

50 SX PRO JUNIOR LC, 50 SX PRO SENIOR LC

KTM
SPORTMOTORCYCLES

BEDIENUNGSANLEITUNG

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

2002



Art. Nr. 3.210.12 8/2001

IMPORTANT

PLEASE READ THIS MANUAL THOROUGHLY BEFORE LETTING YOUR YOUNGSTER RIDE THE MOTORCYCLE FOR THE FIRST TIME. THIS MANUAL CONTAINS IMPORTANT INFORMATION AND RECOMMENDATIONS THAT WILL HELP YOU AND YOUR YOUNGSTER TO OPERATE AND HANDLE THE MOTORCYCLE PROPERLY.

IN THE INTEREST OF EVERYBODY INVOLVED, WE URGE YOU TO PAY PARTICULAR ATTENTION TO INSTRUCTIONS AND INFORMATION MARKED AS FOLLOWS:

⚠ WARNING ⚠

IGNORING THESE INSTRUCTIONS, CAN ENDANGER YOUR BODY AND YOUR LIFE.

! CAUTION !

IGNORING THESE INSTRUCTIONS COULD CAUSE DAMAGE TO PARTS OF THE MOTORCYCLE OR THAT THE MOTORCYCLE IS NOT ROAD-SAFE ANYMORE.

Please insert below the series numbers of the motorcycle

Chassis number

Engine number

Stamp of dealer

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 PREVIOUS ANNOUNCEMENT. IN THE EVENT OF SUCH MODIFICATIONS, PLEASE ASK YOUR LOCAL KTM DEALER FOR INFORMATION. WE SHALL NOT BE HELD LIABLE FOR ANY PRINTING ERRORS.

Introduction

Now you own a modern motorcycle that you and your youngster will certainly enjoy, provided that you service and maintain it properly. This manual contains important information on the operation and maintenance of your new KTM motorcycle. It went to press describing your model's latest state of development. Nevertheless, the descriptions may deviate slightly from the current design as our motorcycles are permanently improved.

Maybe you are one of those riders who have acquired good technical skills and can perform many of the maintenance tasks themselves using the instructions contained in this manual. If this is not the case, please keep in mind that the maintenance tasks marked with an asterisk (*) in the chapter „Maintenance of chassis and engine“ should rather be performed by a KTM dealer to protect you and your youngster.

Please strictly observe the prescribed running-in periods and inspection and maintenance intervals. Compliance with these instructions will significantly prolong the life of your motorcycle. Maintenance work should only be performed by a KTM dealer.

When special needs arise, please contact a KTM dealer, who will seek the assistance of the KTM importer if necessary.

PARENTS SHOULD KEEP IN MIND that the safety of their youngsters always depends on the efforts made by the parents to ensure that the motorcycle is kept in good working order and only used on safe terrains. Nevertheless, driving the motorcycle, like driving any other vehicle, involves a potential risk. Therefore, please make sure that all fundamental precautions are taken. Please also read the „INFORMATION ON SAFE DRIVING FOR PARENTS“ on page 4.

Riding an off-highway motorcycle is a wonderful form of outdoor recreation and we certainly hope that you and your youngsters will enjoy it to the full. However, this enjoyable outdoor activity can cause environmental problems or lead to conflicts with other people. Responsible use of the motorcycle will prevent such problems and conflicts. You can contribute to securing the future of motorcycling by making sure that you and your youngsters only use the motorcycle within the limits established by the applicable laws, making environmental protection one of your top priorities and never violating other people's rights.

In this spirit, we hope that you and your youngsters will always safely enjoy your motorcycle!



REG.NO. 12 100 6061

KTM Austria's certificate of achievement for its Quality System ISO 9001 is the beginning of an on-going total re-engineering quality plan for a brighter tomorrow.

KTM SPORTMOTORCYCLE AG
5230 MATTIGHOFEN, AUSTRIA

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IMPORTANT INFORMATION FOR PARENTS ABOUT SAFE DRIVING



KTM mini motorcycles are off-road motorcycles designed for one person only. They are not allowed on public roads.

The vehicle is designed to be used by children from 6 to 10 years of age with a maximum weight of 35 kg (78 lbs) and a maximum height of 130 cm (51 in) .

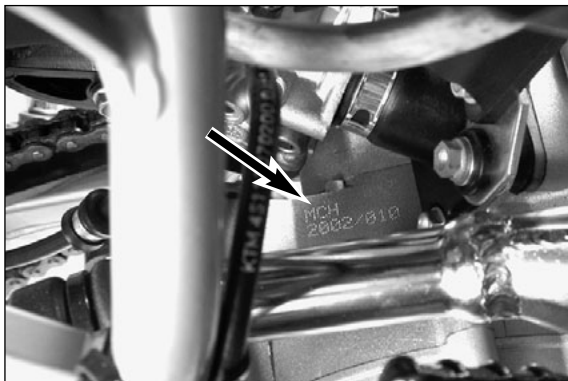
- Have your youngster wear proper protective gear whenever he or she rides the motorcycle: helmet, eye protection, chest, back, arm and leg protectors, gloves and boots. To set a good example, be sure to wear protective gear yourself whenever riding a motorcycle!
- Before your youngster takes his or her first ride, explain how each of the controls works and check if your youngster has understood what you explained. We recommend to review the entire owner's manual with your youngster item by item, paying particular attention to the specially marked warnings and pointing out the danger of injury.
- Instruct your youngster about riding and falling techniques, explain how the motorcycle will respond to shifting of the rider's weight, etc.
- Before using the motorcycle you should always check all components for proper operation (see maintenance schedule). Have your youngster perform these technical checks himself / herself as well.
- Whenever you go for a ride with your youngster, keep in mind that the speed should be adjusted to your youngster and not the other way around.
- Your youngster must understand that all instructions he or she receives from you or any other supervising adult must be followed.
- Your child must be physically ready to ride a motorcycle. This means that he or she must at least be able to ride a bicycle. Being good at sports that require fast reactions is an additional advantage. Your youngster should be strong enough to pick up the motorcycle after a fall.
- Never demand too much of your youngster. Give him or her time to get used to the motorcycle and to improve his / her riding skills. Do not even consider letting your youngster participate in a race before his / her physical condition, riding skills and motivation have sufficiently developed.
- Explain to your youngster that he / she should always adjust his / her riding speed to the local conditions as well as to his / her own riding skills and that excessive speed can cause falls and severe injuries. Always keep in mind that youngsters tend to underestimate dangers or fail to recognize them altogether. The riding speed must be reduced, in particular, on unknown terrain.
- Never let your youngster ride the motorcycle without supervision. An adult should always be present.
- The motorcycle is designed for one rider only. Your youngster is not allowed to transport a passenger.
- When you go for a ride, somebody at home should always know where you are going and when you will be back. This makes it easier to send you help, should problems occur.



SERIAL NUMBER LOCATIONS

Chassis number

The chassis number is located on the type plate on the steering head. Write this number into the field on page no 1.



Engine number

The engine number is stamped into the right half of the engine case next to the kickstarter. Write this number into the relevant area on page 1.

Engine typ

50 MCH



OPERATION INSTRUMENTS

Throttle grip

The throttle grip is located on the right side of the handlebar. It is used to reduce the engine speed and, thus, the driving speed.



WARNING



THE MOTORCYCLE IS EQUIPPED WITH A CENTRIFUGAL CLUTCH. THE MOTORCYCLE BEGINS TO MOVE AS SOON AS THE THROTTLE IS OPENED.



Hand brake lever

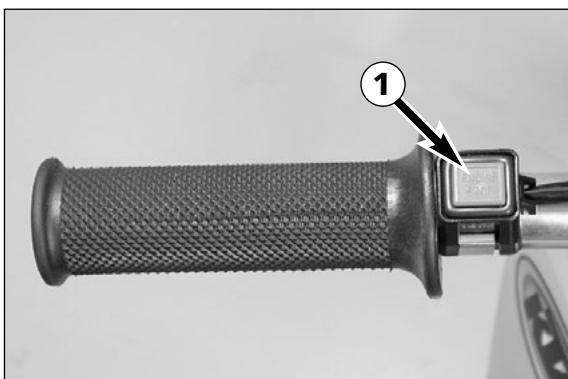
The hand brake lever is located on the right side of the handlebars and actuates the front wheel brake. The basic position can be adjusted to fit your child's hand.



CAUTION

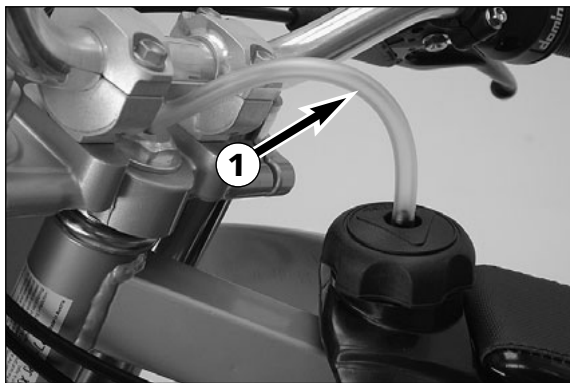


IF THE RESISTANCE OF THE HAND BRAKE LEVER FEELS UNRESPONSIVE, SOMETHING IS WRONG WITH THE BRAKE SYSTEM. HAVE THE BRAKE SYSTEM CHECKED AT A KTM WORKSHOP BEFORE YOU LET YOUR CHILD DRIVE THE MOTORCYCLE.



Short circuit button

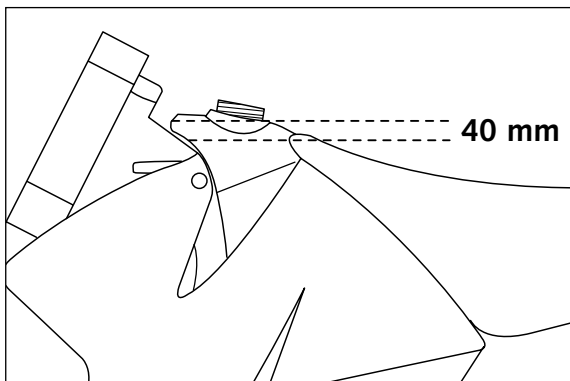
The short circuit button ❶ turns off the engine. When pressing this button, the ignition circuit is short-circuited.



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.



Refueling, fuel

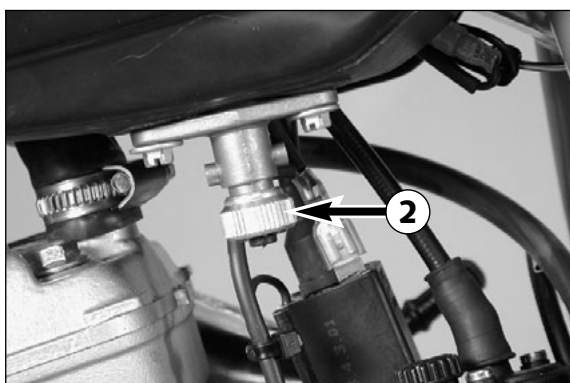
Oil (high-grade two-stroke engine oil) must be mixed with the fuel (ROZ 95) at a mixing ratio of 1:40.

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. NEVER 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 95 MIXED WITH HIGH-GRADE TWO-STROKE ENGINE OIL. OTHER TYPES OF GASOLINE CAN CAUSE ENGINE FAILURE.
 - ONLY USE KNOWN BRANDS OF HIGH-GRADE 2-STROKE ENGINE OIL (SHELL ADVANCE RACING X).
 - 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.
 - FUEL EXPANDS WHEN ITS TEMPERATURE RISES. THEREFORE DO NOT FILL THE TANK TO THE TOP. (SEE FIG.)



Fuel tap

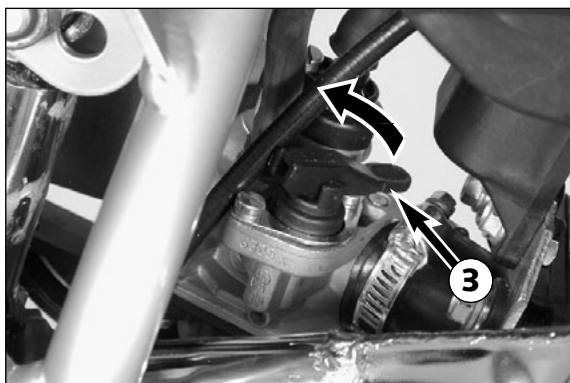
The fuel tap ❷ is located at the front of the motorcycle on the left side of the tank.

Opening the fuel tap: Turn the knob all the way to the left.

Closing the fuel tap: Turn the knob all the way to the right.

! CAUTION !

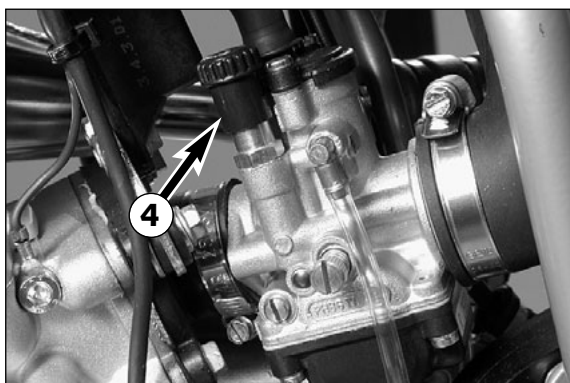
THE FUEL TAP SHOULD BE LOCKED WHENEVER THE MOTORCYCLE IS PARKED. IF THE TAP IS NOT CLOSED THE CARBURETOR MAY OVERFLOW AND FUEL GET INTO THE ENGINE.



Choke (Dell'Orto carburetor PHVA 14 DS)

Choke lever ❸ is mounted to the right side of the carburetor. If you move the choke lever up to the stop, a hole is opened in the carburetor through which the engine can draw in additional fuel. This results in a "rich" fuel-air mixture required for a cold start.

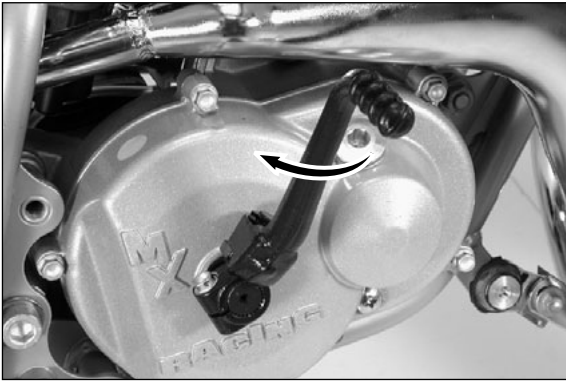
Moving the choke lever back closes the hole in the carburetor again.



Choke (Dell'Orto carburetor PHBG 19 BS)

Choke control knob ❹ is mounted to the left side of the carburetor. If you pull the choke control knob up to the stop and turn it 90°, a hole is opened in the carburetor through which the engine can draw additional fuel. This results in a "rich" fuel-air mixture required for a cold start.

Turning back the choke control knob returns the knob to the starting position and closes the hole in the carburetor again.



Kickstarter

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

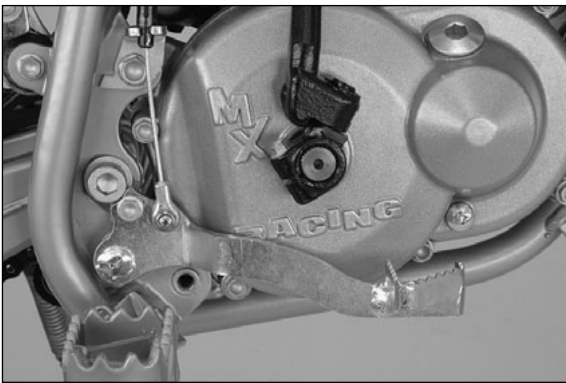


WARNING



WHEN STARTING THE ENGINE, PUT ON MOTORCYCLE BOOTS IN ORDER TO AVOID INJURIES. YOU MAY SLIP OFF THE KICKSTARTER, OR THE ENGINE MAY STRIKE BACK WHEN KICKING NOT VEHEMENTLY ENOUGH.

NOTE: an accessory kit for kick starter backwards operation is available.



Foot brake lever

The foot brake lever is located in front of the right footrest. The basic position can be adjusted to the seating position (see maintenance work).



Side stand

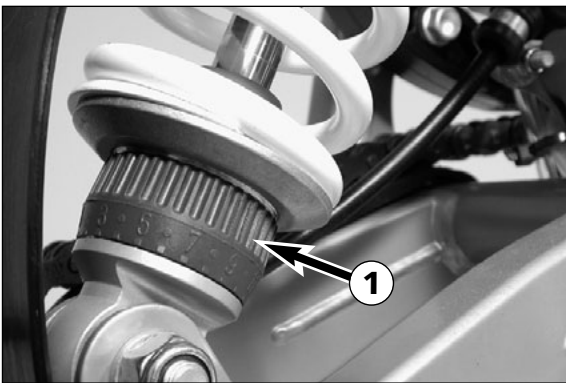
Use your foot to swing the side stand forwards to the stop. Make sure it rests securely on solid ground.



WARNING



- THE SIDE STAND IS ONLY DESIGNED FOR THE WEIGHT OF THE MOTORCYCLE. IF YOU GET ON THE MOTORCYCLE AND THUS PUT ADDITIONAL WEIGHT ON THE SIDE STAND, THE SIDE STAND OR THE FRAME CAN BE DAMAGED AND THE MOTORCYCLE MAY FALL ON THE SIDE.
- ALWAYS CHECK BEFORE GOING FOR A RIDE THAT YOU HAVE FOLDED UP THE SIDE STAND AS FAR AS POSSIBLE. IF THE STAND TOUCHES THE GROUND WHILE YOU ARE DRIVING, YOU MAY LOSE CONTROL OF YOUR MOTORCYCLE.



Rebound damping function of the shock absorber

The damping effect of the rebound damping mechanism can be adjusted by means of the setting wheel ❶. Turn the setting wheel clockwise (in) to increase and counterclockwise (out) to reduce the damping effect.

STANDARD SETTING: 5 CLICKS OPEN



WARNING



- NEVER TURN THE SETTING WHEEL MORE THAN TWO CLICKS BETWEEN TWO TEST RIDES.
- DO NOT TRY TO DISASSEMBLE THE SHOCK ABSORBER OR TO PERFORM MAINTENANCE WORK YOURSELF. DANGER OF INJURY!



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.
A lack of gear oil leads to premature wear and finally results in destruction of the gear wheels.
- 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 COOLING FLUID
Check the level of cooling fluid when the engine is cold.
- 4 CHAIN
A loose chain may fall off the chain wheels; an extremely worn chain may tear, and insufficient lubrication may result in unnecessary wear of chain and chain wheels.
- 5 TIRES
Check for damaged tyres. Tyres showing cuts or dents must be replaced. Also check the air pressure. Insufficient tread and incorrect air pressure deteriorate the driving performance.
- 6 BRAKES
Check for proper functioning, check brake fluid level in the tank. The tank is designed such that it does not need to be refilled, even if the brake shoes are worn. If the brake fluid falls below the minimum level, the brake system is either leaking or the brake shoes are completely worn out. Have the brake system checked at a KTM workshop to avoid brake failure. Also have the condition of the brake hose and the brake-lining thickness checked.
Check the play of the hand brake lever and foot brake lever.
- 7 THROTTLE CABLE
Check the throttle cable for proper adjustment and smooth operation.

⚠ WARNING ⚠

- HAVE YOUR YOUNGSTER WEAR PROPER PROTECTIVE GEAR WHENEVER HE OR SHE RIDES THE MOTORCYCLE: HELMET, EYE PROTECTION, CHEST, BACK, ARM AND LEG PROTECTORS, GLOVES AND BOOTS. TO SET A GOOD EXAMPLE, BE SURE TO WEAR PROTECTIVE GEAR YOURSELF WHENEVER RIDING A MOTORCYCLE!
- ONLY USE ACCESSORY PARTS RECOMMENDED BY KTM.

Instructions for the first ride

- Verify that your KTM dealer performed the PREPARATION OF VEHICLE jobs (see Customer Service Manual).
- Before your youngster takes his or her first ride, explain how each of the controls works and check if your youngster has understood what you explained. We recommend to review the entire owner's manual with your youngster item by item, paying particular attention to the specially marked warnings and pointing out the danger of injury.
- Adjust the basic position of the hand brake lever to fit the size of your child's hand. Your child should of course wear gloves. Adjust the foot brake lever to your child's seating position.
- To prevent injury, teach your youngster the basic riding skills on soft ground, e.g. on a meadow or in the garden. Be sure that there is room enough to maneuver, and that no other riders are close.

- To ensure that your youngster gets the feel of the brakes, have your youngster operate the brakes while you push the motorcycle. Do not start the engine before your youngster has learned to apply both brakes with appropriate pressure.
- Now your youngster must get the feel of the throttle. Start the engine, hold the motorcycle and have your youngster slowly open the throttle. Then, your youngster can take his/her first ride. Initially, your youngster should ride back and forth between two persons who help the young rider to stop the motorcycle. However, you should also teach your youngster how to stop the motorcycle himself/herself.
- To improve his/her riding skills, your youngster should practise to ride the motorcycle standing on the footpegs or to ride at the slowest possible speed. Additionally, you can arrange a series of obstacles and have your youngster drive around them, etc.
- Tell your youngster to look 3-10 m ahead, depending on the speed, to recognize and avoid obstacles. When riding through curves, the rider should also look far ahead into the curve.

⚠ WARNING ⚠

- KTM MINI MODELS ARE DESIGNED FOR ONE PERSON ONLY. PASSENGERS ARE NOT ALLOWED.
- THESE MODELS DO NOT COMPLY WITH THE REGULATIONS AND SAFETY STANDARDS ESTABLISHED BY THE LAW. THEREFORE, THEY ARE NOT PERMITTED ON PUBLIC ROADS.
- ALWAYS KEEP IN MIND THAT OTHER PEOPLE FEEL MOLESTED BY EXCESSIVE NOISE.

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. Do not load the engine to the power limit during the first half hour for this reason.
- Apply low but changing loads for running-in.
- NO FULL-LOAD OPERATION DURING THE FIRST HALF HOUR!

Starting when the engine is cold

- 1 Open fuel tap
- 2 Operate the choke
- 3 Swing the side stand all the way up.
- 4 Applying the front brake.
- 5 Operate the kickstarter, depressing it all the way, without opening the throttle.

⚠ WARNING ⚠

- TO AVOID INJURY WHEN STARTING THE ENGINE, ALWAYS WEAR BOOTS!
- ALWAYS APPLY THE FRONT BRAKE WHEN STARTING THE ENGINE AND RELEASE THE BRAKE SLOWLY WHEN THE ENGINE IS RUNNING. AN ACTIVATED CHOKE INCREASES THE IDLE SPEED OF THE ENGINE, THE CENTRIFUGAL CLUTCH THUS BEGINNING TO ENGAGE. THEREFORE, THE MOTORCYCLE CAN BEGIN TO MOVE WHEN THE BRAKE LEVERS ARE RELEASED.
- THE MOTORCYCLE HAS A CENTRIFUGAL CLUTCH. THE MOTORCYCLE BEGINS TO MOVE AS SOON AS THE THROTTLE IS OPENED.
- 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.



Starting when the engine is warm

- 1 Open fuel tap
- 2 Swing the side stand all the way up.
- 3 Applying the front brake.
- 4 Operate the kickstarter, depressing it all the way, without opening the throttle.

What to do when the engine is „flooded“

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

Starting off

Slowly release the brake lever while simultaneously opening the throttle.

⚠ WARNING ⚠

ALWAYS MAKE SURE THE SIDE STAND IS KICKED ALL THE WAY UP BEFORE YOU LET YOUR CHILD DRIVE OFF. IF THE STAND DRAGS ON THE FLOOR, YOU MAY LOSE CONTROL OF YOUR MOTORCYCLE.

Driving

The engine speed, and thus the driving speed, are regulated by the throttle grip.

The choke must always be deactivated as soon as the engine has warmed up.

⚠ WARNING ⚠

- YOUR CHILD SHOULD NEVER DRIVE FASTER THAN ITS SKILLS AND THE TERRAIN PERMIT.
- NEVER LET YOUR CHILD DRIVE ITS MOTORCYCLE UNCHAPERONED.
- WHEN THE ENGINE SPEED DROPS TO THE LEVEL AT WHICH THE CENTRIFUGAL CLUTCH DISENGAGES, BRAKING WITH THE ENGINE IS NO LONGER POSSIBLE AND THE MOTORCYCLE CAN ONLY BE SLOWED DOWN USING THE BRAKES.
- REPLACE THE HELMET VISOR OR GOGGLE GLASSES EARLY ENOUGH. WHEN LIGHT SHINES DIRECTLY ON A SCRATCHED VISOR OR GOGGLES, YOU WILL BE PRACTICALLY BLIND.
- AFTER FALLING WITH THE MOTORCYCLE, CHECK ALL ITS FUNCTIONS THOROUGHLY BEFORE USING IT AGAIN.
- A BENT HANDLEBAR MUST ALWAYS BE REPLACED. NEVER TRY TO STRAIGHTEN THE HANDLEBAR BECAUSE THIS WILL CAUSE IT TO LOSE ITS STABILITY.

! CAUTION !

- DRIVING A COLD ENGINE AT HIGH SPEED WILL REDUCE THE LIFE OF THE ENGINE. WE RECOMMEND TO WARM THE ENGINE UP AT A MEDIUM ENGINE SPEED FOR SEVERAL MINUTES BEFORE SWITCHING TO FULL LOAD.
- NEVER TILT THE MOTORCYCLE OVER THE SIDE STAND TO WARM UP THE ENGINE. THE SIDE STAND COULD FOLD AWAY AND THE MOTORCYCLE RUN OUT OF CONTROL.
- IN THE EVENT THAT, WHILE YOUR CHILD IS RIDING ON THE MOTORCYCLE, YOU NOTICE ANY UNUSUAL OPERATION-RELATED NOISE, YOUR CHILD SHOULD STOP IMMEDIATELY, TURN THE ENGINE OFF, AND CONTACT AN AUTHORIZED KTM DEALER.

Braking

Close the throttle and squeeze both brake levers simultaneously. On sandy, wet or slippery terrain the rear wheel brake should be preferred. The brakes should always be operated carefully as locking wheels can cause skidding or falls.

⚠ WARNING ⚠

- BRAKE DRUM AND LININGS HEAT UP DURING BRAKE OPERATION, THUS REDUCING THE EFFECT OF THE BRAKES.
- WET BRAKES HAVE REDUCED BRAKE PERFORMANCE, THEREFORE BE SHURE TO BRAKE THEM DRY AFTER CLEANING.

Stopping

Reduce the speed. Immediately before the motorcycle comes to a stop, put the left foot down. To turn off the engine, press the short circuit button until the engine stops. Close the fuel tap.

⚠ WARNING ⚠

- NEVER LEAVE YOUR MOTORCYCLE WITHOUT SUPERVISION AS LONG AS THE ENGINE IS RUNNING.
- MOTORCYCLES PRODUCE GREAT HEAT DURING OPERATION. THEREFORE, KEEP IN MIND THAT THE ENGINE, THE EXHAUST SYSTEM AND THE BRAKES CAN HEAT UP CONSIDERABLY. MAKE SURE THAT THESE PARTS ARE NOT TOUCHED AND ALWAYS TAKE CARE, WHEN PARKING THE MOTORCYCLE, THAT OTHER PERSONS WILL NOT BURN THEMSELVES.

! CAUTION !

- CLOSE THE FUEL TAP WHEN LEAVING THE MOTORCYCLE. OTHERWISE THE CARBURETOR MAY GET FLOODED AND FUEL WILL ENTER THE ENGINE.
- THE SIDE STAND IS DESIGNED TO HOLD THE WEIGHT OF THE MOTORCYCLE ONLY. BY SITTING ON THE MOTORCYCLE, YOUR CHILD WILL PUT ADDITIONAL WEIGHT ON THE SIDE STAND, POSSIBLY CAUSING THE SIDE STAND OR FRAME TO BE DAMAGED OR THE MOTORCYCLE TO FALL DOWN.



PERIODIC MAINTENANCE SCHEDULE 2002

50 SX PRO JUNIOR/SENIOR LC
water cooled

A washed motorcycle can be checked more quickly which saves money!

Service every 5 hours

Service every 20 hours

		Service every 5 hours	Service every 20 hours
ENGINE	Check engine for leaks	●	
	Change transmission oil	●	
	Check spark plug, change it if necessary, set electrode gap		●
CARBURETOR	Check carburetor for tight fit at intake flange		●
	Check intake flange for cracks		●
	Check idle setting when engine is warm		●
ADD-ON-PARTS	Check cooling system for leaks, check quantity of anti freeze		●
	Check exhaust system for leaks and suspension		●
	Check actuating cables for damage, smooth operation, and kink-less arrangement, adjust and lubricate	●	
	Clean air filter and air filter box	●	
BRAKES	Check brake fluid level, lining thickness, brake discs		●
	Check the brake line and the brake control cable for damage		●
	Check/adjust smooth operation, free travel of handbrake/footbrake levers	●	
	Check screws of brake system for tight fit	●	
CHASSIS	Check suspension strut and fork for leaks and proper function		●
	Check swinging-fork pivot		●
	Check/adjust steering-head bearing		●
	Check all chassis screws for tight fit (fork plates, axle nuts, swinging-fork pivot, suspension strut)		●
WHEELS	Check spoke tension and rim joint	●	
	Check tire condition and inflation pressure		●
	Check chain, chain wheels, chain wheel guides for wear, tight fit, and tension	●	
	Lubricate chain	●	
	Check wheel bearings for play	●	

IMPORTANT RECOMMENDED MAINTENANCE PROCEDURES TO BE PERFORMED BASED ON A SEPARATE SUPPLEMENTARY ORDER

	once a year
Drain and clean the carburetor's float chamber	●
Perform complete fork maintenance	●
Clean and lubricate the swinging-arm bearing	●
Clean and lubricate the steering-head bearing and sealing elements	●
Change brake fluid	●

MAINTENANCE WORK DONE BY KTM AUTHORISED WORKSHOPS IS NOT A SUBSTITUTE OF CARE AND CHECKS DONE BY THE RIDER!

VITAL CHECKS AND CARE PROCEDURES TO BE CONDUCTED BY THE OWNER OR THE MECHANIC

	before each start	after every cleaning	for cross country use	once a year
Check transmission oil level	●			
Check cooling liquid level	●			
Check brake fluid level	●			
Check brake pads for wear	●			
Check brake performance	●	●		
Lubricate and adjust actuating cables and nipples		●		
Remove and clean dust sleeves of telescopic fork in regular intervals			●	
Clean and lubricate chain, check tension and readjust it if necessary		●	●	
Clean air filter and filter box			●	
Check tire inflation pressure and wear	●			
Check fuel line for leaks	●			
Drain and clean float chamber		●		
Verify smooth operation of all controls	●			
Treat exposed metal components (except for the brake and exhaust systems) with wax-based anti-corrosion agents		●		
Check all screws, nuts, and hose clamps for their tight fit in regular intervals				●

MAINTENANCE WORK ON CHASSIS AND ENGINE



WARNING



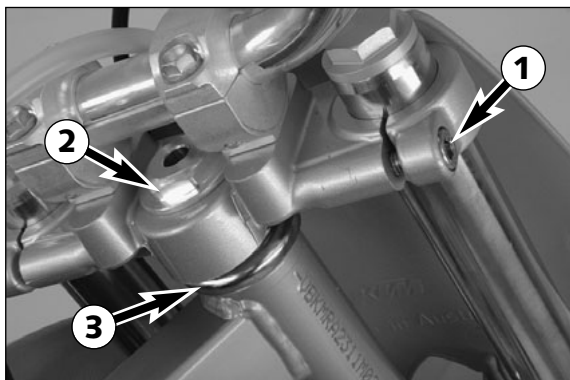
MAINTENANCE WORK AND ADJUSTMENTS MARKED WITH AN ASTERISK (*) MUST BE PERFORMED BY AN EXPERT. TO PROTECT YOUR YOUNGSTER, ALWAYS HAVE SUCH WORK PERFORMED BY A SPECIALIZED KTM DEALER WHERE YOUR MOTORCYCLE WILL BE OPTIMALLY SERVICED BY APPROPRIATELY QUALIFIED SKILLED STAFF.



CAUTION



- WHEN CLEANING THE MOTORCYCLE, DO NOT USE A HIGH PRESSURE CLEANING UNIT IF POSSIBLE, OTHERWISE WATER WILL PENETRATE THE BEARINGS, CARBURETOR, ELECTRIC CONNECTORS, DRUM BRAKES, ETC.
- BEFORE CLEANING WITH WATER, PLUG THE EXHAUST PIPE TO PREVENT WATER INGRESS
- WHEN TRANSPORTING YOUR MOTORCYCLE, SECURE IT WITH ELASTIC STRAPS OR OTHER MECHANICAL DEVICES IN AN UPRIGHT POSITION. BE SURE THAT THE FUEL TAP IS CLOSED. IF THE MOTORCYCLE TOPPLES OVER, FUEL CAN FLOW OUT OF THE CARBURETOR OR FUEL TANK.
- 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.
- REMOVE OILS, FATTY MATTERS, FILTERS, FUELS, WASHING DETERGENTS ETC. ORDERLY.
- UNDER NO CIRCUMSTANCES MAY USED OIL BE DISPOSED OF IN THE SEWAGE SYSTEM OR IN THE OPEN COUNTRYSIDE. 1 LITER USED OIL CONTAMINATES 1.000.000 LITERS WATER.



Checking and adjusting the steering head bearing *

The steering head bearing should regularly be checked for play. For this purpose, jack up the motorcycle by the frame so that the front wheel is in the air. Now try to move the fork forward and backward. There should be no clearance. For readjustment, release the two clamp screws ① of the top triple clamp and the counter nut ②. Turn the adjusting nut ③ until almost no play is left. Do not tighten the adjusting nut! Tightening the adjusting nut can damage the bearings! Keep in mind that tightening the counter nut ② reduces the play of the bearing. Slightly tap the top triple clamp with a rubber hammer to prevent jamming. Then tighten the 2 clamp screws with 15 Nm (11 ft.lb).



WARNING



IF THE STEERING HEAD BEARING IS NOT ADJUSTED TO BE FREE OF CLEARANCE, THE MOTORCYCLE WILL EXHIBIT UNSTEADY DRIVING CHARACTERISTICS AND CAN GET OUT OF CONTROL.

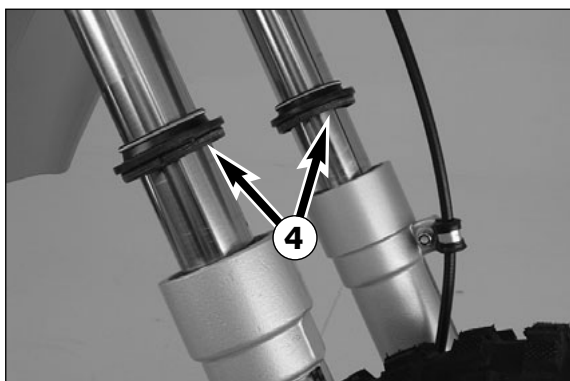
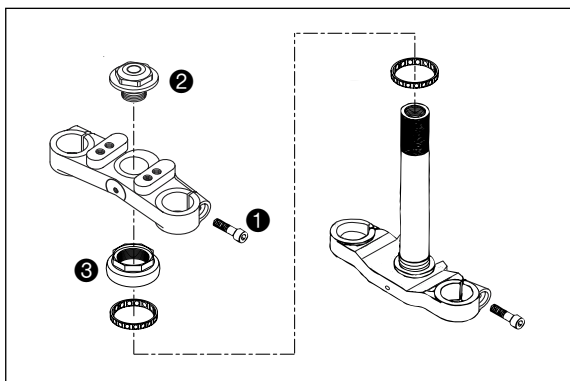


CAUTION



- THE HANDLEBAR MUST MOVE EASILY. OTHERWISE THE BEARINGS WILL BE DAMAGED.
- 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.

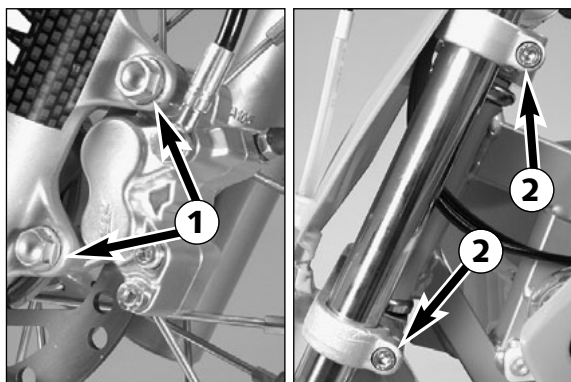
At least once a year, the steering head bearings should be smeared with waterproof grease (Shell Advance Grease).



Cleaning the dust scrabbers of the telescopic fork

The dust-protection bellows ④ 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.

For this purpose, use a screwdriver to lever the dust scrabbers out of the slider tubes, clean them thoroughly with compressed air, spray the fork tubes and dust scrabbers with silicon oil and press the scrabbers back into the slider tubes.



Telescopic fork maintenance *

The telescopic fork must be serviced at least once a year.

To service the fork, proceed as follows:

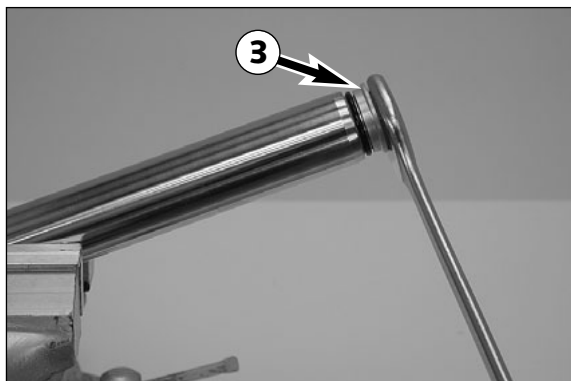
Prop up the motorcycle under the frame to take the load off the front wheel.

Disassemble the front wheel, remove screw **1** from the brake caliper and unscrew holding clamp. Measure the projection of the fork legs at the upper fork stabilizer and make a note of the measurement.

Loosen the clamping screws **2** on the fork stabilizers and pull the fork legs down out of the fork stabilizers.

! 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.



Clamp the fork leg into a vise (use protective jaws) and remove the plugs **3**. Take the preload spacer and the spring out of the fork tube.

Remove screws **4** at the underside of the slider tubes and pull the fork tubes out of the slider tubes.

Remove the dust scrabbers **5**.



Thoroughly clean all parts and check for wear.

Generously lubricate seals and springs and reassemble the telescopic fork.

Tighten the screws on the bottom of the sliding tubes to 30 Nm (22 ft.lb).

Fill in fork oil and assemble the fork (see below). Degrease the screws on the brake caliper and apply Loctite 243. Mount the brake caliper and tighten to 25 Nm (19 ft.lb). Mount brake line and holding clamp.

Insert fork legs in the fork stabilizers (projection as previously noted) and tighten clamping screws to 15 Nm (11 ft.lb).

Mount front wheel (see chapter: mounting the front wheel).



Changing the telescopic fork oil *

Remove front wheel and fork legs (see above).

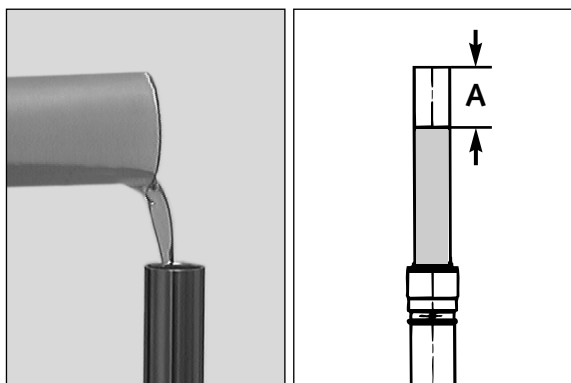
Remove plugs, preload spacers and springs.

Drain the fork oil into an appropriate container.

Clean the dust scrabbers.

! 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 WORKING ON THE BRAKE SYSTEM, ALWAYS OPERATE THE HAND BRAKE LEVER TO APPLY THE BRAKE SHOES TO THE BRAKE DISK AND HAVE A POINT OF PRESSURE.



Pour 170 cm³ SAE 7.5 fork oil into each fork tube.

Slide the fork tube all the way into the slider tube.

Adjust the air-chamber length **A** to 110 mm (4.5 in) by extracting or adding fork oil.

Insert springs and pretensioning sleeves into the fork tube.

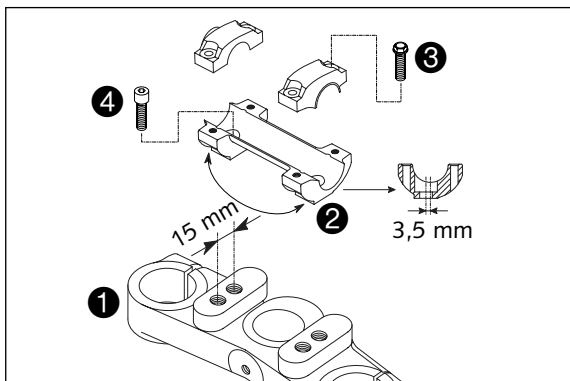
Check O-rings, grease and mount plugs.

Mount the fork legs, front wheel and brake caliper (see above).

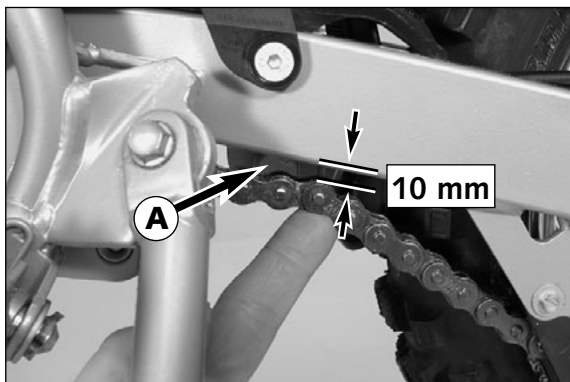


How to change the handlebar position

The handlebar position can be readjusted by 22 mm (0.9 in). The upper triple clamp ① includes 2 bores arranged at a distance of 15 mm (0,6 in) from one another. The bores at the handlebar support ② are offset from the center by 3.5 mm (0,13 in). Accordingly, you can mount the handlebar in 4 different positions.



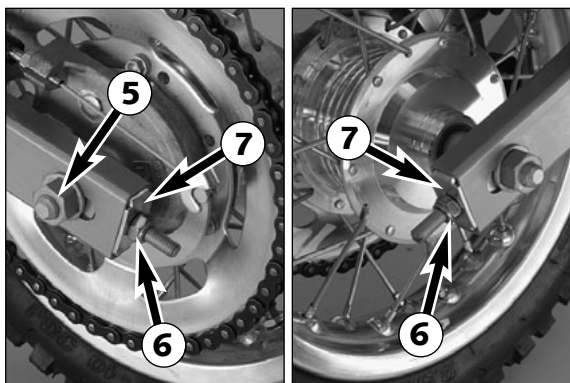
For this purpose, remove screws ③ of the handlebar clamps and screws ④ of the handlebar support. Position handlebar support, and tighten screws ④ to 40 Nm (30 ft.lb). Mount handlebar and handlebar clamps, and tighten screws ③ to 20 Nm (15 ft.lb). The gap between handlebar support and handlebar clamps is to be of equal size in the front and in the rear.



Check chain tension

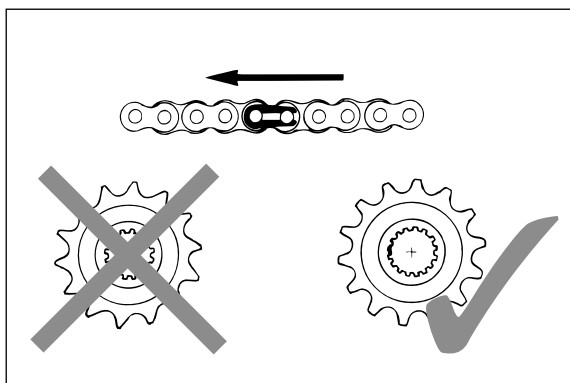
Put the motorcycle on the sidestand. Chain tension has to be checked close to the lower rear shock mounting ①. When pushing the chain upwards, the distance to the swingarm has to be 10 mm (0.4 in). If necessary, correct chain tension.

- ⚠ WARNING ⚠**
- IF CHAIN TENSION IS TOO GREAT, PARTS WITHIN THE SECONDARY TRANSMISSION (CHAIN, CHAIN WHEELS, GEAR BOX 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

Release the hexagon nut of the wheel spindle ⑤ and turn the left and the right hexagon nut ⑥ equally far. Before tightening the hexagon nut of the wheel spindle with 30 Nm (22 ft.lb), ensure that the supporting plates ⑦ are resting against the swing arm. Additionally, check that the rear wheel is aligned with the front wheel.

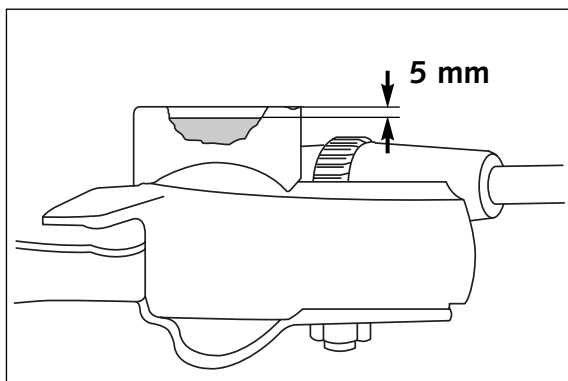
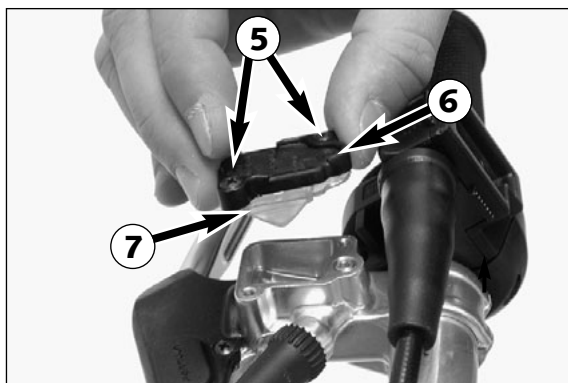
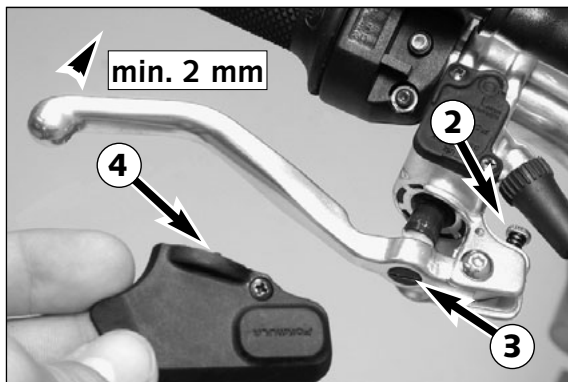
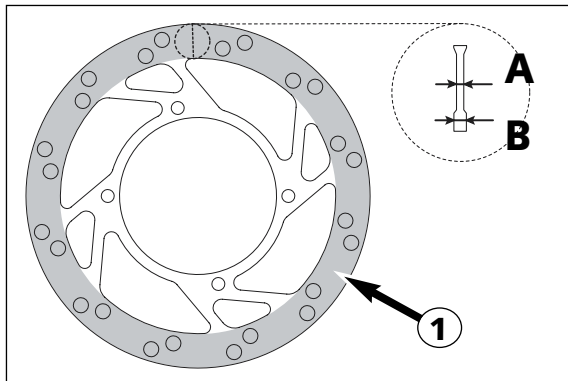
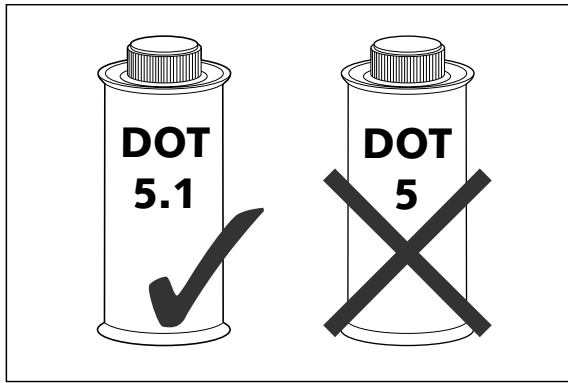


Chain maintenance

For long chain life, good maintenance is very important. Chains without O-rings should be cleaned in fireproof solvent regularly and afterwards treated with hot grease or chain spray (Shell Advance Bio Chain).

- ⚠ WARNING ⚠**
- KEEP THE REAR WHEEL FREE OF GREASE! GREASE ON THE REAR WHEEL WILL SIGNIFICANTLY REDUCE THE GRIP OF THE REAR TIRE AND THE MOTORCYCLE COULD EASILY GET OUT OF CONTROL.

- ! CAUTION !**
- WHEN MOUNTING THE CHAIN MASTERLINK CLIP, THE CLOSED SIDE OF THE MASTERLINK CLIP MUST POINT IN RUNNING DIRECTION.
- Also check sprockets and chain guides for wear, and replace if necessary.



General information about KTM disc brakes

BRAKE FLUID RESERVOIRS:

The brake fluid reservoir for the front brake is designed such that it does not need to be refilled, even if the brake shoes are worn. 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 system with "Shell Advance Brake DOT 5.1", one of the best brake fluids 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. DOT 4 shown on the lid means minimum standard. However, you should replace it as soon as possible by DOT 5.1.

BRAKE DISC:

Due to wear, the thickness of the brake disc in the area of the contact face ① of the brake pads decreases. At their thinnest point A, 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 B outside the contact face. Check wear in several locations.

⚠ WARNING ⚠

- A BRAKE DISK WORN DOWN 0.40 MM (0,016 IN) OR MORE IS A SAFETY RISK. HAVE THE BRAKE DISK REPLACED AS SOON AS IT REACHES THE SERVICE LIMIT.
- HAVE ANY REPAIRS ON THE BRAKE SYSTEM BE PERFORMED BY A KTM DEALER.

Setting the basic position and play of the hand brake lever *

You can adjust the basic position of the hand brake lever to fit your child's hand by turning stop screw ②. Afterwards, be sure to adjust the play of the hand brake lever to 2 mm (0,08 in) with the adjusting screw ③. To adjust, remove covering cap ④. Replace the covering cap after making the adjustment.

! CAUTION !

AT THE HAND BRAKE LEVER, FREE TRAVEL MUST AT LEAST BE 2 MM (0,08 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/refilling the front brake fluid level *

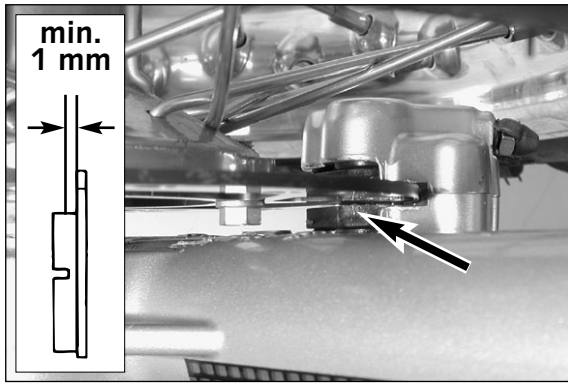
Put the hand brake cylinder in a horizontal position, remove screws ⑤ and cover ⑥ with diaphragm ⑦. If necessary, refill DOT 5.1 (e.g. Shell Advance Brake 5.1) brake fluid up to 5 mm (0,2 in) under the upper edge of the tank. Remount the diaphragm, cover and screws. Wash off any overflowing or spilled brake fluid with water.

⚠ WARNING ⚠

- NEVER USE DOT 5 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 front brake pads

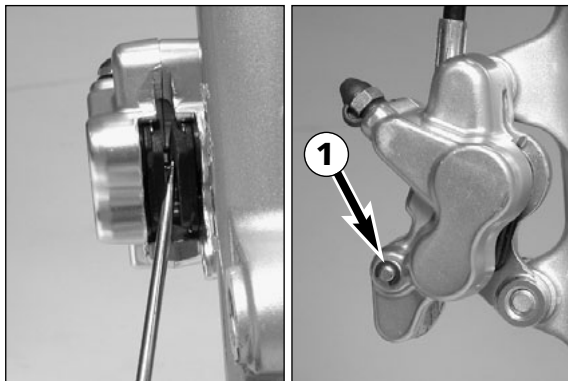
Inspect the brake pads from in front of the vehicle. The linings must be at least 1 mm (0.04 in) thick.

⚠ **WARNING** ⚠

AT THEIR MOST WORN POINT BRAKE PAD LININGS SHOULD NOT BE THINNER THAN 1 MM (0,04 IN), 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 IMPAIRING THE BRAKING EFFECT AND DESTROYING THE BRAKE DISC.

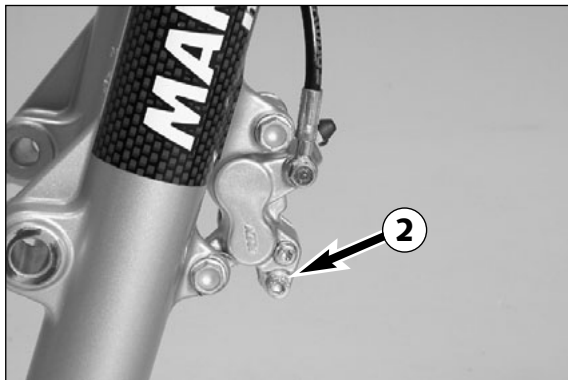


Replacing the front brake pads*

Remove the front wheel (see front wheel chapter).

Press brake shoes apart with a suitable screwdriver to put the brake pistons in their basic position.

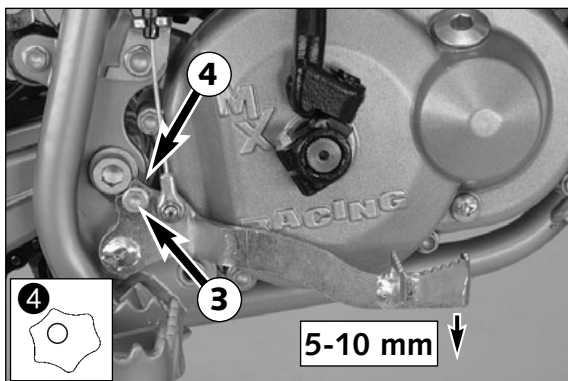
Remove the lock washer ① from the screw as well as fixing screw ② and take the brake shoes out of the brake caliper. Clean brake caliper thoroughly with compressed air.



Mount the right brake shoe and fix with screw. Mount the left brake shoe and tighten the screw to 6 Nm (4,5 ft.lb). Mount the lock washer. Align brake shoes, mount front wheel (see chapter: Mounting the front wheel).

⚠ **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.
- DO NOT UNSCREW ANY OTHER SCREWS ON THE BRAKE CALIPER OR YOU WILL HAVE TO BLEED THE BRAKE SYSTEM.



Changing the basic position of the foot brake lever

The basic position of the foot brake lever can be changed by unscrewing screw ③ and then turning retainer ④.

Afterwards, check the setting of the rear wheel brake.

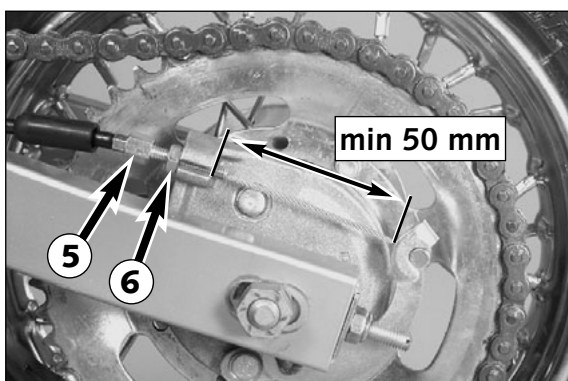
Adjusting the control cable on the rear wheel

You should be able to press the foot brake lever 5 to 10 mm (0,2-0,4 in) before the rear wheel begins to brake.

The brake control cable is adjusted with adjusting screw ⑤ on the brake anchor cover. First loosen lock nut ⑥ and then tighten again.

! **CAUTION** !

AFTER MAKING ADJUSTMENTS, ALWAYS MAKE SURE THE WHEEL TURNS FREELY.

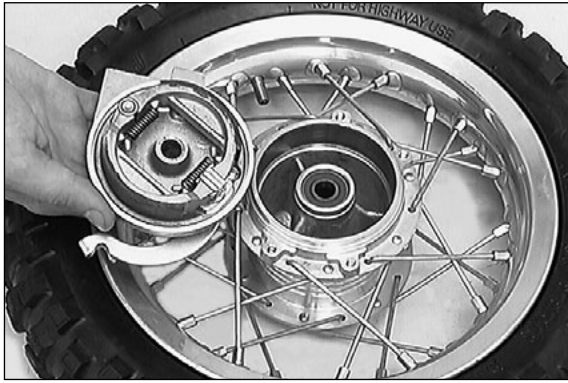


Checking the rear brake linings for wear

The brake linings must be replaced when the distance between the hub brake lever and the cable support, measured with the brake lever squeezed, is less than 50 mm (2 in) (see illustration).

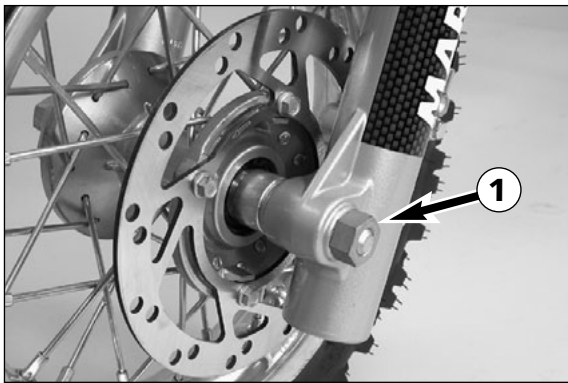
! **CAUTION** !

IF THE BRAKE LININGS ARE REPLACED TOO LATE, I.E. WHEN THE LINING IS PARTLY OR FULLY WORN AWAY, THE METAL SHOES WILL RUB AGAINST THE BRAKE DRUM, THUS REDUCING THE BRAKING EFFECT AND DESTROYING THE BRAKE DRUM.



Drum brake maintenance

Drum brake maintenance is limited to occasional blowing out of brake drum and brake shoes. Brake drum and brake linings can be slightly roughened with an abrasive tape.



Removing and mounting the front wheel

Jack the motorcycle up by the frame so that the front wheel is suspended above the ground.

Undo the hexagon nut ① and remove it together with the washer.

Hold the front wheel and pull out the wheel spindle ②.

Carefully take the front wheel out of 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.

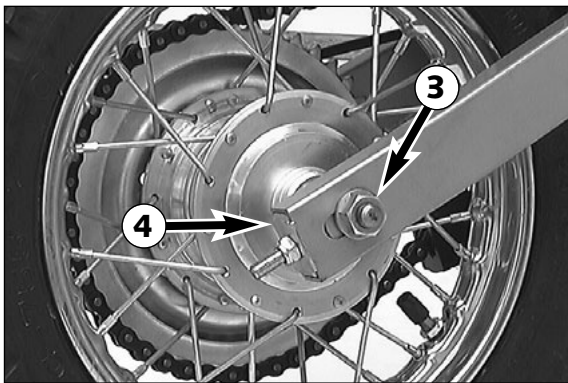
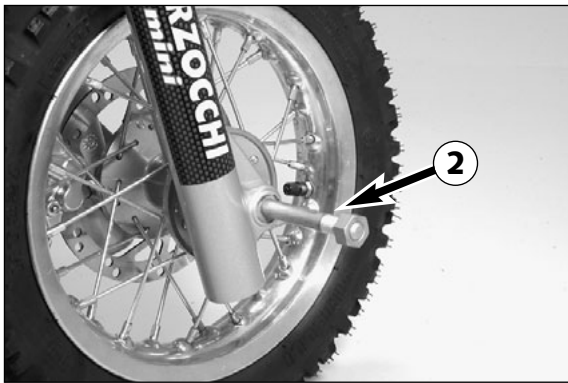
Lift the front wheel into the fork and correctly position it.

Mount the wheel spindle ②.

Mount the washer and the hexagon nut ① and tighten (30 Nm/22 ft.lb).

Put the motorcycle back on the ground and operate the front wheel brake until the working point is reached.

-
- ! 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, EITHERWISE THE BRAKING EFFECTS WOULD BE STRONGLY REDUCED.



Removing and mounting the rear wheel

Prop up the motorcycle under the frame.

Remove hexagon nut ③ on the wheel spindle and disk.

Hold the rear wheel and remove the wheel spindle.

Move the rear wheel forwards, remove chain, lift the rear wheel out of the swinging fork and remove the brake anchor.

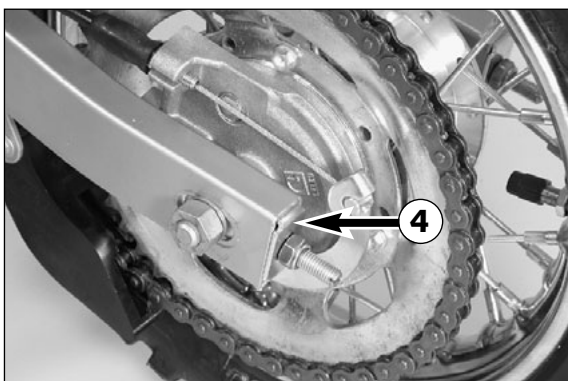
To mount the wheel reverse the procedure described above.

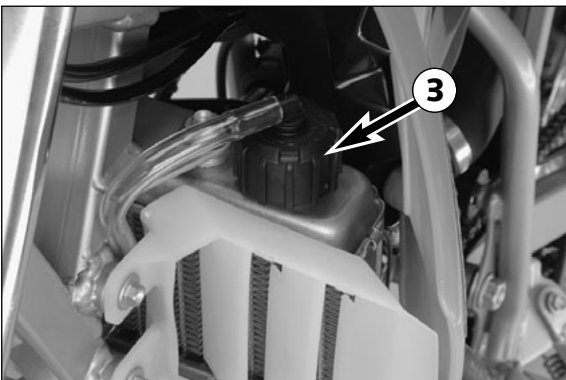
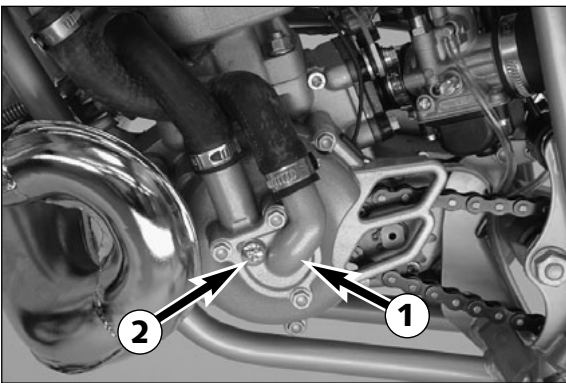
Always hook the brake backing plate into the swing arm support.

Before tightening the hexagon nut of the wheel spindle, ensure that the supporting plates ④ are resting against the swing arm. Additionally, check that the rear wheel is aligned with the front wheel.

Tighten the hexagon nut with 30 Nm (22 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.





Tires, air pressure

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

- Tire size can be found in the technical specifications.
- 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.
- Regularly check the "cold" tire pressure. Correct tire pressure (1.0 bar / 14 psi) guarantees optimum grip and maximum tire life.



WARNING



- DAMAGED TIRES MUST BE REPLACED IMMEDIATELY TO PROTECT YOUR YOUNGSTER.
- WORN TIRES CAN HAVE A NEGATIVE EFFECT ON HOW THE MOTORCYCLE PERFORMS, ESPECIALLY ON WET SURFACES
- TIRE PRESSURE BELOW THE NORMAL LEVEL WILL LEAD TO PREMATURE TIRE WEAR.

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, in regular intervals. 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.

Cooling system

The water pump ❶ in the engine keeps the cooling liquid in circulation. The cooling liquid is cooled by the air stream. Therefore, the cooling effect is reduced when the traveling speed is reduced. Dirty radiators additionally reduce the cooling effect.

The cooling liquid can be drained by removing screw ❷ on the water-pump cover.



WARNING



DO NOT REMOVE ANY COOLER HOSES OR THE DRAIN SCREW WHEN THE ENGINE IS HOT.

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

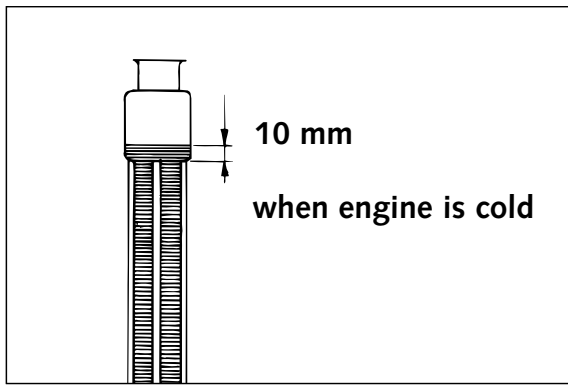


CAUTION



FOR THE COOLING SYSTEM, USE ONLY WITH HIGH-GRADE ANTIFREEZE (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 ❸; a water temperature rising up to 120° C (248° F) is admissible, without fear of problems.



Checking coolant level

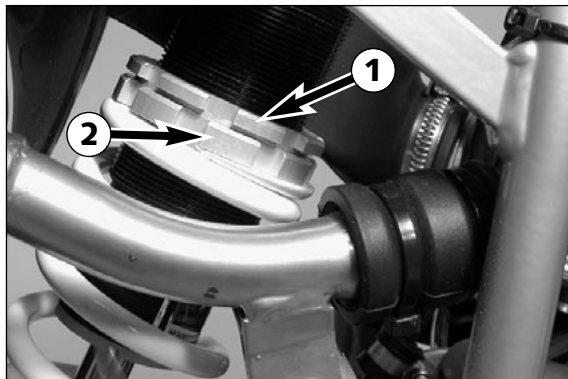
The coolant should be 10 mm (0.4 in) above the radiator fins when the engine is cold (see illustr.). In the event of the coolant being drained, always fill and bleed the system.



WARNING



IF POSSIBLE, ALWAYS CHECK LEVEL OF COOLING LIQUID WHEN 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.



Changing spring preloading of the shock absorber

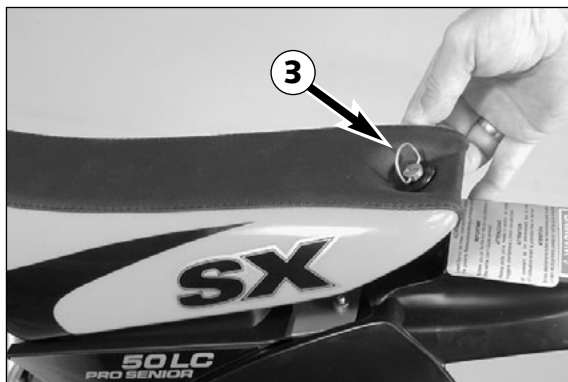
This is easily done.

NOTE: Before changing the spring preload note down the basic setting, e.g. how many threads are visible above the adjusting ring.

Remove the right side cover.

Loosen the locking ring ① with the hook spanner. Change the spring preload with the adjusting ring ② and re-tighten the locking ring ①.

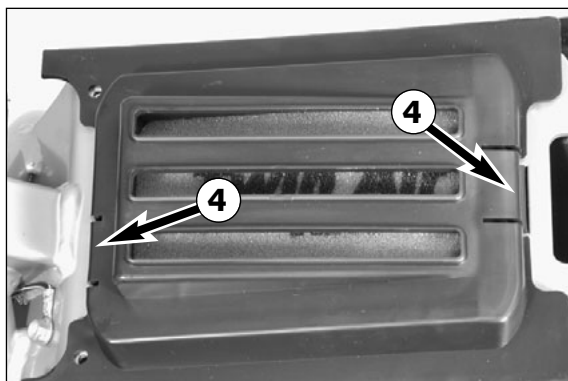
BASIC SETTING – SPRING PRELOAD
7 mm (0.3 in)



Removing the seat

The quick-release mechanism ③ allows removal of the seat without tools. Turn the quick-release device approximately 180° anticlockwise, lift the rear portion of the seat and pull the seat off backwards.

When mounting the seat ensure that the hook engages at the tank.



Cleaning the air filter *

The air filter must be cleaned at intervals depending on the amount of dust accumulated. To clean the air filter, first remove the seat. Then press both retaining clips ④, remove the filter holder and the air filter ⑤. The air filter consists of a foam rubber insert soaked with filter oil.



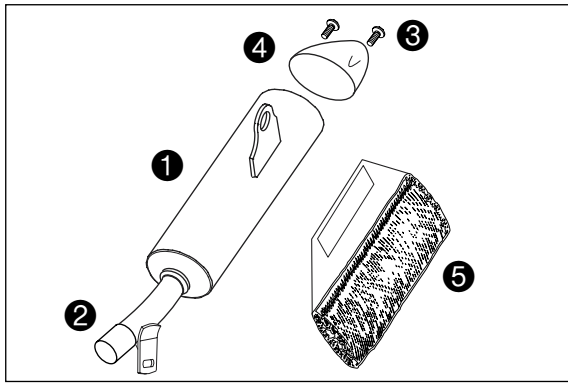
CAUTION



- DO NOT CLEAN FOAM FILTER WITH FUEL OR PETROLEUM SINCE THESE WILL DAMAGE THE FOAM. KTM RECOMMENDS THE PRODUCTS MADE BY TWIN AIR FOR AIR FILTER MAINTENANCE.
- NEVER OPERATE YOUR MOTORCYCLE WITHOUT AIR FILTER. OTHERWISE, DUST AND DIRT MAY GET INTO THE ENGINE AND LEAD TO INCREASED WEAR.
- THE HOLDER MUST RETAIN THE AIR FILTER THROUGHOUT ITS ENTIRE CIRCUMFERENCE. IF THE FILTER HAS BEEN MOUNTED INCORRECTLY, THE ENGINE WILL TAKE IN UNFILTERED AIR, THEREBY CAUSING INCREASED ENGINE WEAR.



Thoroughly wash the foam 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 foam filter with a high-grade filter oil. Also clean the air filter box. Check carburetor collar for damage and that it is filled correctly. Insert the air filter in the opening and fasten it with the filter holder. Then mount the seat.



Exhaust system

The silencer is filled with glass-fiber yarn for damping. When in use, the glass-fiber yarn becomes loose or coked with oil carbon. This can lead to a power loss and a reduction of the silencer damping. The glass-fiber yarn packing can be replaced in a few easy steps.

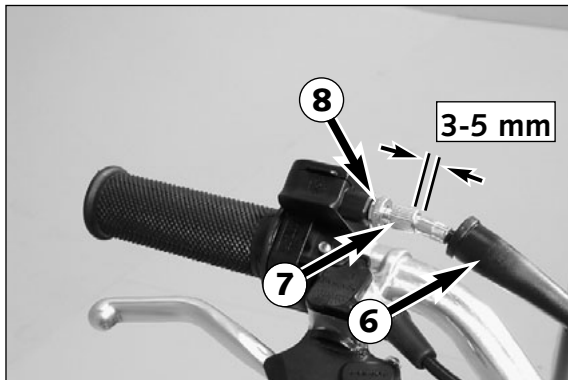
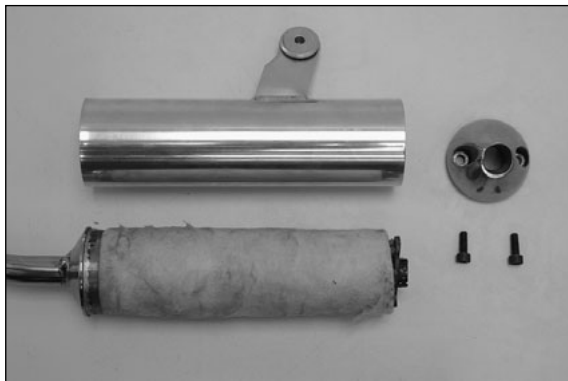
To replace, remove the silencer from the vehicle and mark the position of the outer tube ① to the inner tube ②. Remove screws ③ and the end cap ④. Pull off the outer tube and remove the old glass-fiber yarn packing ⑤ from the inner tube. Thoroughly clean all parts.

To assemble, mount a new glass-fiber yarn packing onto the inner tube (see illustration) and slide into the outer tube. Mount end cap and fix with screws ③. Before tightening the screws, turn the outer tube until they match the positions you marked. Mount the silencer and check the exhaust system for tightness.

NOTE: Glass fiber yarn packages are offered by your licensed KTM dealer.

⚠ WARNING ⚠

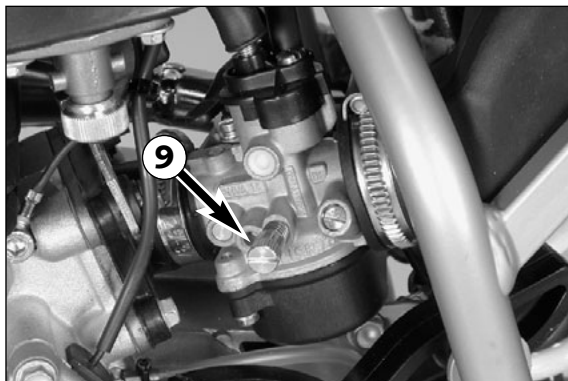
THE EXHAUST SYSTEM BECOMES VERY HOT WHILE THE MOTORCYCLE IS RUNNING. TO AVOID BURNS DO NOT START WORK ON THE EXHAUST SYSTEM UNTIL IT HAS PROPERLY COOLED DOWN.



Adjusting the throttle cable *

There must always be a 3 to 5 mm (0.1 to 0.2 in) play in the throttle cable. To check this, move back the protective cover ⑥ on the throttle grip. You must be able to lift the outer covering of the cable 3-5 mm from the adjusting screw ⑦, until resistance is felt.

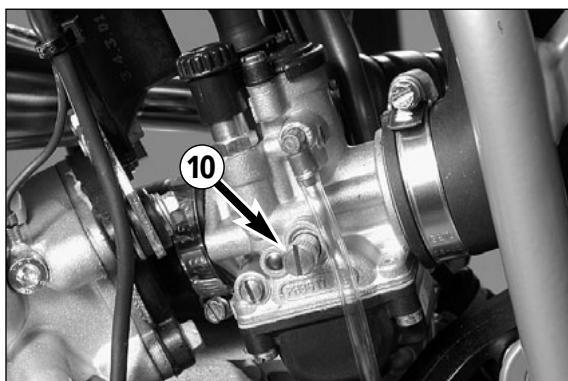
To adjust, loosen the counter nut ⑧ and turn the adjusting screw accordingly. Finally tighten counter nut and slide the protective cover back on.



Adjusting the idle speed (Dell'Orto PHVA 14 DS) *

The idle speed can be adjusted with screw ⑨.

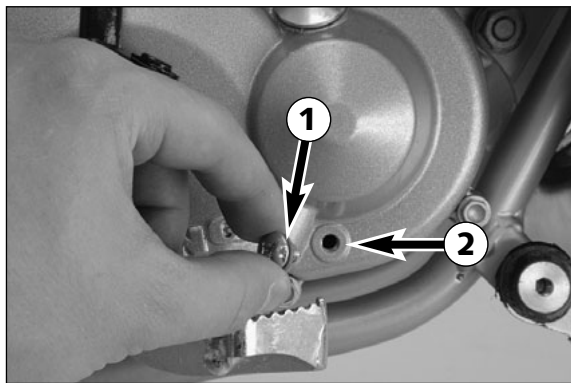
The idle speed is increased by turning clockwise.
The idle speed is reduced by turning counter-clockwise.



Adjusting the idle speed (Dell'Orto PHBG 19 BS) *

The idle speed can be adjusted with screw ⑩.

The idle speed is increased by turning clockwise.
The idle speed is reduced by turning counter-clockwise.

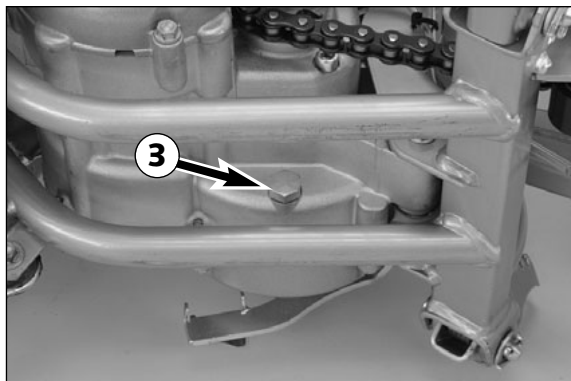


Checking the gear oil level

To check the gear oil level, first remove the plug ❶. With the motorcycle parked in an upright position, a small quantity of oil should flow out of the indicator opening ❷. If oil must be added, tilt the motorcycle and pour automatic gear oil (Shell Donax TA) into the bore.

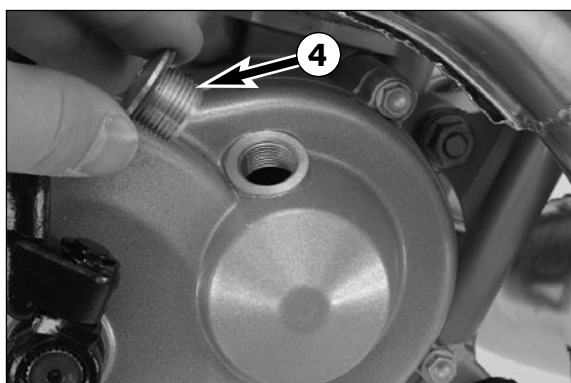
! CAUTION !

LESS OIL OR A POOR OIL QUALITY LEAD TO PREMATURE TRANSMISSION WEAR. THEREFORE, ONLY USE BRANDED PRODUCTS (SHELL Donax TA).



Changing gear oil *

The engine must be warmed up before changing the gear oil. Park the motorcycle on a horizontal surface, remove the oil drain plug ❸ and drain the used oil into an appropriate container. Clean the sealing surface, mount the oil drain plug together with the gasket and tighten with 15 Nm (11 ft.lb).



Remove stopper ❹ and fill in 0.15 liters of automatic gear oil (Shell Donax TA). Mount the stopper and check the engine for tightness.

! CAUTION !

LESS OIL OR A POOR OIL QUALITY LEAD TO PREMATURE TRANSMISSION WEAR. THEREFORE, ONLY USE BRANDED PRODUCTS (SHELL Donax TA).

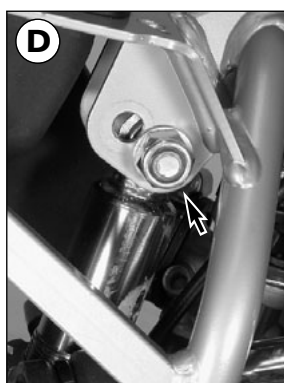


Changing the seat height

The saddle can easily be raised by 25 mm (1 in). This lets you adjust the height as your child grows.

Figures A and B show the fork and shock absorber positions for a low seat position. The fork tubes extend approx. 17 mm (0.7 in) (H) above the upper fork stabilizer. The shock absorber is attached to the upper hole in the frame. Tighten the clamp screws on the fork stabilizers to 15 Nm (10 ft.lb) , the screw on the shock absorber to 45 Nm (33 ft.lb).

Figures A and B: low seat position
Figures C and D: high seat position



Figures C and D show the fork and shock absorber positions for a high seat position. Fork tubes are plane with top of upper fork stabilizer. (Screw cap (Aluminium) protrudes top of upper fork stabilizer)
The shock absorber is attached to the lower hole in the frame. Tighten the clamp screws on the fork stabilizers to 15 Nm (10 ft.lb) , the screw on the shock absorber to 45 Nm (33 ft.lb).

⚠ WARNING ⚠

THE FORK TUBES MAY NOT BE LOWERED ANY FURTHER THAN AS DESCRIBED ABOVE, OTHERWISE THE CLAMPING ON THE UPPER FORK STABILIZER WILL NO LONGER BE ADEQUATE.

CLEANING

Clean your motorcycle regularly in order to keep its painted finish looking shiny and new.

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

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CAUTION

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

- You should use commercially available detergents to clean the motorcycle. Heavily soiled parts should also be cleaned with the help of a paint brush.
- Before cleaning with water, plug the exhaust pipe to prevent water ingress
- 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 its operating temperature, and also operate the brakes. The heat also causes the water at the inaccessible parts of the engine and the brakes to evaporate.
- 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. Also treat the chain with a chain spray.
- To prevent failures in the electric system, you should treat the short circuit button with a contact spray.

STORAGE

If you want to put your motorcycle away for longer periods of time, please observe the following instructions:

- Clean motorcycle thoroughly (see chapter: CLEANING)
- Change engine oil (old engine oil contains aggressive contaminations).
- Check antifreeze and amount of cooling liquid.
- Let the engine warm up again, close fuel tap 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 kickstarter 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 basin.
- Correct tire pressure.
- Lubricate bearing points of the control levers, foot rests, etc. as well as the chain.
- The storage place should be dry and not be subject to overly great temperature fluctuations.
- Cover the motorcycle with an air permeable tarpaulin or blanket. Do not use non-air-permeable materials, as possible humidity might not be able to escape and thereby cause corrosion.

⚠

WARNING

⚠

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 EXHAUST TO RUST.

USE AFTER PERIOD OF STORAGE

- Fill up tank with fresh fuel.
- Check 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 have to 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 mechanic at the beginning of the next biking season.

TECHNICAL DATA – ENGINE 50 LC 2002

Engine	50 SX PRO JUNIOR LC	50 SX PRO SENIOR LC
Design	single cylinder 2-stroke engine, with reed valve inlet	
Displacement	49.0 ccm	
Bore/Stroke	39.5 / 40 mm	
Fuel	SUPER fuel, research octane no 95, mixed with 2-stroke oil	
Oil/gasoline ratio	1 : 40 when using high grade 2-stroke oil (Shell Advance Racing X) When in doubt, please contact your importer or use 1 : 33 mix ratio to be on the safe side	
Lubrication	mixture lubrication	
Crankshaft bearing	2 grooved ball bearing	
Connecting rod bearing	needle bearing	
Piston pin bearing	needle bearing	
Piston rings	1 rectangular ring	
Primary drive	straight cut spur gears, 16 : 57 Z	
Transmission oil	0.15-0,2 liter automatic gear oil Dexron II (Shell Donax TA)	
Spark plug	NGK BR 10 EG	
Electrode gap	0.6 mm	
Carbureto	Dell'Orto PHVA 14 DS	Dell'Orto PHBG 19 BS
Air filter	wet foam type air filter insert	
Cooling liquid	0,5 litres, 40% anti freeze, 60% water, at least -25 °C (-13 °F)	

BASIC CARBURETOR SETTING

Model	50 SX PRO JUNIOR LC	50 SX PRO SENIOR LC
Type	Dell'Orto PHVA 14 DS	Dell'Orto PHBG 19 BS
Main jet	80	85
Needle jet	211 FA	260 AU
Idling jet	45	48
Jet needle	A10	W9
Needle position from top	3.	3.
Air/Mixture reg. screw open	3,5	3,0
Slide	40	60
Starting jet	60	60

TIGHTENING TORQUES - ENGINE

Primary gear nut	M14x1,25	40 Nm (30 ft.lb)
Hexagon nut ignition rotor	M10x1,25	20 Nm (15 ft.lb)
Nut of clutch hub	M10x1,25	Loctite 243 + 35 Nm (26 ft.lb)
Cylinder head screws	M7	15 Nm (11 ft.lb)
Cylinder base nuts	M8	18 Nm (13 ft.lb)
Allan head screw-Stator	M5x25	Loctite 243 + 8 Nm (6 ft.lb)
Oil plug	M16	5 Nm (4 ft.lb)
Oil drain plug	M10	15 Nm (11 ft.lb)
Other screws engine	M5	7 Nm (5 ft.lb)
	M6	10 Nm (7 ft.lb)
	M8	30 Nm (22 ft.lb)

TECHNICAL SPECIFICATIONS - CHASSIS 50 MINI LC 2002

	50 SX PRO JUNIOR LC	50 SX PRO SENIOR LC
Frame	single downtube, split-cradle	
Fork	Marzocchi Ø = 32 mm (1,26 in)	
Wheel travel front/rear	135/200 mm (5,3/8 in)	175/185 mm (6,9/7,4 in)
Rear suspension	Central shock absorber WP	
Front brake	Disk brake Ø 160 mm (6,4 in)	
Rear brake	Drumbrake Ø 90 mm (3,5 in)	
Tyres	front/rear 2.50x10" Pirelli MT 32 / 2.75x10" MT 32	
Tire pressure	front/rear: 1,0 bar	
Fuel tank capacity	1,8 Liter	
Final drive ratio	11 : 48	
Chain	1/2x3/16" 96 rolls	1/2x3/16" 104 rolls
Steering angle	63°	64°
Wheel base	914 mm (36 in)	1030 mm (40 in)
Seat height, unloaded	590 mm/615 mm (23,2/24,2 in)	650/675 mm (25,6/26,6 in)
Ground clearance	220 mm (8,6 in)	255 mm (10 in)
Dead weight without fuel	40 kg	
Rider's body height	max. 130 cm (5,1 in)	
Rider's body weight	max. 35 kg (78 lbs)	
Recommended age of rider	6-10 years	
Engine	50 LC	

TIGHTENING TORQUES

Hexagon nuts front/rear axle	M12x1	30 Nm (22 ft.lb)
Hexagon nut swing arm bolt	M12	40 Nm (30 ft.lb)
Clamping screw upper/lower fork bridge	M8	15 Nm (11 ft.lb)
Screws handlebar clamp	M8	20 Nm (15 ft.lb)
Shock absorber top/bottom	M10	45 Nm (33 ft.lb)
Allan screw – Handlebar support	M10	Loctite + 40 Nm (30 ft.lb)
Front brake caliper	M8	Loctite + 25 Nm (19ft.lb)
Front brake disk	M6	Loctite + 10 Nm (7 ft.lb)
Other screws chassis	M5 M6 M8 M10	6 Nm (4,5ft.lb) 10 Nm (7 ft.lb) 25 Nm (19 ft.lb) 45 Nm (33 ft.lb)

STANDARD-ADJUSTMENT – FORK

Spring	2,0 N/mm
Preload	10 mm (0,4 in)
Fork oil	SAE 7,5
Air chamber length	110 mm (4,3 in)

STANDARD ADJUSTMENT - SHOCK ABSORBER

	WP 0318W910	WP 0318W911
Rebound adjuster	5	5
Spring	85 N/mm	45 N/mm
Spring preload	7 mm (0.28 in)	7 mm (0.28 in)



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