ 0.08 in)

- » If the tread depth is less than the minimum permissible depth:
 Change the tire.
- Check the tire age.

Info

The tire's date of manufacture is usually part of the tire markings and is indicated by the last four digits of the **DOT** marking. 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 tire is older than five years:
 - Change the tire.

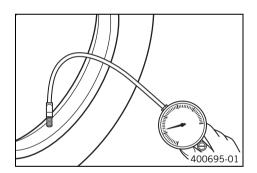
14.6 Checking the tire air pressure

•

Info

Low tire air pressure leads to abnormal wear and overheating of the tire.

Correct tire air pressure ensures optimal riding comfort and maximum tire service life.



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

Tire air pressure off road		
Front	1.0 bar (15 psi)	
Rear	1.0 bar (15 psi)	
Road tire pressure (All EXC-F models)		
Front	1.5 bar (22 psi)	
Rear	1.5 bar (22 psi)	

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

14.7 Checking spoke tension

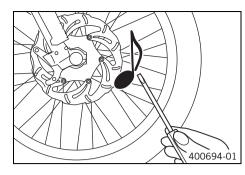
Warning

Danger of accidents Instable handling due to incorrect spoke tension.

- Ensure that the spoke tension is correct. (Your authorized KTM workshop will be glad to help.)

• Info

A loose spoke can cause wheel imbalance, which leads to more loose spokes in a short time. If the spokes are too tight, they can break due to local overload. Check the spoke tension regularly, especially on a new motorcycle.



Tap each spoke with a screwdriver.

• Info The

_

_

The sound frequency depends on the length and thickness of the spoke. If there are different sound frequencies in spokes with the same length and thickness, this indicates different spoke tensions.

You should hear a high note.

- » If the spoke tension varies:
 - Correct the spoke tension. 🔧

Check the spoke torque.

Guideline

Spoke nipple, rear wheel	M4.5	6 Nm (4.4 lbf ft)	
Spoke nipple, front wheel	M4.5	6 Nm (4.4 lbf ft)	

Torque wrench with various accessories in set (58429094000)

15.1 Removing the battery A

Warning

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

- Keep batteries out of the reach of children.
- Wear suitable protective clothing and goggles.
- Avoid contact with battery acid and battery gases.

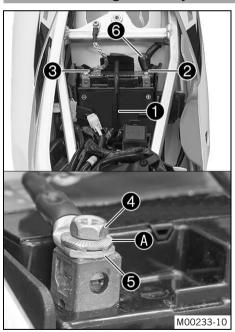
M00232-10

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

Preparatory work

- Switch off all power consumers and switch off the engine.
- Remove the seat. (p. 61)
- Remove the air filter box lid. (* p. 62)
- Main work
 - Disconnect negative cable **1** from the battery.
- Pull back positive terminal cover **2** and disconnect the positive cable from the battery.
- Detach rubber band 3 at the bottom.
- Lift the battery up and out.

15.2 Installing the battery 🔧



Main work

Insert the battery into the battery compartment with the terminals facing forward. (EXC-F EU, EXC-F Factory Edition, EXC-F AU, All XCF-W models, All Six Days models) Condition

Battery (YTX4L-BS) (* p. 116)

(EXC-F BR) Condition

Battery (YTX5L-BS) (* p. 116)

- Reconnect rubber band 1.
- Position the positive cable **2** and mount and tighten the screw.

Guideli	ne
---------	----

Screw, battery terminal M5	15	2.5 Nm
		(1.84 lbf ft)

Info

Contact disk A must be mounted between screw 4 and cable lug 5 with the claws facing down.

- Slide positive terminal cover 6 over the positive terminal.
- Position the negative cable 3 and mount and tighten the screw.

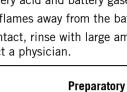
Guideline		
Screw, battery terminal	M5	2.5 Nm (1.84 lbf ft)

Info

Contact disk A must be mounted between screw 4 and cable lug 5 with the claws facing down.

Finishing work

- Install the air filter box lid. (* p. 62)
- Mount the seat. (* p. 62)



15.3 Charging the battery **A**

Warning

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

- Keep batteries out of the reach of children.
- Wear suitable protective clothing and goggles.
- Avoid contact with battery acid and battery gases.
- Keep sparks and open flames away from the battery. Only charge in well-ventilated rooms.
- In the event of skin contact, rinse with large amounts of water. If battery acid gets in the eyes, rinse with water for at least 15 minutes and contact a physician.

g Warning

Environmental hazard The battery contains elements that are harmful to the environment.

Do not dispose of batteries with the household waste. Dispose of a defective battery in an environmentally friendly manner.
 Give the battery to your authorized KTM dealer or dispose of it at a collection point for used batteries.

Warning

Environmental hazard Hazardous substances cause environmental damage.

- Oil, grease, filters, fuel, cleaners, brake fluid, etc., should be disposed of as stipulated in applicable regulations.

Info

Even when there is no load on the battery, it still loses power steadily.

The charge state and the type of charge are very important for the service life of the battery.

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

If the charging current, charging voltage and charging time are exceeded, electrolyte escapes through the safety valves. This reduces the battery capacity.

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

If the battery is left in a discharged state for an extended period, it will become over-discharged and sulfate, destroying the battery.

The battery is maintenance-free, which means that the acid level does not need to be checked.



Preparatory work

- Switch off all power consumers and switch off the engine.
- Remove the seat. (* p. 61)
- To prevent damage to the onboard electronics, disconnect the negative cable from the battery.

Main work

- Connect the battery charger with the battery. Switch on the battery charger.

Battery charger (58429074000)

You can also use the battery charger to test the open-circuit voltage and starting voltage of the battery, and to test the alternator. With this device, you cannot over-charge the battery.

Info

Never remove lid 1.

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

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

Guideline

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

- Connect the negative cable with the battery.

Finishing work

– Mount the seat. (* p. 62)

15.4 Changing the main fuse

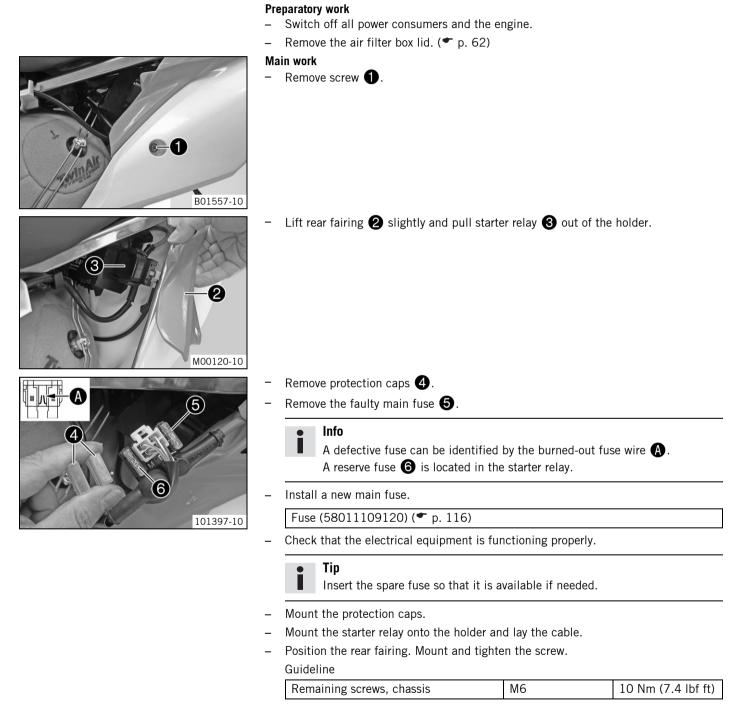
Warning

Fire hazard The electrical system can be overloaded if the wrong fuses are used.

- Use only fuses with the prescribed amperage. Never bypass or repair fuses.

• Info

The main fuse protects all power consumers of the vehicle. It is located in the starter relay housing under the air filter box cover.



Finishing work

- Install the air filter box lid. (* p. 62)

15.5 Changing the fuses of individual power consumers

• Info

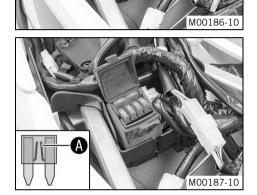
The fuse box containing the fuses of individual power consumers is located under the seat.

Preparatory work

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

Main work

Open fuse box cover 1.



Remove the defective fuse.

Guideline

Fuse 1 - 10 A - EFI control unit
Fuse 2 - 10 A - fuel pump
Fuse ${f 3}$ - 10 A - high beam, low beam, parking light, tail light, license plate lamp
Fuse 4 - 10 A - horn, brake light, turn signal, radiator fan (optional)
Fuses res - 10 A - spare fuses

• Info

A defective fuse can be identified by the burned-out fuse wire **(A**).

Warning

Fire hazard The electrical system can be overloaded if the wrong fuses are used.

- Use only fuses with the prescribed amperage. Never bypass or repair fuses.
- Use spare fuses with the correct rating only.

Fuse (75011088010) (🕶 p. 116)

• Tip

Replace the spare fuse in the fuse box so that it is available if needed.

- Check that the power consumer is functioning properly.
- Close the fuse box cover.

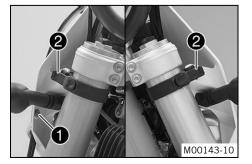
Finishing work

_

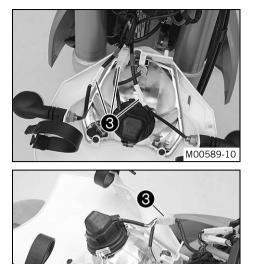
_

Mount the seat. (🕶 p. 62)

15.6 Removing headlight mask with headlight



- Switch off all electrical equipment.
- Remove screw **1** and take off the clamp.
 - Release rubber straps 2. Slide the headlight mask up and swing it forward.



(All EXC-F models)

- Detach plug-in connectors **3** and take off the headlight mask with the headlight.

(All XCF-W models)

- Detach plug-in connector ③ and take off the headlight mask with the headlight.

15.7 Refitting the headlight mask with the headlight

S00646-10



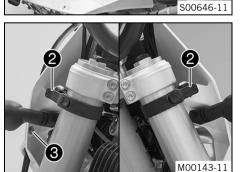
Main work (All EXC-F models)

- Connect plug-in connectors 1.

(All XCF-W models)

- Connect plug-in connector **①**.

- Position the headlight mask and fix it with rubber straps $oldsymbol{2}$.



Info

Ensure the holding lugs engage in the fender.

Position the brake line and wiring harness. Put the clamp on and mount and tighten screw 3.

Finishing work

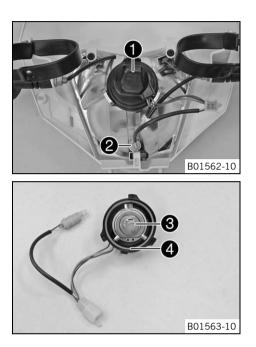
- Check the headlight setting. (* p. 95)

15.8 Changing the headlight bulb

Note

Damage to reflector Reduced brightness.

 Grease on the lamp will evaporate due to the heat and be deposited on the reflector. Clean the lamp and keep it free of grease before mounting.



Preparatory work

Main work

- Turn protection cap 1 together with the underlying bulb socket counterclockwise all the way and remove it.
- Pull bulb socket 2 of the parking light out of the reflector.
- Pull out headlight bulb 🕄.
- Insert the new headlight bulb.

Headlight (HS1 / socket PX43t) (* p. 116)

 Insert the protection cap with the bulb socket into the reflector and turn it clockwise all the way.



Ensure that O-ring $\mathbf{4}$ is seated properly.

Insert the bulb socket of the parking light into the reflector.

Finishing work

_

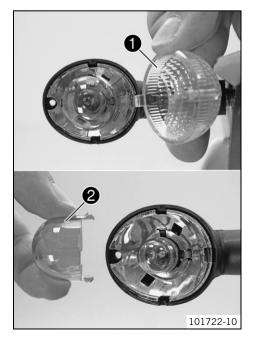
- Refit the headlight mask with the headlight. (* p. 93)
- Check the headlight setting. (* p. 95)

15.9 Changing the turn signal bulb (All EXC-F models)

Note

Damage to reflector Reduced brightness.

 Grease on the lamp will evaporate due to the heat and be deposited on the reflector. Clean the lamp and keep it free of grease before mounting.



Main work

_

- Remove the screw on the rear of the turn signal housing.
- Carefully remove diffuser **1**.
- Lightly squeeze orange cap 2 in the area of the holding lugs and take it off.
- Press the turn signal bulb carefully into the socket, turn it counterclockwise by about 30°, and take it out of the socket.

lnfo

Do not touch the reflector with your fingers, and keep it free from grease.

Press the new turn signal bulb carefully into the socket and turn it clockwise until it stops.

Turn signal (R10W / socket BA15s) (* p. 116)

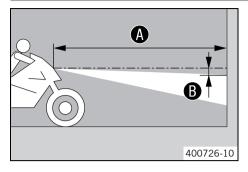
- Mount the orange cap.
- Position the diffuser.
- Insert the screw and first turn it counterclockwise until it engages in the thread. Tighten the screw slightly.

Finishing work

_

Check that the turn signal system is functioning properly.

15.10 Checking the headlight setting



Position the vehicle upright on a horizontal surface in front of a light wall and make a mark at the height of the center of the low beam headlight.

5 cm (2 in)

Make another mark a distance B under the first mark.

Guideline Distance

- Position the vehicle vertically a distance A away from the wall.
 Guideline
 Distance A 5 m (16 ft)
- The rider now sits down on the motorcycle.
- Switch on the low beam.
- Check the headlight setting.

The boundary between light and dark must be exactly on the lower mark for a motorcycle with driver.

- » If the light-dark border does not meet specifications:

15.11 Adjusting the headlight range



Preparatory work

- Check the headlight setting. (* p. 95)

Main work

- Loosen screw 🕦.
- Adjust the headlight range by pivoting the headlight.

Guideline

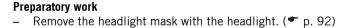
The boundary between light and dark must be exactly on the lower mark for a motorcycle with driver (instructions on how to apply the mark: Checking the headlight setting).



A change in weight on the vehicle may require a correction of the headlight range.

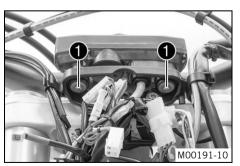
– Tighten screw 🚺.

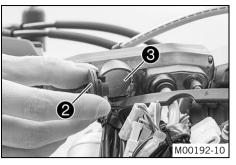
15.12 Changing the speedometer battery

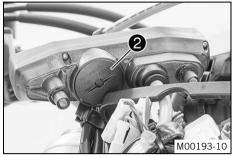


Main work

- Remove screws 1.
 - Pull the speedometer upward out of the holder.







- Using a coin, turn protection cap **2** all the way counterclockwise and remove it.
- Remove speedometer battery 3.
- Insert the new battery with the label facing upward.

Speedometer battery (CR 2430) (* p. 116)

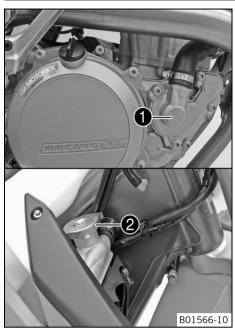
- Check the O-ring of the protection cap for correct seating.
- Position protection cap **2** and turn all the way clockwise using a coin.
- Press any button on the speedometer.
 - ✓ The speedometer is activated.
- Position the speedometer in the holder.
- Mount and tighten the screws with washers.

Finishing work

- Set the speedometer functions. (* p. 22)

16 COOLING SYSTEM

16.1 Cooling system



The water pump $\mathbf{1}$ in the engine circulates the coolant.

The pressure resulting from the warming of the cooling system is regulated by a valve in radiator cap 2. This ensures that operating the vehicle at the specified coolant temperature will not result in a risk of malfunctions.

120 °C (248 °F)

Cooling is effected by the air stream.

The lower the speed, the less the cooling effect. Dirty cooling fins also reduce the cooling effect.

The radiator fan provides extra cooling. It is controlled by a thermoswitch.

16.2 Checking the antifreeze and coolant level

Warning

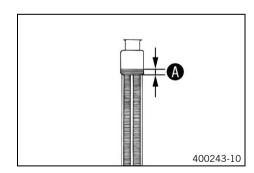
Danger of scalding During motorcycle operation, the coolant gets very hot and is under pressure.

- Do not remove the radiator cap, radiator hoses or other cooling system components when the engine is hot. Allow the engine and cooling system to cool down. In case of scalding, rinse immediately with lukewarm water.

Warning

Danger of poisoning Coolant is poisonous and a health hazard.

 Coolant must not come into contact with the skin, eyes, or clothing. If contact occurs with the eyes, rinse with water immediately and contact a physician. Immediately clean contaminated areas on the skin with soap and water. If coolant is swallowed, contact a physician immediately. Change clothing that is contaminated with coolant. Keep coolant out of reach of children.



Condition

The engine is cold.

- Stand the motorcycle upright on a horizontal surface.
- Remove the radiator cap.
- Check antifreeze of coolant.

−25 −45 °C (−13 −49 °F)			
» If the antifreeze of the coolant does not meet specifications:			
 Correct the antifreeze of the coolant. 			
Check the coolant level in the radiator.			
Coolant level 🚯 above radiator fins.	10 mm (0.39 in)		

- » If the coolant level does not meet specifications:
 - Correct the coolant level.

Coolant (🕶 p.	120)
---------------	------

Mount the radiator cap.

16 COOLING SYSTEM

16.3 Checking the coolant level

Warning

Danger of scalding During motorcycle operation, the coolant gets very hot and is under pressure.

- Do not remove the radiator cap, radiator hoses or other cooling system components when the engine is hot. Allow the engine and cooling system to cool down. In case of scalding, rinse immediately with lukewarm water.

Warning

Danger of poisoning Coolant is poisonous and a health hazard.

 Coolant must not come into contact with the skin, eyes, or clothing. If contact occurs with the eyes, rinse with water immediately and contact a physician. Immediately clean contaminated areas on the skin with soap and water. If coolant is swallowed, contact a physician immediately. Change clothing that is contaminated with coolant. Keep coolant out of reach of children.

Condition

The engine is cold.

- Stand the motorcycle upright on a horizontal surface.
- Remove the radiator cap.
 - Check the coolant level in the radiator.

	Coolant level (A) above radiator fins. 10 mm (0.39 in)
	» If the coolant level does not meet specifications:
	- Correct the coolant level.
400042.10	Coolant (* p. 120)
400243-10	

Mount the radiator cap.

16.4 Draining the coolant **A**

Warning

Danger of scalding During motorcycle operation, the coolant gets very hot and is under pressure.

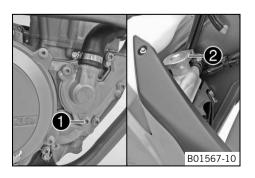
Do not remove the radiator cap, radiator hoses or other cooling system components when the engine is hot. Allow the
engine and cooling system to cool down. In case of scalding, rinse immediately with lukewarm water.



Warning

Danger of poisoning Coolant is poisonous and a health hazard.

 Coolant must not come into contact with the skin, eyes, or clothing. If contact occurs with the eyes, rinse with water immediately and contact a physician. Immediately clean contaminated areas on the skin with soap and water. If coolant is swallowed, contact a physician immediately. Change clothing that is contaminated with coolant. Keep coolant out of reach of children.



Condition

The engine is cold.

- Position the motorcycle upright.
- Place a suitable container under the water pump cover.
- Remove screw 1. Take off radiator cap 2.
- Completely drain the coolant.

Screw, water pump cover	M6	10 Nm (7.4 lbf ft)

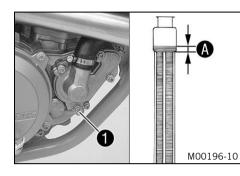
16 COOLING SYSTEM

16.5 Refilling coolant 🔌

Warning Danger of

Danger of poisoning Coolant is poisonous and a health hazard.

 Coolant must not come into contact with the skin, eyes, or clothing. If contact occurs with the eyes, rinse with water immediately and contact a physician. Immediately clean contaminated areas on the skin with soap and water. If coolant is swallowed, contact a physician immediately. Change clothing that is contaminated with coolant. Keep coolant out of reach of children.



Main work – Make s

- Make sure that the screw 🕕 is tightened.
- Stand the vehicle upright.
- Pour coolant in up to measurement (A) above the radiator fins.

Guideline

10 mm (0.39 in)		
Coolant	1.2 l (1.3 qt.)	Coolant (* p. 120)

Refit the radiator cap.

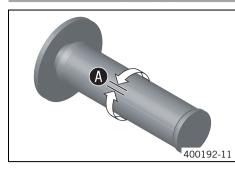
Finishing work

- Take a short test ride.

- Check the coolant level. (* p. 98)

17 TUNING THE ENGINE

17.1 Checking the play in the throttle cable



- Check the throttle grip for smooth operation.

• Move the handlebar to the straight-ahead position. Move the throttle grip back and forth slightly to ascertain play (A) in the throttle cable.

Play in throttle cable 3... 5 mm (0.12... 0.2 in)

- » If the throttle cable play does not meet specifications:
 - Adjust the play in the throttle cable. 🔌 (🕶 p. 100)



- **Danger of poisoning** Exhaust gases are toxic and inhaling them may result in unconsciousness and/or death.
- When running the engine, always make sure there is sufficient ventilation, and do not start or run the engine in an enclosed space without an effective exhaust extraction system.
- Start the engine and let it run idle. Move the handlebar to and fro over the entire steering range.

The idle speed must not change.

- » If the idle speed changes:
 - Adjust the play in the throttle cable. A (* p. 100)

17.2 Adjusting the play in the throttle cable 🔌

Preparatory work

- Remove the fuel tank. 🔧 (🕶 p. 66)

Main work

- Move the handlebar to the straight-ahead position.
- Push back sleeves 1.
- Loosen nut **2**. Turn adjusting screw **3** in as far as possible.
- Loosen nut 4. Turn adjusting screw 5 so that there is play in the throttle cable at the throttle grip.

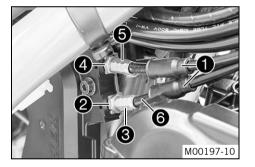
Guideline

Play in throttle cable	3 5 mm (0.12 0.2 in)

- 🕆 Tighten nut 4 .
- Press and hold the throttle grip in the closed setting. Turn adjusting screw 3 out until there is no play in throttle cable 6.
- Tighten nut 2.
- Push sleeves **1** on. Check the throttle grip for smooth operation.

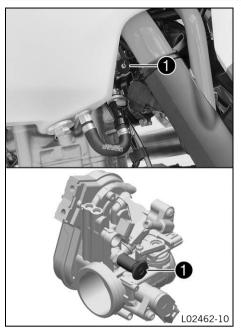
Finishing work

- Install the fuel tank. 🔌 (🕶 p. 67)
- Mount the seat. (* p. 62)
- Check the play in the throttle cable. (* p. 100)



TUNING THE ENGINE 17

17.3 Adjusting the idle speed 🔌



- Run the engine warm and push the idle speed adjusting screw **①** all the way in. _
 - Set the desired idle speed by turning the idle speed adjusting screw.

Guideline Idle speed

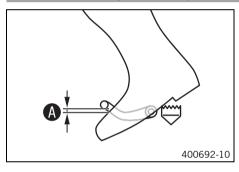
_

1,950... 2,050 rpm



Turn counterclockwise to increase the idle speed. Turn clockwise to decrease the idle speed.

17.4 Checking the basic position of the shift lever

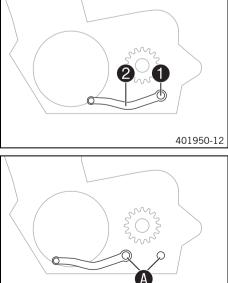


Sit on the vehicle in the riding position and determine the distance (A) between the upper edge of your boot and the shift lever.

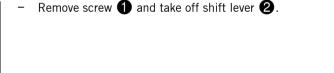
Gap between the shift lever and the top	10 20 mm (0.39 0.79 in)
of the boot	

- If the distance does not meet the specifications:
 - Adjust the basic position of the shift lever. \blacktriangleleft (* p. 101) _

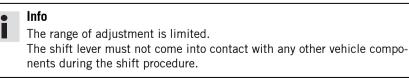
17.5 Adjusting the basic position of the shift lever 🔧



401951-10



- Clean gear teeth (A) of the shift lever and shift shaft. _
- Mount the shift lever on the shift shaft in the required position and engage the _ gearing.



Mount and tighten the screw.

Guideline

Screw, shift lever	M6	14 Nm (10.3 lbf ft)	Loctite [®] 243™
--------------------	----	------------------------	---------------------------

18.1 Changing the fuel screen 🔌

Danger

Fire hazard Fuel is highly flammable.

- Never refuel the vehicle near open flames or burning cigarettes, and always switch off the engine first. Be careful that no
 fuel is spilt, especially on hot vehicle components. Clean up spilt fuel immediately.
- The fuel in the fuel tank expands when warm and may emerge if overfilled. Follow the instructions on refueling.

Warning

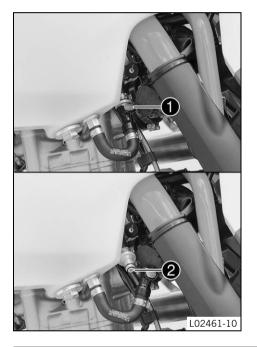
Danger of poisoning Fuel is poisonous and a health hazard.

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

Warning

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

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



Clean the plug-in connection $oldsymbol{1}$ of the fuel line thoroughly with compressed air.

lnfo

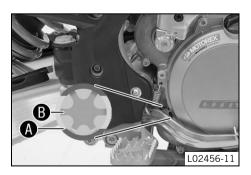
- Under no circumstances should dirt enter into the fuel line. Dirt in the fuel line clogs the injection valve.
- Disconnect the plug-in connection of the fuel line.
- Pull fuel screen 2 out of the connecting piece.
- Insert the new fuel screen all the way into the connecting piece.
- Lubricate the O-ring and connect plug-in connection of the fuel line.

Danger

Danger of poisoning Exhaust gases are toxic and inhaling them may result in unconsciousness and/or death.

- When running the engine, always make sure there is sufficient ventilation, and do not start or run the engine in an enclosed space without an effective exhaust extraction system.
- Start the engine and check the response.

18.2 Checking the engine oil level



Preparatory work

- Stand the motorcycle upright on a horizontal surface.

Condition

- The engine is at operating temperature.
 - Check the engine oil level.

Info

After switching off the engine, wait one minute before checking the level.

The engine oil is at a level between the lower edge (A) and the middle (B) of the level viewer.

- » If the engine oil is not up to the lower edge (A) of the level viewer:
 - Add engine oil. (* p. 105)

18.3

3 Changing the engine oil and oil filter, cleaning the oil screen 🔦

Warning

- Danger of scalding Engine oil and gear oil get very hot when the motorcycle is ridden.
- Wear appropriate protective clothing and safety gloves. In case of burns, rinse immediately with lukewarm water.



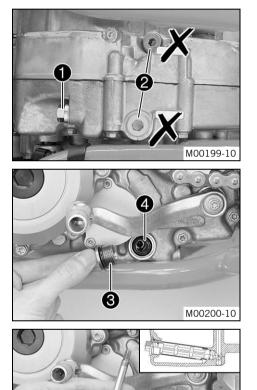
Warning

Environmental hazard Hazardous substances cause environmental damage.

- Oil, grease, filters, fuel, cleaners, brake fluid, etc., should be disposed of as stipulated in applicable regulations.

Info

Drain the engine oil only when the engine is warm.



Preparatory work

(EXC-F Factory Edition, EXC-F AU, All Six Days models)

- Remove the engine guard. (***** p. 74)
- Park the motorcycle on a level surface.

Main work

- Place a suitable container under the engine.
 - Remove oil drain plug 🕕 with the magnet and seal ring.



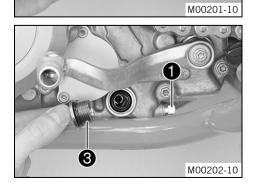
- Remove screw plug 3 with oil screen 4 and the O-rings.
- Completely drain the engine oil.
- Thoroughly clean the parts and sealing surfaces.
- Position oil screen ④ with the O-rings on a pin wrench.
- Position the pin wrench through the drilled hole of the screw plug in the opposite section of the engine case.
- Push the oil screen all the way into the engine case.
- Mount and tighten screw plug **3** with the O-ring.

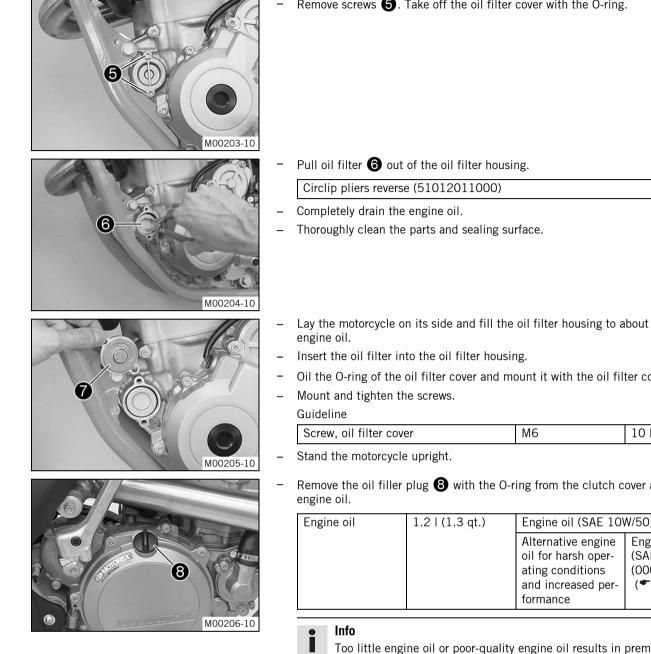
Guideline

Screw plug, oil screen	M20x1.5	15 Nm (11.1 lbf ft)
------------------------	---------	------------------------

Mount and tighten the oil drain plug
 with the magnet and a new seal ring.
 Guideline

Oil drain plug with magnet	M12x1.5	20 Nm (14.8 lbf ft)
----------------------------	---------	------------------------





Remove screws **(5)**. Take off the oil filter cover with the O-ring.

- Lay the motorcycle on its side and fill the oil filter housing to about 1/3 full with
- Oil the O-ring of the oil filter cover and mount it with the oil filter cover $\mathbf{7}$.

Screw, oil filter cover	M6	10 Nm (7.4 lbf ft)

Remove the oil filler plug **8** with the O-ring from the clutch cover and fill up with

Engine oil	1.2 (1.3 qt.)	Engine oil (SAE 10W/50) (🕶 p. 120)		
		Alternative engine oil for harsh oper- ating conditions and increased per- formance	Engine oil (SAE 10W/60) (00062010035) (• p. 120)	

Too little engine oil or poor-quality engine oil results in premature wear to the engine.

Install and tighten the oil filler plug with O-ring.

Danger

Danger of poisoning Exhaust gases are toxic and inhaling them may result in unconsciousness and/or death.

- When running the engine, always make sure there is sufficient ventilation, and do not start or run the engine in an enclosed space without an effective exhaust extraction system.
- Start the engine and check that it is oil-tight.

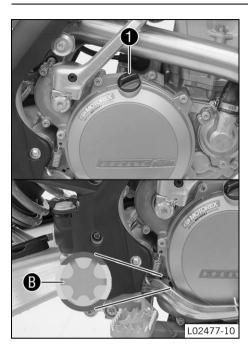
Finishing work

- (EXC-F Factory Edition, EXC-F AU, All Six Days models)
- Check the engine oil level. (p. 102)

18.4 Adding engine oil

• Info

Too little engine oil or poor-quality engine oil results in premature wear to the engine.



Main work

- Remove the oil filler plug 1 with the O-ring from the clutch cover.
- Fill engine oil to the middle **B** of the level viewer.

Engine oil (SAE 10W/50) (* p. 120)

Alternative 1

Engine oil (SAE 10W/60) (00062010035) (* p. 120)

Info

For optimal performance of the engine oil, do not mix different types of engine oil.

If appropriate, change the engine oil.

Install and tighten the oil filler plug with O-ring.

Danger

Danger of poisoning Exhaust gases are toxic and inhaling them may result in unconsciousness and/or death.

When running the engine, always make sure there is sufficient ventilation, and do not start or run the engine in an enclosed space without an effective exhaust extraction system.

- Start the engine and check that it is oil-tight.

Finishing work

19 CLEANING, CARE

19.1 Cleaning the motorcycle

Note

Material damage Damage and destruction of components by high-pressure cleaning equipment.

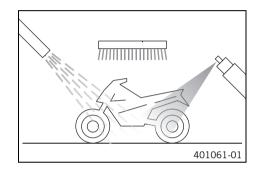
When cleaning the vehicle with a pressure cleaner, do not point the water jet directly onto electrical components, connectors, cables, bearings, etc. Maintain a minimum distance of 60 cm between the nozzle of the pressure cleaner and the component. Excessive pressure can cause malfunctions or destroy these parts.

Environmental hazard Hazardous substances cause environmental damage.

- Oil, grease, filters, fuel, cleaners, brake fluid, etc., should be disposed of as stipulated in applicable regulations.

Info

If you clean the motorcycle regularly, its value and appearance will be maintained over a long period. Avoid direct sunshine on the motorcycle during cleaning.



- Close off the exhaust system to prevent water from entering.
 - First remove coarse dirt particles with a gentle spray of water.
- Spray very dirty areas with a normal motorcycle cleaner and then clean with a paintbrush.

Motorcycle cleaner (* p. 122)

Info

Use warm water containing normal motorcycle cleaner and a soft sponge. Never apply motorcycle cleaner to the dry vehicle; always rinse with water first.

- After rinsing the motorcycle with a gentle spray of water, allow it to dry thoroughly.
- Remove the plug from the exhaust system.



Warning

Danger of accidents Reduced braking efficiency due to a wet or dirty brake system.

- Clean or dry a dirty or wet brake system by riding and braking gently.
- After cleaning, ride a short distance until the engine reaches operating temperature.

Info

The heat produced causes water at inaccessible locations in the engine and brake system to evaporate.

- After the motorcycle has cooled off, lubricate all moving parts and bearings.
- Clean the chain. (***** p. 68)
- Treat bare metal parts (except for brake discs and exhaust system) with anti-corrosion materials.

Preserving materials for paints, metal and rubber (* p. 122)

 Treat all 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 p. 122)

19 CLEANING, CARE

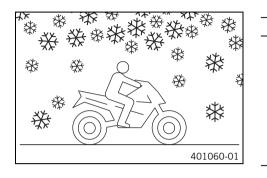
107

19.2 Checks and maintenance steps for winter operation

• Info

If the motorcycle is used in the winter, salt can be expected on the roads. Precautions need to be taken against road salt corrosion.

If the vehicle was operated in road salt, clean it with cold water after riding. Warm water would enhance the corrosive effects of salt.



- Clean the motorcycle. (* p. 106)
- Clean the brake system.



After **EVERY** trip on salted roads, thoroughly wash the brake calipers and brake linings with cold water and dry carefully. This should be done after the parts are cooled down and while they are installed. After riding on salted roads, thoroughly wash the motorcycle with cold water and dry it well.

- Treat the engine, swingarm, and all other bright and zinc-plated parts (except for the brake discs) with a wax-based corrosion inhibitor.



Corrosion inhibitor is not permitted to come in contact with the brake discs as this would greatly reduce the braking force.

– Clean the chain. (🕶 p. 68)

20 STORAGE

20.1 Storage

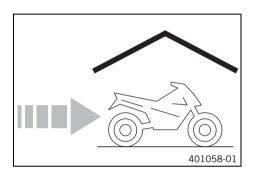
Warning

Danger of poisoning Fuel is poisonous and a health hazard.

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

Info

If you want to garage the motorcycle for a longer period, take the following steps. 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. 122)

- Refuel. (🕶 p. 37)
- Change the engine oil and oil filter, clean the oil screen. 🔌 (🕶 p. 103)
- Check the antifreeze and coolant level. (* p. 97)
- Remove the battery. 🔌 (🕶 p. 89)
- Charge the battery. 🔌 (🕶 p. 90)

Guideline	
Storage temperature of battery without direct sunlight	0 35 °C (32 95 °F)

 Store the vehicle in a dry location that is not subject to large fluctuations in temperature.

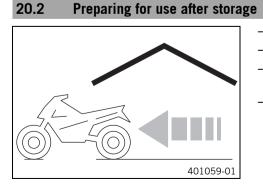
Info

KTM recommends raising the motorcycle.

- Cover the motorcycle with a porous sheet or blanket. Do not use non-porous materials since they prevent humidity from escaping, thus causing corrosion.

Info

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 exhaust system to rust.



- Remove the motorcycle from the lift stand. (* p. 48)
- 🗉 Install the battery. 🔌 (👕 p. 89)
- Perform checks and maintenance work when preparing the vehicle for use. (
 p. 34)
- Take a test ride.

21 TROUBLESHOOTING

Faults	Possible cause	Action
The engine cannot be cranked (elec-	Operating error	- Carry out the start procedure. (* p. 34)
tric starter)	Battery is discharged	– Charge the battery. 🔌 (🕶 p. 90)
		 Check the charging voltage.
		 Check the closed current.
		 Check the stator winding of the alternator.
	Main fuse blown	– Change the main fuse. (🕶 p. 91)
	Starter relay defective	– Check the starter relay. 🔧
	Starter motor defective	 Check the starter motor.
Engine turns but does not start	Operating error	 Carry out the start procedure. (
	The plug-in connection of the fuel hose connection is not connected	- Connect the plug-in connection of the fuel line.
	Fuse 1 blown	 Change the fuses of individual power consumers. (
	Fuse 2 blown	 Change the fuses of individual power consumers. (
	Idle speed is not set correctly	– Adjust the idle speed. ◀ (♥ p. 101)
	Spark plug oily or wet	 Clean and dry the spark plug or replace if nec- essary.
	Electrode distance (plug gap) of spark plug too wide	 Adjust the plug gap. Guideline Spark plug electrode gap 0.8 mm (0.031 in)
	Ignition system defective	
		 Check the ignition system. Check the wiring harness. (visual check)
	Short-circuit cable in wiring harness frayed, kill switch or emergency OFF switch defective	 Check the wiring harness. (visual check) Check the electrical system.
	Defect in fuel injection system	 Read out the fault memory using the KTM diag- nostics tool.
Engine does not speed up	Defect in fuel injection system	 Read out the fault memory using the KTM diagnostics tool.
	Ignition system defective	– Ignition coil - check the secondary winding. 🔦
		 Check the spark plug connector.
		 Check the stator winding of the alternator.
Engine has too little power	Air filter heavily contaminated	 Clean the air filter and air filter box. (* p. 63)
	Fuel filter is very dirty	– Change the fuel filter. 🔧
	Fuel screen is very dirty	− Change the fuel screen. ◀ (♥ p. 102)
	Defect in fuel injection system	 Read out the fault memory using the KTM diagnostics tool.
	Exhaust system leaky, deformed or	 Check exhaust system for damage.
	too little glass fiber yarn filling in main silencer	 Change the glass fiber yarn filling of the main silencer. ◀ (☞ p. 64)
	Valve clearance too little	– Adjust the valve clearance. 🔧
	Ignition system defective	– Ignition coil - check the secondary winding. 🔧
		- Check the spark plug connector. 🔧
		– Check the stator winding of the alternator. \blacktriangleleft
Engine dies during the trip	Lack of fuel	– Refuel. (* p. 37)
	Fuse 1 blown	 Change the fuses of individual power consumers. (
	Fuse 2 blown	 Change the fuses of individual power consumers. (
Engine overheats	Coolant level low in cooling system	 Check the cooling system for leaks.
		 Check the coolant level. (
	Insufficient airflow	 Switch off engine when stationary.
	Radiator fins very dirty	- Clean radiator fins.

21 TROUBLESHOOTING

Faults	Possible cause	Action
Engine overheats	Foam formation in cooling system	– Drain the coolant. 🔌 (🕶 p. 98)
		 Refill the coolant.
	Bent radiator hose	– Change the radiator hose. 🔦
	Thermostat defective	 Check the thermostat.
		Guideline Opening temperature: 70 °C (158 °F)
	Defect in radiator fan system	- Check the radiator fan fuse.
		– Check fuse 4 .
		 Check the radiator fan.
FI warning lamp (MIL) lights up/flashes	Defect in fuel injection system	 Stop the motorcycle and identify the faulty part using the blink code.
		Info See blink code
		 Check the cabling for damage and the electri- cal plug-in connectors for corrosion and dam- age.
		 Read out the fault memory using the KTM diag- nostics tool.
High oil consumption	Engine vent hose bent	 Route the vent hose without bends or replace it if necessary.
	Engine oil level too high	 Check the engine oil level. (
	Engine oil too thin (low viscosity)	 Change the engine oil and oil filter, clean the oil screen. ◀ (♥ p. 103)
	Piston and cylinder worn	 Measure the piston/cylinder mounting clear- ance.
Battery discharged	Battery is not being charged by alter-	 Check the charging voltage.
	nator	 Check the stator winding of the alternator.
	Undesired power consumer	 Check the closed current.
Speedometer values deleted (time, stop watch, lap times)	The battery in the speedometer is discharged	- Change the speedometer battery. (* p. 95)
The high beam, low beam, parking light, tail light, and license plate lamp are not working	Fuse 3 blown	 Change the fuses of individual power consumers. (* p. 92)
The speedometer, horn, brake light, turn signal, and radiator fan (optional) are not working	Fuse 4 blown	 Change the fuses of individual power consumers. (

22 BLINK CODE

Blink code FI warning lamp (MIL)	F	
	02 FI warning lamp (MIL) flashes 2x short	
Error level condition	Crankshaft position sensor - circuit fault	
Blink code FI warning lamp (MIL)	F	
	06 Fl warning lamp (MIL) flashes 6x short	
Error level condition	Throttle position sensor circuit A - input signal too low Throttle position sensor circuit A - input signal too high	
Blink code FI warning lamp (MIL)	(F) 09 Fl warning lamp (MIL) flashes 9x short	
Error level condition	Manifold absolute pressure sensor cylinder 1 - input signal too low	
	Manifold absolute pressure sensor cylinder 1 - input signal too high	
Blink code FI warning lamp (MIL)	F	
Error level condition	12 FI warning lamp (MIL) flashes 1x long, 2x short Engine coolant temperature sensor - input signal too low	
	Engine coolant temperature sensor - input signal too low	
Blink code FI warning lamp (MIL)	(F) 13 FI warning lamp (MIL) flashes 1x long, 3x short	
Error level condition	Intake air temperature sensor - input signal too low	
	Intake air temperature sensor - input signal too high	
Blink code FI warning lamp (MIL)		
	(F)	
Error level condition	15 FI warning lamp (MIL) flashes 1x long, 5x short Rollover sensor (A/D type) - input signal too low	
	Rollover sensor (A/D type) - input signal too high	
Blink code FI warning lamp (MIL)		
blink coue ri wanning lamp (Mill)	E 17 Fl warning lamp (MIL) flashes 1x long, 7x short	
Error level condition	EXC-F EU, EXC-F Factory Edition, EXC-F BR, EXC-F Six Days	
	Lambda sensor cylinder 1, sensor 1 - circuit fault	
Blink code FI warning lamp (MIL)	E	
	33 FI warning lamp (MIL) flashes 3x long, 3x short	
Error level condition	Injector cylinder 1 - circuit fault	
Blink code FI warning lamp (MIL)		
blink code i i warning famp (witz)	FI 37 FI warning lamp (MIL) flashes 3x long, 7x short	
Error level condition	Ignition coil 1, cylinder 1 - circuit fault	
Blink code FI warning lamp (MIL)		
	(F) 41 FI warning lamp (MIL) flashes 4x long, 1x short	
Error level condition	Fuel pump relay - short circuit to ground or open circuit	
	Fuel pump relay - input signal too low	

22 BLINK CODE

Blink code FI warning lamp (MIL)	45 FI warning lamp (MIL) flashes 4x long, 5x short	
Error level condition	EXC-F EU, EXC-F Factory Edition, EXC-F BR, EXC-F Six Days Lambda sensor heater cylinder 1, sensor 1 - short circuit to ground or open circuit	
	EXC-F EU, EXC-F Factory Edition, EXC-F BR, EXC-F Six Days Lambda sensor heater cylinder 1, sensor 1 - input signal too high	

23.1 Engine

Design	1-cylinder 4-stroke engine, water-cooled
Displacement	349.7 cm ³ (21.34 cu in)
Stroke	57.5 mm (2.264 in)
Bore	88 mm (3.46 in)
Compression ratio	12.3:1
Idle speed	1,950 2,050 rpm
Control	DOHC, four valves controlled via cam lever, drive via timing chain
Valve diameter, intake	36.3 mm (1.429 in)
Valve diameter, exhaust	29.1 mm (1.146 in)
Valve clearance	· · ·
Intake at: 20 °C (68 °F)	0.10 0.15 mm (0.0039 0.0059 in)
Exhaust at: 20 °C (68 °F)	0.13 0.18 mm (0.0051 0.0071 in)
Crankshaft bearing	2 cylinder bearings
Conrod bearing	Slide bearing
Piston pin bearing	Not a bearing bush - DLC-plated piston pins
Pistons	Forged light alloy
Piston rings	1 compression ring, 1 oil scraper ring
Engine lubrication	Pressure circulation lubrication with two Eaton pumps
Primary transmission	24:73
Clutch	Multidisc clutch in oil bath/hydraulically activated
Transmission ratio	· · ·
1st gear	14:32
2nd gear	16:26
3rd gear	20:25
4th gear	22:23
5th gear	25:22
6th gear	26:20
Alternator	12 V, 168 W
Ignition	Contactless controlled fully electronic ignition with digital igni- tion adjustment
Spark plug	NGK LMAR9AI-8
Spark plug electrode gap	0.8 mm (0.031 in)
Cooling	Water cooling, permanent circulation of coolant by water pump
Starting aid	Kick starter and electric starter

23.2 Engine tightening torques

Nozzle, crank chamber ventilation	M4	2 Nm (1.5 lbf ft)	Loctite [®] 243™
Oil nozzle for alternator cooling	M4	2 Nm (1.5 lbf ft)	Loctite [®] 243™
Oil nozzle for balancer shaft lubrication	M4	2 Nm (1.5 lbf ft)	Loctite [®] 243™
Oil nozzle for conrod bearing lubrica- tion	M4	2 Nm (1.5 lbf ft)	Loctite [®] 243™
Screw, oil nozzle for piston cooling	M4	2 Nm (1.5 lbf ft)	Loctite [®] 243™
Locking screw for bearing	M5	6 Nm (4.4 lbf ft)	Loctite [®] 243™
Oil channel screw plug in alternator cover	M5	1.2 Nm (0.89 lbf ft)	Loctite [®] 648™
Oil nozzle for cam lever lubrication	M5	3 Nm (2.2 lbf ft)	Loctite [®] 243™
Oil nozzle for clutch lubrication	M5	6 Nm (4.4 lbf ft)	Loctite [®] 243™
Oil nozzle, piston cooling	M5	2 Nm (1.5 lbf ft)	Loctite [®] 243™
Screw, clutch spring	M5	6 Nm (4.4 lbf ft)	-
Screw, crankshaft position sensor	M5	6 Nm (4.4 lbf ft)	Loctite [®] 243™

Screw, locking lever	M5	6 Nm (4.4 lbf ft)	Loctite [®] 243™
Screw, oil pump cover	M5	6 Nm (4.4 lbf ft)	Loctite [®] 243™
Screw, stator	M5	6 Nm (4.4 lbf ft)	Loctite [®] 243™
Nut, cylinder head	M6	10 Nm (7.4 lbf ft)	Lubricated with engine oil
Nut, water-pump wheel	M6	6 Nm (4.4 lbf ft)	Loctite [®] 243™
Screw, alternator cover	M6	6 Nm (4.4 lbf ft)	-
Screw, clutch cover	M6	10 Nm (7.4 lbf ft)	-
Screw, clutch slave cylinder	M6	10 Nm (7.4 lbf ft)	-
Screw, engine case	M6	10 Nm (7.4 lbf ft)	-
Screw, exhaust flange	M6	10 Nm (7.4 lbf ft)	Loctite [®] 243™
Screw, kick starter stop	M6	10 Nm (7.4 lbf ft)	Loctite [®] 243™
Screw, oil filter cover	M6	10 Nm (7.4 lbf ft)	-
Screw, shift drum locating	M6	10 Nm (7.4 lbf ft)	Loctite [®] 243™
Screw, shift lever	M6	14 Nm (10.3 lbf ft)	Loctite [®] 243™
Screw, starter motor	M6	10 Nm (7.4 lbf ft)	-
Screw, timing chain guide rail	M6	10 Nm (7.4 lbf ft)	Loctite [®] 243™
Screw, timing chain securing guide	M6	10 Nm (7.4 lbf ft)	Loctite [®] 243™
Screw, valve cover	M6	8 Nm (5.9 lbf ft)	-
Screw, water pump cover	M6	10 Nm (7.4 lbf ft)	-
Stud, cylinder head	M6	10 Nm (7.4 lbf ft)	-
Screw, camshaft bearing bridge	M7x1	14 Nm (10.3 lbf ft)	Lubricated with engine oil
Screw plug, crankshaft location	M8	10 Nm (7.4 lbf ft)	-
Screw, kick starter	M8	25 Nm (18.4 lbf ft)	Loctite [®] 243™
Screw, timing chain tensioning rail	M8	15 Nm (11.1 lbf ft)	Loctite [®] 243™
Screw, engine sprocket	M10	60 Nm (44.3 lbf ft)	Loctite [®] 2701™
Plug, oil channel	M10x1	15 Nm (11.1 lbf ft)	Loctite [®] 243™
Rotor screw	M10x1	70 Nm (51.6 lbf ft)	Thread, oiled with engine oil/cone degreased
Screw plug, cam lever axis	M10x1	10 Nm (7.4 lbf ft)	-
Screw, unlocking of timing chain ten- sioner	M10x1	10 Nm (7.4 lbf ft)	-
Spark plug	M10x1	10 12 Nm (7.4 8.9 lbf ft)	-
Nut, cylinder head	M10x1.25	Tightening sequence: Tighten diagonally. 1st tightening stage 10 Nm (7.4 lbf ft) 2nd tightening stage 30 Nm (22.1 lbf ft) 3rd tightening stage 50 Nm (36.9 lbf ft)	Thread, oiled with engine oil/cone greased
Stud, cylinder head	M10x1.25	20 Nm (14.8 lbf ft)	Loctite [®] 243™
Screw, camshaft drive sprocket	M12x1	70 Nm (51.6 lbf ft)	Loctite [®] 243™/cone degreased
Engine coolant temperature sensor	M12x1.5	12 Nm (8.9 lbf ft)	-
Dil drain plug with magnet	M12x1.5	20 Nm (14.8 lbf ft)	-
Plug, oil pressure regulator valve	M12x1.5	20 Nm (14.8 lbf ft)	-
Oil drain plug	M14x1.5	15 Nm (11.1 lbf ft)	-
Nut, inner clutch hub	M18x1.5	100 Nm (73.8 lbf ft)	Loctite [®] 243™
Nut, primary gear	M18LHx1.5	100 Nm (73.8 lbf ft)	Loctite [®] 243™
Screw plug, oil screen	M20x1.5	15 Nm (11.1 lbf ft)	-
Plug, timing chain tensioner	M24x1.5	25 Nm (18.4 lbf ft)	-
Screw, alternator cover	M24x1.5	18 Nm (13.3 lbf ft)	_

23.3 Capacities

23.3.1 Engine oil

Engine oil	1.2 (1.3 qt.)	Engine oil (SAE 10W/50) (🕶 p.	120)
		Alternative engine oil for harsh operating conditions and increased performance	Engine oil (SAE 10W/60) (00062010035) (& p. 120)

23.3.2 Coolant

[- ·		
Coolant	1.2 (1.3 qt.)	Coolant (🕶 p. 120)
	J	

23.3.3 Fuel

Total fuel tank capacity, approx. (All EXC-F models)	9 I (2.4 US gal)	Super unleaded (ROZ 95/RON 95/PON 91) (* p. 121)
Total fuel tank capacity, approx. (All XCF-W models)	8.5 I (2.25 US gal)	Super unleaded (ROZ 95/RON 95/PON 91) (* p. 121)
Fuel reserve, approx.		1.5 l (1.6 qt.)

23.4 Chassis

Frame	Central tube frame made of chrome molybdenum steel tubing
Fork (EXC-F EU/AU/BR, EXC-F Factory Edition, XCF-W)	WP Suspension Up Side Down 4860 MXMA PA
Fork (All Six Days models)	WP Suspension Up Side Down 4860 4CS
Suspension travel (EXC-F EU/AU/BR, EXC-F Factory Edition, >	(CF-W)
Front	300 mm (11.81 in)
Suspension travel (All Six Days models)	•
Front	300 mm (11.81 in)
Suspension travel	•
Rear	335 mm (13.19 in)
Fork offset	20 mm (0.79 in)
Shock absorber	WP Suspension PDS 5018 DCC
Brake system	Disc brakes, brake calipers on floating bearings
Brake discs - diameter	•
Front	260 mm (10.24 in)
Rear	220 mm (8.66 in)
Brake discs - wear limit	
Front	2.5 mm (0.098 in)
Rear	3.5 mm (0.138 in)
Tire air pressure off road	
Front	1.0 bar (15 psi)
Rear	1.0 bar (15 psi)
Road tire pressure (All EXC-F models)	
Front	1.5 bar (22 psi)
Rear	1.5 bar (22 psi)
Final drive (EXC-F EU, EXC-F Factory Edition, EXC-F AU, EXC-F Six Days)	14:52 (13:52)
Final drive (EXC-F BR, All XCF-W models)	13:52
Chain	5/8 x 1/4"
Rear sprockets available	38, 40, 42, 45, 48, 49, 50, 51, 52
Steering head angle	63.5°
Wheelbase	1,482±10 mm (58.35±0.39 in)
Seat height unloaded	970 mm (38.19 in)
Ground clearance unloaded	345 mm (13.58 in)

Homologated weight without fuel, approx. (All EXC-F models)	108 kg (238 lb.)
Weight without fuel, approx. (All XCF-W models)	107.2 kg (236.3 lb.)
Maximum permissible front axle load	145 kg (320 lb.)
Maximum permissible rear axle load	190 kg (419 lb.)
Maximum permissible overall weight	335 kg (739 lb.)

23.5 Electrical system

Battery (EXC-F EU, EXC-F Factory Edi- tion, EXC-F AU, All XCF-W models, All Six Days models)	YTX4L-BS	Battery voltage: 12 V Nominal capacity: 3 Ah Maintenance-free
Battery (EXC-F BR)	YTX5L-BS	Battery voltage: 12 V Nominal capacity: 4 Ah Maintenance-free
Speedometer battery	CR 2430	Battery voltage: 3 V
Fuse	75011088010	10 A
Fuse	58011109120	20 A
Headlight	HS1 / socket PX43t	12 V 35/35 W
Parking light	W5W / socket W2.1x9.5d	12 V 5 W
Indicator lamps	W2.3W / socket W2x4.6d	12 V 2.3 W
Turn signal (All EXC-F models)	R10W / socket BA15s	12 V 10 W
Brake/tail light	LED	·
License plate lamp (All EXC-F models)	W5W / socket W2.1x9.5d	12 V 5 W

23.6 Tires

Validity	Front tires	Rear tires
(EXC-F EU, EXC-F AU)	80/100 - 21 M/C 51M TT MAXXIS MAXX CROSS SI	140/80 - 18 M/C 70R TT Maxxis Maxx Enduro
(EXC-F Factory Edition, EXC-F BR, EXC-F Six Days)	90/90 - 21 M/C 54M M+S TT Metzeler MCE 6 Days Extreme	140/80 - 18 M/C 70M M+S TT Metzeler MCE 6 Days Extreme
(All XCF-W models)	90/90 - 21 54M TT Dunlop GEOMAX AT81F	110/100 - 18 64M TT Dunlop GEOMAX AT81

23.7 Fork

23.7.1 EXC-F EU/AU/BR, EXC-F Factory Edition, XCF-W

Fork part number	14.18.7L.67
Fork	WP Suspension Up Side Down 4860 MXMA PA
Compression damping	
Comfort	22 clicks
Standard	20 clicks
Sport	18 clicks
Rebound damping	
Comfort	20 clicks
Standard	18 clicks
Sport	16 clicks
Spring preload - Preload Adjuster	
Comfort	1 turn
Standard	2 turns

Sport		2 turns	
Spring length with preload spacer(s)			
Weight of rider: 65 75 kg	(143 165 lb.)	513 mm (20.2 in)	
Weight of rider: 75 85 kg	(165 187 lb.)	513 mm (20.2 in)	
Weight of rider: 85 95 kg	(187 209 lb.)	513 mm (20.2 in)	
Spring rate			
Weight of rider: 65 75 kg (143 165 lb.)		4.0 N/mm (22.8 lb/in)	
Weight of rider: 75 85 kg (165 187 lb.)		4.2 N/mm (24 lb/in)	
Weight of rider: 85 95 kg (187 209 lb.)		4.4 N/mm (25.1 lb/in)	
Fork length		940 mm (37.01 in)	
Air chamber length		$110^{+10}_{-20} \text{ mm} (4.33^{+0.39}_{-0.79} \text{ in})$	
Fork oil per fork leg	620 ml (20.96 fl. oz.)	Fork oil (SAE 4) (48601166S1) (* p. 120)	

23.7.2 All Six Days models

Fork part number		24.18.7N.67	
Fork		WP Suspension Up Side Down 4860 4CS	
Compression damping			
Comfort		15 clicks	
Standard		13 clicks	
Sport		11 clicks	
Rebound damping		· ·	
Comfort		15 clicks	
Standard		13 clicks	
Sport		11 clicks	
Spring length with preload spacer(s)		472 mm (18.58 in)	
Spring rate		· ·	
Weight of rider: 65 75 kg (143 165 lb.)		4.0 N/mm (22.8 lb/in)	
Weight of rider: 75 85 kg (165 187 lb.)		4.2 N/mm (24 lb/in)	
Weight of rider: 85 95 kg (187 209 lb.)		4.4 N/mm (25.1 lb/in)	
Fork length		932 mm (36.69 in)	
Air chamber length		100 mm (3.94 in)	
Oil capacity per fork leg	635 ml (21.47 fl. oz.)	Fork oil (SAE 4) (48601166S1) (p. 120)	

23.8 Shock absorber

Shock absorber part number	12.18.7L.67	
Shock absorber	WP Suspension PDS 5018 DCC	
Compression damping, low-speed		
Comfort	25 clicks	
Standard	20 clicks	
Sport	15 clicks	
Compression damping, high-speed	· · · ·	
Comfort	2 turns	
Standard	1.5 turns	
Sport	1.25 turns	
Rebound damping		
Comfort	28 clicks	
Standard	24 clicks	
Sport	22 clicks	
Spring preload	8 mm (0.31 in)	
Spring rate		
Weight of rider: 65 75 kg (143 165 lb.)	66 N/mm (377 lb/in)	

Weight of rider: 75 85 kg (165 187 lb.)	69 N/mm (394 lb/in)
Weight of rider: 85 95 kg (187 209 lb.)	72 N/mm (411 lb/in)
Spring length	250 mm (9.84 in)
Gas pressure	10 bar (145 psi)
Static sag	33 35 mm (1.3 1.38 in)
Riding sag	105 115 mm (4.13 4.53 in)
Fitted length	417 mm (16.42 in)
Damper oil	Shock absorber fluid (SAE 2.5) (50180751S1) (* p. 121)

23.9 Chassis tightening torques

Zere endeere tightening terque			
Screw, pressure regulator	EJOT PT® K60x25-Z	3 Nm (2.2 lbf ft)	-
Spoke nipple, front wheel	M4.5	6 Nm (4.4 lbf ft)	-
Spoke nipple, rear wheel	M4.5	6 Nm (4.4 lbf ft)	-
Screw, battery terminal	M5	2.5 Nm (1.84 lbf ft)	-
Screw, intake air temperature sensor	M5	2 Nm (1.5 lbf ft)	-
Screw, shock absorber adjusting ring	M5	5 Nm (3.7 lbf ft)	-
Screw, spoiler on fuel tank (All XCF-W models)	M5x12	1.5 Nm (1.11 lbf ft)	-
Nut, cable on starter motor	M6	4 Nm (3 lbf ft)	-
Remaining nuts, chassis	M6	10 Nm (7.4 lbf ft)	-
Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)	-
Screw, ball joint of push rod on foot brake cylinder	M6	10 Nm (7.4 lbf ft)	Loctite [®] 243™
Screw, chain sliding guard	M6	6 Nm (4.4 lbf ft)	Loctite [®] 243™
Screw, front brake disc	M6	14 Nm (10.3 lbf ft)	Loctite [®] 243™
Screw, rear brake disc	M6	14 Nm (10.3 lbf ft)	Loctite [®] 243™
Screw, throttle grip	M6	5 Nm (3.7 lbf ft)	-
Fuel connection on fuel pump	M8	10 Nm (7.4 lbf ft)	-
Nut, foot brake lever stop	M8	20 Nm (14.8 lbf ft)	-
Nut, rear sprocket screw	M8	35 Nm (25.8 lbf ft)	Loctite [®] 2701™
Nut, rim lock	M8	12 Nm (8.9 lbf ft)	-
Remaining nuts, chassis	M8	25 Nm (18.4 lbf ft)	-
Remaining screws, chassis	M8	25 Nm (18.4 lbf ft)	-
Screw, bottom triple clamp (EXC-F Factory Edition, All Six Days models)	M8	15 Nm (11.1 lbf ft)	-
Screw, bottom triple clamp (EXC-F EU/AU/BR, XCF-W)	M8	15 Nm (11.1 lbf ft)	-
Screw, chain sliding piece	M8	15 Nm (11.1 lbf ft)	-
Screw, engine brace	M8	33 Nm (24.3 lbf ft)	Loctite [®] 2701™
Screw, fork stub	M8	15 Nm (11.1 lbf ft)	-
Screw, front brake caliper	M8	25 Nm (18.4 lbf ft)	Loctite [®] 243™
Screw, handlebar clamp	M8	20 Nm (14.8 lbf ft)	-
Screw, side stand attachment	M8	45 Nm (33.2 lbf ft)	Loctite [®] 2701™
Screw, subframe	M8	35 Nm (25.8 lbf ft)	Loctite [®] 2701™
Screw, top steering stem (EXC-F Fac- tory Edition, All Six Days models)	M8	17 Nm (12.5 lbf ft)	Loctite [®] 243™
Screw, top steering stem (EXC-F EU/AU/BR, XCF-W)	M8	20 Nm (14.8 lbf ft)	-
Screw, top triple clamp (EXC-F Fac- tory Edition, All Six Days models)	M8	17 Nm (12.5 lbf ft)	-
Screw, top triple clamp (EXC-F EU/AU/BR, XCF-W)	M8	20 Nm (14.8 lbf ft)	-
Engine attachment bolt	M10	60 Nm (44.3 lbf ft)	-

Remaining nuts, chassis	M10	45 Nm (33.2 lbf ft)	-
Remaining screws, chassis	M10	45 Nm (33.2 lbf ft)	-
Screw, handlebar holder	M10	40 Nm (29.5 lbf ft)	Loctite [®] 243™
Nut, fuel pump fixation	M12	15 Nm (11.1 lbf ft)	-
Screw, bottom shock absorber	M12	80 Nm (59 lbf ft)	Loctite [®] 2701™
Screw, top shock absorber	M12	80 Nm (59 lbf ft)	Loctite [®] 2701™
Nut, seat fixing	M12x1	20 Nm (14.8 lbf ft)	-
Nut, swingarm pivot	M16x1.5	100 Nm (73.8 lbf ft)	-
Nut, rear wheel spindle	M20x1.5	80 Nm (59 lbf ft)	-
Screw, top steering head	M20x1.5	12 Nm (8.9 lbf ft)	-
Screw-in nozzles, cooling system	M20x1.5	12 Nm (8.9 lbf ft)	Loctite [®] 243™
Screw, front wheel spindle	M24x1.5	45 Nm (33.2 lbf ft)	-

24 SUBSTANCES

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

- RESPONSE BRAKE FLUID SUPER DOT 4

Motorex®

- Brake Fluid DOT 5.1

Coolant

Guideline

 Only use high quality coolant with corrosion inhibitor for aluminum motors (even in countries with high temperatures). Using inferior antifreeze can result in corrosion and foaming.

Mixture ratio

Antifreeze protection: -2545 °C (-13	anti-corrosion/antifreeze
-49 °F)	distilled water

Recommended supplier

Motorex®

- COOLANT M3.0

Engine oil (SAE 10W/60) (00062010035)

Standard/classification

- JASO T903 MA (🕶 p. 124)
- SAE (* p. 124) (SAE 10W/60)
- KTM LC4 2007+

Guideline

Use only engine oils that comply with the specified standards (see specifications on the container) and that possess the corresponding properties.

Synthetic engine oil

Recommended supplier

Motorex®

Cross Power 4T

Engine oil (SAE 10W/50)

Standard/classification

- JASO T903 MA (🕶 p. 124)
- SAE (* p. 124) (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.

Synthetic engine oil

Recommended supplier

Motorex®

Cross Power 4T

Fork oil (SAE 4) (48601166S1)

Standard/classification

– SAE (🕶 p. 124) (SAE 4)

Guideline

Use only oils that comply with the specified standards (see specifications on the container) and that exhibit the corresponding
properties.

24 SUBSTANCES

Shock absorber fluid (SAE 2.5) (50180751S1)

Standard/classification

- SAE (* p. 124) (SAE 2.5)

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 n

Do not use fuel containing methanol (e. g. M15, M85, M100) or more than 10 % ethanol (e. g. E15, E25, E85, E100).

25 AUXILIARY SUBSTANCES

Air filter cleaner

Recommended supplier Motorex®

Racing Bio Dirt Remover

Chain cleaner

Recommended supplier Motorex®

Chain Clean

Fuel additive

Recommended supplier Motorex[®] – Fuel Stabilizer

High viscosity grease

Recommended supplier SKF® – LGHB 2

Long-life grease

Recommended supplier Motorex[®] – Bike Grease 2000

Motorcycle cleaner

Recommended supplier Motorex® – Moto Clean

Off-road chain spray

Recommended supplier Motorex[®] – Chainlube Offroad

Oil for foam air filter

Recommended supplier Motorex® – Racing Bio Liquid Power

Preserving materials for paints, metal and rubber

Recommended supplier Motorex[®] – Moto Protect

Rubber grip adhesive (00062030051)

Recommended supplier KTM Motorrad AG – GRIP GLUE

Special cleaner for glossy and matte paint finishes, metal and plastic surfaces

Recommended supplier Motorex®

Quick Cleaner

25 AUXILIARY SUBSTANCES

Universal oil spray

Recommended supplier Motorex® – Joker 440 Synthetic

26 STANDARDS

JASO T903 MA

Different technical development directions required a new specification for 4-stroke motorcycles – the JASO T903 MA Standard. Earlier, engine oils from the automobile industry were used for 4-stroke motorcycles because there was no separate motorcycle specification. Whereas long service intervals are demanded for automobile engines, high performance at high engine speeds are in the foreground for motorcycle engines. In most motorcycles, the gearbox and the clutch are lubricated with the same oil as the engine. The JASO MA 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.

INDEX

Α
Accessories
Air filter
cleaning
installing
removing
Air filter box
cleaning
sealing
Air filter box lid
installing
removing
Antifreeze
checking
Auxiliary substances
В

Basic suspension setting

checking against the rider's weight
Battery
charging
installing
removing
Blink code
Brake discs
checking
Brake fluid
front brake, adding 76
rear brake, adding 80
Brake fluid level
front brake, checking
rear brake, checking
Brake linings
front brake, changing
front brake, checking
rear brake, changing
rear brake, checking 81
Brake system

C

Capacity
coolant 99, 115
engine oil 104, 115
fuel
Chain
checking
cleaning
Chain guide
checking
Chain tension
adjusting
checking
Chassis number
Clutch
fluid level, checking/correcting
fluid, changing

Clutch lever	4
basic position, adjusting 74	3
Compression damping fork, adjusting	1
	4
Compression damping, high-speed shock absorber, adjusting 4	1
Compression damping, low-speed	
shock absorber, adjusting 4	0
Coolant	
draining	
Coolant level	
checking	8
Cooling system 9 Customer service 9	
	2

D

Difficult riding conditions	31
dry sand	32
high temperature	33
low temperature	33
muddy surfaces	33
slow speed	
snow	33
	32
wet surfaces	33
E	
Electric starter button	-17
Emergency OFF switch	16
Engine	
running-in	31
Engine guard	
installing	74
removing	
Engine number	
-	12
Engine oil	05
adding	
changing 1	.03
Engine oil level	
checking 1	.02
Engine sprocket	
checking	70
Environment	. 7
F	
Figures	. 9
Filler cap	
closing	18
opening	
Filling up	
fuel	37
Foot brake lever	19
basic position, adjusting	
free travel, checking	79
Fork legs	
basic setting, checking	44
bleeding	48

INDEX

removing	51 50
loosening	52 50 50 52
Frame	70
checking	Ζ
Front fender installing 6 removing 6	
Front wheel	۸ c
installing ٤ removing ٤	
Fuel screen	
changing 10)2
Fuel tank	
installing	
removing	90
Fuse individual power consumers, changing main fuse, changing or	
H	
basic position, adjusting	14 75 75 75
	17
	+7 17
Headlight	
headlight range, adjusting	€
Headlight bulb changing	94
Headlight mask with headlight	
installing	
removing S Headlight setting	12
checking	95
Horn button	
1	
Idle speed	
adjusting	
Idle speed adjusting screw 1 Intended use 1	
K	0
	12
-	12
Kill switch	
L	
Light switch	16
Lower triple clamp installing	

removing
Μ
Main fuse
changing
Main silencer glass fiber yarn filling, changing 64
installing 64
removing 64
Motorcycle
cleaning
removing from lift stand
0
Oil filter
changing 103
Oil screen
cleaning 103 Operating substances 9
Overview of indicator lamps
Owner's Manual
Р
Play in throttle cable checking
Preparing for use
advice on first use
after storage
checks and maintenance work when preparing for use
Protective clothing /
Protective clothing
R
-
Rear sprocket checking
Rear sprocket checking
R Rear sprocket checking 70 Rear wheel installing 86 removing 85
R Rear sprocket checking 70 Rear wheel installing 86 removing 85 Rebound damping
R Rear sprocket checking 70 Rear wheel installing 86 removing 85
R Rear sprocket checking 70 Rear wheel installing 86 removing 85 Rebound damping fork, adjusting 45 shock absorber, adjusting 41 Riding sag
R Rear sprocket checking 70 Rear wheel installing 86 removing 85 Rebound damping fork, adjusting 45 shock absorber, adjusting 41 Riding sag 43
R Rear sprocket checking 70 Rear wheel installing 86 removing 85 Rebound damping fork, adjusting 45 shock absorber, adjusting 41 Riding sag 43 Rubber grip 43
R Rear sprocket checking 70 Rear wheel installing 86 removing 85 Rebound damping fork, adjusting 45 shock absorber, adjusting 41 Riding sag 43 Rubber grip 73
R Rear sprocket checking 70 Rear wheel 86 installing 85 Rebound damping 45 fork, adjusting 45 shock absorber, adjusting 41 Riding sag 43 Rubber grip 73 securing 73
R Rear sprocket checking 70 Rear wheel installing 86 removing 85 Rebound damping fork, adjusting 45 shock absorber, adjusting 41 Riding sag 43 Rubber grip 73
R Rear sprocket checking 70 Rear wheel 86 installing 86 removing 85 Rebound damping 45 fork, adjusting 45 shock absorber, adjusting 41 Riding sag 43 Rubber grip 73 securing 73
R Rear sprocket checking 70 Rear wheel 86 installing 86 removing 85 Rebound damping 45 fork, adjusting 45 shock absorber, adjusting 41 Riding sag 43 Rubber grip 73 checking 73 securing 73 S 5 Safe operation 7 Seat 62
R Rear sprocket checking 70 Rear wheel 86 installing 86 removing 85 Rebound damping 41 fork, adjusting 45 shock absorber, adjusting 41 Riding sag 43 Rubber grip 73 checking 73 securing 73 S 36 Safe operation 7 Seat 62 mounting 62 removing 61
R Rear sprocket checking 70 Rear wheel 86 installing 86 removing 85 Rebound damping 45 fork, adjusting 45 shock absorber, adjusting 41 Riding sag 43 Rubber grip 73 checking 73 securing 73 S S Safe operation 7 Seat 61 mounting 62 removing 61
R Rear sprocket checking 70 Rear wheel 86 installing 86 removing 85 Rebound damping 45 fork, adjusting 45 shock absorber, adjusting 41 Riding sag 43 Rubber grip 73 checking 73 securing 73 S 5 Safe operation 7 Seat 61 mounting 62 removing 61 Service 9 Service schedule 38-39
R Rear sprocket checking 70 Rear wheel 86 installing 86 removing 85 Rebound damping 45 fork, adjusting 45 shock absorber, adjusting 41 Riding sag 43 Rubber grip 73 checking 73 securing 73 S S Safe operation 7 Seat 61 mounting 62 removing 61
R Rear sprocket checking 70 Rear wheel 86 installing 86 removing 85 Rebound damping 45 fork, adjusting 45 shock absorber, adjusting 41 Riding sag 43 Rubber grip 73 checking 73 securing 73 S 5 Safe operation 7 Seat 61 mounting 62 removing 61 Service 9 Service schedule 38-39 Shift lever 18
R Rear sprocket checking 70 Rear wheel 86 installing 86 removing 85 Rebound damping 45 fork, adjusting 45 shock absorber, adjusting 41 Riding sag 43 Rubber grip 73 checking 73 securing 73 S S Safe operation 7 Seat 61 mounting 62 removing 61 Service 9 Service schedule 38-39 Shift lever 18 basic position, adjusting 101

INDEX

removing riding sag, checking spring preload, adjusting static sag, checking Side stand	42 43 42
Side stand	
Speedometer	
battery, changing clock, setting kilometers or miles, setting setting speedometer overview	22 21 22
Spoke tension	
checking	87
Starting	34
Steering	
lockingunlocking	
Steering head bearing	
greasing	60
Steering head bearing play	
Steering head bearing play adjusting	59
Steering head bearing play adjusting checking	59 58
Steering head bearing play adjusting checking Storage	59 58
Steering head bearing play adjusting checking Storage Swingarm	59 58 08
Steering head bearing play adjusting checking Storage	59 58 08
Steering head bearing play adjusting checking Storage Swingarm	59 58 08
Steering head bearing play adjusting checking Storage Storage checking checking T Technical data	59 58 08 72
Steering head bearing play adjusting checking Storage Storage checking T Technical data capacities 1 chassis 1 chassis 1 chassis 1 chassis tightening torques 1	59 58 08 72 15 15 18
Steering head bearing play adjusting checking Storage Storage checking T Technical data capacities chassis ichassis adjusting adjusting checking adjusting checking adjusting checking adjusting adjusting adjusting checking adjusting checking adjusting checking adjusting checking adjusting checking adjusting checking adjusting adjusting capacities adjusting adjusting	59 58 08 72 15 15 15 18 16
Steering head bearing play adjusting checking Storage Swingarm checking checking T Technical data capacities chassis chassis adjusting checking adjusting checking checking T technical data capacities 1 chassis 1 chassis 1 chassis tightening torques 1 engine 1 engine 1 engine tightening torques 1 engine tightening torques	59 58 08 72 15 15 18

shock absorber 117
tires
Throttle cable play
adjusting 100
Throttle cable routing
checking
Throttle grip
Tire air pressure
checking
Tire condition
checking
Transport
Troubleshooting
Turn signal bulb
changing 94
Turn signal switch
Type label
U
Use definition

3213235en

11/2014





KTM Motorrad AG 5230 Mattighofen/Austria http://www.ktm.com



