KTM SPORTMOTORCYCLES

BEDIENUNGSANLEITUNG

OWNERS HANDBOOK
MANUALE D'USO
MANUEL D'UTILISATION
MANUAL DE INSTRUCCIONES

2003



Art.Nr. 3.210.49 04/2002

IMPORTANT

PLEASE READ THIS MANUAL CAREFULLY AND COMPLETELY BEFORE GOING ON YOUR FIRST RIDE. IT CONTAINS A GREAT DEAL OF INFORMATION AND ADVICE WHICH WILL HELP YOU USE AND HANDLE YOUR BIKE PROPERLY. IN YOUR OWN INTEREST, PLEASE PAY PARTICULAR ATTENTION TO NOTICES THAT ARE MARKED AS FOLLOWS:

⚠ WARNING ⚠

IGNORING THESE INSTRUCTIONS, CAN BE DANGEROUS TO LIFE AND LIMB.

! CAUTION !

IGNORING THESE INSTRUCTIONS MAY DAMAGE PARTS OF THE MOTORCYCLE OR IMPAIR THE MOTORCYCLE'S TRAFFIC SAFETY.

Please insert the serial numbers of your motorcycle in the boxes below

Chassis number

Engine number

Key number

Stamp of dealer

COMSUMER INFORMATION FOR AUSTRALIA ONLY

Tampering with noise control system prohibited

Owners are warned that the law may prohibit:

(a) 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; and

(b) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

KTM SPORTMOTORCYCLE AG RESERVES THE RIGHT TO MODIFY ANY EQUIPMENT, TECHNICAL SPECIFICATIONS, COLORS, MATERIALS, SERVICES OFFERED AND RENDERED, AND THE LIKE SO AS TO ADAPT THEM TO LOCAL CONDITIONS WITHOUT PREVIOUS ANNOUNCEMENT AND WITHOUT GIVING REASONS, OR TO CANCEL ANY OF THE ABOVE ITEMS WITHOUT SUBSTITUTING THEM WITH OTHERS. IT SHALL BE ACCEPTABLE TO STOP MANUFACTURING A CERTAIN MODEL WITHOUT PRIOR NOTICE . IN THE EVENT OF SUCH MODIFICATIONS, PLEASE ASK YOUR LOCAL KTM DEALER FOR INFORMATION.

Introduction

We would like to congratulate you on your purchase of a KTM motorcycle.

You are now the owner of a state-of-the-art sports motorcycle that guarantees to bring you lots of fun and enjoyment, provided that you clean and maintain it appropriately. **Before you go for your first ride, be sure to read this manual carefully and thoroughly in order to familiarize yourself with how to operate your new motorcycle and with its characteristics, even if this means that you will have to dedicate some of your valuable time to this task. Only by doing so will you learn how to tune your motorbike to your specific needs and how to protect yourself against injury. Besides, this manual contains important information on motorcycle maintenance.** At the time this manual was typeset, it was up-to-date with the latest state of this production series. It cannot be completely ruled out, however, that minor discrepancies may exist resulting from further design upgrades of these motorcycles.This manual is an important part of your motorbike and should be passed on to any subsequent owner in case you decide to sell it.

We expressly point out that work marked with an asterisk in the chapter "Maintenance work on the chassis and engine" must be performed by a KTM workshop. If maintenance work should become necessary during a competition, it must be performed by a trained mechanic.

For your own safety, use KTM-approved parts and accessories only. KTM is not liable for damage that arises in connection with the use of other products.

Take special care to follow the recommended run in, inspection, and maintenance intervals. Heeding these guidelines will significantly increase the life of your motorcycle. Have services carried out by a KTM dealer so that your warranty claim remains intact.

Off-road motorcycle driving is a wonderful sport and we hope that you will be able to enjoy it to the full. It may, however, involve potential problems for the environment or lead to conflicts with others. These problems or conflicts can be avoided if the motorcycle is used responsibly. To safeguard the future of motorcycle sports, make sure that you use the motorcycle in accordance with the law, show that you are environmentally conscious and respect the rights of others.

We wish you a lot of fun when driving !

KTM SPORTMOTORCYCLE AG
5230 MATTIGHOFEN, AUSTRIA

Attachments: Spare parts manual chassis & engine

ALL RIGHTS RESERVED TO MAKE ALTERATIONS TO DESIGN AND MODEL.

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IMPORTANT WARRANTY AND GUARANTEE INFORMATION

KTM sports motorcycles are designed and constructed to resist the usual wear and tear of normal use in competitions.
The motorcycles comply with the regulations and categories currently in effect with the leading international motorcycle associations.

Observance of the service, maintenance and tuning instructions for the engine and chassis specified in the Owner's Manual is a prerequisite for faultless operation and the avoidance of premature wear. An improperly tuned chassis can lead to damage and breakage of the chassis components (see chapter on checking the basic chassis setting).

The service work specified in the "Lubrication and Maintenance Schedule" must be performed by a KTM workshop and recorded in the service manual otherwise claims under the warranty shall become void.

The fuels and lubricants specified in the Owner's Manual or automotive fluids with equivalent specifications must be used in accordance with the maintenance schedule.

No claims can be filed under the warranty for damage or consequential damage caused by manipulations or conversions to the motorcycle.

The use of the motorcycle under extreme conditions, e.g. on extremely muddy and wet terrain, can lead to higher than average wear on components such as the drive train or the brakes. In this case it may become necessary to service or replace wear parts before the service limit specified in the maintenance schedule has been reached.

THE SX/SXS AND MXC MODELS ARE PROHIBITED ON PUBLIC ROADS.
The EXC models are only allowed on public roads in the original homologated (throttled) version. **Without this performance restriction (i.e. dethrottled), these models are only allowed to be driven off-road but not on public roads.** The EXC models are designed for off-road sports endurance competitions(enduro) and **not suitable for predominant motocross** use.

TÜV MANAGEMENT SERVICE ISO 9001
REG.NO. 12 100 6061

In accordance with the international quality management ISO 9001 standard, KTM uses quality assurance processes that lead to the highest possible product quality.

TABLE OF CONTENTS

Page

SERIAL NUMBER LOCATIONS 5
- Chassis number 5
- Engine number, engine type (125/200) 5
- Engine number, engine type (250/300) 5

OPERATION INSTRUMENTS 5
- Clutch lever 5
- Hand brake lever 5
- Electronic speedometer, indicator lamp (EXC) 6
- Electronic speedometer 6
- Tripmaster switch 7
- Short circuit button (SX) 11
- Combination switch (EXC) 11
- Headlamp switch (EXC USA) 11
- Flasher switch 11
- Emergency OFF switch (Australia) 11
- Filler cap 12
- Fuel tap 12
- Choke knob 12
- Shift lever 12
- Kickstarter 13
- Foot brake pedal 13
- Side stand 13
- Steering lock 13
- Compression damping of fork 14
- Rebound damping of fork 14
- Compression damping of shock absorber (SX) 14
- Compression damping of shock absorber (MXC, EXC) 15
- Rebound damping of shock absorber (SX, MXC, EXC) 15

GENERAL TIPS AND WARNINGS FOR STARTING THE MOTORCYCLE 16
- Instructions for your first ride 16
- Running in 16

DRIVING INSTRUCTIONS 17
- What you should check before each start 17
- Starting when the engine is cold 18
- Starting when the engine is warm 18
- What to do when the engine is "flooded" 18
- Starting off 18
- Shifting, Riding 18
- Braking 19
- Stopping, Parking 19
- Refueling, fuel 19

PERIODIC LUBRICATION - AND MAINTENANCE-SCHEDULE 20

MAINTENANCE WORK ON CHASSIS AND ENGINE 24
- Checking and adjusting the steering head bearing 24
- How to change the handlebar position 25
- Breather plug front fork 25
- Cleaning the dust sleeves of the telescopic fork 25
- Basic suspension setup for the weight of the driver 26
- Checking the shock absorber and spring 26
- Determining the static sag of the shock absorber 26
- Determining the riding sag of the shock absorber 26
- Checking the basic setup of the telescopic fork 27
- Changing the spring preload on the telescopic fork (SX models) 27

Page

- Changing the spring preload on the telescopic fork (MXC/EXC models) .27
- Replacing fork springs 27
- Adjusting the spring preload on the fork (SX) 28
- Changing the spring preloading of the shock absorber 28
- Pivot bearing 28
- Checking the chain tension 29
- Correct the chain tension 29
- Chain maintenance 30
- Chain wear 30
- General information about KTM disc brakes 31
- Adjusting the free travel at the hand brake lever 32
- Checking the brake fluid level - front brake 32
- Refilling the front brake fluid reservoir 32
- Checking the front brake pads 32
- Replacing the front brake pads 33
- Changing the basic position of the foot brake pedal 33
- Checking the rear brake fluid level 33
- Refilling the rear brake fluid reservoir 33
- Checking the rear brake pads 34
- Replacing the rear brake pads 34
- Dismounting and mounting the front wheel 34
- Dismounting and mounting the rear wheel 35
- Tires, air pressure 36
- Checking the spoke tension 36
- Replacing the battery of the electronic speedometer 36
- Setting the clock of the electronic speedometer 37
- Checking/setting the distance of the magnetic sensor 38
- Replacing the headlight lamp 38
- Cooling system 39
- Radiator cover for the cold season 39
- Checking the coolant level 39
- Refilling / Bleeding the cooling system 40
- Cleaning the air filter 40
- Changing the original position of the clutch lever 41
- Checking the oil level of the hydraulic clutch 41
- Bleeding of the hydraulic clutch 41
- Exhaust system 41
- Cleaning the spark arrestor (EXC USA) 42
- Carburetor adjustment 42
- Draining the float chamber of the carburetor 43
- Checking the float level 43
- Checking the transmission oil level (125/200) 44
- Changing the transmission oil (125/200) 44
- Checking the transmission oil level (250/300) 44
- Changing the transmission oil (250/300) 44

CLEANING 45

CONSERVATION FOR WINTER OPERATION 45

STORAGE 45
- Using RE Iniation 45

TECHNICAL SPECIFICATIONS - CHASSIS (125/200) 46

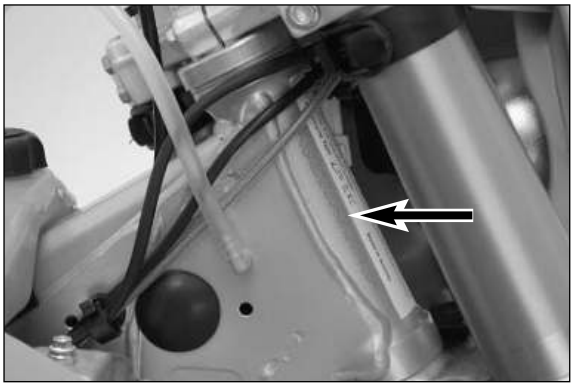
TECHNICAL SPECIFICATIONS - ENGINE (125/200) 48

TECHNICAL SPECIFICATIONS - CHASSIS (250/300) 50

TECHNICAL SPECIFICATIONS - ENGINE (250/300) 52

INDEX 54

WIRING DIAGRAM, CARBURETOR SETTING ....Appendix



SERIAL NUMBER LOCATIONS

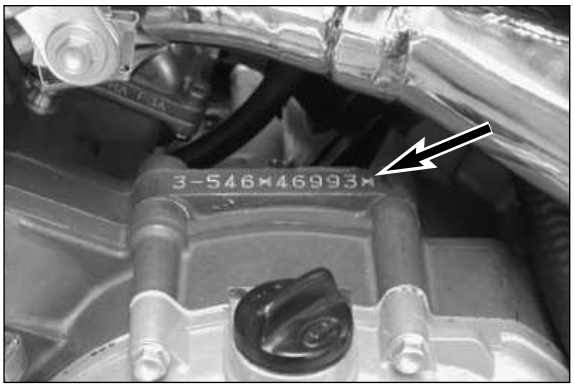
Chassis number

The chassis number is stamped on the right side of the steering head tube. Enter this number in the field on page no 1.



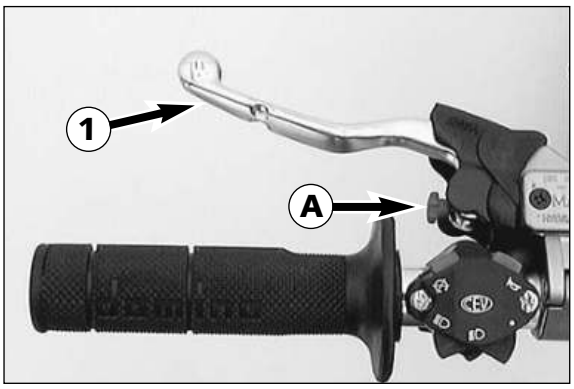
Engine number, engine type (125/200)

The engine number and the engine type are stamped into the left side of the engine below the engine sprocket. Enter this number on page 1.



Engine number, engine type (250/300)

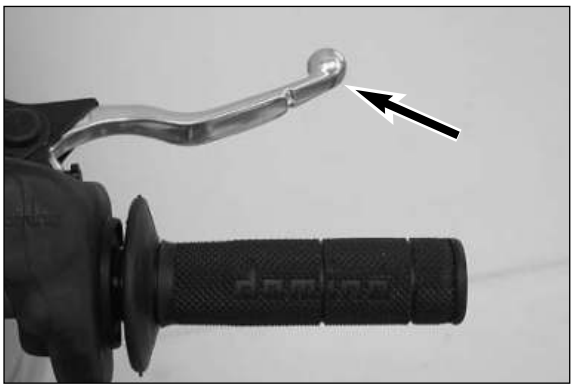
Engine number and engine type are stamped on the right hand side of the engine in front of the kickstarter. Enter this number in the relevant field on page 1.



OPERATION INSTRUMENTS

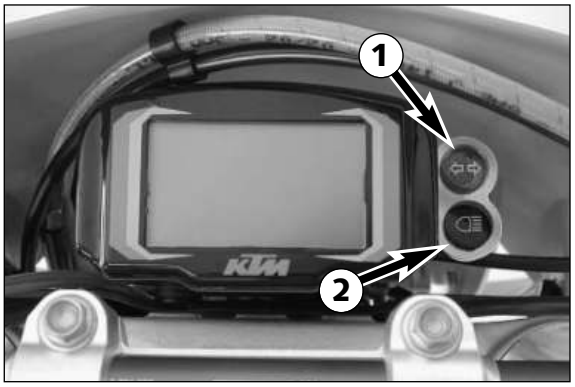
Clutch lever

The clutch lever ❶ is located on the left side of the handlebars. The adjusting screw Ⓐ is used to change the original position of the clutch lever (see maintenance work on chassis and engine).



Hand brake lever

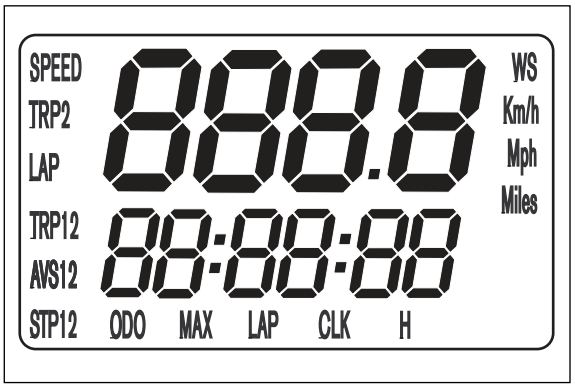
The hand brake lever is mounted on the handlebars on the right and actuates the front wheel brake.



Electronic speedometer, indicator lamp (EXC)

The green control lamp ❶ flashes in the same rhythm as the flashing indicator when the indicator is working.

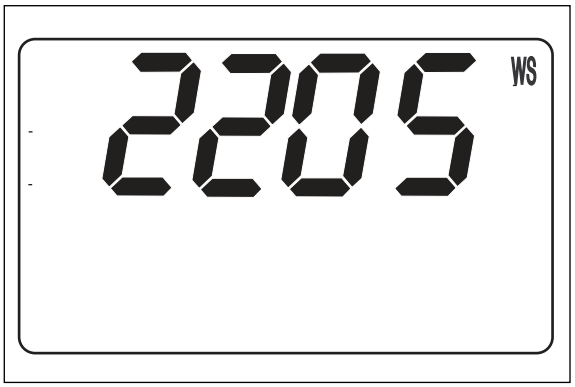
The blue control lamp ❷ lights up when the high beam is on.



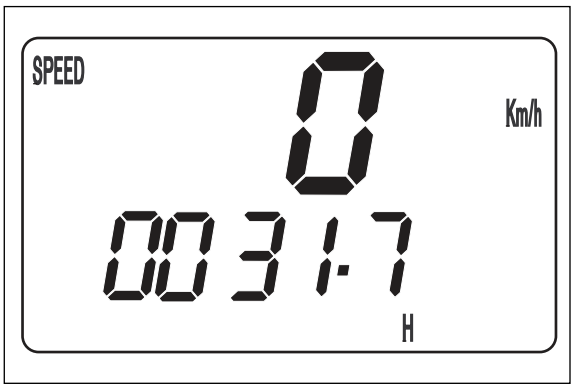
Electronic speedometer

The electronic speedometer display is activated as soon as the engine is switched on and the motorcycle starts to move.
The engine must be started in order for the speedometer to be supplied with electricity from the generator. An impulse must be received from the wheel sensor to activate the display; the front wheel must turn at least one time.

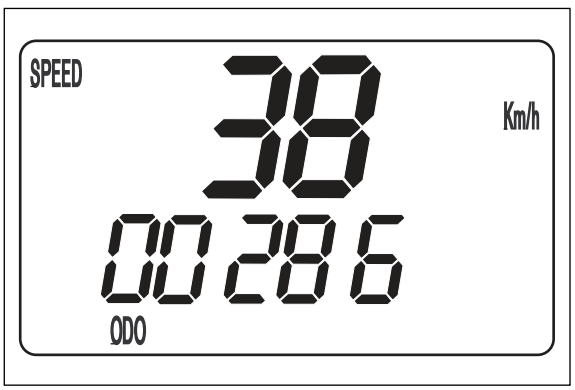
TEST
All of the display elements will light up for 1 second for the function test.



WS (wheel size)
The display will change and briefly show the diameter of the front wheel in millimeters.
If the front wheel does not turn, the display will automatically change to the SPEED/H mode.
If the front wheel turns, the display will automatically change to the SPEED /ODO mode.

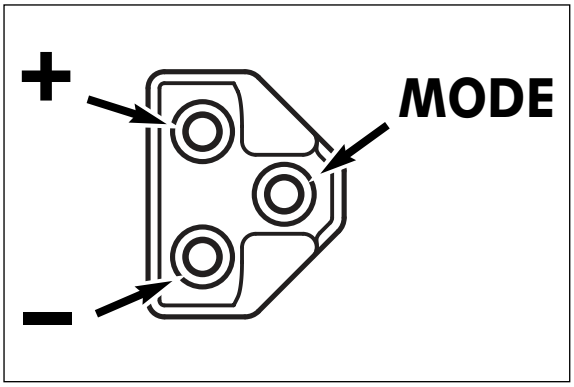


SPEED/H (hours) display mode
When you stop driving and no impulses are sent from the wheel sensor, the display mode will automatically change from SPEED/ODO to SPEED/H. H shows the operating hours. The operating hour counter starts to count as soon as you start the engine. The displayed figure cannot be cleared.
Service intervals are indicated in operating hours for some KTM offroad motorcycles, making the operating hour counter a very practical function.



Anzeigemodus SPEED/ODO
The SPEED/ODO mode shows the speed and the total kilometers traveled.
When the front wheel stops turning, the display will automatically change to the SPEED/H mode.
The information will disappear in the display when the front wheel stops turning for 1 minute.

NOTE:
A Tripmaster switch is available as an accessory and enhances the electronic speedometer by providing the following functions:
2x Tripmaster
2x chronometer for the lap time
Average speed
Maximum speed
Clock
Display in miles



Tripmaster switch

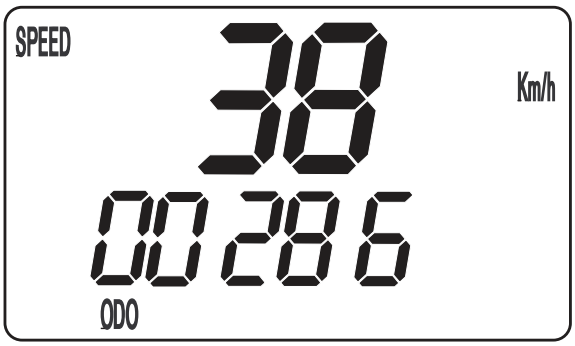
The switch has three buttons: MODE, + (plus) and – (minus).

⚠ WARNING ⚠

DO NOT TRY TO CHANGE THE MODE OR READ THE SETTINGS WHILE DRIVING. YOUR ATTENTION WILL BE DISTRACTED FROM THE TRAFFIC WHICH CAN EASILY LEAD TO AN ACCIDENT.

Electronic speedometer functions provided by the Tripmaster switch

The display modes on the electronic speedometer will change in the following order. If not, please read the chapter "ACTIVATING AND DEACTIVATING THE DISPLAY MODE."

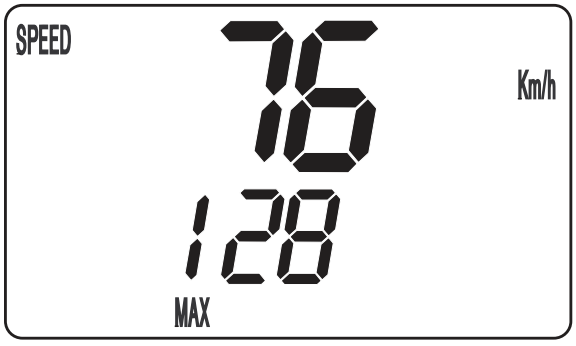


SPEED/ODO display mode

SPEED displays the speed in KPH or MPH. The displayed figure cannot be cleared.

ODO displays the kilometers or miles traveled. The displayed figure cannot be cleared.

+ BUTTON no function
– BUTTON no function
press the MODE BUTTON to change to the next mode
press and hold the MODE BUTTON 3 SECONDS to change to the next mode



SPEED/MAX display mode

MAX displays the maximum speed. It is always active.

+ BUTTON no function
– BUTTON no function
press the MODE BUTTON to change to the next mode
press and hold the MODE BUTTON 3 SECONDS to reset the MAX figure to 0



SPEED/LAP display mode

LAP displays the stopped lap time in hours, minutes and seconds.

+ BUTTON Starts and stops the stop watch. The lap time is not reset to 0.
– BUTTON Stops the running stop watch, stores the lap time and restarts the stop watch. The time is reset to 0. A total of 10 lap times can be stored and read in the SPEED/LAP display mode. To clear all of the stored lap times, hold the MODE button for 3 seconds in the SPEED/LAP mode.
press the MODE BUTTON to change to the next mode
If no lap time is stored or the motorcycle is driving, the LAP/LAP mode will be skipped.
press and hold the MODE BUTTON 3 SECONDS to reset the LAP figure and all stored lap times to 0



LAP/LAP display mode

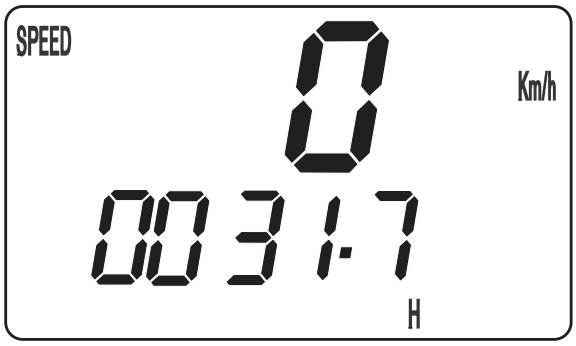
The lap number is shown at the top and the lap time in hours, minutes and seconds at the bottom of the display.
If no lap time is stored or the motorcycle is driving, the LAP/LAP mode will be skipped.
Hold the MODE button for 3 seconds in the SPEED/LAP mode to clear the stored lap times.

+ BUTTON changes to the next lap time.
– BUTTON no function
press the MODE BUTTON to change to the next mode
press and hold the MODE BUTTON 3 SECONDS to change to the next mode



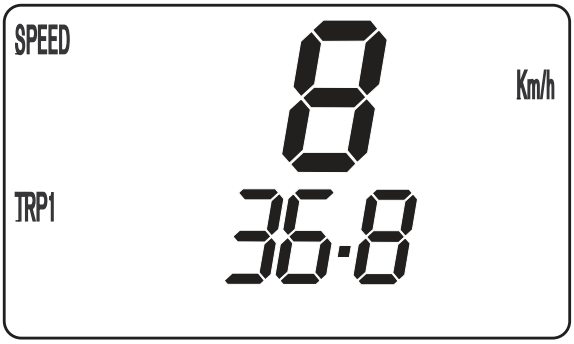
SPEED/CLK (clock) display mode
CLK will display time in hours, minutes and seconds.

+ BUTTON no function
– BUTTON no function
press the MODE BUTTON to change to the next mode.
press and hold the MODE BUTTON 3 SECONDS to set the time in the menu (see SETTING THE CLOCK)



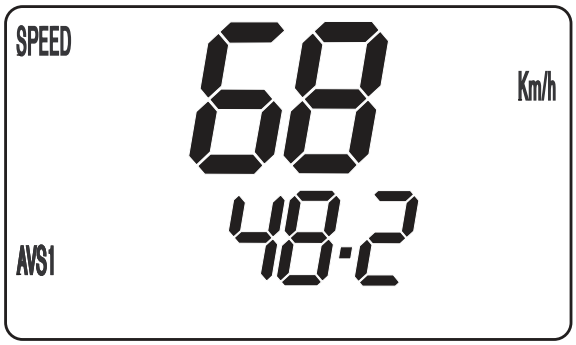
SPEED/H (hours) display mode
When you stop driving and no impulses are sent from the wheel sensor, the display mode will automatically change from SPEED/ODO to SPEED/H. H shows the operating hours. The operating hour counter starts to count as soon as you start the engine. The displayed figure cannot be cleared.
Service intervals are indicated in operating hours for some KTM offroad motorcycles, making the operating hour counter a very practical function.

+ BUTTON no function
– BUTTON no function
press the MODE BUTTON to change to the next mode
press and hold the MODE BUTTON 3 SECONDS to change to the SETUP mode (see REVEALING/CONCEALING functions).



SPEED/TRP1 (trip 1) display mode
The TRP1 trip meter is always active and counts to 999.9. It is used to measure the length of a trip or the distance between 2 refueling stops.
TRP1 is linked to AVS1 and STP1. The calculation of these figures is activated by the first impulse received from the wheel sensor (when the front wheel starts to turn) and stops 3 seconds after the last impulse is received (when the front wheel has stopped).
The TRP1, AVS1 and STP1 figures are automatically reset to 0 after passing 999.9.

+ BUTTON no function
– BUTTON no function
press the MODE BUTTON to change to the next mode.
press and hold the MODE BUTTON 3 SECONDS to automatically reset the TRP1, AVS1 and STP1 figures to 0.



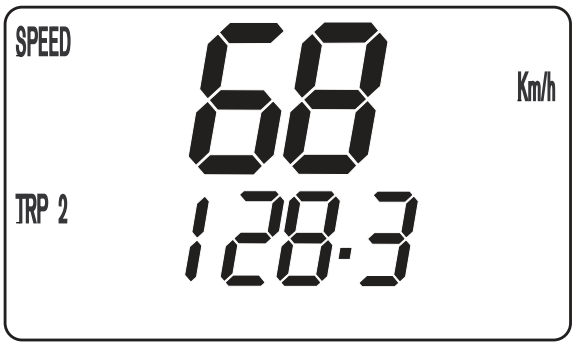
SPEED/AVS1 (average speed 1) display mode
AVS1 is always active and shows the average speed based on the TRP1 and STP1 figures. The calculation of this figure is activated by the first impulse received from the wheel sensor and stops 3 seconds after the last impulse is received.

+ BUTTON no function
– BUTTON no function
press the MODE BUTTON to change to the next mode
press and hold the MODE BUTTON 3 SECONDS to reset the TRP1, AVS1 and STP1 figures to 0.



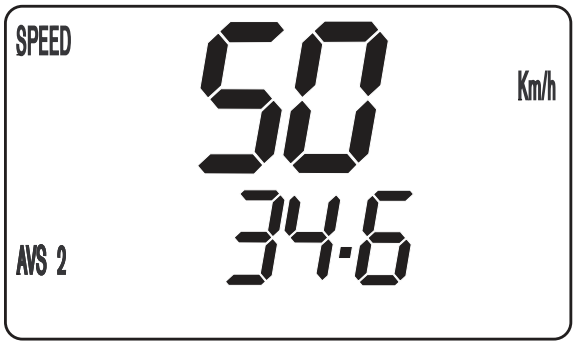
SPEED/STP1 (stop 1) display mode
STP1 shows the traveling time based on TRP1 and continues to count whenever it receives impulses from the wheel sensor. The calculation of this figure is activated by the first impulse received from the wheel sensor and stops 3 seconds after the last impulse is received.

+ BUTTON no function
– BUTTON no function
press the MODE BUTTON to change to the next mode
press and hold the MODE BUTTON 3 SECONDS to reset the TRP1, AVS1 and STP1 figures to 0.

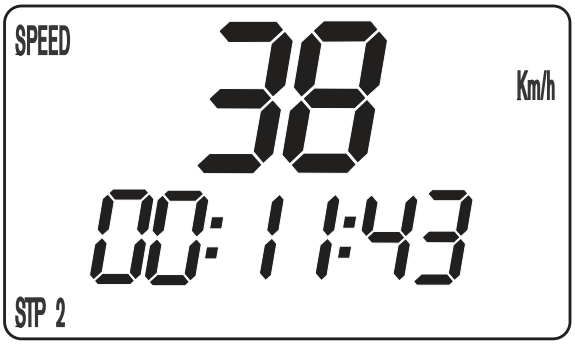


SPEED/TRP2 (trip 2) display mode
The TRP2 trip meter is always active and counts to 999.9. Contrary to TRP1, the displayed figure can be changed using the + and – buttons. This is a very useful function for trips taken according to a roadbook.
TRP2 is activated by the first impulse received from the wheel sensor and stops automatically 3 seconds after the last impulse is received.

+ BUTTON increases the TRP2 figure
– BUTTON decreases the TRP2 figure
press the MODE BUTTON to change to the next mode
press and hold the MODE BUTTON 3 SECONDS to reset TRP2 to 0



SPEED/AVS2 (average speed 2) display mode
AVS2 shows the average speed based on the TRP2 and STP2 figures. The calculation of this figure is activated by the first impulse received from the wheel sensor and stops 3 seconds after the last impulse is received.
The displayed figure will deviate from the actual average speed if TRP2 was changed manually or if STP2 was not stopped after the trip.
+ BUTTON no function
– BUTTON no function
press the MODE BUTTON to change to the next mode
press and hold the MODE BUTTON 3 SECONDS to change to the next mode

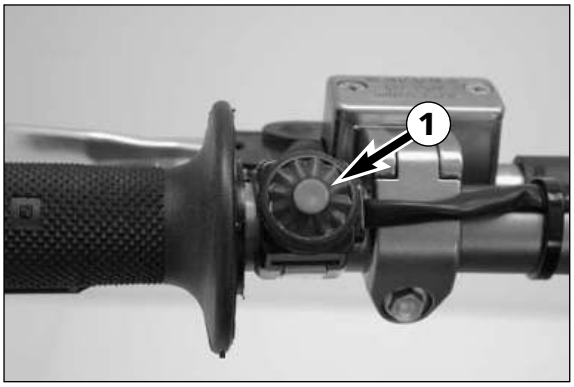


SPEED/STP2 (stop 2) display mode
STP2 is a manual stop watch. Start the stop watch by pressing the + button, press again to hold. Press again to continue timing.
Press the MODE button to change to the next mode. The STP2 display will blink in the other modes if STP2 continues to run in the background. To stop STP2, return to the SPEED/STP2 mode and press the + button.

+ BUTTON starts and stops the stop watch
– BUTTON no function
press the MODE BUTTON to change to the next mode
press and hold the MODE BUTTON 3 SECONDS to reset STP2 figures to 0

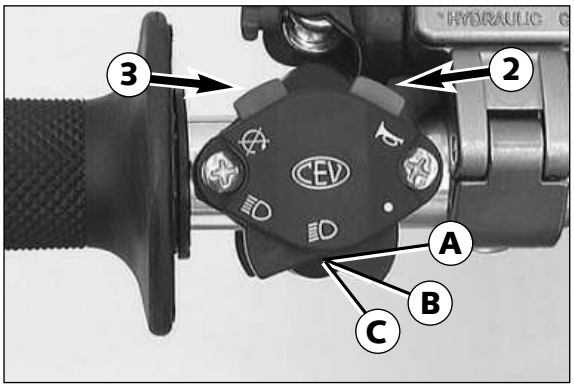
OVERVIEW OF TRIPMASTER FUNCTIONS

Standing motorcycle	Driving motorcycle	Display	Press +	Press −	Press **MODE**	Hold **MODE for 3 sec**
	X	**SPEED / ODO**	no function	no function	next display mode	no function
X	X	**SPEED / MAX**	no function	no function	next display mode	resets MAX to 0
X	X	**SPEED / LAP**	starts / stops LAP figure LAP remains	stops LAP, stores LAP figure, resets LAP to 0	next display mode	clears all LAP figures
X		**LAP / LAP**	next figure	no function	next display mode	next display mode
X	X	**SPEED / CLK**	no function	no function	next display mode	set clock menu
X		**SPEED / H**	no function	no function	next display mode	display setup menu
X	X	**SPEED / TRP1**	no function	no function	next display mode	resets TRP1, STP1 and AVS1 to 0
X	X	**SPEED / AVS1**	no function	no function	next display mode	resets TRP1, STP1 and AVS1 to 0
X	X	**SPEED / STP1**	no function	no function	next display mode	resets TRP1, STP1 and AVS1 to 0
X	X	**SPEED / TRP2**	increases TRP2 figure	decreases TRP2 figure	next display mode	resets TRP2 to 0
X	X	**SPEED / AVS2**	no function	no function	next display mode	next display mode
X	X	**SPEED / STP2**	starts / stops STP2	no function	next display mode	sets STP2 to 0



Short circuit button (SX)

The short circuit button ❶ turns off the engine. When pressing this button, the ignition circuit is short-circuited.



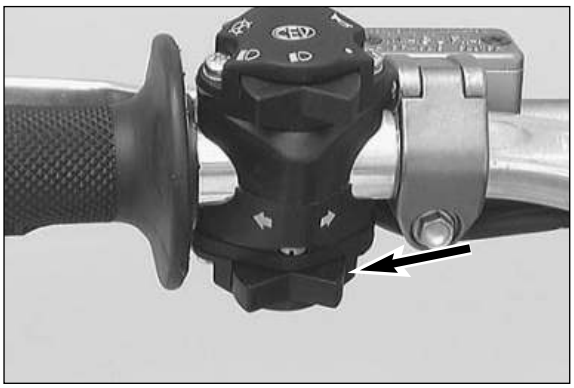
Combination switch (EXC)

The light switch has 2, respectively 3 switch positions.
Ⓐ = Light off (this function is not available in all models)
Ⓑ = Low beam on
Ⓒ = High beam on
You may use button ❷ to actuate the horn.
The red short circuit button ❸ serves to switch off the engine. Leave the switch pressed until the engine stops.



Headlamp switch (EXC USA)

In this model the headlamp is switched on with the pull switch ❹.

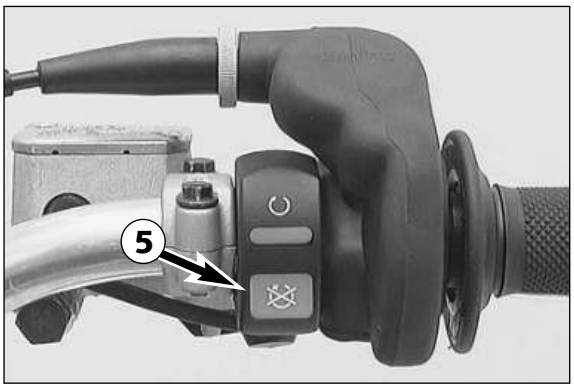


Flasher switch

The flasher switch is a separate unit and is mounted on the left portion of the handlebar.
The wire harness is designed in a way that whenever you want to use your bike off-road, you can dismount the entire turn indicator system without affecting the function of the remaining electrical system.

⇦ Flasher left

⇨ Flasher right

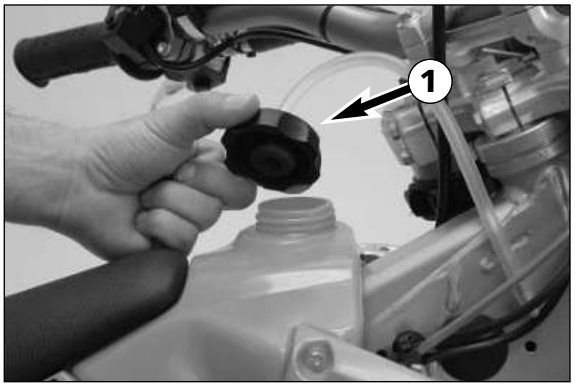


Emergency OFF switch (Australia)

The emergency OFF switch ❺ is located next to the throttle grip. Primarily designed as safety or emergency OFF switch, it should normally not be in its activated state.

⊗ In this position, the ignition circuit is shorted; if the engine is running, it will stall immediately, if it is at standstill, it will not start.

○ In this position, the ignition circuit is enabled; the engine should start.



Filler cap

To open it: turn filler cap counter-clockwise.
To close it: put filler cap back on and tighten it by turning it clockwise. Install tank breather hose ❶ without kinks.

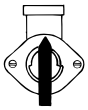


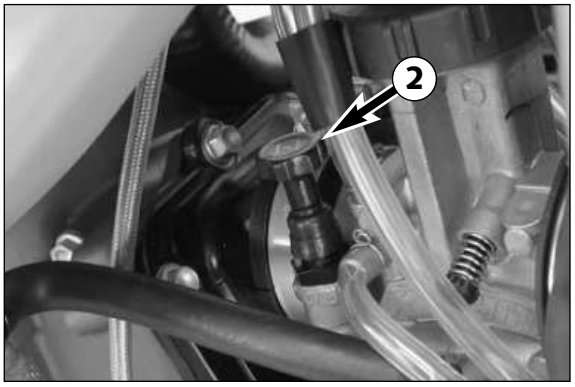
Fuel tap

OFF In this position the fuel tap is closed. No fuel can flow to the carburetor.

ON During operation the twist grip must be turned to ON. This means that the fuel can flow to the carburetor. With the twist grip in this position the tank will be emptied until only the reserve is left.

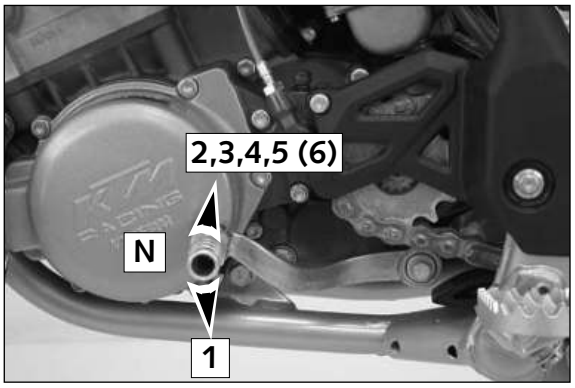
RES The reserve tank cannot be tapped until the rotating handle is turned to the RES position. Fill the tank as soon as possible and remember to turn the rotating handle back to the ON position so that you will have backup fuel next time, too.
Reserve of the 9 l tank . . . . . 1.3 l (0.32 US gallons)
Reserve of the 11 l tank . . . . . 1.7 l (0.45 US gallons)

	OFF	ON	RES
SX			
MXC EXC			



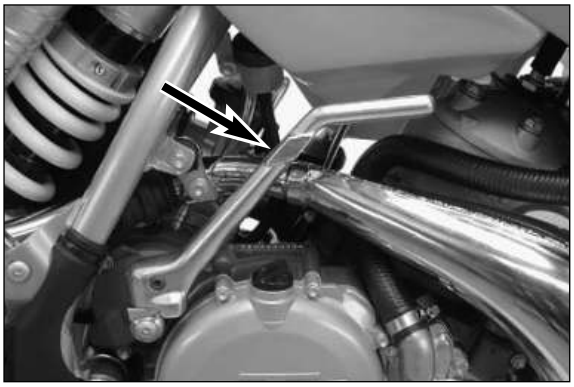
Choke knob

When pulling the choke knob ❷ fully towards the top, a bore is opened in the carburetor. Through this bore the engine can take in additional fuel. This results in a rich fuel-air mixture, that is needed for a cold start.
When pressing the choke knob downward in the carburetor, the bore is closed again.



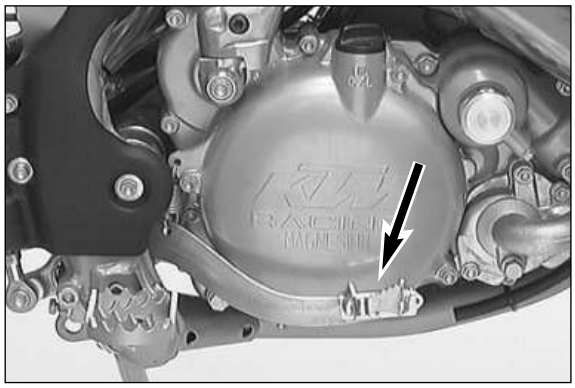
Shift lever

The shift lever is mounted on the left side of the engine. The position of the gears is shown in the illustration. Neutral, or the idle speed, is located between first and second gear.



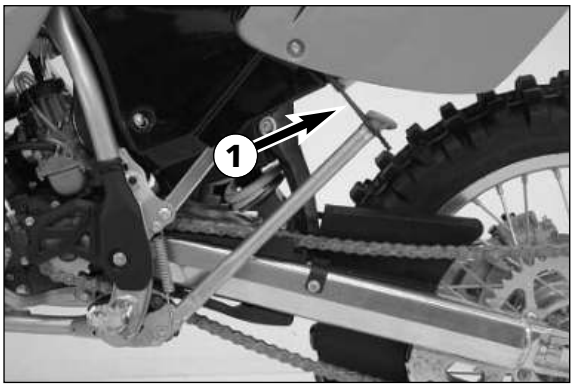
Kickstarter

The kickstarter is mounted on the left side of the engine. Its upper part can be swivelled.



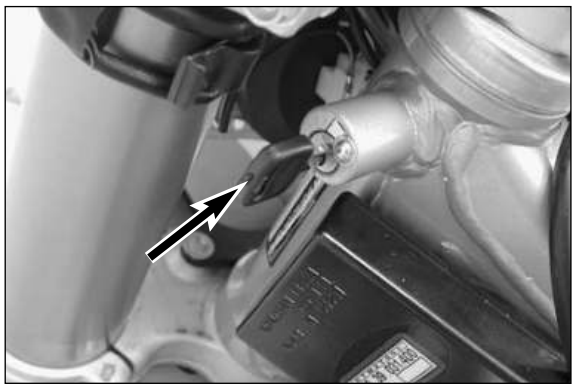
Foot brake pedal

The foot brake pedal is disposed in front of the right foot rest. Its basic position can be adjusted to your seat position (see maintenance work).



Side stand

Push the side stand to the ground with your foot and load it with the motorcycle. Make sure that you put your bike on solid ground and in a secure position. For off-road riding, you can use the rubber band ❶ to additionally secure the center stand in its folded-up position.

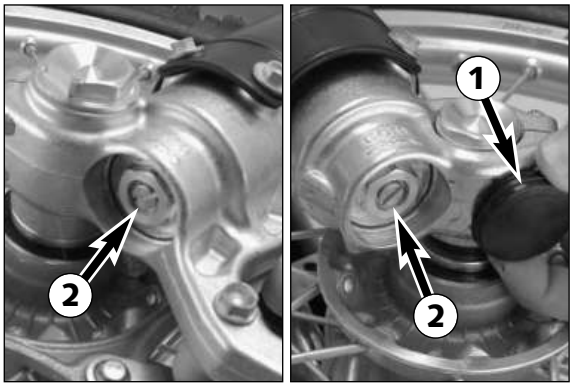


Steering lock

The handlebar can be locked by means of the lock located on the steering head. To lock it, turn the handlebar all the way to the right, insert the key, turn it to the left, press it in, turn it to teh right, and remove it.

! CAUTION !

NEVER LEAVE THE KEY INSERTED IN THE STEERING LOCK. IF YOU TURN THE HANDLEBAR TO THE LEFT THE KEY COULD GET DAMAGED.

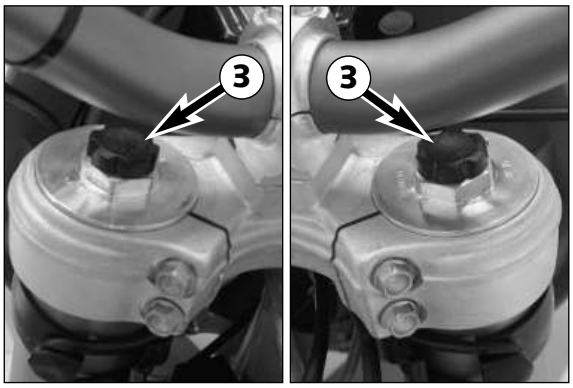


Compression damping of fork

Hydraulic compression damping determines the reaction when the fork is compressed. The degree of compression can be adjusted with adjusting screws at the bottom of the fork legs.Remove the protecting cap ❶.
Turn the knob ❷ clockwise to increase damping, turn it counterclockwise to reduce damping during compression.

STANDARD ADJUSTMENT
– turn adjusting screw clockwise as far as it will go
– turn it back by as many clicks as are specified for the relevant type of fork

Type White Power 1418X725 .....20 clicks
Type White Power 1418X735 .....22 clicks
Type White Power 1418X736 .....20 clicks



Rebound damping of fork

Hydraulic rebound damping determines the reaction when the fork is rebound. By turning the adjusting screw ❸ (REB), the degree of damping of the rebound can be adjusted. Turn the knob clockwise to increase damping, turn it counterclockwise to reduce damping during rebounding.

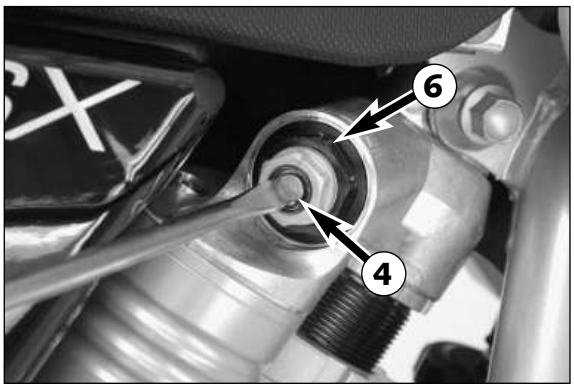
STANDARD ADJUSTMENT
– turn adjusting screw clockwise as far as it will go
– turn it back by as many clicks as are specified for the relevant type of fork

Type White Power 1418X725 .....20 clicks
Type White Power 1418X735 .....20 clicks
Type White Power 1418X736 .....20 clicks



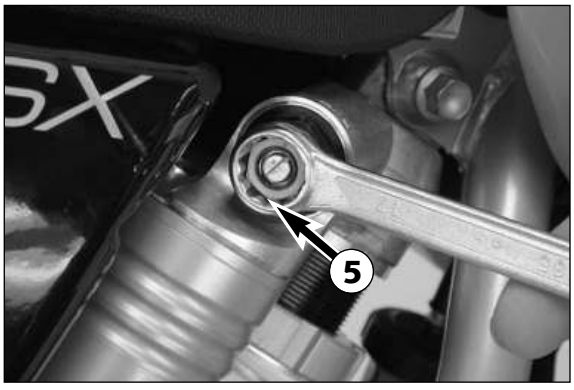
Damping action during compression of shock absorber (SX)

The shock absorber on the SX models can synchronize the compression damping in the low and high-speed range separately (Dual Compression Control).
Low and high speed refers to the movement of the shock absorber during compression and not to the speed of the motorcycle.
The low and high-speed technology overlaps.
The low-speed setting is primarily for slow to normal shock absorber compression rates.The high-speed setting is effective at fast compression rates.Turning in a clockwise direction will increase the damping, turning counterclockwise will decrease the damping.



STANDARD LOW-SPEED SETTING:
– Turn the adjusting screw ❹ to the limit in a clockwise direction using a screwdriver .
– Unscrew the respective number of clicks for the specific type of shock absorber in a counterclockwise direction.

Type White Power 1218X756.....17 clicks

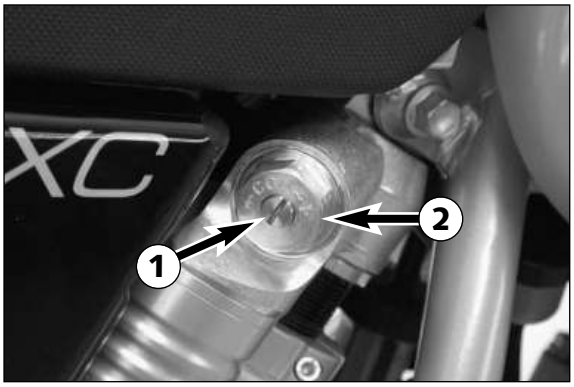


STANDARD HIGH-SPEED SETTING:
– Turn the adjusting screw ❺ to the limit in a counterclockwise direction using a box wrench.
– Unscrew the respective number of turns for the specific type of shock absorber in a clockwise direction.

Type White Power 1218X756..... 2 turns

⚠ WARNING ⚠

THE DAMPING UNIT OF THE SHOCK ABSORBER IS FILLED WITH HIGH-COMPRESSION NITROGEN. NEVER TRY TO TAKE THE SHOCK ABSORBER APART OR TO DO ANY MAINTENANCE WORK YOURSELF. SEVERE INJURIES COULD BE THE RESULT.
NEVER UNSCREW THE BLACK SCREW ❻ CONNECTION (24MM).



Compression damping of shock absorber (MXC, EXC)

The compression damping (during compression) can be adjusted for the MXC and EXC shock absorbers (Mono Compression Control).
The degree of damping can be adjusted by turning adjusting screw ❶ with a screwdriver. Turning in a clockwise direction will increase the damping, turning in a counterclockwise direction will decrease the damping.

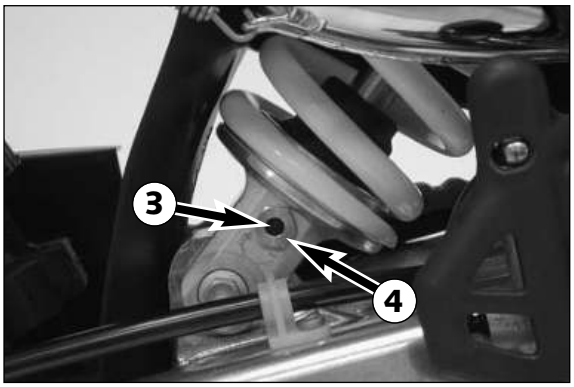
STANDARD ADJUSTMENT:
– Turn the adjusting screw clockwise to the stop.
– Then turn the adjusting screw counterclockwise, counting the number of clicks that corresponds to the respective type of shock absorber.

Type White Power 1218X757 .....17 clicks
Type White Power 1218X759 .....17 clicks

⚠ **WARNING** ⚠

THE DAMPING UNIT OF THE SHOCK ABSORBER IS FILLED WITH HIGH-COMPRESSION NITROGEN. NEVER TRY TO TAKE THE SHOCK ABSORBER APART OR TO DO ANY MAINTENANCE WORK YOURSELF. SEVERE INJURIES COULD BE THE RESULT.

NEVER UNSCREW THE BLACK SCREW ❷ CONNECTION (24MM).



Rebound damping of shock absorber (SX, MXC, EXC)

By using the adjusting screw ❸, the degree of damping of the rebound can be adjusted. Turn the knob to the right side to increase damping, turn it to the left side to reduce damping during rebounding.

STANDARD ADJUSTMENT:
– Turn the adjusting screw clockwise to the stop.
– Then turn the adjusting screw counterclockwise, counting the number of clicks that corresponds to the respective type of shock absorber.

Type White Power 1218X756 .....28 clicks
Type White Power 1218X757 .....28 clicks
Type White Power 1218X759 .....26 clicks

⚠ **WARNING** ⚠

THE DAMPING UNIT OF THE SHOCK ABSORBER IS FILLED WITH HIGH-COMPRESSION NITROGEN. NEVER TRY TO TAKE THE SHOCK ABSORBER APART OR TO DO ANY MAINTENANCE WORK YOURSELF. SEVERE INJURIES COULD BE THE RESULT.

NEVER UNSCREW THE BLACK SCREW ❹ CONNECTION (15MM).

GENERAL TIPS AND WARNINGS FOR STARTING THE MOTORCYCLE

Instructions for your first ride

- Verify that your KTM dealer performed the PREPARATION OF VEHICLE jobs (see Customer Service Manual).
- Thoroughly read the whole instruction manual before starting for your first tour.
- Familiarize yourself with the controls.
- Adjust the clutch lever, the hand brake lever and the foot brake pedal to the most comfortable position.
- Get used to handling the motorcycle on an empty parking lot or open space, before going for a longer ride. Also try to ride as slowly as possible while standing upright, to improve your feeling for the vehicle.
- Do not drive along off-road trails which go beyond your ability and experience.
- Hold the handlebar with both hands and leave your feet on the foot rests while driving.
- Remove your foot from the foot brake lever when you are not braking. If the foot brake lever is not released the brake pads rub continuously and the braking system is overheated.
- You may only take a passenger along if your motorcycle is fitted and registered for such purposes. During the ride, the passenger must hold on to the straps or to the driver, with his feet on the passenger footrests.
- Do not make any alterations to the motorcycle and always use ORIGINAL KTM SPARE PARTS. Spare parts from other manufacturers can impair the safety of the motorcycle.
- Motorcycles are sensitive to alterations in the distribution of weight. If you are taking luggage with you, it should be secured as close as possible to the middle of the vehicle; distribute the weight evenly between the front and the rear wheel. Never exceed the maximum permissible laden weight and the axle weights. The maximum permissible laden weight is made up of the following components:
  - Motorcycle ready for operation and tank full
  - Luggage
  - Driver and passenger with protective clothing and helmet.
- Pay attention to running-in procedure.

Running in

Even very precisely machined sections of engine components have rougher surfaces than components which have been sliding across one another for quite some time. Therefore, every engine needs to be broken in. For this reason, during its first 500 kilometers (300 miles) or 5 hours the engine must not be revved up to its performance limits.
Apply low but changing loads for running-in.

! CAUTION !

DO NOT DRIVE AT FULL LOAD FOR THE FIRST 500 KILOMETERS (300 MILES) OR 5 HOURS!

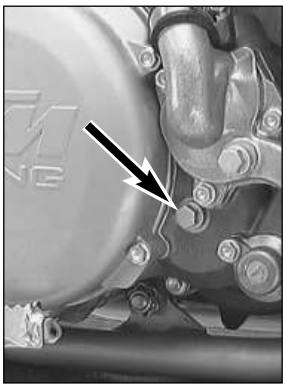
⚠ WARNING ⚠

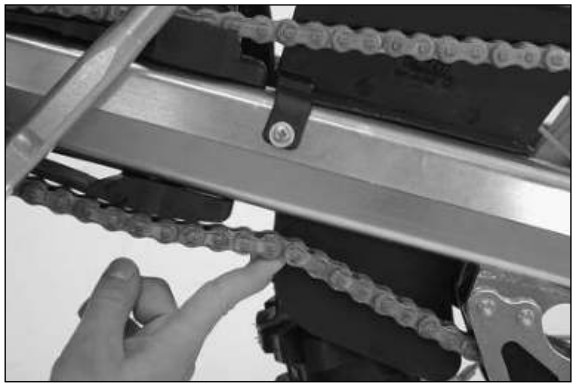
- WEAR SUITABLE CLOTHING WHEN DRIVING A MOTORCYCLE. SMART KTM DRIVERS ALWAYS WEAR A HELMET, BOOTS, GLOVES, AND A JACKET, REGARDLESS OF WHETHER DRIVING ALL DAY OR JUST GO FOR A SHORT RIDE. THE PROTECTIVE CLOTHING SHOULD BE BRIGHTLY COLORED SO THAT OTHER USERS OF THE ROADS CAN SEE YOU AS EARLY AS POSSIBLE. OF COURSE YOUR PASSENGER WILL ALSO NEED SUITABLE PROTECTIVE CLOTHING.
- ALWAYS TURN ON THE LIGHT TO MAKE SURE THAT OTHER DRIVERS BECOME AWARE OF YOU AS EARLY AS POSSIBLE.
- DO NOT DRIVE AFTER HAVING CONSUMED ALCOHOL.
- ONLY USE ACCESSORY PARTS RECOMMENDED BY KTM. FOR EXAMPLE, FRONT PANELLING CAN IMPAIR THE DRIVING CHARACTERISTICS OF THE MOTORCYCLE. CASES, EXTRA TANKS ETC. CAN ALTER THE WEIGHT DISTRIBUTION AND THUS ALSO IMPAIR THE VEHICLE'S DRIVING CHARACTERISTICS.
- THE FRONT AND REAR WHEEL ARE ALLOWED TO BE FITTED ONLY WITH TIRES THAT HAVE THE SAME PROFILE TYPE.
- BE SURE TO CHECK THE SPOKE TENSION AFTER 30 MINUTES' RUNNING TIME. THE SPOKE TENSION WILL DECREASE QUICKLY ON NEW WHEELS. IF YOU CONTINUE TO DRIVE WITH LOOSE SPOKES, THE SPOKES MAY CRACK AND LEAD TO UNSTABLE HANDLING (SEE "CHECKING THE SPOKE TENSION").
- OBSERVE THE TRAFFIC REGULATIONS, DRIVE DEFENSIVELY AND TRY TO LOOK AHEAD AS FAR AS POSSIBLE SO THAT YOU RECOGNIZE ANY HAZARDS AS EARLY AS POSSIBLE.
- ADJUST YOUR DRIVING SPEED TO THE CONDITIONS AND YOUR DRIVING SKILLS.
- DRIVE CAREFULLY ON UNKNOWN ROADS OR IN UNKNOWN TERRITORY.
- WHEN DRIVING OFF-ROAD, ALWAYS HAVE A FRIEND ON A SECOND MOTORCYCLE TO KEEP YOU COMPANY, SO THAT YOU CAN HELP EACH OTHER SHOULD DIFFICULTIES ARISE.
- REPLACE THE HELMET VISOR OR GOGGLE GLASSES EARLY ENOUGH. WHEN LIGHT SHINES DIRECTLY ON A SCRATCHED VISOR OR GOGGLES, YOU WILL BE PRACTICALLY BLIND.
- NEVER LEAVE YOUR MOTORCYCLE WITHOUT SUPERVISION AS LONG AS THE ENGINE IS RUNNING.

⚠ WARNING ⚠

- THE ABOVE MODELS WERE DESIGNED AND BUILT FOR ONE PERSON ONLY - NO ADDITIONAL PASSENGER ALLOWED!
- NEITHER DO THESE MODELS MEET THE APPLICABLE STATUTORY REGULATIONS AND SAFETY STANDARDS. USING THEM ON PUBLIC ROADS, HIGHWAYS, FREEWAYS, ETC. IS AGAINST THE LAW.
- WHEN RIDING YOUR MOTORCYCLE, PLEASE BEAR IN MIND THAT OTHER PEOPLE MAY FEEL MOLESTED BY EXCESSIVE NOISE.











What you should check before each start

When you start off, the motorcycle must be in a perfect technical condition. For safety reasons, you should make it a habit to perform an overall check of your motorcycle before each start.

The following checks should be performed:

1 CHECK TRANSMISSION OIL LEVEL
Too little transmission oil leads to premature wear and will ultimately destroy gear wheels and parts of the shift mechanism.

2 FUEL
Check that there is sufficient fuel in the tank; when closing the filler cap, check that the tank venting hose is free of kinks.

3 CHAIN
A loose chain was fall off the chain wheels; an extremely worn chain may tear, and insufficient lubrication may result in unnecessary wear of the chain and chain wheels.

4 TIRES
Check for damaged tires. Tires showing cuts or dents must be replaced. The tread depth must comply with the legal regulations. Also check the air pressure. Insufficient tread and incorrect air pressure deteriorate the driving performance.

5 BRAKES
Check correct functioning of the braking system. Verify that there is sufficient brake fluid in the reservoir. The reservoirs have been designed in such a way that brake fluid does not need to be refilled even when the brake pads are worn. If the level of brake fluid falls below the minimum value, this indicates a leak in the braking system or completely worn out brake pads. Arrange for the braking system to be checked by an authorized KTM dealer, as complete failure of the braking system can be expected.
Also check the state of the brake hose and the thickness of the brake linings.
Check free travel of the hand brake lever and foot brake lever.

⚠ WARNING ⚠

IF THE RESISTANCE IN THE HAND BRAKE LEVER OR FOOT BRAKE PEDAL FEELS "SPONGY" (TOO MUCH GIVE), THIS IS AN INDICATION THAT SOMETHING IS WRONG WITH THE BRAKE SYSTEM. DON'T RIDE YOUR MOTORCYCLE ANYMORE WITHOUT FIRST HAVING THE BRAKE SYSTEM LOOKED OVER BY A KTM DEALER.

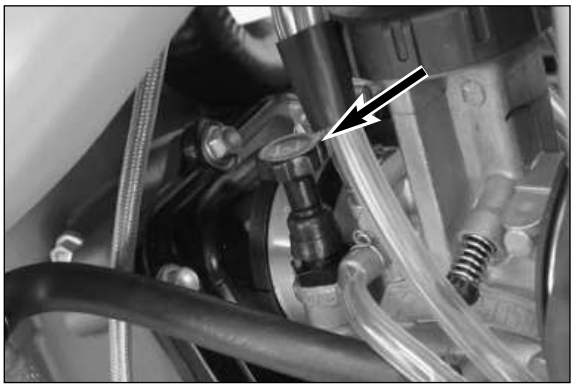
6 CABLES
Check correct adjustment and easy running of all control cables.

7 COOLING FLUID
Check the level of cooling fluid when the engine is cold.

8 ELECTRICAL SYSTEM
Check correct functioning of headlamps, tail-lights, brake lights, turn indicators, indicator lamps and horn while the engine is running.

9 LUGGAGE
If you are taking luggage with you, check that it is securely fastened.











Starting when the engine is cold

1 Open fuel tap
2 Turn on ignition or emergency OFF switch
3 Put the gear in neutral
4 Activate cold-starting aid (choke)
5 Leave throttle closed or open it no more than ⅓ and kick down kickstarter vigorously all the way.

⚠ WARNING ⚠

– For starting always put on your motorcycle boots to avoid injuries. You could slip off the kickstarter or the motor could kick back and fling your foot upwards.
– Forcefully kick the kickstarter down the whole way and do not open the throttle. A kickstart with too little momentum and an opened throttle increases the kicking back risk.
– Do not start the engine and allow it to idle in a closed area. Exhaust fumes are poisonous and can cause loss of consciousness and death. Always provide adequate ventilation while the engine is running.

! CAUTION !

Do not ride your motorcycle with full load and do not rev up the engine when cold. Since the piston warms up and expands faster than the water cooled cylinder, this might cause engine damage. Always let engine idle until warm or drive it warm at low r.p.m. speeds.

Starting when the engine is warm

1 Open fuel tap
2 Turn on ignition or emergency OFF switch
3 Put the gear in neutral
4 Open throttle to ½ and kick down kickstarter vigorously

What to do when the engine is "flooded"

1 Close fuel tap
2 Start engine with full throttle. If necessary, unscrew spark plug and dry it.
3 Once the engine is running, open fuel tap again.

Starting off

Pull the clutch lever. Put the engine into first gear, slowly release the clutch lever and accelerate at the same time.

⚠ WARNING ⚠

– Before you start off, check that the main or side stand has been swung right up to the top. If the stand drags on the floor, you may lose control of your motorcycle.
– Before starting for an off-road tour, it is recommended to additionally secure the side stand with the rubber band on the air filter box.

Shifting/Riding

You are now in first gear, referred to as the drive or uphill gear. Depending on the conditions (traffic, hill size, etc.), you can shift to a higher gear. Turn down the throttle, at the same time pull the clutch lever in and shift to the next higher gear. Let the clutch lever go again and open the throttle. If you turned on the choke, make sure you turn it off again as soon as engine is warm.
When you reach full speed through opening the throttle all the way, turn throttle back to ¾; the speed hardly decreases although the engine will use less gas. Only give as much gas as the engine can handle. Through quick and high revving of throttle, the gas consumption will increase. When shifting down, use the brakes if necessary and turn down at the same time. Pull the clutch lever and shift down to the next lower gear. Let the clutch lever go slowly and open the throttle or shift down again.

⚠ WARNING ⚠

– After falling with the motorcycle, check all its functions thoroughly before using it again.
– A twisted handlebar must always be replaced. Do not adjust the handlebar, it will lose stability.

! CAUTION !

- High rpm rates when the engine is cold have an adverse effect on the life of your engine. We recommend you run the engine in a moderate rpm range for a few miles giving it a chance to warm up. After that no further precautions in this respect need to be taken.
- Never have the throttle wide open when changing down to a lower gear. The engine will overrev, damaging the valves. In addition, the rear wheel will block so that the motorcycle can easily get out of control.
- If the engine runs without throttle during longer downhill travel, the engine should be accelerated occasionally to ensure that it is supplied with sufficient lubricant which is mixed in the fuel.
- In the event that, while riding on your motorcycle, you notice any unusual operation-related noise, stop immediately, turn the engine off, and contact an authorized KTM dealer.

Braking

Turn off the gas and apply the hand and foot brakes at the same time. When driving on sandy, wet or slippery ground, use mainly the rear wheel brake. Always brake with feeling, blocking wheels can cause you to skid or fall. Also change down to lower gears depending on your speed.

⚠ WARNING ⚠

- In case of rain, after washing the motorcycle, after rides through water and in case of rides on wet off-road tracks, humid or dirty brake discs can delay the braking effect. The brakes must be pulled until they are dry or clean.
- Rides on salt-strewed or dirty roads can also delay the braking effect. The brakes must be pulled until they are clean.
- Dirty brake discs cause increased tear of brake pads and brake discs.
- When you brake, the brake discs, brake pads, brake caliper and brake fluid heat up. The hotter these parts get, the weaker the breaking effect. In extreme cases, the entire braking system can fail.
- If the resistance in the hand brake lever or foot brake pedal feels "spongy" (too much give), this is an indication that something is wrong with the brake system. Don't ride your motorcycle anymore without first having the brake system looked over by a KTM dealer.

Stopping and parking

Brake motorcycle and shift gears to idling. To switch off the engine, depress short circuit switch until the engine stops or switch off ignition. Close fuel tap.

⚠ WARNING ⚠

Motorcycle engines produce a great amount of heat while running. The engine, exhaust pipe, muffler, brake rotors, and shock absorbers can become very hot. Do not touch any of these parts after starting the motorcycle, and take care to park it where pedestrians are not likely to touch it and get burned.

! CAUTION !

- Close the fuel tap when leaving your vehicle. Otherwise the carburetor may get flooded and fuel will enter the engine.
- Never park your motorcycle in places where there exist fire hazards due to dry grass or other easily flammable materials.
- The side stand is only designed for the weight of the motorcycle. If you get on your motorcycle and thus put additional weight on the motorcycle, the side stand or the frame can be damaged or the motorcycle may fall on the side.

Refueling, fuel

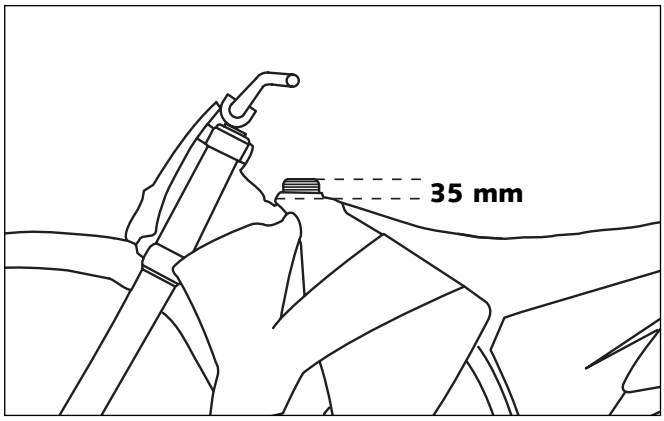
125-300: Unleaded premium gasoline **RON 95** mixed with high grade two stroke oil. Mixture ratio **1:40 - 1:60**
Fuel and engine oil should only be mixed immediately before use. KTM recommends SHELL ADVANCE RACING X.

⚠ WARNING ⚠

Gasoline is highly flammable and poisonous. Extreme caution should be used when handling gasoline. Do not refuel the motorcycle near open flames or burning cigarettes. Always switch off the engine before refueling. Be careful not to spill gasoline on the engine or exhaust pipe while the engine is hot. Wipe up spills promptly. If gasoline is swallowed or splashed in the eyes, seek a doctor's advice immediately.

! CAUTION !

- Only use premium-grade gasoline ROZ 98 respectively 95 mixed with high-grade two-stroke engine oil. Other types of gasoline can cause engine failure.
- Do not use premixed two-stroke oils, oils for outboard engines or normal engine oil to prepare the mixture.
- Do not use gasoline and oil mixtures that are older than one week. The lubrication properties of some two-stroke oils can deteriorate very rapidly.
- Only use known brands of high-grade 2-stroke engine oil (i.e. Shell Advance Racing X).
- Never mix synthetic oils and mineral oils.
- Not enough oil or low-grade oil can cause erosion of the piston. when Using too much oil, the engine may start smoking and foul the spark plug.
- If your motorcycle is equipped with a catalytic converter, always keep in mind that leaded fuel will destroy the catalytic converter.
- Fuel expands when its temperature rises. Therefore do not fill the tank to the top. (see fig.)



PERIODIC MAINTENANCE SCHEDULE

125/200 SX/MXC/EXC
250/300 SX/MXC/EXC

	A clean motorcycle can be checked more quickly which saves money!	1st service after 10 hours or 1000 kilometers	after 20 hours or 2000 kilometers	after 4000 kilometer or once a year
ENGINE	Check gear box oil level		●	
	Change gear box oil	●		●
	Check spark plugs, adjust distance between electrodes	●	●	
	Renew spark plugs			●
CARBURETOR	Check the carburetor connection boot for cracks and leaks			●
	Check idle speed setting	●		●
	Check that vent hoses are not damaged or bent	●		●
ADD-ON-PARTS	Check cooling system for leaks, check quantity of antifreeze	●		●
	Check exhaust system for leaks and fitment			●
	Check cables for damage, smooth operation, bends; adjust and lubricate	●		●
	Check oil level of the clutch master cylinder	●	●	●
	Clean air filter and filter box			●
	Check electric wires for damage and bends			●
	Check headlamp setting			●
	Check function of electric systems (low beam, high beam, break light, indicator, indicator lamps, speedometer illumination, horn, emergency OFF switch or button	●		●
BRAKES	Check brake fluid level, lining thickness, brake lining	●		●
	Check brake lines for damage and leaks	●		●
	Check/adjust smooth operation and free travel of handbrake/foot brake lever	●		●
	Check tightness of brake system screws	●		●
CHASSIS	Check shock absorber and fork for leaks and function	●		●
	Clean dust bellows			●
	Bleed fork legs			●
	Check swing arm bearings			●
	Check/adjust steering head bearings	●		●
	Check tightness of all chassis screws (triple clamps, fork leg axle passage axle nuts and screws, swing arm bearings, shock absorber)	●		●
WHEELS	Check spoke tension and rim joint			●
	Check tires and air pressure	●		●
	Check chain, rear sprockets and chain guides for wear, fitment and tension	●		●
	Lubricate chain	●		●
	Check clearance of wheel bearings	●		●

IMPORTANT RECOMMENDED MAINTENANCE WORK THAT CAN BE CARRIED OUT BY EXTRA ORDER

	at least once a year	every 2 years or 20000 km
Check function of exhaust control	●	
Complete maintenance of shock absorber	●	
Complete maintenance of fork		●
Clean and grease steering head bearings and gasket elements	●	
Clean and adjust carburetor	●	
Replace glass fibre- yarn filling of the exhaust main silencer	●	
Treat electric contacts and switches with contact grease	●	
Change hydraulic clutch fluid	●	
Change break fluid	●	

IF MOTORCYCLE IS USED FOR COMPETITION 4000KM SERVICE SHOULD BE CARRIED OUT AFTER EVERY RACE!
SERVICE INTERVALS SHOULD NEVER BE EXCEEDED BY MORE THAN 5 HOURS OR 500 KM!
MAINTENANCE WORK DONE BY KTM AUTHORISED WORKSHOPS IS NOT A SUBSTITUTE FOR CARE AND CHECKS DONE BY THE RIDER!

Important Checks and Maintenance to be Carried out by the Rider

	Before each start	After every cleaning	For cross-country use	Once a year
Check gear box oil level	●			
Check brake fluid level	●			
Check brake pads for wear	●			
Check lights for function	●			
Check horn for function	●			
Lubricate and adjust cables and nipples		●		
Bleed fork legs regulary			●	
Remove and clean dust bellows regularly			●	
Clean and lubricate chain, check tension and adjust if necessary		●	●	
Clean air filter and filter box			●	
Check tires for pressure and wear	●			
Check cooling liquid level	●			
Check fuel lines for leaks	●			
Empty and clean float chamber		●		
Check all control elements for smooth operation	●			
Check brake performance	●	●		
Treat blank metal parts (with the exception of brake and exhaust systems) with wax-based anti corrosion agent		●		
Treat ignition and steering locks and light switches with contact spray		●		
Check tightness of screws, nuts and hose clamps regularly				●

RECOMMENDED INSPECTION OF THE 125/200/250/300 SX AND EXC ENGINE USED FOR ENDURO COMPETITIONS BY YOUR KTM WORKSHOP (ADDITIONAL ORDER FOR THE KTM WORKSHOP)						
	30 hours	45 hours	60 hours	90 hours	120 hours	135 hours
Check the reed-type intake valve for wear	●	●	●	●	●	●
Check the clutch shoes for wear	●	●	●	●	●	●
Check the length of the clutch springs	●	●	●	●	●	●
Check the cylinder and piston for wear	●	●	●	●	●	●
Check the exhaust control for proper functioning and smooth running	●	●	●	●	●	●
Check the eccentricity of the crankshaft journal	●	●	●	●	●	●
Check the radial clearance of the conrod bearings	●		●		●	
Check the radial clearance of the piston pin main bearing	●		●		●	
Check the crankshaft main bearing for wear	●		●		●	
Replace the crankshaft bearings and conrod bearings		●		●		●
Check the entire transmission including roller and bearings for wear		●		●		●

RECOMMENDED INSPECTION OF THE 125/200/250/300 EXC ENGINE USED FOR HOBBY- ENDURO BY YOUR KTM WORKSHOP (ADDITIONAL ORDER FOR THE KTM WORKSHOP)						
	60 hours	90 hours	120 hours	180 hours	240 hours	270 hours
Check the reed-type intake valve for wear	●	●	●	●	●	●
Check the clutch shoes for wear	●	●	●	●	●	●
Check the length of the clutch springs	●	●	●	●	●	●
Check the cylinder and piston for wear	●	●	●	●	●	●
Check the exhaust control for proper functioning and smooth running	●	●	●	●	●	●
Check the eccentricity of the crankshaft journal	●	●	●	●	●	●
Check the radial clearance of the conrod bearings	●		●		●	
Check the radial clearance of the piston pin main bearing	●		●		●	
Check the crankshaft main bearing for wear	●		●		●	
Replace the crankshaft bearings and conrod bearings		●		●		●
Check the entire transmission including roller and bearings for wear		●		●		●

NOTE: IF THE INSPECTION ESTABLISHES THAT PERMISSIBLE TOLERANCES ARE EXCEEDED, THE RESPECTIVE COMPONENTS MUST BE REPLACED.

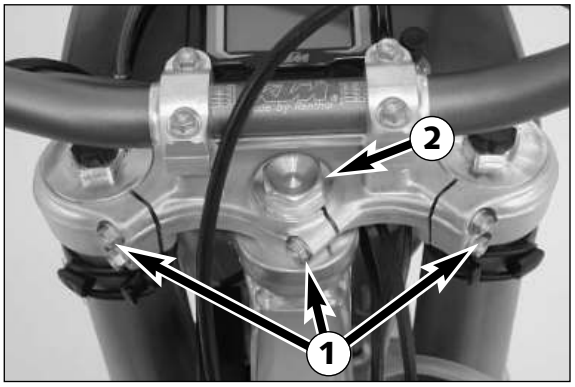
MAINTENANCE WORK ON CHASSIS AND ENGINE

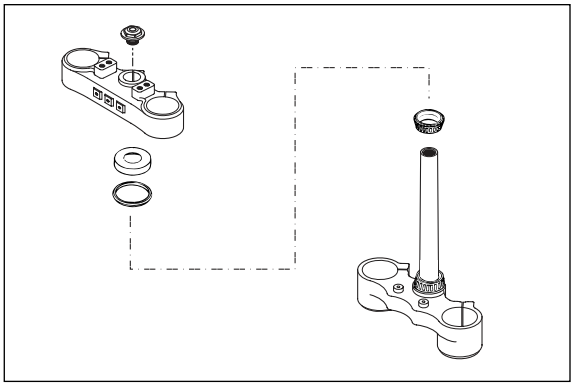
⚠ WARNING ⚠

MAINTENANCE AND ADJUSTING WORK MARKED WITH AN ASTERISK (*) REQUIRES EXPERT SKILLS AND TECHNICAL KNOW-HOW. FOR YOUR OWN SAFETY, ALWAYS HAVE SUCH WORK PERFORMED BY A SPECIALIZED KTM DEALER WHERE YOUR MOTORCYCLE WILL BE OPTIMALLY SERVICED BY APPROPRIATELY QUALIFIED, SKILLED STAFF.

! CAUTION !

- When cleaning the motorcycle, do not use a high pressure cleaning unit if possible, otherwise water will penetrate the bearings, carburetor, electric connectors, etc.
- When transporting your KTM, ensure that it is held upright with restraining straps or other mechanical fastening devices and that the fuel tap is in the OFF position - if the motorcycle should fall over, no fuel can leak from the carburetor or fuel tank
- Only use special screws with an appropriate thread length supplied by KTM to fix the spoilers on the tank. Using other screws or longer screws can cause leaks in the tank through which fuel can flow out.
- Do not use toothed washers or spring rings with the engine fastening screws, as these work into the frame parts and keep working loose. Instead, use self-locking nuts.
- Let your motorcycle cool down before beginning any maintenance work in order to avoid getting burned.
- Dispose of oils, fatty matters, filters, fuels, washing detergents, etc. properly.
- Under no circumstances may used oil be disposed of in the sewage system or in the open countryside. 1 liter of used oil contaminates 1,000,000 liters of water.





Checking and adjusting the steering head bearing *

Check steering head bearing for play periodically. To check, put the motorcycle on a stand so that the front wheel is off the ground. Now try to move the fork forward and backward. For readjusting, loosen the five pinch bolts ❶ of the top triple clamp and turn steering stem bolt clockwise ❷ until there is no more play. Don't tighten the steering stem bolt all the way, otherwise the bearings will be damaged. With a plastic hammer, lightly tap on the triple clamp to release tension. Retighten the five pinch bolts to 20 Nm (15 ft.lb).

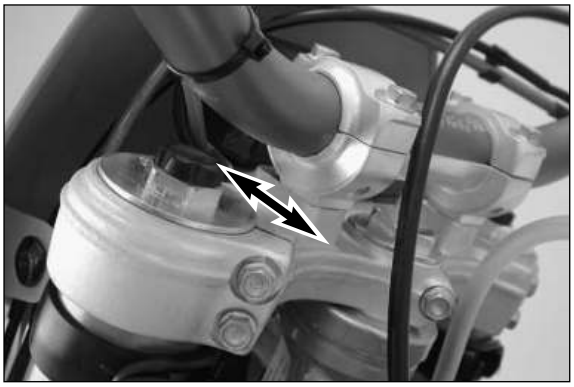
⚠ WARNING ⚠

If the steering head bearing is not adjusted to be free of play, the motorcycle will exhibit unsteady driving characteristics and can get out of control.

! CAUTION !

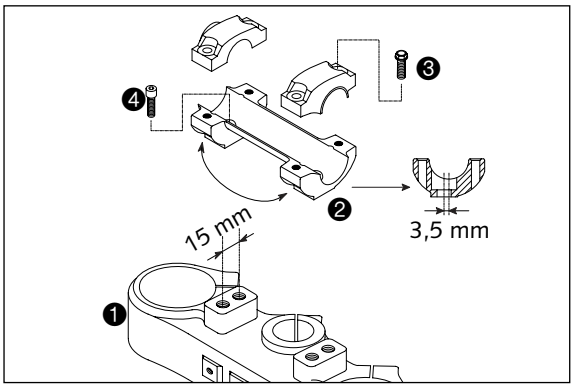
If you drive with play in the steering head bearing for longer periods, the bearings and subsequently the bearing seats in the frame will be destroyed.

The steering head bearings should be regreased at least once a year (e.g. Shell Advance Grease).



How to change the handlebar position

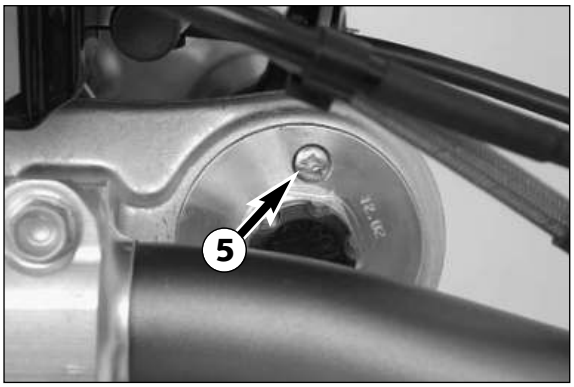
The handlebar position can be readjusted by 22 mm. Thus, you can put the handlebar in the position that is the most convenient for you. The upper triple clamp ❶ includes 2 bores arranged at a distance of 15 mm (0.6 in) from one another. The bores at the handlebar support ❷ are offset from the center by 3.5 mm (0.13 in). Accordingly, you can mount the handlebar in 4 different positions.



For this purpose, remove screws ❸ of the handlebar clamps and screws ❹ of the handlebar support. Position the handlebar support, and tighten screws ❹ to 40 Nm (30 ft.lbs). Mount the handlebar and handlebar clamps, and tighten screws ❸ to 20 Nm (15 ft.lbs). The gap between the handlebar support and the handlebar clamps should be the same size in the front and in the rear.

⚠ WARNING ⚠

THE SCREWS ❹ MUST BE SECURED WITH LOCTITE 243.

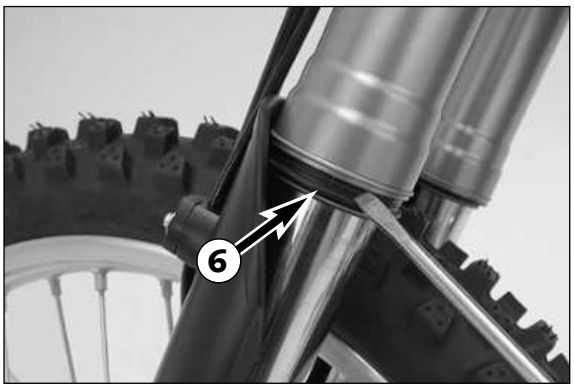


Breather plug front fork

After every 5 hours of use for competitive racing, slacken the breather plugs ❺ a few turns in order to relieve excess pressure from the inside of the fork. To do this, place the motorcycle on a stand with the front wheel lifted off the ground. When riding the motorcycle mainly on the road, it will suffice to have this job performed in the course of the periodical maintenance service.

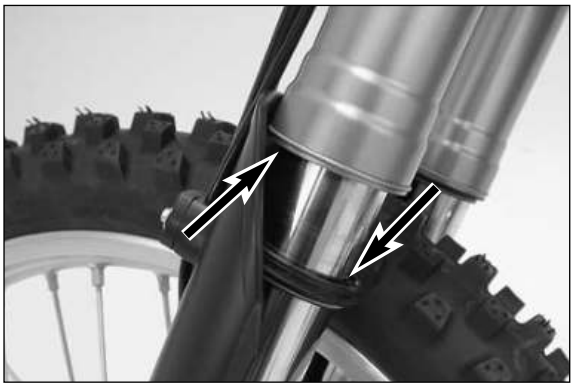
! CAUTION !

EXCESSIVE PRESSURE IN THE INTERIOR OF THE FORK CAN CAUSE LEAKS IN THE FORK. IF YOUR FORK IS LEAKING, IT IS RECOMMENDED TO OPEN THE BREATHER PLUGS BEFORE HAVING THE SEALS REPLACED.

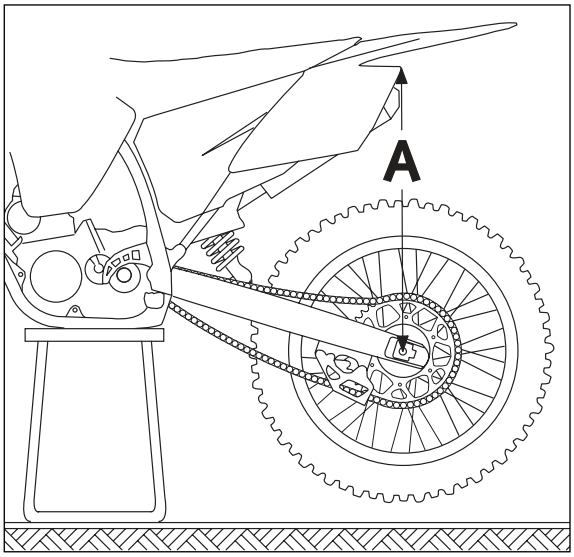


Cleaning the dust sleeves of the telescopic fork

The dust-protection bellows ❻ are to remove dust and coarse dirt particles from the fork tube. However, after some time, dirt may also get in behind the dust-protection bellows. If this dirt is not removed, the oil sealing rings located behind it may start to leak.
Use a screwdriver to lift the dust-protection bellows out of the outer tubes and slide them downward.



Clean the dust-protection bellows, outer tubes, and fork tubes thoroughly, and oil them thoroughly with silicone spray or engine oil. Then, push the dust-protection bellows into the outer tubes by hand.

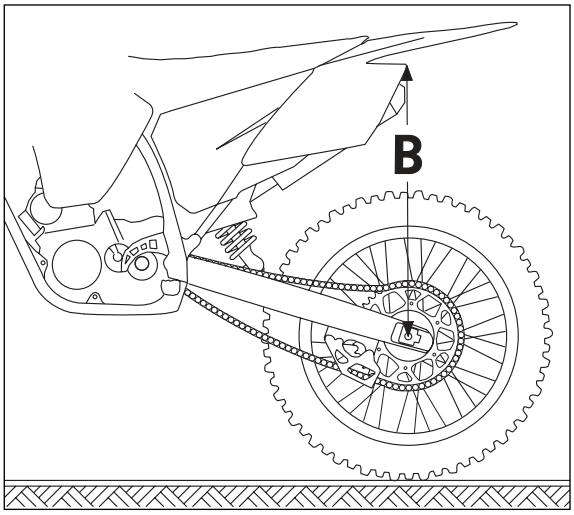


Basic suspension setup for the weight of the driver

To achieve maximum handling performance and to prevent the fork, shock absorber, swing arm and frame from being damaged, the basic setup of the suspension components must be suitable for your weight. At delivery, KTM's offroad motorcycles are set to accommodate a driver weighing 70 - 80 kg (wearing full protective clothing). If your weight exceeds or falls short of this range, you will need to adjust the basic setup for the suspension components accordingly. Minor deviations in weight can be compensated by adjusting the spring preload. Different springs must be installed for larger deviations.

Checking the shock absorber and spring

You can establish whether or not the shock absorber spring is suitable for your weight by checking the riding sag. The static slag must be correctly adjusted before the riding sag can be determined.

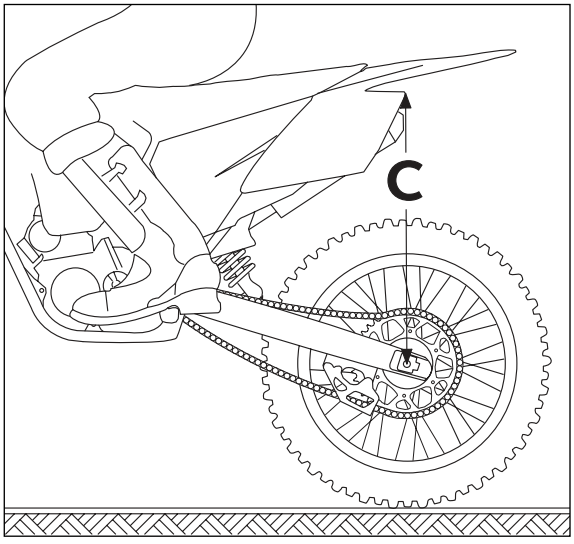


Determining the static sag of the shock absorber

The static sag should be as close as possible to 35 mm. Deviations of more than 2 mm can strongly influence the motorcycle's performance.
Procedure:

- Jack up the motorcycle until the rear wheel no longer touches the ground.
- Measure the vertical distance between the rear wheel axle and a fixed point (e.g. a mark on the side cover) and write it down as dimension A.
- Place the motorcycle on the ground again.
- Ask a helper to hold the motorcycle in vertical position.
- Measure the distance between the rear axle and the fixed point again to establish dimension B.
- The static sag is the difference between dimensions A and B.

EXAMPLE:
Motorcycle jacked up (dimension A) . . . . . .600 mm
Motorcycle on ground, unloaded (dimension B) . . . . . – 565 mm
Static sag . . . . . .35 mm

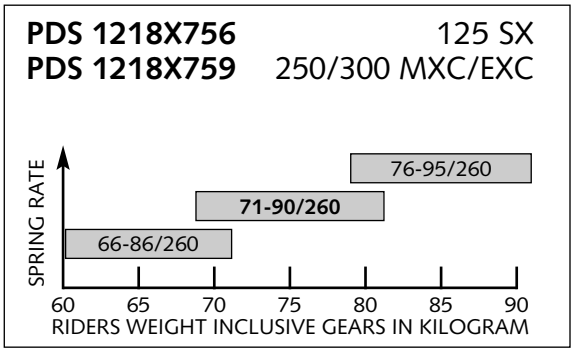


If the static sag is lower, the spring preload of the shock absorber must be increased, if the static sag is reduced, the spring preload must be higher. See chapter "Changing the spring preload of the shock absorber."

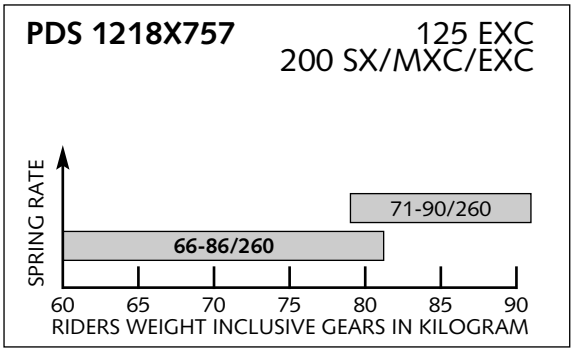
Determining the riding sag of the shock absorber

- Have a helper hold the motorcycle while you sit on the bike in a normal seating position (feet on the footrests) wearing full protective clothing and bounce up and down a few times to allow the rear wheel suspension to become level.
- Stay on the bike and have another person measure the distance between the same two points and write it down as dimension C.
- The riding sag is the difference between dimensions A and C.

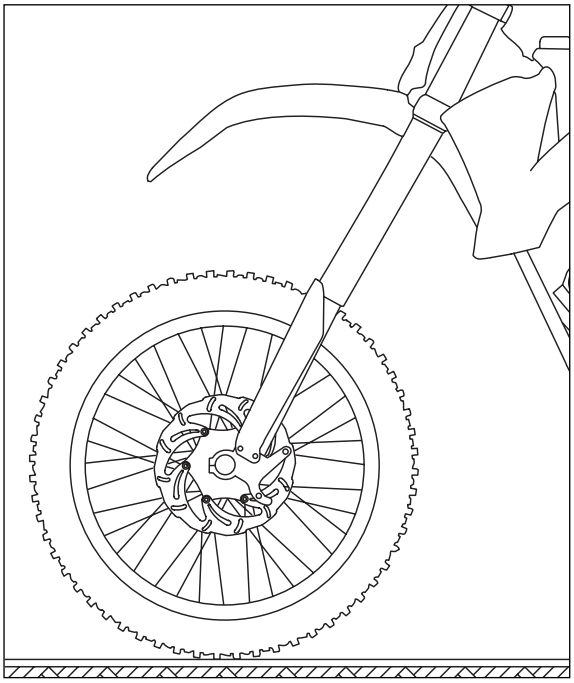
EXAMPLE:
Motorcycle jacked up (dimension A) . . . . . .600 mm
Motorcycle on ground, loaded (dimension C) . . . . . – 510 mm
Riding sag . . . . . .90 mm



The riding sag should lie between 90 and 105 mm.
If the riding sag is less than 90 mm, the spring is too hard (the spring rate is too high). If the riding sag is more than 105 mm, the spring is too soft (the spring rate is too low).
The spring rate is written on the outside of the spring (e.g. 71-90/260). The type number of the shock absorber is embossed on the bottom of the tank.
The illustrations show which spring should be installed. The standard spring is shown in bold print (e.g. 1218X756).
After installing a different spring, readjust the static sag to 35 mm (± 2 mm).



According to our experience, the damping rate of the compression stage can remain unchanged. The damping rate of the rebound stage can be reduced by a few clicks for a softer spring or increased by a few clicks for a harder spring.



Checking the basic setup of the telescopic fork

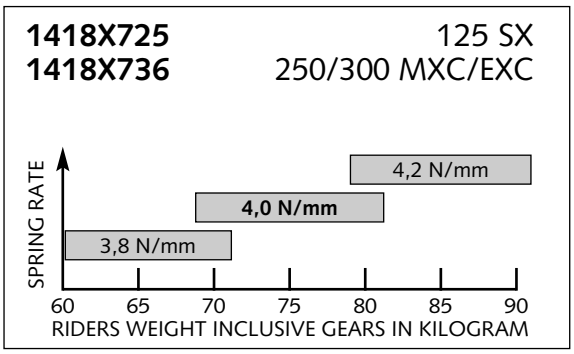
The precise riding sag of the telescopic fork cannot be determined for various reasons. Similar to the shock absorber, smaller deviations in your weight can be compensated by adjusting the spring preload. However, if your telescopic fork bumps frequently (hard end stop during compression), you should install harder fork springs to avoid damaging the telescopic fork and frame.

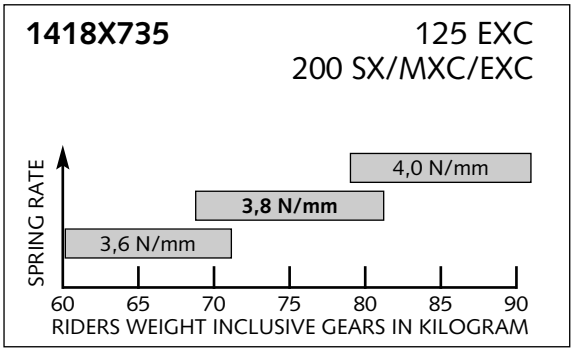
Changing the spring preload on the telescopic fork (SX models)

The telescopic forks of the SX models come with a preload adjuster for easy adjustment of the spring preload. You can adjust the spring preload ± 9 mm by turning the adjusting screws (basic position = middle position).
NOTE:
Always turn the adjusting screws the same distance on both fork legs. Different spring preloads on the fork legs will reduce the telescopic fork's response.

Changing the spring preload on the telescopic fork (MXC/EXC models)

The telescopic forks for these models must be partly disassembled to adjust the spring preload (see WP manual). Pretension spacers are available in heights of 1.5, 2.5 and 5 mm (see spare parts catalog). The fork springs may not be pretensioned by more than 20 mm.
The preload adjuster used in the SX models can easily be retrofitted for the telescopic forks of the MXC/EXC models.
NOTE:
WP precisely adjusts the spring pressure by inserting pretension spacers. Fluctuations in production are compensated with pretension spacers in various heights. This can cause the fork springs in the fork legs to have different degrees of pretension. Fork springs and pretension spacers should always stay together.

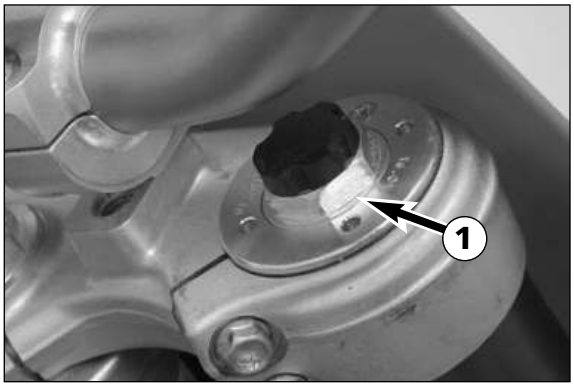




Replacing fork springs

If you weigh less than 70 kg or more than 80 kg, you should install the respective fork springs. The correct spring rate is shown in the illustrations. The standard spring is shown in bold print. The type number of the telescopic fork is embossed on the caps on the top of the telescopic fork.
If you are uncertain which spring to use, contact your KTM workshop.

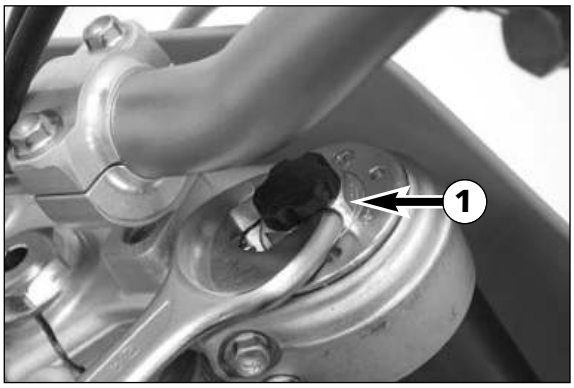
According to our experience, the damping rate of the compression stage can remain unchanged. The damping rate of the rebound stage can be reduced by a few clicks for a softer spring or increased by a few clicks for a harder spring.

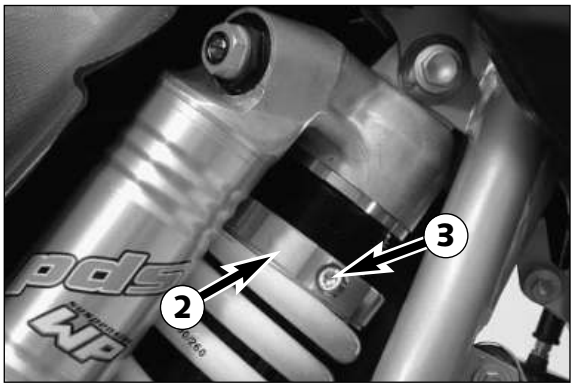


Adjusting the spring preload on the fork (SX)

The spring preload on the SX models can be adjusted (changed) by 10 mm by turning adjusting screw ❶.
Turning in a clockwise direction will increase the prestress, turning in a counterclockwise direction will decrease the prestress.
Changing the spring preload will not affect the rebound damping adjustment.
Generally, if the spring preload is higher, the rebound damping should also be set higher.

STANDARD SETTING:
Unscrew the adjusting screw to the limit and then back 2 turns.



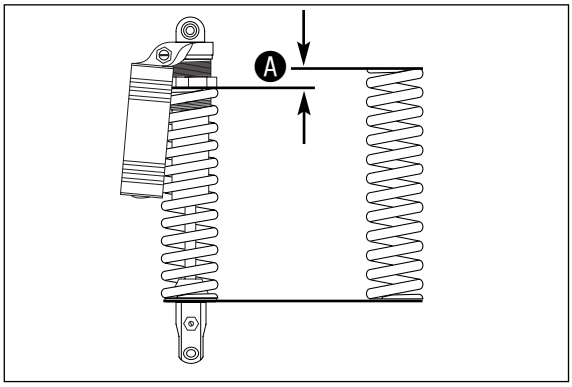


Changing the spring preloading of the shock absorber

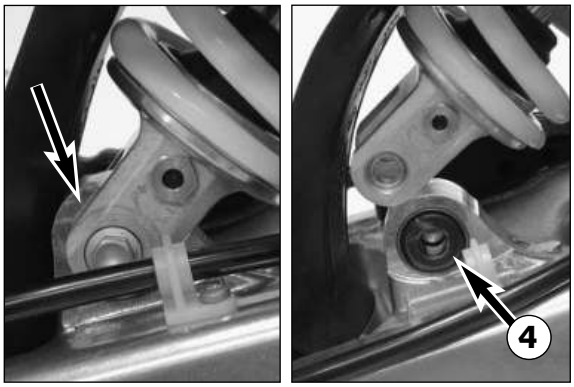
The spring preload can be changed by turning the adjusting ring ❷. For this purpose, you should dismount the shock absorber and clean it thoroughly.

NOTE:
- Before changing the spring preload note down the basic setting, e.g. how many threads are visible above the adjusting ring.
- One rotation of the adjusting ring ❷ changes the spring pretension by approximately 1.75 mm (0.07 in).

Loosen the clamping screw ❸ and use the hook wrench contained in the vehicle tool set to turn the adjusting ring as desired. Turning it counterclockwise will reduce the preload, turning it clockwise will increase the preload.
After readjusting the clamping screw ❸, tighten it to 8 Nm (6 ft.lb)



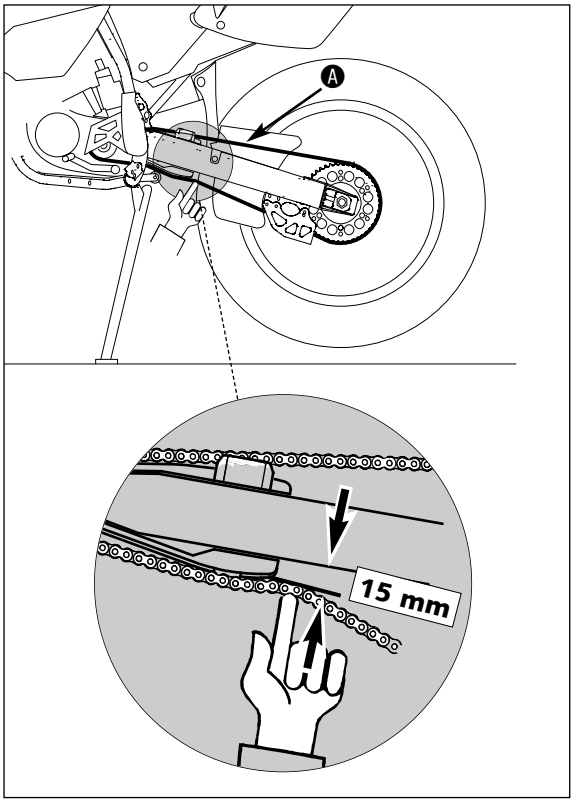
ADJUSTMENT VALUES - SPRING PRELOAD ❹
minimum preload . . . . . 4 mm (0.15 in)
STANDARD PRELOAD . . . . . 6 mm (0.24 in)
maximum preload . . . . . 10 mm (0.4 in)



Pivot bearing

The pivot bearing ❹ for PDS suspension struts at the swinging fork is Teflon-coated and must not be lubricated with either grease or other lubricants. Grease and other lubricants cause the Teflon coat to dissolve, whereby the bearing's lifecycle will be reduced dramatically.

When cleaning your bike with a high-pressure cleaner, do not aim the high-pressure spray directly at the pivot bearing.

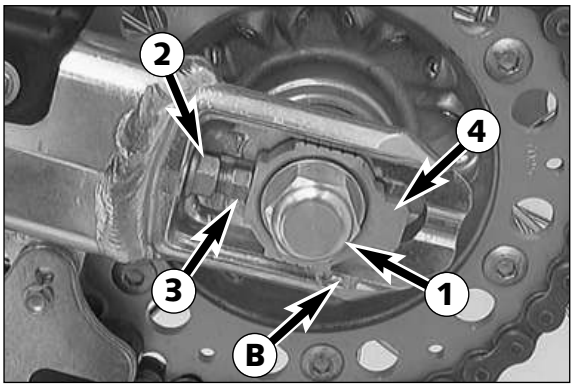


Check chain tension

To check the chain tension, park the motorcycle.
Press the chain upward at the end of the chain sliding component. The distance between the chain and the swing arm should be approx. 15 mm (0.6 in). In the course of this procedure, the upper chain portion ❹ must be taut (see drawing). If necessary, correct the chain tension.

⚠ WARNING ⚠

– If the chain tension is too great, parts within the secondary transmission (chain, chain wheels and rear wheel bearings) will be subjected to unnecessary stress, resulting in premature wear and even chain breakage.
– Too much slack in the chain, on the other hand, can result in the chain jumping off the chain wheels. If this happens, the chain could also block the rear wheel or damage the engine.
– In either case the operator is likely to lose control of the motorcycle.

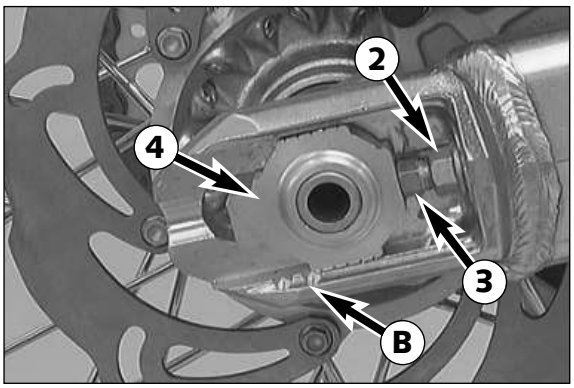


Correct chain tension

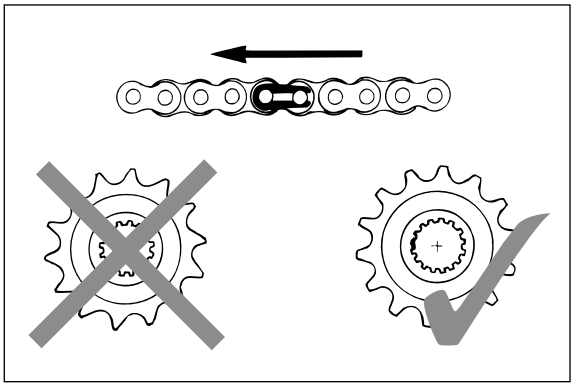
Loosen collar nut ❶, loosen lock nuts ❷, and turn right and left adjusting screws ❸ equally far. Tighten lock nuts.
Before tightening the collar nut, verify that the chain adjusters ❹ are sitting close to the adjusting screws and that the rear wheel has been aligned with the front wheel.
Tighten collar nut ❶ to 80 Nm (60 ft.lb).

⚠ WARNING ⚠

– If you don't happen to have a torque wrench at hand, make sure you have the tightening torque corrected by a KTM dealer as soon as possible. A loose axle may lead to an unstable driving behavior of your motorcycle.
– Tighten the collar nut with the required torque. A loose wheel spindle may lead to an unstable behavior of your motorcycle.



NOTE:
The large adjusting range of the chain adjusters (32mm) allows you to use different secondary ratios in combination with the same chain length. The chain adjusters ❹ can be rotated by 180°.



Chain maintenance

For long chain life, good maintenance is very important. X-ring chains require only modest maintenance. The best way is to use lots of water, but never use brushes or solvents. After letting the chain dry, you can use a special X-ring chain spray (Shell Advance Bio Chain).

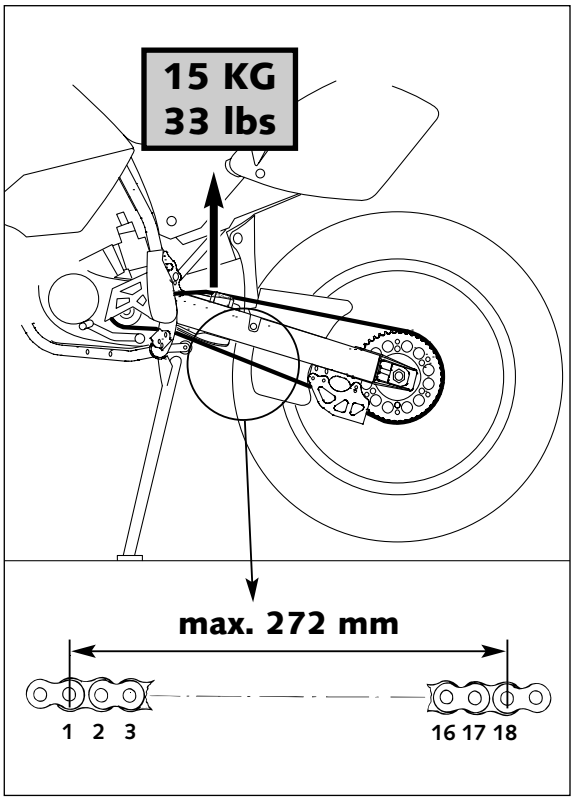
⚠ WARNING ⚠

NO LUBRICATION IS ALLOWED TO REACH THE REAR TIRE OR THE BRAKE DISK, EITHERWISE THE ROAD ADHERENCE AND THE REAR WHEEL BRAKING EFFECTS WOULD BE STRONGLY REDUCED AND THE MOTORCYCLE COULD EASILY GET OUT OF CONTROL.

! CAUTION !

WHEN MOUNTING THE CHAIN JOINT, THE CLOSED SIDE OF THE SAFETY DEVICE MUST POINT IN RUNNING DIRECTION.

Also check sprockets and chain guides for wear, and replace if necessary.



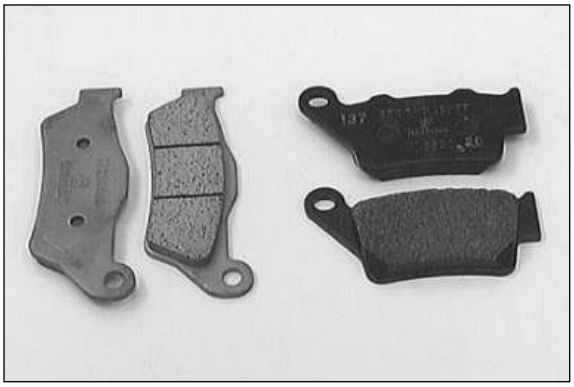
Chain wear

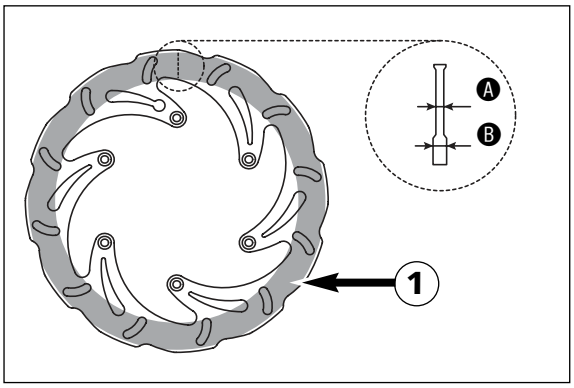
To check the chain wear, observe the following indications:
Shift the gear into idling and pull the upper chain strand with approx. 10-15 kilograms (33 lb) upwards (see figure). Now one can measure a space of 18 chain reels at the lower chain strand. The chain should be replaced at the latest when a space of 272 mm (10.70 in) is measured. Chains do not always wear off evenly, therefore repeat the measurement at different places on the chain.

NOTE:
If you mount a new chain, the sprockets should also be replaced. New chains wear faster if used on old used sprockets.

! CAUTION !

WHEN YOU ASSEMBLE A REAR SPROCKET WITH 14T, THE COLLAR MUST BE ON THE INSIDE SECURE THE SCREWS OF THE CHAIN WHEEL BY APPLYING LOCTITE AND FASTEN THEM IN A CROSSWISE ORDER.
TIGHTENING TORQUE FOR NUTS: 35 NM
TIGHTENING TORQUE FOR SCREWS: 50 NM





General information about KTM disc brakes

BRAKE CALIPERS:
The brake calipers of this series use a "floating" mount. This means that the brake calipers are not solidly attached to the caliper support, which enables them to "float" for maximum braking contact.Secure the screws of the caliper support with Loctite 243 and tighten to 25 Nm (19 ft.lb).

BRAKE PADS:
The brake pads are fitted with TOSHIBA TT 2701 sintered lining at the front and TOSHIBA H 38 sintered lining at the back. These linings provide an optimal combination of dosing, brake performance and life cycle. The lining type is stated on the back of the brake pad and also recorded in the homologation papers.

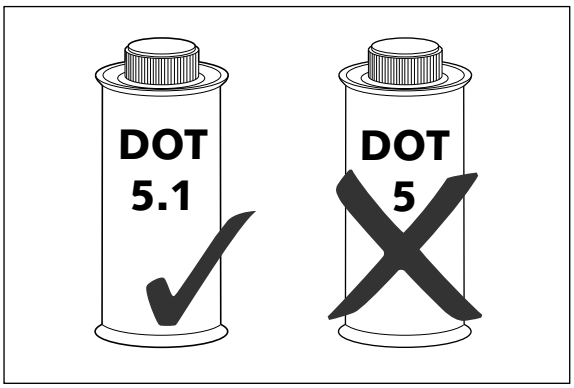
Other brake pads are available for competition sports.
FRONT: TOSHIBA H 38 (SINTERED) – harder to dose, good brake performance, long life, for wet slippery terrain.
FERODO ID 450 (ORGANIC) – easy to dose, good brake performance, short life, for dry terrain, low price.
REAR: FERRIT 222 (ORGANIC) – can be dosed better, short life cycle, for dry terrain.
FERODO ID 450 (ORGANIC) – easy to dose, good brake performance, short life, for dry terrain, low price.

BRAKE DISCS:
Due to wear, the thickness of the brake disc in the area of the contact face ❶ of the brake pads decreases. At their thinnest point Ⓐ, the brake discs must not be more than 0.40 mm (0.016 in) thinner than the pad's nominal thickness. Measure the nominal thickness in a location Ⓑ outside the contact face. Check wear at several locations.

⚠ WARNING ⚠

– Brake discs suffering from wear greater than 0.4 mm (0.016 in) constitute a safety risk. Have the brake discs replaced immediately as soon as they reach the wear limit.
– Have any repairs on the brake system be performed by a KTM dealer

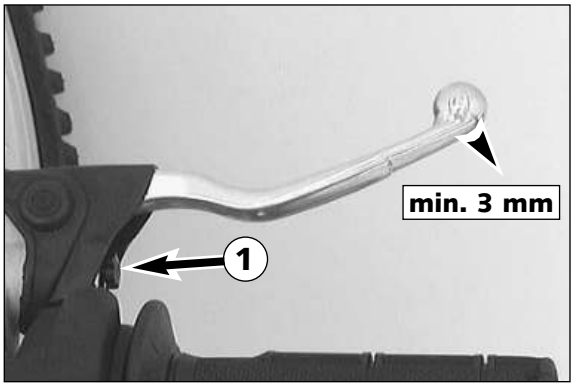
BRAKE FLUID RESERVOIRS:
The brake fluid reservoirs on the front and rear wheel brakes have been designed in such a way that even if the brake pads are worn it is not necessary to top up the brake fluid. If the brake fluid level drops below the minimum level either the brake system has a leak or the brake pads are completely worn.
In this case, consult an authorized KTM dealer immediately.



BRAKE FLUID:
KTM fills the brake systems with SHELL ADVANCE BRAKE DOT 5.1 brake fluid, one of the best brake fluids is currently available. We recommend that you continue to use it. DOT 5.1 brake fluid is based on glycol ether and of an amber color. If you do not have any DOT 5.1 for refilling, you may use DOT 4 brake fluid. However, you should replace it as soon as possible with DOT 5.1.
Never use brake fluid DOT 5. The color of this silicon oil-based product is purple red. The gaskets and brake hoses of KTM motorcycles are not designed for DOT 5 brake fluid.

⚠ WARNING ⚠

Have the brake fluid changed at least once annually. If you wash your motorcycle often, the brake fluid should be changed even more frequently. Brake fluid tends to absorb water. Therefore, vapor pockets may form in "old" brake fluids even at low temperatures, causing the brake system to fail.

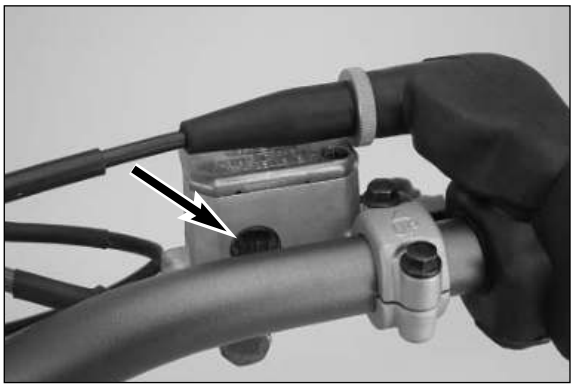


Adjusting the free travel at the hand brake lever

Free travel at the hand brake lever may be readjusted by using adjustment screw ❶. In this way, the position of the point of pressure (i.e. the resistance you feel on the hand brake lever when the brake pads are pressed against the brake disc) can be adjusted for any hand size.

! CAUTION !

At the hand brake lever, free travel must at least be 3 mm (0.1 in). Only then may the piston in the hand brake cylinder be moved (to be recognized by the greater resistance of the hand brake lever). If this free travel is not provided, pressure will build up in the braking system, and the front-wheel brake may fail due to overheating.

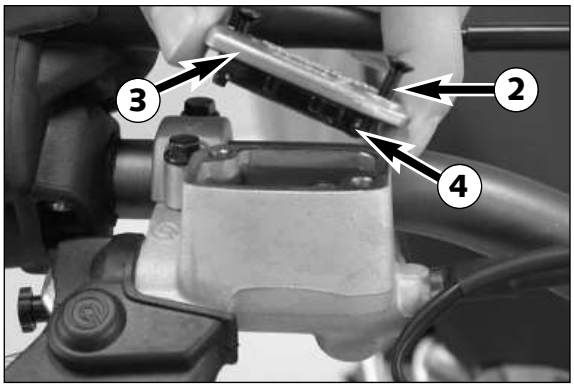


Checking the brake fluid level - front brake

The brake fluid reservoir is linked with the hand brake cylinder at the handlebar and the reservoir is provided with an inspection glass. With the reservoir in a horizontal position, the brake fluid level should not drop below the middle of the glass.

⚠ WARNING ⚠

If the brake fluid level drops below the minimum either the brake system has a leak or the brake pads are completely worn. In this case, consult an authorized KTM dealer immediately.



Refilling the front brake fluid reservoir *

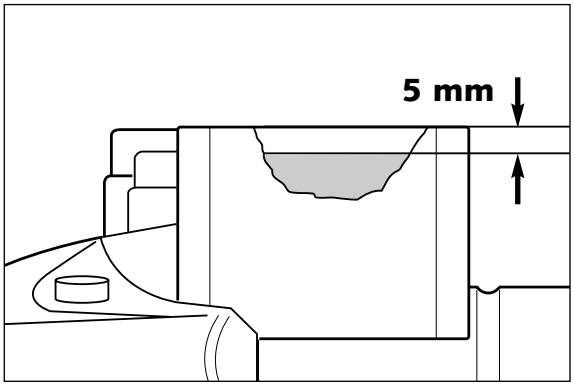
Loosen screws ❷ and remove lid ❸ and membrane ❹.
Place hand brake cylinder in a horizontal position and fill the brake fluid reservoir to 5 mm (0.2 in) below the rim with clean brake fluid DOT 5.1 (e.g. Shell Advance Brake DOT 5.1). Replace membrane and lid, tighten screws. Rinse off spilled or overflowing brake fluid with water.

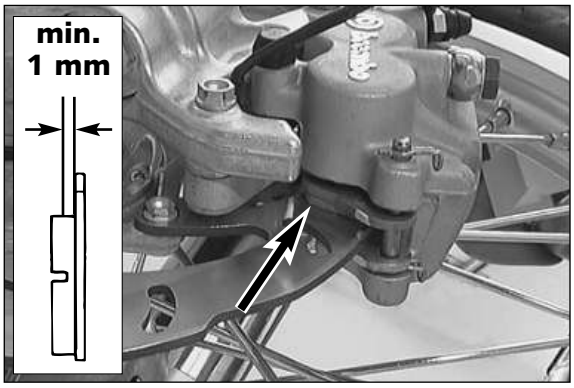
⚠ WARNING ⚠

- Never use DOT5 brake fluid! It is based on silicone oil and of a purple color. Seals and brake hoses must be especially adapted to it.
- Store brake fluid out of reach of children.
- Brake fluid can cause skin irritation. Avoid contact with skin and eyes. If you get brake fluid in your eyes, rinse with plenty of water and consult a doctor

! CAUTION !

- Don't let brake fluid get in contact with paint, it is an effective paint remover.
- Use only clean brake fluid taken from a tightly sealed container.





Checking the front brake pads

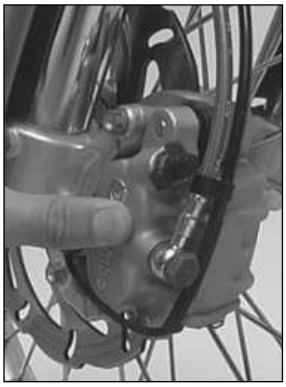
The brake pads can be inspected from below. The linings must be at least 1 mm (0.04 in) thick.

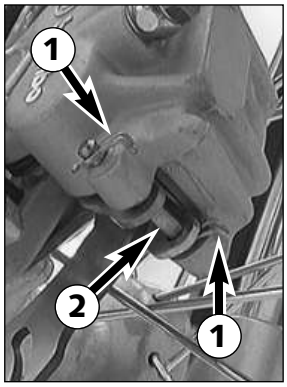
⚠ WARNING ⚠

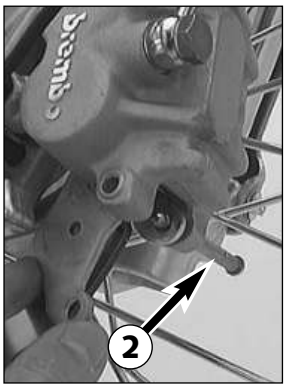
At their most worn point brake pad linings should not be thinner than 1 mm, otherwise they could lead to brake failure. For your own safety don't put off having your brake pads changed.

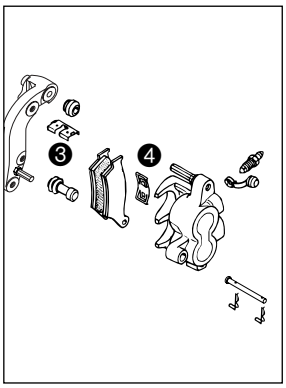
! CAUTION !

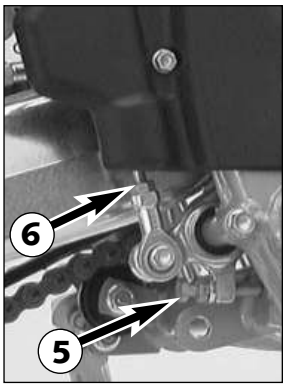
If the brake pads are replaced too late so that the lining is partly or entirely worn, the steel components of the brake pad will rub against the brake disc, thereby imparing the braking effect and destroying the brake disc.



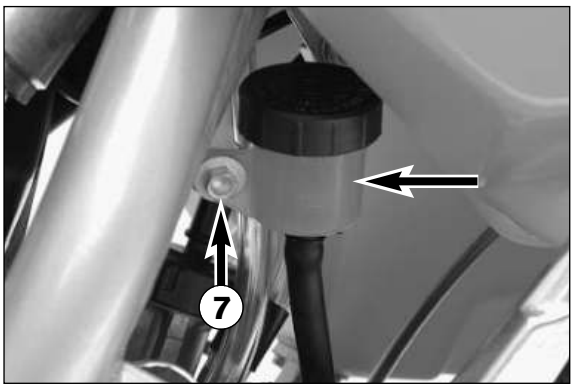


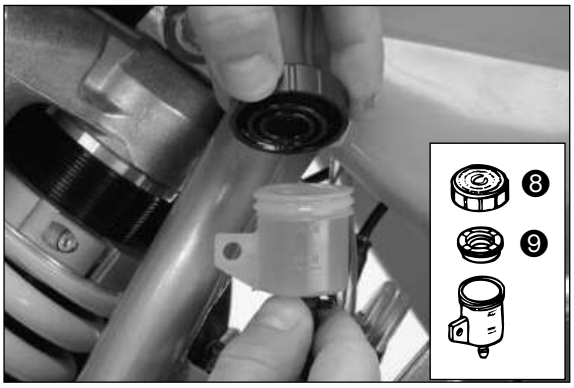












Replacing the front brake pads *

Press the brake caliper toward the brake disk, to put the brake piston in its basic position. Remove clips ❶ and pull out bolt ❷. Remove brake pads from the brake caliper. Clean the brake caliper and the brake caliper support with compressed air. Check the sleeves of the guide bolts for damage, and grease guide bolts if necessary.
Mount the right brake pad and fix it with the bolt. Mount the left brake pad and insert the bolt until it stops. Mount the clips.
When mounting the brake pads, be sure to check for correct fit of the sliding metal-sheet ❸ in the caliper support and of the leaf spring ❹.

⚠ **WARNING** ⚠

- It is very important to keep the brake disk free from oil and fatty matters. Otherwise, the braking effect would be strongly reduced.
- After assembly, check if circlips have been fitted correctly.
- after working on the braking system, always actuate the hand brake lever or foot brake lever, respectively to ensure that the brake pads will lie against the brake disk and the pressure point is established.

Changing the basic position of the foot brake pedal *

The basic position of the foot brake pedal can be altered by turning the stop screw ❺. The free play at the foot brake pedal must then be adjusted by means of the piston rod ❻.
Measured on the outside, the foot brake pedal must have 3-5 mm (0.12–0.20 in) of free play before the piston rod can move the piston in the brake cylinder (to be recognised from the resistance on the foot brake pedal).

! **CAUTION** !

If this free play is not present, then pressure can build up in the brake system when driving, causing the rear wheel to brake.The braking system overheats and may even fail completely in extreme cases.

Checking the rear brake fluid level

The brake fluid reservoir of the rear disc brake is located on the right side of the motorcycle next to the kickstarter. The brake fluid level must not drop below the "MIN" marking when the vehicle is in an upright position.

⚠ **WARNING** ⚠

If the brake fluid level drops below the minimum either the brake system has a leak or the brake pads are completely worn. In this case, consult an authorized KTM dealer immediately.

Refilling the rear brake fluid reservoir *

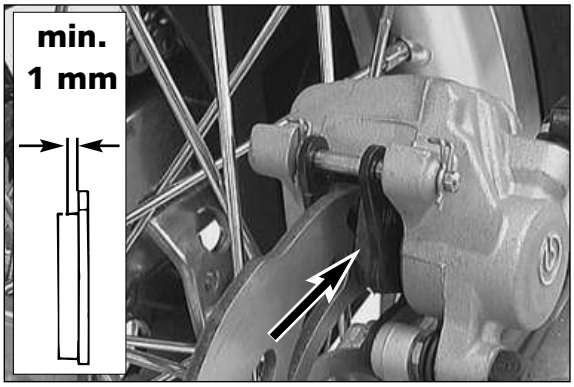
For this purpose, it is recommended to remove screw ❼ and to pull the brake fluid reservoir outwards. Now the screw cap ❽ and the rubber boot ❾ can be removed. Add brake fluid DOT 5.1 (Shell Advance Brake DOT 5.1) until the brake fluid level reaches the "MAX" mark, then mount the screw cap together with the rubber boot. Return the brake fluid reservoir to its original position and fix it with the screw. The connecting hose between the reservoir and the foot brake cylinder must be carefully positioned, preventing kinks and keeping a safe distance between the hose and the exhaust pipe. Spilled brake fluid must be rinsed off with water.

⚠ **WARNING** ⚠

- Never use DOT5 brake fluid! It is based on silicone oil and of a purple color. Seals and brake hoses must be especially adapted to it.
- Store brake fluid out of reach of children.
- Brake fluid can cause skin irritation. Avoid contact with skin and eyes. If you get brake fluid in your eyes, rinse with plenty of water and consult a doctor.

! **CAUTION** !

- Don't let brake fluid get in contact with paint, it is an effective paint remover.
- Use only clean brake fluid taken from a tightly sealed container.



Checking the rear brake pads

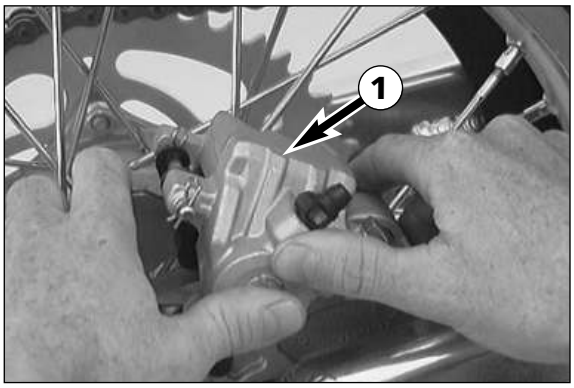
The brake pads can be inspected from the rear. The thickness of the linings may not be less than 1 mm (0.04 in).

⚠ WARNING ⚠

AT THEIR MOST WORN POINT BRAKE PAD LININGS SHOULD NOT BE THINNER THAN 1 MM, OTHERWISE THEY COULD LEAD TO BRAKE FAILURE. FOR YOUR OWN SAFETY DON'T PUT OFF HAVING YOUR BRAKE PADS CHANGED.

! CAUTION !

IF THE BRAKE PADS ARE REPLACED TOO LATE SO THAT THE LINING IS PARTLY OR ENTIRELY WORN, THE STEEL COMPONENTS OF THE BRAKE PAD WILL RUB AGAINST THE BRAKE DISC, THEREBY IMPARING THE BRAKING EFFECT AND DESTROYING THE BRAKE DISC.

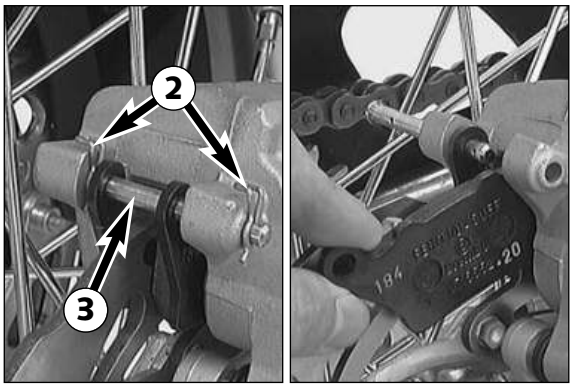


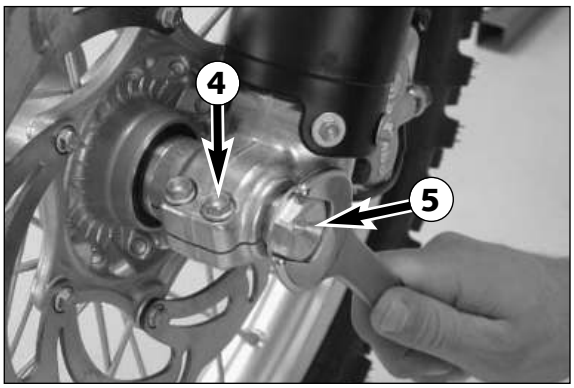
Replacing the rear brake pads *

Press the brake caliper ❶ in the direction of the chain wheel for the brake piston to reach its basic position. Remove the safety device ❷, knock out the guide pin ❸ from the brake caliper with a drift towards the chain wheel and remove the brake pads. Carefully clean the brake caliper with compressed air and check the sleeves of the guide pins for damage.
Slide the left brake pad into the brake caliper and fix it with the pin. Slide in the right brake pad and knock the bolt ❸ in as far as it will go. Mount the safety device ❷.

⚠ WARNING ⚠

- IT IS VERY IMPORTANT TO KEEP THE BRAKE DISK FREE FROM OIL AND FATTY MATTERS. OTHERWISE, THE BRAKING EFFECT WOULD BE STRONGLY REDUCED.
- AFTER ASSEMBLY, CHECK IF CIRCLIPS HAVE BEEN FITTED CORRECTLY.
- AFTER WORKING ON THE BRAKING SYSTEM, ONE MUST ALWAYS ACTUATE THE HAND BRAKE LEVER OR FOOT BRAKE LEVER, RESPECTIVELY SO AS TO ENSURE THAT THE BRAKE PADS WILL LIE AGAINST THE BRAKE DISK AND THE PRESSURE POINT IS ESTABLISHED.



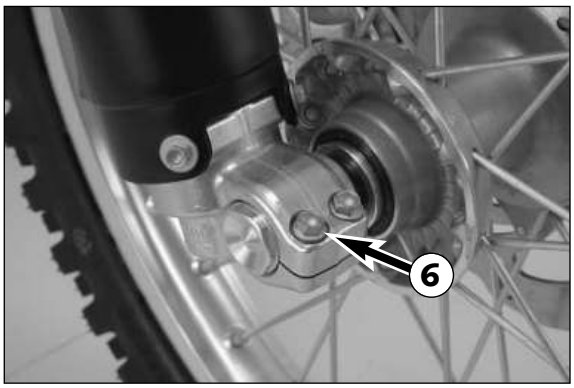


Dismounting and mounting the front wheel

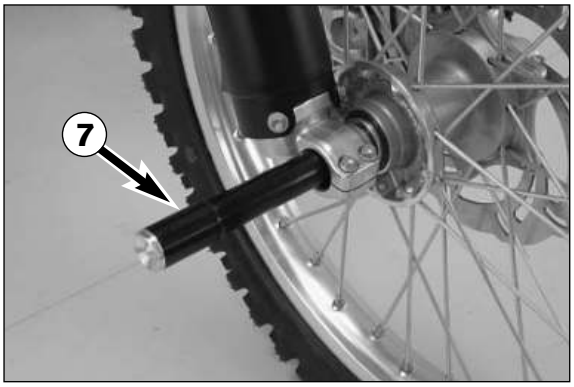
To remove the front wheel, jack the motorcycle up on its frame so that the front wheel no longer touches the ground.
Loosen the 2 clamping screws ❹ on the left side of the fork fists.
Loosen and remove the collar nut ❺, loosen the clamping screews ❻ on the right side of the fork fist.
Hold the front wheel, pull out the wheel spindle ❼.
NOTE: The wheel spindle can be easily removed if you slightly revolve it with a ring spanner (SW 21 mm).
Carefully remove the front wheel from the fork.

! CAUTION !

- DO NOT OPERATE THE HAND BRAKE WHEN THE FRONT WHEEL HAS BEEN DISMOUNTED.
- MAKE SURE THE BRAKE DISC IS ALWAYS ON TOP WHEN YOU LAY DOWN THE WHEEL, OTHERWISE THE BRAKE DISC CAN BE DAMAGED.

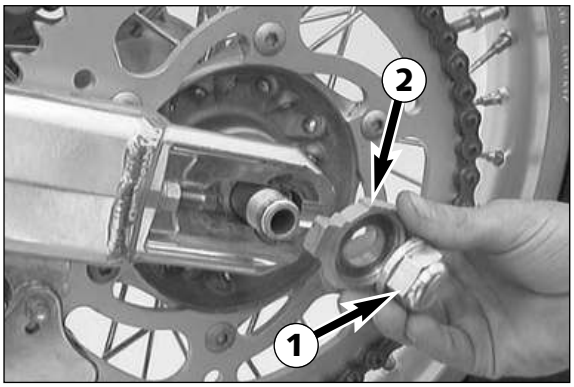


To install the front wheel, lift it into the fork, position and mount the axle shaft. Mount the collar nut ❺, tighten the clamping screws ❻ on the right fork leg axle passage to prevent the axle shaft from turning and tighten the collar nut to 40 Nm (30ft.lb).
Loosen the clamp screws on the right fork leg. Take the motorcycle down from its stand. Press the front wheel brakes and push down on the fork a few times vigorously so that the fork legs come into alignment.
Only after this has been accomplished, tighten the clamp screws on both fork legs with 10 Nm(7 ft. lbs).



⚠ WARNING ⚠

– If you don't happen to have a torque wrench at hand, make sure you have the tightening torque corrected by a KTM dealer as soon as possible. A loose axle may lead to an unstable driving behavior of your motorcycle.
– After mounting the front wheel, keep operating the hand brake until the pressure point returns.
– It is very important to keep the brake disk free from oil and fatty matters, otherwise the braking effect would be strongly reduced.

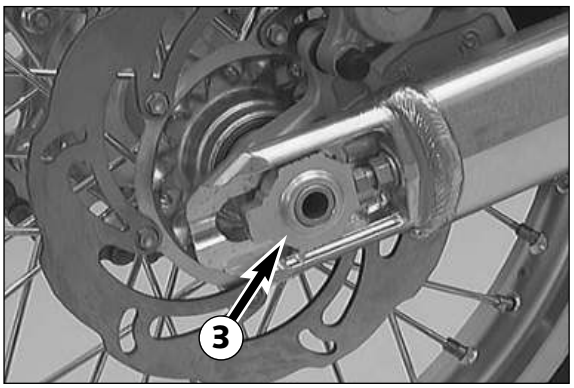


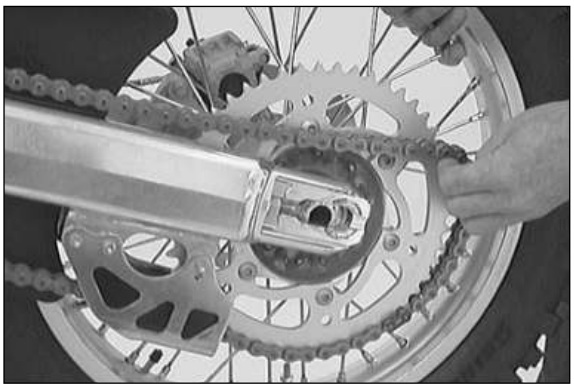
Dismounting and mounting the rear wheel

Jack the motorcycle up on its frame so that the rear wheel no longer touches the ground.
Loosen the collar nut ❶, remove chain tensioner ❷, hold the rear wheel and pull out the wheel spindle ❸ until the rear wheel is free but the brake caliper support is still held.
Push the rear wheel as far forward as possible, take the chain from the chain wheel and carefully take the rear wheel out of the swingarm.

! CAUTION !

– Do not operate the rear brake when the rear wheel has been dismounted.
– Make sure the brake disc is always on top when you lay down the wheel, otherwise the brake disc can be damaged.
– If the axle is dismounted, clean the thread of the wheel spindle and collar nut thoroughly and apply a new coat of grease to prevent the thread from jamming.

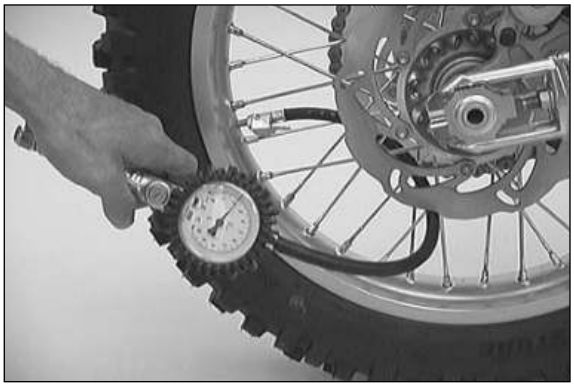




The rear wheel is remounted in the reverse order. Before tightening the collar nut to 80 Nm (60 ft.lb), push the rear wheel forwards so that the chain tensioners lie on the tension screws.

⚠ WARNING ⚠

– If you don't happen to have a torque wrench at hand, make sure you have the tightening torque corrected by a KTM dealer as soon as possible. A loose axle may lead to an unstable driving behavior of your motorcycle.
– After mounting the rear wheel, keep operating the rear brake until the pressure point returns.
– It is very important to keep the brake disk free from oil and fatty matters, otherwise the braking effects would be strongly reduced.
– Tighten the collar nut with the required torque. A loose wheel spindle may lead to an unstable behavior of your motorcycle.



TIRES-AIR PRESSURE		
	front	rear
Off road	1,0 bar	1,0 bar
Road	1,5 bar	2,0 bar

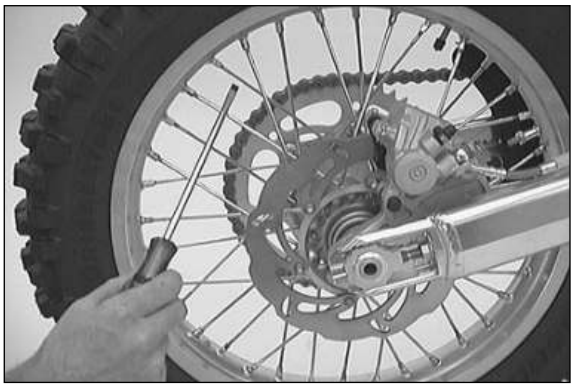
Tires, air pressure

Tire type, tire condition, and air pressure level affect the way your motorcycle rides and must therefore be checked whenever you are getting ready to go anywhere on your motorcycle.

– Tire size can be found in the technical specifications and in the homologation certificate
– Tire condition has to be checked every time you want to ride your motorcycle. Before leaving, check tires for punctures and nails or other sharp objects that might have become embedded in them.
  Refer to the specific regulations in your country for minimum tire tread requirements. We recommend you replace the tires at the latest when the tread is down to 2 mm (0.08 in).
– Tire pressure should be checked regularly on a "cold" tire. Proper pressure ensures optimum driving comfort and extends the life of your tires.

⚠ **WARNING** ⚠

– DO NOT MOUNT TIRES WHICH HAVE NOT BEEN APPROVED BY KTM. OTHER TIRES COULD HAVE ADVERSE EFFECTS ON THE WAY YOUR MOTORCYCLE BEHAVES.
– FRONT AND REAR WHEELS MAY ONLY BE FITTED WITH TIRES HAVING THE SAME TREAD LAYOUT. USE HOMOLOGATED TIRES
– FOR YOUR OWN SAFETY REPLACE DAMAGED TIRES IMMEDIATELY.
– WORN TIRES CAN HAVE A NEGATIVE EFFECT ON HOW YOUR MOTORCYCLE PERFORMS, ESPECIALLY ON WET SURFACES
– IF AIR PRESSURE IS TOO LOW, ABNORMAL WEAR AND OVERHEATING OF THE TIRE CAN RESULT

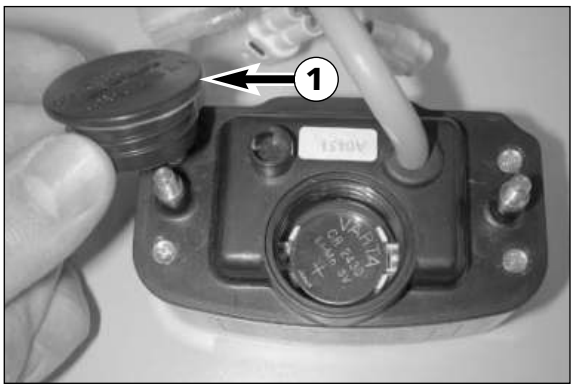


Checking spoke tension

The correct spoke tension is very important for the stability of the wheels and thus for riding safety. A loose spoke causes the wheel to become unbalanced and before long other spokes will have come loose. Check spoke tension, especially on a new motorcycle, at regular intervals. For checking, tap on each spoke with the blade of a screwdriver (see photo). A clear tone must be the result. Dull tones are indicators of loose spokes. If necessary, have the spokes retightened and the wheel centered by a KTM dealer.

⚠ **WARNING** ⚠

– SPOKES CAN TEAR IF YOU CONTINUE TO RIDE WITH THEM LOOSE. THIS MAY LEAD TO AN UNSTABLE HANDLING OF YOUR MOTORCYCLE.
– EXCESSIVELY TENSIONED SPOKES MAY RUPTURE DUE TO LOCAL OVERLOADING.THE SPOKES MUST BE TENSIONED TO 5 NM.



Replacing the battery of the digital speedometer

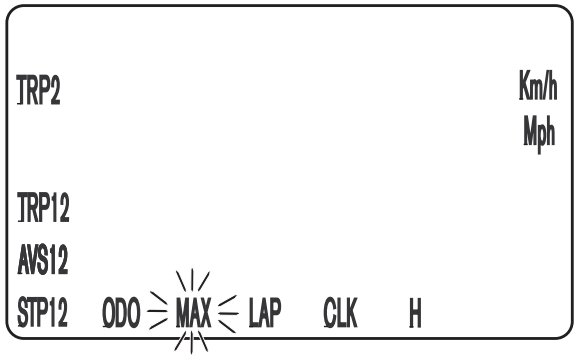
Remove the headlight mask and disassemble the electronic speedometer. Remove the screw connection ❶, insert the battery (type Duracell CR 2430) with the writing facing up and reinstall the screw connection.



Setting the clock

To set the clock, switch the ignition off and select the SPEED/CLK mode. Press and hold the MODE button for 3 seconds. The blinking digits can be changed using the + and – buttons. Press the MODE button to move to the next digit.
If no button is pressed for 20 seconds, the settings will be stored automatically and the display will return to the SPEED/CLK mode.

+ BUTTON time +
– BUTTON time –
press the MODE BUTTON to change to the next digit
press and hold the MODE BUTTON 3 SECONDS to store the time and return to the SPEED/CLK mode

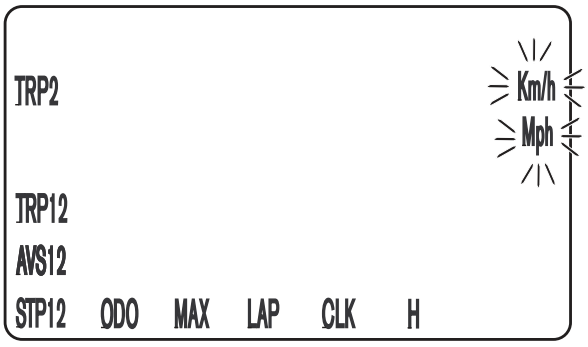


Activating/deactivating the display modes

It may not be necessary to display all of the display modes (functions) at the same time. It is possible to conceal any information not currently required. By deactivating certain functions, the MODE button will only allow you to select from the activated modes.

In the SPEED/H mode, press and hold the MODE button for 3 seconds to access the SETUP menu. The blinking function can be activated by pressing the + button and deactivated by pressing the – button.
If no button is pressed for 20 seconds, the setting will be stored automatically and the display will return to the SPEED/H mode.

+ BUTTON activates the blinking display
– BUTTON deactivates the blinking display
press the MODE BUTTON to change to the next display without changing any settings
press and hold the MODE BUTTON 3 SECONDS to store the settings and change to the SPEED/H mode



Kilometers or miles

The unit (kilometers or miles) can also be changed. The ODO figure will be retained and converted accordingly. The TRP1, AVS1, STP1, TRP2 and AVS2 figures will be cleared.
To select the unit, select the SPEED/H mode and hold the MODE button for 3 seconds to access the SETUP menu. Press the MODE button 10 times until the KMH/MPH function blinks. Press the + button to move to the options. Press the + button for KMH or the – button for MPH. If no button is pressed for 20 seconds, the setting will be stored automatically and the display will return to the SPEED/H mode.
The setting can be stored immediately by holding the MODE button for a few seconds until the display returns to the SPEED/H mode.

+ BUTTON to access the menu
to activate the KMH setting
– BUTTON to activate the MPH setting
press the MODE BUTTON to change to the next mode
press and hold the MODE BUTTON 3 SECONDS to store the setting and return to the SETUP menu

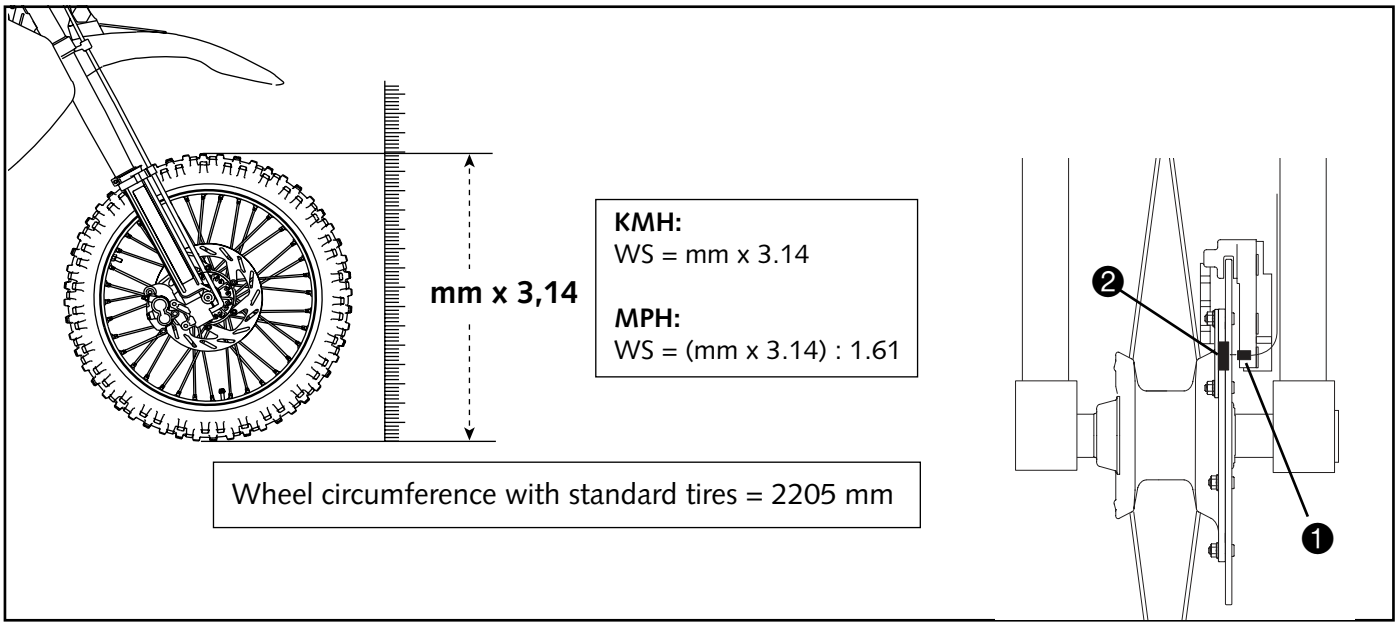
NOTE:
If you retrofit this Tripmaster on another motorcycle, the power can also be supplied by the 12 V vehicle electric system. You will need an additional cable harness, spare part no. 583.14.069.210, which you can order from your KTM dealer.

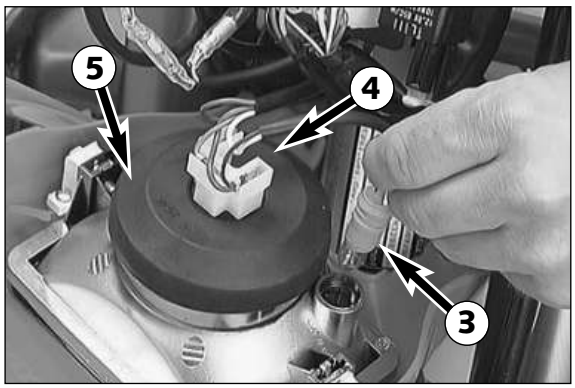


Check/set distance of the magnetic sensor

The distance between the magnet ❷ and the sensor ❶ must be 2-4 mm, otherwise malfunctions on the speedometer might occur.

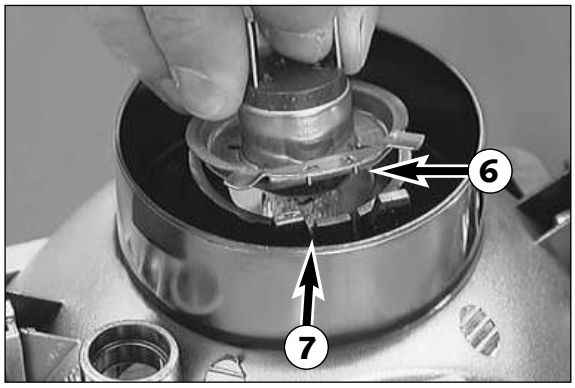
This distance can be corrected by screwing the sensor ❶ in or off.



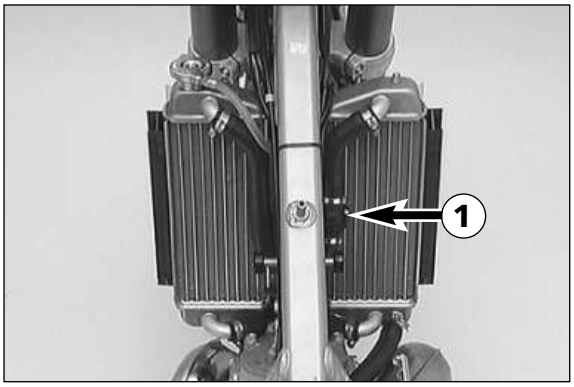


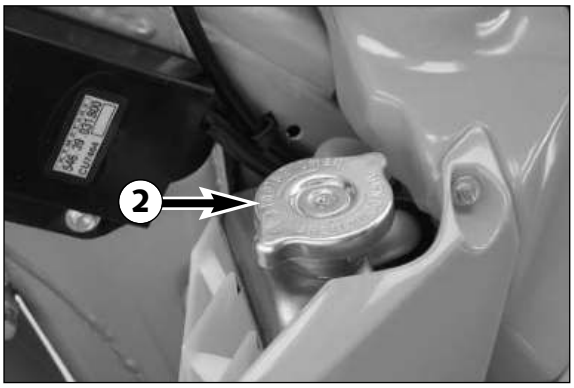
Replacing the headlight lamp/parking light lamp

Loosen both rubber bands and tilt the headlight mask to the front. Pull the parking light lamp with holder ❸ carefully out of the reflector. Pull connector ❹ off the headlamp and remove rubber cap ❺. Disengage retaining clip and take the bulb out of the reflector. When changing the parking-light lamp, simply pull it out of the holder.



Insert a new lamp such that the noses ❻ engage in the recesses ❼ .When doing so, do not touch the glass body of the lamp so that it remains free from fat. Engage retaining clip, mount rubber cap and connector. If the parking-light lamp is to be replaced, simply insert it in the holder. Reinsert parking-light lamp together with the holder.
Engage the bottom end of the headlamp mask at the retaining pins and fix the mask by means of the rubber bands.





Cooling system

The water pump in the engine circulates the cooling liquid. However, the cooling liquid can only circulate properly if the cooling circuit contains no air bubbles.
Bleeding of the cooling system is therefore required
a) after adding more than 0.25 l cooling liquid and
b) after refilling the entire cooling system.
(see Bleeding the cooling system).

Some models are equipped with a thermostat ❶ so that the engine reaches its operating temperature more quickly. When the engine is cold, the liquid coolant circulates in the cylinder and the cylinder head. As soon as the cooling liquid has reached a temperature of approximately 55°C, the thermostat opens and the cooling liquid is also pumped through the two aluminum radiators.

The cooling liquid is cooled by the air stream. This means that the cooling effect decreases with the traveling speed. Dirty radiators additionally reduce the cooling effect.

⚠ **WARNING** ⚠

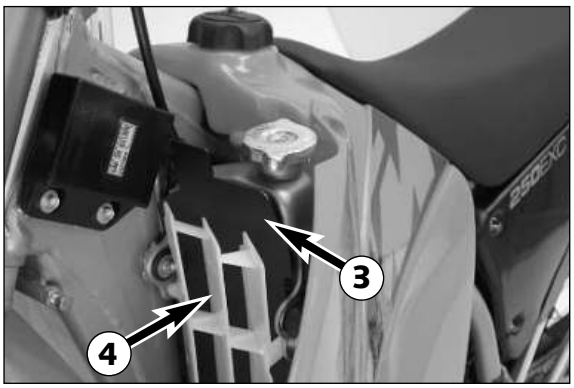
- If possible, always check level of cooling liquid when engine is cold. If you have to open the radiator cap ❷ when the engine is hot, use a rag to cover the cap and open slowly to release pressure. **Caution - scalding hazard.**
- Do not detach any radiator hoses while the engine is hot. The escaping hot coolant and the steam may cause serious burns.
- In case you get burnt, hold the affected part of your body under running cold water right away.
- Coolant is toxic. Keep the coolant out of the reach of children.
- In case coolant is ingested, consult a doctor immediately.
- If coolant gets into your eyes, rinse them out with water immediately and go see a doctor.

A mixture of 40% antifreeze liquid and 60% water is used as coolant. However, the antifreeze protection must be at least -25° C (-13° F). This mixture offers antifreeze protection but also good corrosion protection and should therefore not be replaced by pure water.

! **CAUTION** !

For the cooling system, use only with high-grade antifreeze (e.g. Shell Advance Coolant). Using lower-grade antifreeze agents can cause corrosion and coolant foaming.

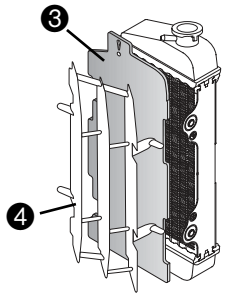
Pressure induced by heating of the coolant in the system is controlled by a valve in the radiator cap ❷; a water temperature of up to 120° C (248° F) is admissible without, having to expect any trouble.

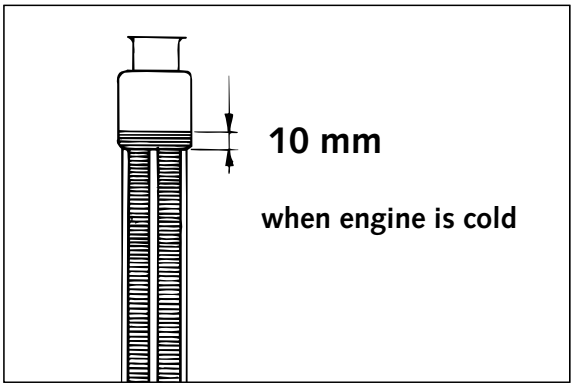


Radiator cover for the cold season

To ensure that the engine reaches its operative temperature also at low temperatures, the radiator cover ❸ must be mounted.
For this purpose, detach the left radiator protection ❹ and mount the cover in front of the left radiator as illustrated.
Remount the radiator protection.

NOTE: The radiator shutter can be obtained from your KTM dealer





Checking the coolant level

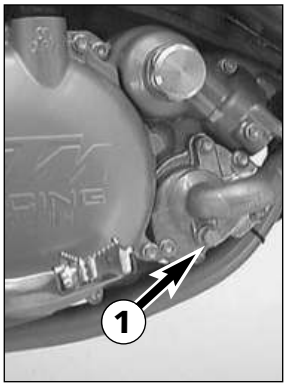
The coolant should be 10 mm (0.4 in) above the radiator fins when the engine is cold (see diagram). In the event of the coolant being drained, always fill and bleed the system.

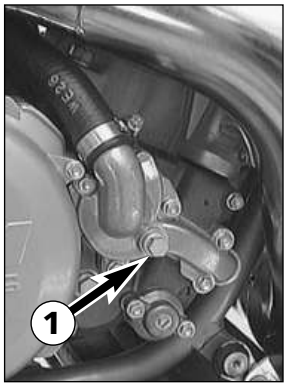
⚠ **WARNING** ⚠

If possible, always check the level of cooling liquid when the engine is cold. If you have to open the radiator cap when the engine is hot, use a rag to cover the cap and open slowly to release pressure.

! **CAUTION** !

The cooling system must be bled after draining the cooling liquid or after adding more than 0.25 l (0.06 US gallons) cooling liquid.



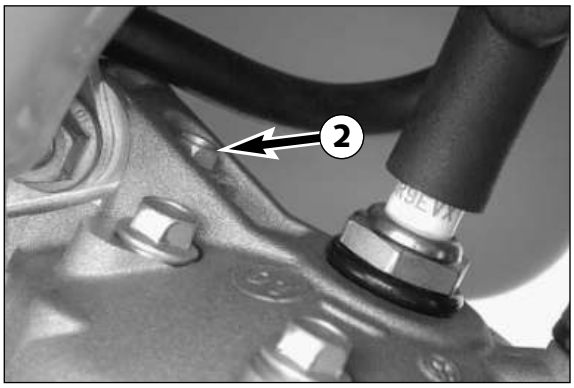


Refilling/Bleeding the cooling system

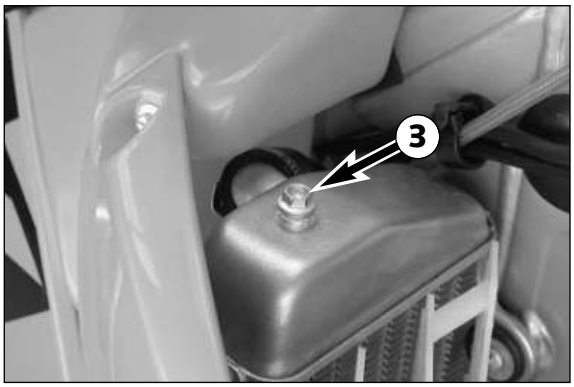
The cooling system must be bled as described below after draining the cooling liquid or after adding more than 0.25 l (0.06 US gallons) cooling liquid.

Make sure that the drain screw ❶ is fastened.

Pour approx. 0.5 litres (0.13 US gallons) coolant into the system.



Remove screw ❷ at the cylinder head. Reinstall it as soon as the cooling liquid emerges free of air bubbles (only for 125/200 engines).

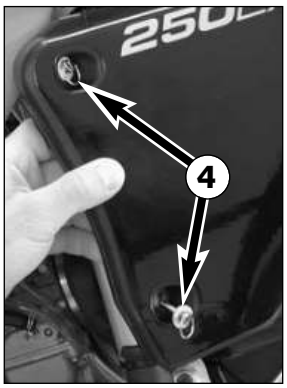


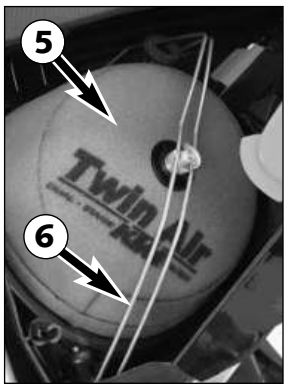
Remove the screw ❸ on the right radiator.

Now add cooling liquid until it emerges free of bubbles at the right radiator. Then immediately mount the screw so that no more air can enter the right radiator.

Top up the left radiator until the coolant can be seen approx. 10 mm (0.4 in) above the radiator fins.

Check the coolant level again after a short ride.





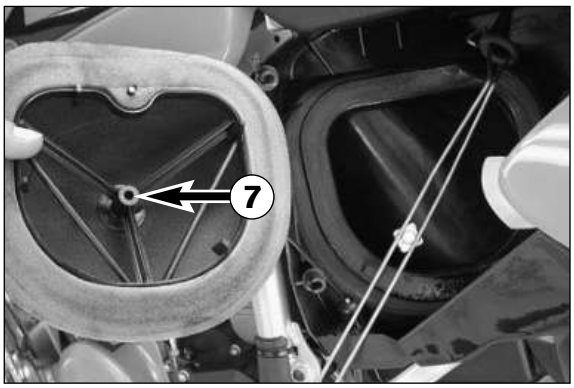
Cleaning the air filter *

The air filter must be cleaned prior to every race or whenever the motorcycle has been exposed to great quantities of dust.

For this purpose, rotate the two quick-release fasteners ❹ counter-clockwise and pull them outward up to the stop, pull the filter box cover forward and remove it. Unhook the filter holding brackets ❻ at the bottom, swing them sideways and take the air filter ❺ together with the filter support ❼ out of the filter box.

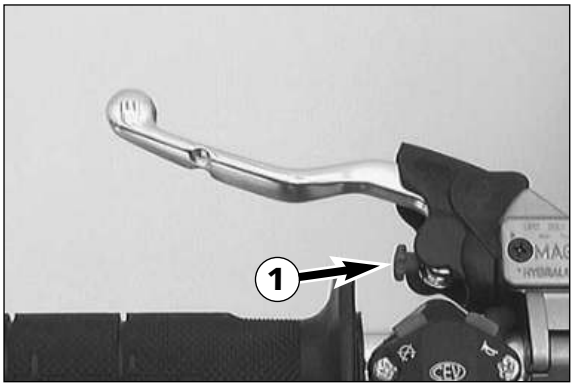
! CAUTION !

DO NOT CLEAN THE AIR FILTER WITH FUEL OR PETROLEUM SINCE THESE WILL DAMAGE THE FOAM. KTM RECOMMENDS THE PRODUCTS MADE BY TWIN AIR FOR AIR FILTER MAINTENANCE. FOR CLEANING PURPOSES AND TO OIL THE AIR FILTER.



Thoroughly wash the air filter in special cleaning fluid and allow it to dry well. Only press out the filter, do not wring it out under any circumstances. Oil the dry air filter with a high-grade filter oil. Also clean the air filter box. Check the carburetor collar for damage and that it is filled correctly.

Mount the air filter on the filter support. Mount the filter together with the filter support in the filter box, making sure to center them, and fix them properly with the filter holding bracket.

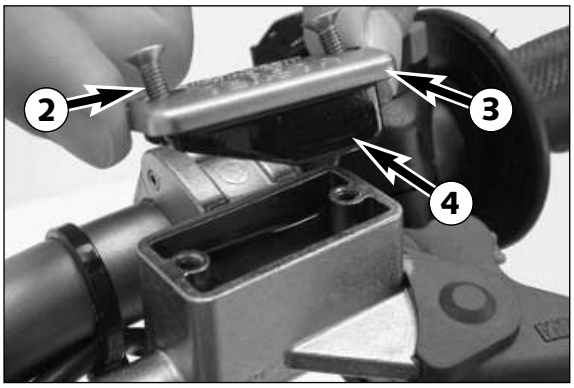


Changing the original position of the clutch lever

The adjusting screw ❶ can be used for individual adjustment of the original position of the clutch lever, thus allowing adjustment to an optimal position for every hand size.
Turning the adjusting screw clockwise reduces the distance between the clutch lever and the handlebar. Turning the adjusting screw counterclockwise increases the distance between the clutch lever and the handlebar.

! CAUTION !

ADJUSTMENT OF THE CLUTCH LEVER POSITION IS ONLY POSSIBLE WITHIN CERTAIN LIMITS. ONLY TURN THE ADJUSTING SCREW MANUALLY AND NEVER APPLY EXCESSIVE FORCE.

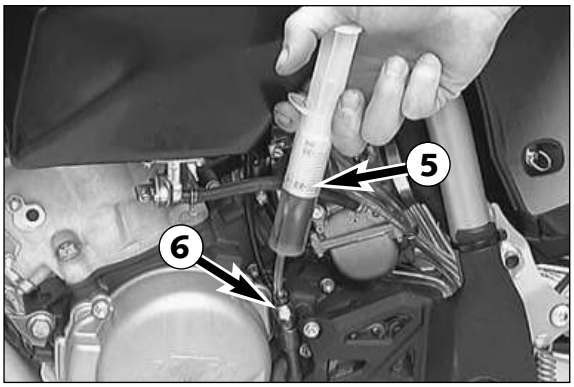


Checking the oil level of the hydraulic clutch

To check the oil level in the master cylinder of the clutch remove the cover. For this purpose, remove screws ❷ and cover ❸ together with the rubber boot ❹. The oil level in the horizontaly positioned master cylinder should be 4 mm below the upper edge.
If necessary, fill up with biodegradable hydraulic oil SAE 10 (e.g. Shell Naturelle HF-E15).Biodegradable hydraulic oil is available from your KTM dealer (50ml).

! CAUTION !

KTM USES BIODEGRADABLE HYDRAULIC OIL FOR THE HYDRAULIC CLUTCH CONTROL. NEVER MIX BIODEGRADABLE HYDRAULIC OILS WITH MINERAL OILS.
ALWAYS USE BIODEGRADABLE HYDRAULIC OIL SAE 10 TO FILL UP THE MASTER CYLINDER. NEVER REFILL WITH MINERAL HYDRAULIC OIL OR BRAKE FLUID.

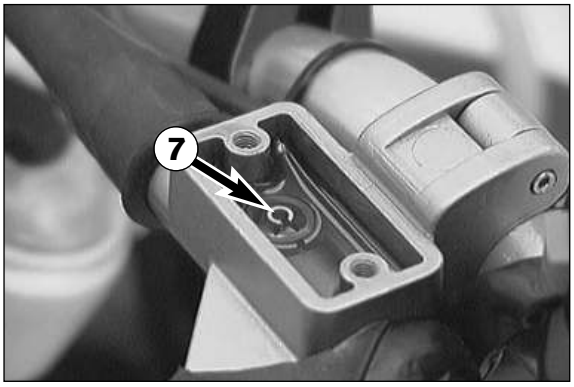


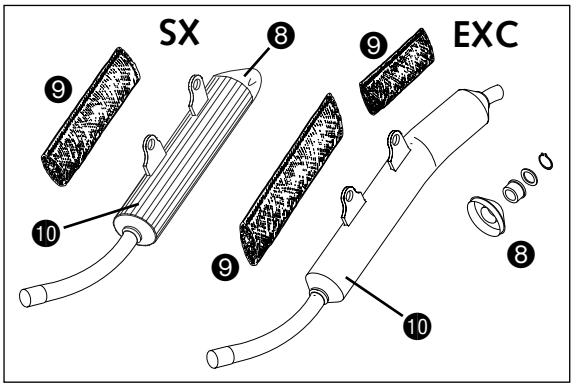
Bleeding of the hydraulic clutch

To bleed, the cover of the master cylinder of the clutch needs to be removed. For this purpose, remove screws ❷ and take off cover ❸ together with rubber bellows ❹. At the slave cylinder of the clutch, remove the bleeder nipple ❺. In its place, mount the bleeder syringe ❻ which is filled with SAE 10 hydraulic oil. Refill oil, until oil is discharged from the bore ❼ of the master cylinder in a bubble-free state. Make sure that the oil does not overflow. The bleeder syringe can be purchased at your KTM dealer.Having completed the bleeding procedure, you have to verify that the oil level in the master cylinder is correct.If necessary, fill up with biodegradable hydraulic oil SAE 10 (e.g. Shell Naturelle HF-E15).Biodegradable hydraulic oil is available from your KTM dealer (50ml).

! CAUTION !

KTM USES BIODEGRADABLE HYDRAULIC OIL FOR THE HYDRAULIC CLUTCH CONTROL. NEVER MIX BIODEGRADABLE HYDRAULIC OILS WITH MINERAL OILS.
ALWAYS USE BIODEGRADABLE HYDRAULIC OIL SAE 10 TO FILL UP THE MASTER CYLINDER. NEVER REFILL WITH MINERAL HYDRAULIC OIL OR BRAKE FLUID.



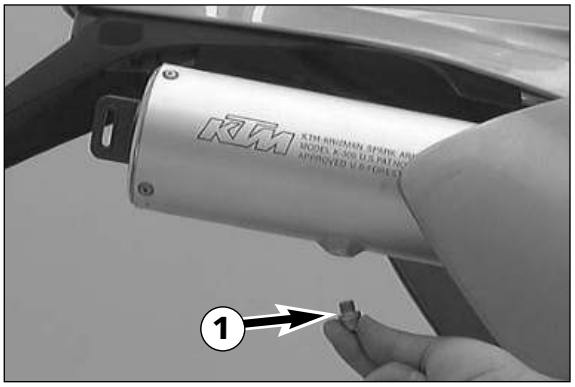


Exhaust system *

Silencers whose cap ❽ is detachable are filled with glass-fiber yarn. Let this package be ckecked at least after 4000 km or at once a year. Glass-fiber yarn that is too loose may cause a drop in performance and curtail the silencer's silencing effect.
To replace the glass-fiber yarn packing ❾, remove the silencer cap and pull off the outer tube ❿. Use adhesive tape to attach the new glass-fiber yarn packing to the inner tube, and slide on outer tube. Mount silencer cap.
Glass-fiber yarn packings are available at your authorized KTM dealer.

⚠ WARNING ⚠

THE EXHAUST SYSTEM BECOMES VERY HOT WHILE THE MOTORCYCLE IS RUNNING. DO NOT START WORK ON THE EXHAUST SYSTEM UNTIL IT HAS PROPERLY COOLED DOWN, TO AVOID BURNS.



Cleaning the spark arrestor (EXC USA) *

With these models, the spark arrestor is part of the exhaust silencer. Clean it every 4000 km (2500 miles) to guarantee proper functioning. Also clean the spark arrestor when replacing the glassfiber yarn filling.
After assembling the silencer, remove the plug ❶ and start the motorcycle. Close the opening of the muffler with a rag and press the accelerator approximately 20 times. The carbon deposits will be blown out through the opening. Then turn off the engine and let the exhaust system cool down. Grease the plug with molycote grease and mount the plug.

Carburetor adjustment *

Basic information on the original carburetor setting
The original carburetor setting was adapted for an altitude of approx. 500 meters (1600 ft.) above sea level, and the ambient temperature of approx. 20° C (68° F), mainly for off-road use and central European premium-grade fuel (95 ROZ).
Mixing ratio (2-stroke motor oil : super fuel)

1:40 – 1:60 (depends on oil quality)

Basic information on changing the carburetor setting
Always start with the original carburetor setting (the provided factory setting is meant for break-in operation; after the break-in period, the carburetor needs to be adjusted according to the carburetor datasheet - see appendix). Essential requirements are a clean air filter system, air-tight exhaust system and an intact carburetor. Experience has shown that adjusting the main jet, the idling jet and the jet needle is sufficient and that changes of other parts of the carburetor will not greatly affect engine performance.

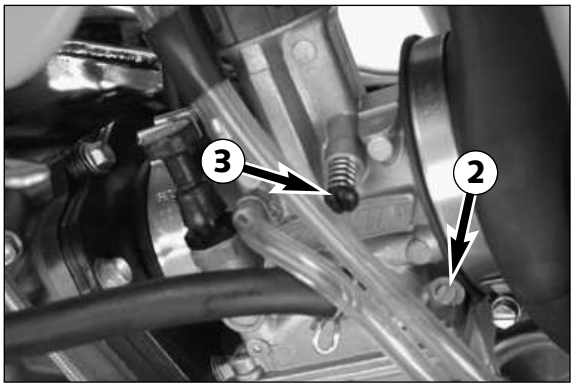
RULE OF THUMB: high altitude or high temperatures → choose leaner carburetor adjustment
low altitude or low temperatures → choose richer carburetor adjustment

⚠ **WARNING** ⚠

- ONLY USE PREMIUM-GRADE GASOLINE ROZ 95 MIXED WITH HIGH-GRADE TWO-STROKE ENGINE OIL. OTHER TYPES OF GASOLINE CAN CAUSE ENGINE FAILURE, AND WILL VOID YOUR WARRANTY.
- ONLY USE HIGH-GRADE 2-STROKE ENGINE OIL OF KNOWN BRANDS (e. g. Shell Advance Racing X).
- NOT ENOUGH OIL OR LOW-GRADE OIL CAN CAUSE EROSION OF THE PISTON. IF YOU USE TOO MUCH OIL THE ENGINE CAN START SMOKING AND FOUL THE SPARK PLUG AND THE EXHAUST CONTROL SYSTEM.
- IN THE CASE OF A LEANER ADJUSTMENT OF THE CARBURETOR, PROCEED CAUTIOUSLY. ALWAYS REDUCE THE JET SIZE IN STEPS OF ONE NUMBER TO AVOID OVERHEATING AND PISTON SEIZURE.

NOTE: If the engine does not run properly despite a changed adjustment, look for mechanical faults and check the ignition system.

Basic information on carburetor wear
As a result of engine vibrations, throttle valve, jet needle, and needle jet are subjected to increased wear. This wear may cause carburetor malfunction (e.g. overly rich mixture). Therefore, these parts should be replaced after 10000 kilometers (6000 miles).

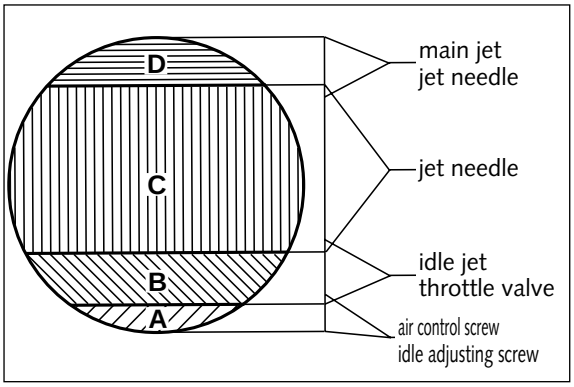


Definitions

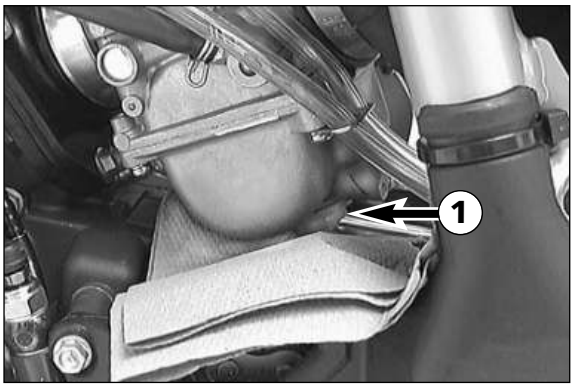
Mixture too rich:
Too much fuel in proportion to air.

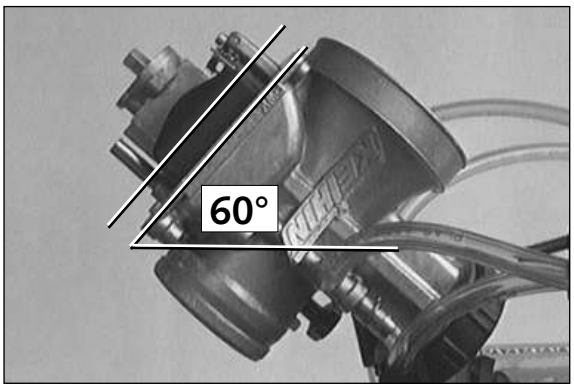
Mixture too lean:
Not enough fuel in proportion to air.

Idling range **A**
Operation with closed throttle valve. This range is influenced by the position of the air control screw ❷ and the air control screw ❸. Only make adjustments when the engine is hot.
To this end, slightly increase the idling speed of the engine by means of the air control screw. Turning it clockwise produces a higher idling speed and turning the screw counterclockwise produces a lower idling speed. Create a round and stable engine speed using the air control screw (basic position of the air control screw = open by 1.5 turns). Then adjust to the normal idling speed by means of the air control screw.



JET NEEDLE TYPE	RANGE OF ACTION RICHER — LEANER
NOZD	←
NOZE	←
NOZF	←
NOZG	←
NOZH	←





Opening up **B**

Engine behavior when the throttle opens. The idle jet and the shape of the throttle valve influences this range. If, despite good idling-speed and part-throttle setting, the engine sputters and smokes when the throttle is fully opened and develops its full power not smoothly but suddenly at high engine speeds, the mixture to the carburetor will be too rich, the fuel level too high or the float needle is leaking.

Part-throttle range **C**

Operation with partly open throttle valve. This range is only influenced by the jet needle (shape and position). The optimum part-throttle setting is controlled by the idling setting in the lower range and by the main jet in the upper range. If the engine runs on a four-stroke cycle or with reduced power when it is accelerated with the throttle partly open, the jet needle must be lowered by one notch. If then the engine pings, especially when accelerating under full power at maximum engine revs, the jet needle should be raised.
If these faults should occur at the lower end of the part throttle range at a four-stroke running, make the idling range leaner; if the engine pings, adjust the idling range richer.

Full throttle range **D**

Operation with the throttle fully open (flat out). This range is influenced by the main jet and the jet needle. If the porcelain of the new spark plug is found to have a very bright or white coating or if the engine rings, after a short distance of riding flat out, a larger main jet is required. If the porcelain is dark brown or black with soot the main jet must be replaced by a smaller one.

Draining the float chamber of the carburetor

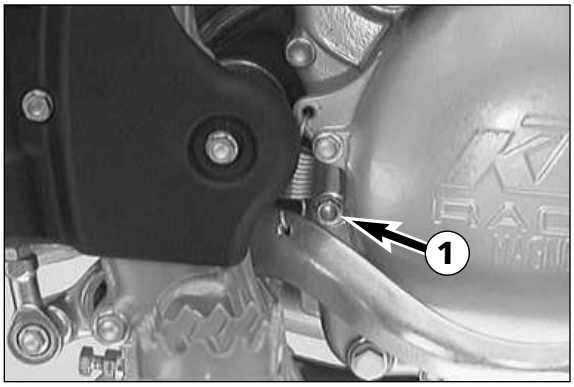
Following every wet-cleaning procedure, the float chamber of the carburetor should be drained in order to remove any water that may have penetrated into it. Water in the float chamber leads to engine malfunction.
Make sure you do this while the engine is cold. Close the fuel tap, and place a cloth under the carburetor, which is capable of absorbing the leaking fuel. Unscrew the plug ❶ and clean it with compressed air. Then, mount the plug together with the gasket, open the fuel tap, and check the float chamber for leaks.

⚠ WARNING ⚠

FUEL IS EASILY FLAMMABLE AND TOXIC. WHEN HANDLING FUEL, BE SURE TO EXERCISE THE UTMOST CAUTION. NEVER PERFORM ANY WORK ON THE FUEL SYSTEM NEAR OPEN FLAMES OR BURNING CIGARETTES. ALWAYS ALLOW THE ENGINE TO COOL OFF FIRST. IMMEDIATELY CLEAN UP ANY FUEL WHICH MAY HAVE BEEN SPILLED. MATERIALS SATURATED WITH FUEL ARE ALSO EASILY FLAMMABLE. IN CASE YOU INGESTED FUEL OR FUEL SPLASHED INTO YOUR EYES, CONSULT A DOCTOR IMMEDIATELY.
DISPOSE OF THE FUEL PROPERLY.

Checking the float level *

Arrange the carburetor diagonally at about 60° so that the spring in the float needle valve is not pressed together. In this position, the edge of the float should be parallel with the float chamber sealing surface (see illustration).

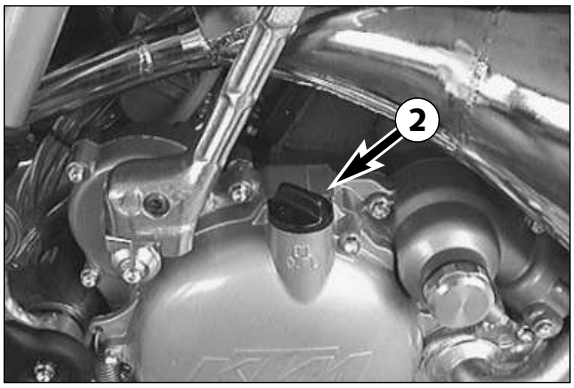


Check transmission oil level (125/200)

In order to check the transmission oil level the control screw ❶ on the clutch cover is to be removed. Oil should just barely escape from the inspection opening when the motorcycle is in an upright position. If necessary, remove the plug ❷ and top up with oil (see technical data engine).

! CAUTION !

TRANSMISSION AND CLUTCH WILL BE SUBJECTED TO EXCESSIVE WEAR AND TEAR IF YOU USE TOO LITTLE OR LOW GRADE OIL. USE ONLY HIGH-GRADE OIL.



Changing the transmission oil (125/200) *

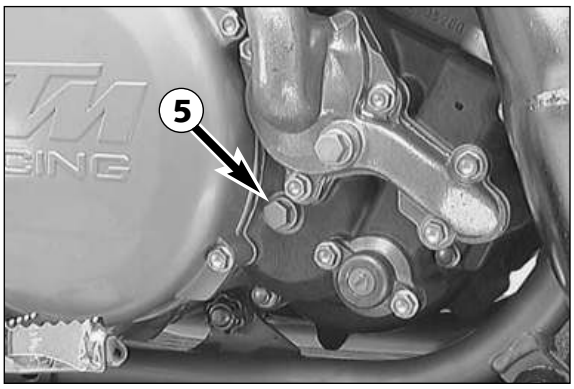
To change the gear oil warm up the engine and park the motorcycle on a horizontal surface. Remove oil drain plugs ❸ and ❹ and drain the used oil into an appropriate container. Clean the magnets of the oil drain plugs and mount them together with the appropriate gaskets. Fill in 0.7 l oil (see technical data- engine), mount the plug ❷ and check the engine for leaks.

! CAUTION !

TRANSMISSION AND CLUTCH WILL BE SUBJECTED TO EXCESSIVE WEAR AND TEAR IF YOU USE TOO LITTLE OR LOW GRADE OIL. USE ONLY HIGH-GRADE OIL.







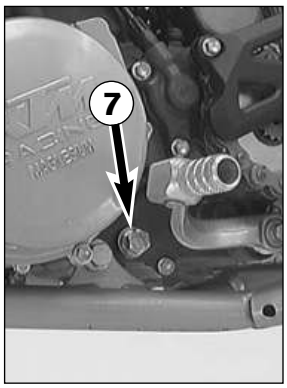
Check transmission oil level (250/300)

In order to check the transmission oil level the control screw ❺ on the clutch cover is to be removed. Oil should just barely escape from the inspection opening when the motorcycle is in an upright position. If necessary, remove the plug ❻ and top up with oil (see technical data- engine).

! CAUTION !

TRANSMISSION AND CLUTCH WILL BE SUBJECTED TO EXCESSIVE WEAR AND TEAR IF YOU USE TOO LITTLE OR LOW GRADE OIL. USE ONLY HIGH-GRADE OIL.





Changing the transmission oil (250/300) *

To change the transmission oil run the engine warm and set up the motorcycle on a horizontal surface. Remove the oil drain screw ❼ and drain used oil into a container. Clean the magnet of the oil drain screw and reinstall oil drain screw with seal. Pour in 0.8 litres engine oil (see technical data engine), replace plug ❻ and check engine for leaks.

! CAUTION !

TRANSMISSION AND CLUTCH WILL BE SUBJECT TO EXCESSIVE WEAR AND TEAR, IF YOU USE TOO LITTLE OR LOW GRADE OIL. USE ONLY HIGH-GRADE OIL.

CLEANING

Clean your motorcycle regularly in order to maintain the beauty of its plastic surfaces.

The best manner would be to use warm water that has been mixed with a normal brand-name washing detergent and a sponge. The hard dirt can be removed before washing with the help of a soft water jet.

! CAUTION !

NEVER CLEAN YOUR MOTORCYCLE WITH A HIGH-PRESSURED CLEANER OR A HIGH-PRESSURED WATER JET. THE WATER COULD OTHERWISE RUN INTO THE ELECTRICAL COMPONENTS, CONNECTORS, SHEATHED CABLES, BEARINGS, CARBURETOR, ETC. AND CAUSE DISTURBANCES OR LEAD TO A PREMATURE DESTRUCTION OF THESE PARTS.

- Before cleaning with water, plug the exhaust pipe to prevent water ingress.
- You should use normal brand-name detergents to clean the motorcycle. Especially dirty parts should also be cleaned with the help of a paint brush.
- After the motorcycle has been rinsed with a soft water jet, it should be dried by air pressure and a cloth. Then take a short drive until the engine has reached the working temperature and also use the brakes. By warming these components, the residual water can evaporate from inaccessable parts of the engine and the brakes.
- Slide back the protective covers on the handlebar-mounted instruments so that any water that may have seeped into this part of the motorcycle is allowed to evaporate.
- After the motorcycle has cooled down, oil and grease all the gliding bearing parts. Treat the chain with a chain spray.
- To prevent failures in the electric system, you should treat the ignition lock, the emergency OFF switch, the short circuit button, the light switch and the socket connectors with contact spray.

CONSERVATION FOR WINTER OPERATION

In the event that the motorcycle is also used in winter and on roads where one has to expect salt spraying, you will have to take precautions against the aggressive road salt.

- clean the motorcycle thoroughly and let it dry after each ride
- treat the engine, carburetor, swing arm, and all other bare or galvanized parts (except for brake discs) with a wax-based anti-corrosion agent.

⚠ WARNING ⚠

KEEP THE ANTI-CORROSION AGENT FROM GETTING INTO CONTACT WITH THE BRAKE DISCS, OTHERWISE THIS WILL SIGNIFICANTLY REDUCE THE BRAKING POWER.

! CAUTION !

AFTER RIDES ON SALTED ROADS, CLEAN MOTORCYCLE THOROUGHLY WITH COLD WATER AND LET IT DRY WELL.

STORAGE

Should you wish to make a pause over a longer space of time, please observe the following instructions:

- Clean motorcycle thoroughly (see chapter: CLEANING)
- Change engine oil (old engine oil contains aggressive contaminants).
- Check antifreeze and amount of cooling liquid.
- Let the engine warm up again, close fuel cock and wait until the engine dies off by itself. In this way the carburetor jets are prevented from becoming resin- clogged by the old fuel.
- Remove spark plug and fill in approx. 5 ccm of engine oil into the cylinder through the opening. Actuate kick-starter 10 times in order to distribute the oil onto the cylinder walls and mount the spark plug.
- Let fuel flow out of tank into an appropriate container.
- Correct tire pressure.
- Lubricate bearing points of the control levers, footrests, etc. as well as the chain.
- The storage place should be dry and not be subjected to too big temperature fluctuations.
- Cover the motorcycle with an air permeated tarp or blanket. Do not use non airtight materials as a possible humidity might not be able to escape and thereby cause corrosion.

! CAUTION !

IT WOULD BE VERY BAD TO LET THE ENGINE RUN FOR A SHORT TIME DURING THE STORAGE PERIOD. THE ENGINE WOULD NOT GET WARMED UP ENOUGH AND THE THUS DEVELOPED STEAM WOULD CONDENSE DURING THE COMBUSTION PROCESS AND CAUSE THE VALVES AND EXHAUST TO RUST.

USE AFTER A PERIOD OF STORAGE

- Fill up the tank with fresh fuel.
- Check the motorcycle as before each start (see driving instructions)
- Take a short, careful test ride first.

NOTE: Before you put your motorcycle away for the winter, you should check all parts for their function and wear. Should any service jobs, repairs, or any refitting be necessary, you should have them carried out during the off-season (lower workload at mechanics' shops). This way, you can avoid the long waiting times at your shop at the beginning of the next biking season.

TECHNICAL SPECIFICATIONS CHASSIS 125 SX / EXC, 200 SX / MXC / EXC 2003

	125 SX	125 EXC	200 SX	200 MXC	200 EXC
Frame	Central chrome-moly-steel frame				
Fork	**W**hite **P**ower – **U**pside down 48 MA				
Wheel travel front/rear	300/335 mm (11.8/13.2 in)				
Rear suspension	WP PDS 5018 (**P**rogressive **D**amping **S**ystem) shock absorber, aluminium swingarm				
Front brake	Disc brake with carbon-steel brake disc Ø 260 mm (10.2 in), brake caliper floated				
Rear brake	Disc brake with carbon-steel brake disc Ø 220 mm (8.7 in), brake caliper floated				
Brake discs	Wear limit max. 0.4 mm (0.016 in)				
Front tires Front tires USA Air pressure offroad Air pressure road driver only	80/100 - 21“51M 80/100 - 21“51M 1.0 bar (14psi) –	90/90 - 21“ 54R 80/100 - 21“51M 1.0 bar (14psi) 1.5 bar (21psi)	80/100 - 21“51M 80/100 - 21“51M 1.0 bar (14psi) –	– 80/100 - 21“51M 1.0 bar (14psi) –	90/90 - 21“ 54R 80/100 - 21“51M 1.0 bar (14psi) 1.5 bar (21psi)
Rear tires Rear tires USA Air pressure offroad Air pressure road driver only	100/90 - 19“ 57M 100/90 - 19“ 57M 1.0 bar (14psi) –	120/90 - 18“ 65R 100/100 - 18“ 59M 1.0 bar (14psi) 2.0 bar (28psi)	100/90 - 19“ 57M 100/90 - 19“ 57M 1.0 bar (14psi) –	– 100/100 - 18“ 59M 1.0 bar (14psi) –	120/90 - 18“ 65R 100/100 - 18“ 59M 1.0 bar (14psi) 2.0 bar (28psi)
Fuel tank capacity	7.5 liters (2 US Gallons)	9 liters (2.3 US Gallons)	7.5 liters (2 US Gallons)	11 liters (2.9 US Gallons)	9/11 liter (2.3/2.9 US gallons)
Final drive ratio Final drive ratio USA	13:50t 13:50t	14:38t 13:50t	14:48t 14:48t	– 14:48t	14:45t / 14:48t 14:48t
Chain	5/8 x 1/4 "				
Available final sprockets	38t, 40t, 42t, 45t, 48t, 50t, 52t				
Bulbs	headlight: HS1 12V 35/35W parking light: 12V 5W (base W2, 1x9,5d) instrument light: 12V 1,2W (base W2, 1x4,6d) brake- rear light: 12V 21/5W (base BaY15d) flasher light: 12V 10W (base Ba15s) license plate illumination: 12V 1,2W (base 1x4,6d)				
Steering head angle	63°				
Wheel base	1461 ± 10 mm (57,3 ± 0,4 in)				
Seat height, unloaded	925 mm (36,5 in)				
Ground clearance, unloaded	385 mm (15,2 in)				

STANDARD ADJUSTMENT - FORK		
	WP 4860 MXMA 1418X725	**WP 4860 MXMA 1418X735**
Compression adjuster	20	22
Rebound adjuster	20	20
Spring	4.0 N/mm	3.8 N/mm
Spring preload	5 mm (0.2in)	5 mm (0.2in)
Air chamber length	100 mm (5.1in)	110 mm (4,3in)
Fork oil	SAE 5	SAE 5

STANDARD ADJUSTMENT - SHOCK ABSORBER		
	WP 5018 PDS-DCC 1218X756	**WP 5018 PDS-MCC 1218X757**
Compression adjuster	17 LS (low speed) 2 HS (high speed)	17
Rebound adjuster	28	28
Spring	71-90/260	66-86/260
Spring preload	6 mm (0.2 in)	7 mm (0.2 in)

TIGHTENING TORQUES - CHASSIS		
Collar screw, front wheel spindle	M 24x1,5	40 Nm
Brake caliper, front	M 8	Loctite 243 + 25 Nm
Brake disk, front	M 6 10.9	Loctite 243 + 15 Nm
Brake disk, rear	M 6	Loctite 243 + 15 Nm
Clamping screws, upper fork bridge	M 8	20 Nm
Clamping screws, lower fork bridge	M 8	15 Nm
Clamping screws, fork stubs	M 8	10 Nm
Collar nut, rear wheel spindle	M 20x1,5	80 Nm
Hexagon nut, swing arm bolt	M 14x1,5	100 Nm
Hexagon collar screw, handlebar clamp	M 8	20 Nm
Allan head screw, handlebar support	M 10	Loctite 243 + 40 Nm
Shock absorber, top	M 12	60 Nm
Shock absorber, bottom	M 12	60 Nm
Sprocket screws	M 8	Loctite 243 + 35 Nm
Ball joint for push rod	M 6	Loctite 243 + 10 Nm
Engine mounting bolt	M 10	45 Nm
Engine brace	M 8	33 Nm
Screw adjusting ring spring preload shock abs.	M6	8 Nm
Spoke nipple	M4,5 /M5	5 Nm
Other screws on chassis	M 6 M 8 M 10	10 Nm 25 Nm 45 Nm
Other collar nuts on chassis	M 6 M 8 M 10	15 Nm 30 Nm 50 Nm

TECHNICAL DATA - ENGINE 125 / 200 2003

Engine	125 SX	125 EXC	200 SX	200 MXC	200 EXC
Design	Liquid-cooled, single-cylinder, two-stroke engine with intake and exhaust control				
Piston displacement	124.8 ccm		193 ccm		
Bore / stroke	54 / 54.5 mm (2.126 / 2.145 in)		64 / 60 mm (2.52 / 2.362 in)		
Fuel	unleaded SUPER fuel, research octane no 95, mixed with high grade, two- stroke oil				
Oil / gasoline ratio	1:40-1:60 when using high grade, two- stroke oil (Shell Advance Racing X). When in doupt, please contact your importer				
Crankshaft bearing	1 deep-groove ball bearing / 1 cylinder roller bearing				
Connecting rod bearing	needle bearing				
Piston pin bearing	needle bearing				
Piston	cast piston				
Piston ring	one plain compression ring	two plain compression rings	one plain compression ring	two plain compression rings	
Dimension "X" (upper edge piston-upper edge cylinder)	0,0 mm				
Ignition timing	1.4 mm (0.055 in) (16.5°) BTDC		1.6 mm (0.063 in) (17°) BTDC		
Spark plug	NGK BR9 EVX			NGK BR 8 EG	
Electrode gap	0,60 mm				
Dimension "Z" (height of the control flap)	43 mm (1.67 in)		46 mm (1,81 in)	46,5 mm (1.85 in)	
Primary drive	straight cut spur gears, primary ratio 23:73				
Clutch	multiple disc clutch in oil bath, hydraulically operated (Shell HF-E15)				
Transmission	5 speed, claw actuated	6 speed, claw actuated			
Gear ratio 1st gear 2nd gear 3rd gear 4th gear 5th gear 6th gear	 13 : 32 „1S32“ „2S15“ 15 : 30 „2S30“ „3S17“ 17 : 28 „3S28“ „4S19“ 19 : 26 „4S26“ „5S21“ 21 : 25 „5S25“	 12 : 33 „1G33“ „2S15“ 15 : 31 „2G31“ „3S17“ 17 : 28 „3S28“ „4S19“ 19 : 26 „4S26“ „5S21“ 21 : 25 „5S25“ „6G20“ 20 : 20 „6G20“	 13 : 32 „1S32“ „2S15“ 15 : 30 „2S30“ „3S17“ 17 : 28 „3S28“ „4S19“ 19 : 26 „4S26“ „5S21“ 21 : 25 „5S25“ „6S22“ 20 : 23 „6S23“		 13 : 33 „1G33“ „2S15“ 15 : 31 „2G31“ „3S17“ 17 : 28 „3S28“ „4S19“ 19 : 26 „4S26“ „5G17“ 21 : 25 „5G19“ „6G22“ 20 : 20 „6G20“
Gear lubrication	0.7 l engine oil 20W-40 (Shell Advance VSX4)	0.7 l engine oil 80W (Shell Gear EP 80)	0.7 l engine oil 20W-40 (Shell Advance VSX4)		0.7 l engine oil 80W (Shell Gear EP 80)
Available chain sprockets	13Z / 14Z / 15Z for chain 5/8 x 1/4"				
Coolant	1.2 litres, 40% anti freeze, 60% water, at least -25 °C (-13 °F)				
Ignition system	KOKUSAN 2K-1	KOKUSAN 2K-3	KOKUSAN 2K-1	–	KOKUSAN 2K-3
Generator output	no genaerator	12V / 110 W	no genaerator	–	12V 110 W
Ignition system USA	KOKUSAN 2K-1	KOKUSAN 2K-2	KOKUSAN 2K-1	KOKUSAN 2K-2	
Generator output	no genaerator	12V 40 W	no genaerator	12V 40 W	
Carburetor	flat-slide carburetor, carburetor setting see table				
Air-filter	wet foam type air filter insert				

TIGHTENING TORQUES - ENGINE		
Flange bolts - cylinder-head	M 7	18 Nm
Nuts-cylinder base	M 8	30 Nm
Flywheel collar nut	M 12x1	60 Nm
Nut for primary sprocket (LH thread)	M 16x1.5	180 Nm
Nut for inner clutch hub	M 18x1.5	120 Nm
Crankcase and clutch cover bolts	M 6	8 Nm
Spark plug	M 14x1.25	20 Nm
Swingarm pivot	M 14x1.5	100 Nm
Other screws	M 6	10 Nm
	M 8	25 Nm
	M 10	45 Nm

BASIC CARBURETOR SETTING					
	125 SX	**200 MXC/EXC USA**	**200 SX**	**200 EXC AUS 200 EXC EU**	**125 EXC EU 125 EXC AUS**
Carburetor	Keihin PWK 39	Keihin PWK 38 AG	Keihin PWK 39	Keihin PWK 38 AG	Keihin PWK 38 AG
Carburetor setting number	060202	080202	090202	100202	070202
Main jet	185 (188/190)	178(180/185)	190 (188,192)	180 (178)	148 (180/185)
Idling jet	48 (45)	45 (48)	48 (45)	35 (45/48)	35 (45/48)
Starting jet	85	85	85	85	85
Jet needle	R 1469 D (R 1470 D)	NOZ E (NOZ F)	R 1468G (R1469G)	R 1475J (NOZ E/NOZ F)	R 1472 N (NOZ E/NOZ F)
Needle position from top	III	III	III	III	V
Throttle valve	5.5 (6)	6.5	5.5	6.5	6.5
Air adjustment screw open	1.5	1.5	1.5	1.5	1.5
Performance restrictor	–	–	–	slide stop 36mm	–

TECHNICAL SPECIFICATIONS CHASSIS 250/300 MXC, EXC 2003

	250/300 MXC	250/300 EXC
Frame	Central chrome-moly-steel frame	
Fork	**W**hite **P**ower – **U**p **S**ide **D**own 48 MA	
Wheel travel front/rear	300/335 mm (11.8/13.2 in)	
Rear suspension	WP PDS 5018 (**P**rogressive **D**amping **S**ystem) shock absorber, aluminium swingarm	
Front brake	Disc brake with carbon-steel brake disc Ø 260 mm (10.2 in), brake caliper floated	
Rear brake	Disc brake with carbon-steel brake disc Ø 220 mm (8.7 in), brake caliper floated	
Brake discs	Wear limit max. 0,4 mm (0,016 in)	
Front tires Front tires USA Air pressure offroad Air pressure road driver only	– 80/100 - 21"51M 1,0 bar (14psi) 1,5 bar (21psi)	90/90 - 21" 54R 80/100 - 21"51M 1,0 bar (14psi) 1,5 bar (21psi)
Rear tires Rear tires USA Air pressure offroad Air pressure road driver only	– 100/100 - 18" 64M 1,0 bar (14psi) 2,0 bar (28psi)	140/80 - 18" 70R 100/100 - 18" 64M 1,0 bar (14psi) 2,0 bar (28psi)
Fuel tank capacity	11 liter (2,9 US Gallons)	9/11 liter (2,3/2,9 US Gallons)
Final drive ratio Final drive ratio USA	– 14:52t	15:48t / 14:50t 14:52t
Chain	5/8 x 1/4 "	
Available final sprockets	38t, 40t, 42t, 45t, 48t, 50t, 52t	
Bulbs	headlight	HS1 12V 35/35W
	parking light	12V 5W (base W2, 1x9,5d)
	instrument light	12V 1,2W (base W2, 1x4,6d)
	brake- rear light	12V 21/5W (base BaY15d)
	flasher light	12V 10W (basel Ba15s)
	license plate illumination	12V 1,2W (base 1x4,6d)
Steering head angle	63,5°	
Wheel base	1481 ± 10 mm (58,3 ± 0,4 in)	
Seat height, unloaded	925 mm (36,5 in)	
Ground clearance, unloaded	385 mm (15,2 in)	

STANDARD ADJUSTMENT-FORK

	WP 4860 MXMA 1418X736
Compression adjuster	20
Rebound adjuster	20
Spring	4,0 N/mm
Spring preload	5 mm (0.20in)
Air chamber length	110 mm (4,3 in)
Fork oil	SAE 5

STANDARD ADJUSTMENT - SHOCK ABSORBER

	WP 5018-MCC 1218X759
Compression adjuster	17
Rebound adjuster	26
Spring	71-90/260
Spring preload	7 mm (0.27 in)

TIGHTENING TORQUES - CHASSIS		
Collar screw, front wheel spindle	M 24x1,5	40 Nm
Brake caliper, front	M 8	Loctite 243 + 25 Nm
Brake disk, front	M 6 10.9	Loctite 243 + 15 Nm
Brake disk, rear	M 6	Loctite 243 + 15 Nm
Clamping screws, upper fork bridge	M 8	20 Nm
Clamping screws, lower fork bridge	M 8	15 Nm
Clamping screws, fork stubs	M 8	10 Nm
Collar nut, rear wheel spindle	M 20x1,5	80 Nm
Hexagon nut, swing arm bolt	M 14x1,5	100 Nm
Hexagon collar screw, handlebar clamp	M 8	20 Nm
Allan head screw, handlebar support	M 10	Loctite 243 + 40 Nm
Shock absorber, top	M 12	60 Nm
Shock absorber, bottom	M 12	60 Nm
Sprocket screws	M 8	Loctite 243 + 35 Nm
Ball joint for push rod	M 6	Loctite 243 + 10 Nm
Engine mounting bolt	M 10	45 Nm
Engine brace	M 8	33 Nm
Screw adjusting ring spring preload shock abs.	M6	8 Nm
Spoke nipple	M4,5 /M5	5 Nm
Other screws on chassis	M 6 M 8 M 10	10 Nm 25 Nm 45 Nm
Other collar nuts on chassis	M 6 M 8 M 10	15 Nm 30 Nm 50 Nm

TECHNICAL DATA - ENGINE 250/300 MXC / EXC 2003

Engine	250 MXC/EXC		300 MXC/EXC	
Desgin	Liquid-cooled single-cylinder two-stroke engine with **KTM T**win **V**alve **C**ontrol exhaust system and **K**TM **T**orque **C**hamber			
Piston displacement	249 ccm		297 ccm	
Bore / stroke	66,4 / 72 mm (2.62 / 2.84 in)		72 / 73 mm (2.84 / 2.88 in)	
Fuel	unleaded SUPER fuel, research octane no 95, mixed with high-grade, two- stroke oil (Shell Advance Racing X)			
Oil / gasolino ratio	1:40 – 1:60 when using high grade, two- stroke oil. When in dout, please contact your importer or use 1:40 mix ratio to be on the safe side			
Crankshaft bearing	1 deep-groove ball bearing / 1 cylinder roller bearing			
Connecting rod bearing	needle bearing			
Piston pin bearing	needle bearing			
Piston	cast piston		forged piston	
Piston ring	two plain compression rings			
Dimension "X" (upper edge piston - upper edge cylinder)	0 + 0,1 mm (0 + 0.004 in)			
Ingition timing	1,9 mm vor OT		1,94 mm vor OT	
Spark plug	NGK BR 7 ES			
Electrode gap	0,60 mm			
Dimension "Z" (height of the control flap)	49,5 mm (0.024 in)		46 mm (1.7 in)	
TVC start open TVC fully open	5000/min 7000/min		5900/min 7750/min	
Primary drive	straight cut spur gears, primary ratio 25:72			
Clutch	multiple disc clutch in oil bath, hydraulically operated (Shell HF-E15			
Transmission	5 speed, claw actuated			
Gear ratio	EXC	MXC	EXC	MXC
1st gear	15:29	15:29	15:29	15:29
2nd gear	18:26	17:27	18:26	18:26
3rd gear	19:22	19:25	19:22	19:24
4th gear	21:20	21:23	21:20	21:23
5th gear	23:18	23:21	23:18	23:21
Gear lubrication	0,8 l engine oil 10W-40 (Shell Gear EP 80)			
ailable chain sprockets	13Z / 14Z / 15Z for chain 5/8 x 1/4"			
Coolant	1.3 liters, 40% antifreeze, 60% water, at least -25 °C (-13 °F)			
Ignition system	KOKUSAN 2K-3			
Generator output	12V 110W			
Ignition system USA (MXC)	KOKUSAN 2K-2			
Generator output	12V 40W			
Carburetor	flat-slide carburetor, carburetor setting see table			
Air- filter	wet foam type air filter insert			

TIGHTENING TORQUES

Flange bolts - cylinder-head	M 8	35 Nm (25 ft.lb)
Nuts-cylinder base	M 10	35 Nm (25 ft.lb)
Flywheel collar nut	M 12x1	60 Nm (44 ft.lb)
Nut for primary sprocket (LH thread)	M 18x1.5	Loctite 243 150 Nm (110 ft.lb)
Nut for inner clutch hub	M 18x1.5	Loctite 243 100 Nm (74 ft.lb)
Crankcase and cover bolts	M 6	8 Nm (6 ft.lb)
Swingarm pivot	M 14	100 Nm (74 ft.lb)
Flat head screw release plate kickstarter	M 6x16	Loctite 648 19 Nm (14 ft.lb)
Other screws	M 6 M 8 M 10	10 Nm (7 ft.lb) 25 Nm (19 ft.lb) 45 Nm (33 ft.lb)

BASIC CARBURETOR SETTING

	250/300 EXC throttled	250 EXC USA	300 EXC AUS throttled	300 MXC / EXC USA
Carburetor	Keihin PWK 38 AG	Keihin PWK 38 AG	Keihin PWK 38 AG	Keihin PWK 38 AG
Carburetor setting number	120202	140202	130202	150202
Main jet	175 (182,185)	182 (185)	175 (172,178)	175 (172,178)
Idling jet	35 (48)	48	35 (45,48)	45 (48)
Starting jet	85	85	85	85
Jet needle	R 1475 J (N3CH/N3CW)	N3CH (N3CW)	R1475J (NOZ H/NOZ I)	NOZ H (NOZ I)
Needle position from top	III	IV	II	III
Slide	6.5	6.5	6.5	6.5
Air adjustment screw open	1.5	1.5	1.5	1.5
Performance restrictor	slide stop 34mm	–	slide stop 34mm	–
Power jet nozzle	–	–	–	–

INDEX

Page

Adjusting the free travel at the hand brake lever....32
Adjusting the spring preload on the fork (SX)....28
Basic suspension setup for the weight of the driver....26
Bleeding of the hydraulic clutch....41
Braking....19
Breather plug front fork....25
Carburetor adjustment....42
Chain maintenance....30
Chain wear....30
Changing the basic position of the foot brake pedal....33
Changing the original position of the clutch lever....41
Changing the spring preload on the telescopic fork (MXC/EXC models)....27
Changing the spring preload on the telescopic fork (SX models)27
Changing the spring preloading of the shock absorber....28
Changing the transmission oil (125/200)....44
Changing the transmission oil (250/300)....44
Chassis number....5
Checking and adjusting the steering head bearing....24
Checking the basic setup of the telescopic fork....27
Checking the brake fluid level - front brake....32
Checking the chain tension....29
Checking the coolant level....39
Checking the float level....43
Checking the front brake pads....32
Checking the oil level of the hydraulic clutch....41
Checking the rear brake fluid level....33
Checking the rear brake pads....34
Checking the shock absorber and spring....26
Checking the spoke tension....36
Checking the transmission oil level (125/200)....44
Checking the transmission oil level (250/300)....44
Checking/setting the distance of the magnetic sensor....38
Choke knob....12
Cleaning....45
Cleaning the air filter....40
Cleaning the dust sleeves of the telescopic fork....25
Cleaning the spark arrestor (EXC USA)....42
Clutch lever....5
Combination switch (EXC)....11
Compression damping of fork....14
Compression damping of shock absorber (MXC, EXC)....15
Compression damping of shock absorber (SX)....14
Conservation for winter operation....45
Cooling system....39
Correct the chain tension....29
Determining the riding sag of the shock absorber....26
Determining the static sag of the shock absorber....26
Dismounting and mounting the front wheel....34
Dismounting and mounting the rear wheel....35
Draining the float chamber of the carburetor....43
Driving instructions....17
Electronic speedometer....6
Electronic speedometer, indicator lamp (EXC)....6
Emergency OFF switch (Australia)....11

Page

Engine number, engine type (125/200)....5
Engine number, engine type (250/300)....5
Exhaust system....41
Filler cap....12
Flasher switch....11
Foot brake pedal....13
Fuel tap....12
General information about KTM disc brakes....31
General tips and warnings for starting the motorcYcle....16
Hand brake lever....5
Headlamp switch (EXC USA)....11
How to change the handlebar position....25
Index....54
Instructions for your first ride....16
Kickstarter....13
Maintenance work on chassis and engine....24
Operation instruments....5
Periodic lubrication - and maintenance-schedule....20
Pivot bearing....28
Radiator cover for the cold season....39
Rebound damping of fork....14
Rebound damping of shock absorber (SX, MXC, EXC)....15
Refilling / Bleeding the cooling system....40
Refilling the front brake fluid reservoir....32
Refilling the rear brake fluid reservoir....33
Refueling, fuel....19
Replacing fork springs....27
Replacing the battery of the electronic speedometer....36
Replacing the front brake pads....33
Replacing the headlight lamp....38
Replacing the rear brake pads....34
Running in....16
Serial number locations....5
Setting the clock of the electronic speedometer....37
Shift lever....12
Shifting, Riding....18
Short circuit button (SX)....11
Side stand....13
Starting off....18
Starting when the engine is cold....18
Starting when the engine is warm....18
Steering lock....13
Stopping, Parking....19
Storage....45
Technical specifications - chassis (125/200)....46
Technical specifications - chassis (250/300)....50
Technical specifications - engine (125/200)....48
Technical specifications - engine (250/300)....52
Tires, air pressure....36
Tripmaster switch....7
Using re iniation....45
What to do when the engine is “flooded“....18
What you should check before each start....17
Wiring diagram, carburetor setting....Appendix



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