

A person wearing a white helmet with goggles, a black and white long-sleeved shirt, black pants, and gloves is riding a silver and black electric mountain bike. The bike is balanced on a large, mossy log in a dense forest. The background is filled with tall trees and green foliage.

**KUBERG**

**RANGER**

OWNER'S MANUAL

ENGLISH



# A word about this safety manual —

DEAR KUBERG CUSTOMER

Congratulations on your purchase of a KUBERG Ranger. You now own a state of the art electric motorcycle that will give you endless thrills if you maintain it properly. We welcome you to the community of KUBERG riders.

Your KUBERG Ranger is a performance motorcycle that should be treated with caution and used in safe environments. The Ranger is highly adjustable and can be set up specifically for the rider. Please do not allow the motorcycle to be used or adjusted by other operators.

Your KUBERG Ranger is driven by a powerful electric motor, which requires experience and careful handling. The speed and torque settings **MUST** be set to suit the abilities of the rider. Please remember that even when the torque setting is set to a slow setting, the torque on these motors is virtually instant. This means that opening the throttle will propel the motorcycle to a rapid speed almost instantly. For developing good riding skills this is a wonderful feature, as it will teach riders throttle control gradually with lower power. If the maximum power and torque is set too aggressively, the rider may accelerate to a speed he/she is not comfortable with. Your Ranger has great capabilities and can grow with the skills of the rider to very high levels of performance, but it is important to start slow and speed up as you improve.

KUBERG motorcycles (except the KUBERG Freerider Street) are designed for off road use only and must not be used on public roads or sidewalks. Please check and obey all local and state laws. KUBERG motorcycles should only be ridden in safe areas where all laws are being followed and all required permissions are given.

KUBERG motorcycles are amazingly capable and can be used from the earliest stages of learning to ride all the way through to veteran riders. The secret of learning to ride well is to be able to ride a lot, and KUBERG motorcycles make this learning process very gratifying for teenagers and adults alike. Thanks again for purchasing a KUBERG motorcycle, and we hope you enjoy the ride!

Michal Kubanek  
President, KUBERG, Inc.

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# Introduction —

## PLEASE READ THIS SAFETY INSTRUCTION MANUAL PRIOR TO OPERATION!

To ensure optimum performance from your new KUBERG motorcycle and to ensure safe operation, it is important to fully understand the features of the motorcycle. This manual contains IMPORTANT INFORMATION that every owner must fully understand. Please read this manual carefully and completely before operating your KUBERG motorcycle. Do not attempt to operate the motorcycle until you have attained adequate knowledge of its controls and operating properties and until you have received training in proper and safe riding techniques.

Motorcycles generally, as well as KUBERG electric motorcycles, are single-track vehicles. The safe use and operation of such single-track vehicles depend on proper riding techniques and the experience of their riders (operators).

Please read, understand and follow all Warning, Caution and Note notices on your KUBERG electric motorcycle and those included in this Manual. If you do not understand any of this important information, please contact your selling dealer/distributor or the KUBERG Customer Service Department (Email: [kuberg@kuberg.com](mailto:kuberg@kuberg.com), phone: +420 608 757 353)

### Prop 65 WARNING

**CALIFORNIA PROPOSITION 65 WARNING:** accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Batteries also contain chemicals known to the State of California to cause cancer. Wash hands after handling.

## Important symbols and terms

This Owner's Manual uses the following symbols and terms to call your attention to Warnings, Cautions and Notes:

### **WARNING!**

A Warning indicates a potentially hazardous situation, which if not avoided, could result in bodily injury or death, in addition to the damage of the property. Read the text accompanying the warning to be aware of the specific hazard.

### **CAUTION!**

A Caution indicates a potentially hazardous situation, which if not avoided, may result in damage to equipment or an inadvertent system failure. Read the text accompanying the Caution to be aware of the specific hazard and to avoid damage or system failure.

### **NOTE:**

The text accompanying a Note provides helpful or other important related information.

# Safety advice —

## **WARNING!**

Failure to obey all of the warnings & instructions contained in this manual may result in serious injury or death and/or permanent damage to your KUBERG motorcycle.

## **Speed & torque settings**

Your KUBERG Ranger features a power and torque control button that must be set for the abilities of the rider. This must be set by the responsible supervising adult before each and every ride. Instructing and practicing in a controlled situation will allow the rider to learn how to operate the motorcycle safely. **Go to page 16** to find detailed instructions on how to set up the different torque modes.

## **WARNING! ADULT SUPERVISION REQUIRED**

This vehicle must be used in the presence of adult supervision to ensure that safe riding practices are established and followed. Even though teenagers are of the recommended age to use this vehicle, not all teenagers have the strength, skills or judgment needed to operate this vehicle safely. Parents should permit continued use of this vehicle only if they determine that their child or teenager has the ability and judgment to operate the vehicle safely.

## **WARNING! OFFROAD USE ONLY**

KUBERG motorcycles are designed primarily for OFF-ROAD use. Please check your local, state and national regulations as to whether single-track, motorized electric vehicles are legal for road use in your area. KUBERG Ranger is not homologated for road use in the European Union.

## **WARNING!**

This motorcycle is for personal use only and is not intended for commercial purposes. The use of this motorcycle for commercial purposes, such as rentals, will void all warranties.

## **Electric drivetrain**

The fully electric drivetrain of this motorcycle is different from any gasoline motorcycle, in that:

- 1 There is very little engine braking and no engine noise.
- 2 When going into corners or coming to a stop the rider will be fully dependent on the motorcycle brakes.
- 3 This motorcycle has a regen braking function, controlled by the button located on the handlebar. (or by the throttle negative movement, depending on motorcycle revision) When you push this button during riding (or turn the throttle to negative direction), the motorcycle will start to decelerate significantly. This function works only when the battery is NOT fully charged.

- 4 Passers-by may not hear you approach – so extra caution should be taken.
- 5 Make yourself conspicuous in order to reduce the chance of other vehicle users or pedestrians being unaware of you approaching.
- 6 Be aware that your motorcycle is still ON when stopped and while at an “idle”.

**⚠ WARNING!**

Accidental twisting the throttle can cause serious harm.

## Safe riding practices

- 1 SINGLE OPERATOR ONLY! No passengers!
- 2 Long hair, loose clothing or items worn by the rider must be covered to prevent entanglement in moving parts of the vehicle or the surroundings whilst riding
- 3 Do not exceed the weight limit. Heavier riders may significantly reduce performance and/or render the vehicle unstable and/or over-tax the brakes and other control devices. Heavier riders may cause structural damage not covered by the warranty.
- 4 Do not touch any moving or hot parts.
- 5 DO NOT RIDE AT NIGHT OR UNDER LOW VISIBILITY CONDITIONS, if your KUBERG Ranger is not equipped with the light kit (sold separately).
- 6 Do not immerse this vehicle in water.
- 7 Do not combine regen braking with regular brakes.
- 8 BEFORE TOWING A TRAILER, GO TO PAGE 33 TO READ THE INSTRUCTIONS FIRST!
- 9 Do not ride on steep or uneven surfaces. Steep or uneven surfaces greatly increase the likelihood of loss-of-control.
- 10 Do not ride faster than the conditions permit for safe operation. Excess speed greatly increases the likelihood of loss-of-control.
- 11 The rider should be securely seated on the vehicle or have one leg on the foot rail (no seat version) ready to ride before turning the power switch ON.

Ride where other motorists, pedestrians and cyclists can see you. Avoid riding in another motorist’s blind spot. Know your skills and limits. Stay within your limits in order to avoid an accident.

**i NOTE:**

Many motorcycle accidents are caused by rider error. A typical error made by motorcycle riders is veering wide on a turn due to EXCESSIVE SPEED or under cornering due to insufficient lean angle for the given speed.

**⚠ WARNING!**

Maintain a proper posture while riding. The posture of the rider is important for proper control of the motorcycle. The rider should keep both hands on the handlebars and both feet on the footrail during operation in order to maintain control of the motorcycle. Never ride under the influence of alcohol or other drugs. **Go to page 30** to find detailed instructions concerning proper riding technique.



## One rider only

Your motorcycle was engineered to carry one rider and no (0) passengers. Carrying a passenger would overload the motorcycle and alter the handling. Do not allow this to happen.

## Do not overload the motorcycle

Exceeding the weight limitations will adversely affect the handling of the motorcycle, and potentially cause damage.

## Obey all laws

Obey all laws. KUBERG motorcycles are for OFF-ROAD USE ONLY (except the KUBERG Freerider Street). KUBERG motorcycles cannot be used on public roads or sidewalks. The purchaser, owner, and/or riders of this motorcycle are directly responsible for ensuring that they obey all local, state, federal and national laws regarding the riding and use of this motorcycle.

## Weather & riding conditions

Do not ride in the rain or snow. Please be aware that the distance required to stop under wet conditions may be double or even triple the usual distance required under dry conditions. If riding in adverse weather conditions, ride more slowly and anticipate your stops by applying the brakes MUCH earlier. Do not allow young riders to ride on slopes that are too steep for their ability.

## Night time

Your KUBERG Ranger can be equipped with the light kit (sold separately). You can ride after dark or in low light conditions ONLY if your KUBERG Ranger is equipped with the lights.

## Batteries

We have equipped your KUBERG Ranger with highly advanced lithium-ion batteries. **Go to page 26** to learn about these batteries and the correct charging procedure.

## Be aware of the motorcycle's chain

Under no circumstances should hands or other body parts be close to a moving motorcycle chain. Riders should wear motorcycle boots without laces and should not wear any loose clothing that could be caught by the chain.

## Maintenance tools

The motorcycle package contains a complete set of tools required for assembly, first setup and basic maintenance of the motorcycle. However, we strongly recommend that all the maintenance including the first set-up of the motorcycle should be performed by your local dealer.

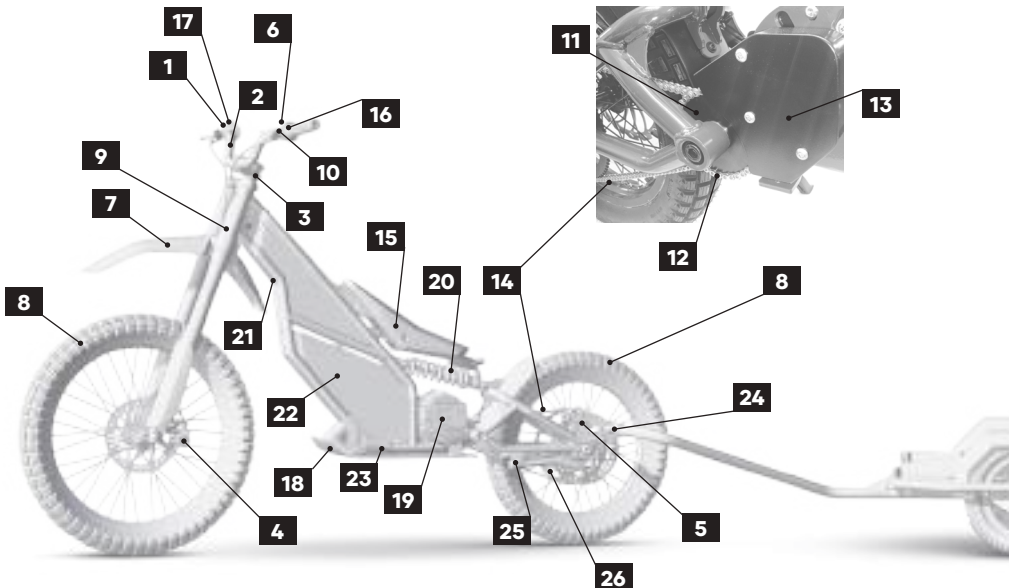


# Vehicle overview —

## 2021 Kuberg Ranger

For teens and adults looking for serious acceleration, the powerful Ranger opens the door to a whole new riding experience.

- |           |                         |           |  |
|-----------|-------------------------|-----------|--|
| <b>1</b>  | Throttle                | <b>14</b> | Secondary chain                        |
| <b>2</b>  | Handlebar               | <b>15</b> | Reclining seat                         |
| <b>3</b>  | Steering column         | <b>16</b> | Reclining seat adjustment lever        |
| <b>4</b>  | Front brake             | <b>17</b> | Speed & torque control button          |
| <b>5</b>  | Rear brake              | <b>18</b> | Foot rail                              |
| <b>6</b>  | On-off switch           | <b>19</b> | Motor                                  |
| <b>7</b>  | Front fender            | <b>20</b> | Rear shock absorber                    |
| <b>8</b>  | Tire                    | <b>21</b> | Inspection lid                         |
| <b>9</b>  | Front fork              | <b>22</b> | Battery / batt. cover (dual ver. only) |
| <b>10</b> | Regen braking button    | <b>23</b> | Lower battery holder                   |
| <b>11</b> | Central double sprocket | <b>24</b> | Towing hitch (sold with a trailer)     |
| <b>12</b> | Primary chain           | <b>25</b> | Stand                                  |
| <b>13</b> | Primary chain guard     | <b>26</b> | Sprocket                               |



# Specifications

## Kuberg Ranger Single | Double battery pack

<b>Top Speed</b>	80kmph (50mph)
<b>Weight</b>	50 kg / (110 lbs)   (60 kg / 132 lbs)
<b>Power</b>	8, 12 or 14 kW, 48 V motor
<b>Batteries</b>	24 Ah   48 Ah, 48 V lithium-ion with BMS
<b>Controller</b>	KUBERG BLDC PRO
<b>Input standard</b>	110 V or 230 V
<b>Transmission</b>	Clutchless one speed
<b>Final drive</b>	Primary gearing 16T / 35 T, Secondary gearing 25 T / 85T
<b>Frame</b>	Steel double cradle tube frame, powder-coated
<b>Wheelbase</b>	128 cm (50.4")
<b>Seat height</b>	57 - 87 cm (23" - 34.3"), reclining seat
<b>Handlebar height</b>	111 cm (43.7")
<b>Front and rear brakes</b>	Hydraulic Disc Brake System Tektro Orion 4-piston
<b>Brake discs front / rear</b>	Hardened brake discs SBT 35 HRC 203 / 203 mm
<b>Brake pads</b>	Sintered brake pads
<b>Front fork</b>	Manitou Dorado Expert 203 mm
<b>Rear shock absorber</b>	DNM Burner RCP-3 200 lbs
<b>Tires front / rear</b>	19 x 2.75" / 14 x 3", Tire Options: Trail/Knobby
<b>Carrying capacity</b>	Maximum 220 lbs (100 kg), 1 person only
<b>Towing capacity</b>	Maximum 30 kg (66 lbs)
<b>Colors</b>	Black or Military Green

### **WARNING!**

The KUBERG Ranger is designed to operate at 48 volts only. Use of any battery voltage other than 48 volts will result in motor failure. KUBERG Inc. considers modifications and/or changes to its electrical components to be a material alteration of its products, thereby voiding any warranties and/or guarantees in their entirety. KUBERG Inc. will not be responsible for any injuries, and/or death and/or other damage(s) caused by such modifications.

# Before first ride —

## **i** NOTE:

If you purchased your KUBERG motorcycle at a local dealer your motorcycle might already be fully adjusted and ready to ride. If you purchased your KUBERG motorcycle still in the original packing, please carefully follow the instructions below and any supplemental instructions in order to complete the assembly and adjustment of your KUBERG motorcycle.

## Unpacking and assembly

### **!** WARNING!

Failure to properly assemble and adjust your motorcycle prior to use may result in an accident, resulting in death, serious injury and/or damage to property. If you are uncertain about any aspect of the assembly and adjustment of your motorcycle, seek help from a qualified mechanic or KUBERG Customer Service.

- 1** With the help of another person, carefully remove your KUBERG Ranger from the box.
- 2** Place the motorcycle on a solid and level surface onto a block or stand so that the rear wheel is off the ground.
- 3** Remove all the packing materials.
- 4** Using the Allen wrench #4 remove the front side of the stem, install the handlebars onto the stem and tighten all bolts crosswise (6 - 7 Nm).
- 5** Using the Allen wrench #6 loosen and remove the locking axle bolt on the front brake disc side.
- 6** Using the Allen wrench #5 loosen 4 front axle bolts, located on the bottom of the front fork and slowly remove the axle and spacers.
- 7** Remove the transport insert from the front brake caliper. From this point on do not push the front brake lever until the assembly is done completely.
- 8** Insert the front wheel and both spacers carefully into the front fork and insert the axle. This step may require another person to help. The brake disc must slide easily and gently between brake pads.
- 9** Insert and tighten the axle locking bolt (3,4 - 4,5 Nm) and tighten all 4 axle bolts (10,7 - 12,4 Nm)
- 10** Ensure the wheel is aligned correctly and all bolts are tight.
- 11** Spin the front wheel to ensure it is centered and spins freely. If not, go to page 23 and follow the front brake adjustment instructions.
- 12** Using the Allen wrench #4 adjust the brake levers positions to suit the rider and then tighten the bolts (5 - 7 Nm).



- 13 Take the motorcycle off the block or stand and engage the motorcycle stand.
- 14 Unpack the footrail from the packing foil and unscrew 4 bolts and 2 nuts that will connect the footrail with the frame.
- 15 Install the footrail onto its place and tighten all bolts and nuts (15 - 16 Nm). The 2 nuts act as additional bolts locking.
- 16 Make sure the on/off switch is in OFF position and using the Allen wrench #3 and #4 unscrew 3 bolts holding the inspection lid.
- 17 Connect two main battery connectors (**red to red** and **black to black**) and the BMS (battery management system) connector (**yellow**).
- 18 Put the inspection lid back on its place and screw in all 3 bolts that were removed in step #15 (2 - 3 Nm).
- 19 Double check that all bolts and nuts are in the place and tightened correctly.



**⚠ WARNING!**

Incorrect connecting of the battery wires to the motorcycle terminals may cause irreparable damage to motorcycle electrical components.

## First setup

- 1 Check the tire pressure of both tires and confirm that they are properly inflated. The optimal tire pressure for the KUBERG Ranger is 35 – 50 PSI (2.4 – 3.4 bar) for general use and should never exceed 50 PSI (3.4 bar).
- 2 Unpack the charger from its box and charge the batteries, being sure to follow the correct charging procedure. **Go to page 26** to find detailed charging instructions.
- 3 Compress each brake lever. The lever should not compress completely to the handlebar. Each individual brake should hold the motorcycle securely when you push the motorcycle against the brake. If your brake needs adjustment, **follow the instructions on page 23**. All riders should be aware which lever operates which brake.
- 4 Check the chain for tightness and lubrication and if needed, follow the section Adjusting chain tension **on page 16**.
- 5 Set the power and torque settings to an adequate level for the rider's experience and riding skills. **Go to page 16** to find detailed instructions concerning how to set speed limits and different riding modes.

**⚠ WARNING!**

There are no user serviceable elements incorporated into the motor, motor controller, batteries, battery charger, throttle, or wiring harness of your KUBERG electric motorcycle. **DO NOT ATTEMPT TO DISASSEMBLE OR ADJUST ANY OF THESE COMPONENTS.** Doing so may cause extensive damage to these components, will void your warranty, and may result in danger to persons and/or property. If you cannot resolve any problem using this

owner's manual, contact your KUBERG authorized dealer, or call the KUBERG Customer Service for assistance.

## Break-in period

To assure future reliability and top-notch performance of your KUBERG Ranger, please pay extra attention during your first 150 km/93 miles or three full-charge cycles (whichever comes first). During this period please obey the following:

- Avoid full-throttle starts and accelerate gradually.
- Avoid full speed riding and use the Beginner and the Sport mode only. Do not use the Race mode.
- Avoid hard braking. New brakes need some time to break in with moderate use.

## Motorcycle controls

### Magnetic Kill Switch (ON/OFF switch)

The magnetic kill switch is located on the left hand side of the handlebars. Always switch the motorcycle into the OFF position when stopped or parked.



#### **⚠ WARNING!**

If the power is turned on and the throttle is open, the motorcycle will accelerate immediately. This is potentially very dangerous. The rider's right hand should be used to switch the power ON, with no hands on the throttle.

### Regen braking

This motorcycle has a regen braking function, controlled by the button located on the handlebar (or by the throttle negative movement, depending on motorcycle revision). When you push this button during riding (or turn the throttle in a negative direction), the motorcycle will start to decelerate significantly and charge the battery.



#### **⚠ WARNING!**

**Do not combine** regen braking with regular brakes, as it can easily block your rear wheel and may result in injury or death and/or damage to your motorcycle.

**i NOTE:**

The regen braking function works only when the battery is NOT fully charged.

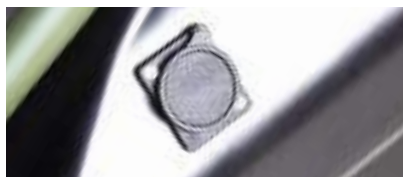
## Speed & torque control button

The speed & torque control button allows a responsible adult to set motorcycle maximum power and torque. There are three distinct power & torque modes.

**Go to page 16** to read detailed instructions concerning how to set the various power & torque modes. Do not attempt to guess or assume these settings. Always check them before allowing the rider back on the motorcycle.

## Charging port

When it's time to recharge the motorcycle, the battery charger connector attaches to this port. Before attaching, ensure that the power is switched to the OFF position. Please refer to the battery and charging section (**page 27**) of this manual for more information.



**⚠ WARNING!**

The power on the motorcycle must be switched OFF before attaching and plugging in the charger.

## LCD Charge indicator

The LCD battery charge indicator is located on the steering stem and shows the state of charge and the voltage of the battery. These informations are most accurate when the motorcycle is in idle.

# Setting up your Kuberg Ranger for riding —

**⚠ WARNING!**

Improper set-up is dangerous! It is your responsibility to set the motorcycle to the ability of the rider. Failure to do so, may result in injury or death, and/or damage to your motorcycle.

**i NOTE:**

A responsible adult must ensure that the KUBERG Ranger and its rider are prepared for every ride. The motorcycle must be set to the abilities of the rider and the rider and the motorcycle must be supervised when ridden by a teenager. Novice riders can lose concentration quickly and be easily distracted. If the power is set too high, an accident could occur. **RIDE SAFE!**

# Setting power & torque modes

Follow these steps to limit the maximum power and torque on your KUBERG Ranger:

- 1 Turn off your motorcycle.
- 2 Press and hold the control button. The control button is located on the right side of the handlebar.
- 3 Turn on your motorcycle ON.
- 4 The motorcycle will beep one, two or three times to indicate the desired power mode

**1 beep** - Beginner Mode, low-power, max 25 kmph (12 mph)

**2 beeps** - Sport Mode, medium-power, max 40 kmph (25 mph)

**3 beeps** - Race Mode, unlimited power and speed

- For example, if you want the medium power mode, hold the control button for two beeps and release. The motorcycle will confirm your selection with a double beep.

- 5 The power mode is now set. If you want to set a different power mode level, repeat the process from step 1.

## ! CAUTION!

Sport and Race modes should only be used by experienced riders!



# Drivetrain —

Your KUBERG Ranger features two traditional chains and rear sprocket and the central double sprocket. It has a direct drive with no clutch and one reduction gear. Both chains need to be lubricated and adjusted on a regular basis and before every ride. There should be only a very little slack in the chain.

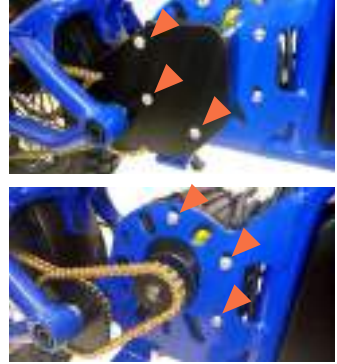
## Adjusting chain tensions

Follow these steps to adjust the chain tension:

- 1 Make sure the on/off switch is in the OFF position.
- 2 Lift the motorcycle onto a block or stand so that both wheels are off the ground.
- 3 Using the Allen wrench #10 and the open wrench #24 loosen the rear axle nut.
- 4 Using the Allen wrench #4 (or Torx wrench #30) loosen and remove 3 bolts holding the primary chain guard. Each bolt has its own spacer under the chain guard.



- 5 Remove the chain guard and uncover the primary chain.
- 6 Using the Allen wrench #4 (or Torx wrench #30) loosen 3 bolts holding the motor in the frame just enough for the motor to be able to move up and down.
- 7 Using a dry cloth and a motorcycle chain cleaner remove all the dirt from both chains if there's any.
- 8 By moving the motor up or down adjust the primary chain tension. Do not tighten the chain too much that there is no slack at all. It should be 'taught', not 'tight'.
- 9 Move the motor to the desired position and tighten 3 motor bolts to secure its position in the frame (9,5 - 10,5 Nm).
- 10 Install primary chain guard using remaining 3 bolts and 3 spacers (9,5 - 10,5 Nm).
- 11 **DOUBLE CHECK THAT ALL MOTOR AND CHAIN GUARD BOLTS ARE TIGHTEN CORRECTLY!**
- 12 Using the open wrench #10 turn the adjustment bolts on the rear wheel evenly on both sides. Be precise - very small movements make a big difference. Again, do not tighten the secondary chain too much that there is no slack at all. It should be 'taught', not 'tight' and the rear wheel and the double sprocket need to be in alignment with the secondary chain.
- 13 Tighten the rear axle nut (78 - 80 Nm), check the rear sprocket for tightness and ensure all bolts are tightened correctly.
- 14 While turning the rear wheel by hand, lubricate both chains with the off-road motorcycle chain lube spray.
- 15 Spin the rear wheel by hand at least 10 times more around and wait a few minutes for a spray to dry off.
- 16 Remove the excess lubricant using a cloth. If the wheel does not spin freely, go to page 23 and follow the brake adjustment instructions.
- 17 Check once more the rear wheel for alignment and both chains for tension.



### **⚠ WARNING!**

Failure to maintain and adjust the chain and align the wheel correctly could result in the primary and/or secondary chain jumping off the sprockets, causing a potentially dangerous and damaging situation.

## **Motor performance**

The KUBERG Ranger has multiple sensors and control software to prevent the batteries, the motor and the controller from overheating. Once the temperature of batteries, motor or controller reaches a high temperature, the motorcycle power will be limited to 70%

until the components are able to cool down. If the motorcycle continues to overheat, the controller will shut off the motorcycle until the components have cooled. This takes approximately 15 to 30 minutes.

Thermal shutdown of the motor can occur when riding in situations that stress the motor for a long periods of time, such as long up-hills or continuous full throttle operation with no rest period for the motor or a dirt on the motor cooling ribs. For the best riding experience keep your motorcycle clean.

## Weather effects on performance

Very cold weather (-10°C / 14°F and lower) is hard on the motorcycle's batteries and, as a result, the battery charge will not last as long as in temperatures around 20°C / 68°F. This is normal and does not require maintenance or servicing.

# Maintenance —

KUBERG motorcycles generally require significantly less maintenance compared to traditional gas motorcycles due to having very few moving parts, no gas engine and no exhaust. Our authorized dealers have extensive experience and know KUBERG vehicles inside and out, so they can provide high-quality service for your KUBERG motorcycle. However, service at a dealer is not required to maintain your warranty.

### **WARNING! PROPER MAINTENANCE OF THIS VEHICLE IS REQUIRED**

Failure to maintain this vehicle in proper operating condition may lead to an accident resulting in death or serious injury, and/or damage to property. If you have any questions about the proper care and maintenance of this vehicle, consult your selling dealer/distributor or contact KUBERG Customer Service ([kuberg@kuberg.com](mailto:kuberg@kuberg.com), +420 608 757 353).

## Before each ride

- 1 Make sure that all bolts and nuts are fastened securely and that the tires are properly inflated.
- 2 Check that the throttle and brake controls are operating freely.
- 3 Check the primary and secondary chain and if needed, go to page 16 and follow these steps to adjust their tensions.
- 4 Lubricate both chains with the dry motorcycle chain lube spray, spin the rear wheel by hand at least 10 times around, let the lubricant dry off for a few minutes and remove the excess lubricant using a cloth. If the wheel does not spin freely, go to page 23 and follow the brake adjustment instructions.
- 5 Once every 2 weeks check the reclining speed of the seat and adjust it according to instruction on page 21 if needed.

This vehicle should be returned for periodic maintenance to your selling dealer AT LEAST once per year, but more frequently if used under severe or heavy use conditions. The service log is located at the end of this manual and required when servicing the motorcycle.

Keep your KUBERG Ranger clean and dry. Regularly check all components for tightness and adjustment, including handlebars, levers, axles, chain and brakes. Check the settings for torque and maximum speed. Check the tires for damage and for proper inflation.

## Cleaning

Cleaning and maintaining your Ranger correctly will provide more enjoyable ownership and riding experience. By hand cleaning the motorcycle, you can simultaneously inspect all of the components. When cleaning the motorcycle, make sure that the charger port is closed before washing. While the motorcycle components are waterproof, be careful when washing the motorcycle around the electrical components, especially the charge port, the controller, battery, motor and throttle. Do not disassemble the motorcycle in any way before washing. You are free to wash your Ranger with a low pressure water hose with a clean water. After cleaning:

- 1 Lubricate the front fork gliders with an appropriate amount of specialized fork lubricant spray and remove the excess lubricant using a cloth.
- 2 Lubricate both chains with the offroad motorcycle chain lube spray, spin the rear wheel by hand at least 10 times around and wait a few minutes for a spray to dry off.
- 3 Remove the excess lubricant from both chains using a cloth.



### **⚠ WARNING!**

Do not disassemble the motorcycle in any way before washing. Using a power wash is NOT ALLOWED! Do not use cleaners with added salt as it often consists of a lot of phosphates that can harm the paint and the electronics. Do not use engine cleaners or solvents.

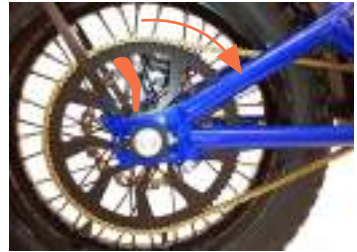
## Maintaining the central double sprocket and chains tensions

The central double sprocket requires checking on a regular basis, especially when riding hard and/or in harsh conditions. If the sprocket wears out, it's time for it to be replaced along with both chains, rear sprocket and pinion gear at the same time.

Replacing of the central double sprocket and corresponding parts requires further skills and is highly recommended to be executed by your local service dealer.

Follow these steps to change the central double sprocket:

- 1** Make sure the on/off switch is in OFF position.
- 2** Lift the motorcycle onto a block or stand so that both wheels are off the ground.
- 3** Using the Allen wrench #10 and the open wrench #24 loosen and remove the rear axle nut. Don't remove the rear axle yet.
- 4** With the open wrench #10 loosen (screw in) both rear wheel tensioners enough for the rear wheel to be able to move forward and for the secondary chain to be able to slip to the outer side of the sprocket.
- 5** Remove the rear axle and the rear wheel, notice the position of 2 silver axle spacers and 2 black washers. From this point on, do not push the rear brake lever until the assembly is complete.
- 6** Using the Allen wrench #4 loosen and remove all 7 bolts holding the rear sprocket from the rear wheel.
- 7** Install the new sprocket and use the new bolts. Apply a small amount of thread lock glue on each bolt and tighten them to the rear hub (19 - 20 Nm).
- 8** Using the Allen wrench #4 (or Torx wrench #30) loosen and remove 3 bolts holding the primary chain guard. Keep in mind that each bolt has its own spacer under the chain guard.
- 9** Remove the chain guard and uncover the primary chain.
- 10** Using the Allen wrench #4 (or Torx wrench #30) loosen and remove 3 bolts holding the motor in the frame.
- 11** Move the motor in the frame just for the primary chain to be able to slip to the outer side of the sprocket.
- 12** Using a flat screwdriver (not included) remove the retaining ring from the motor pinion gear.
- 13** With a specialized puller (not included) take off the pinion gear, replace it with the new one and gently put the new retaining ring to its place using a pair of pliers (not included). Do not use a hammer on the pinion gear - this installation requires a press.
- 14** Using the Allen wrench #10 loosen and remove the right pivot bolt from the rear swing arm (on the double sprocket side).
- 15** Remove the double sprocket including both chains. Keep in mind that there's one spacer between the double sprocket and the swing arm.
- 16** Install the new double sprocket with both chains on corresponding positions and with the spacer which has been removed during the previous step.
- 17** Screw in and tighten the right pivot bolt to the swing arm (53 - 55 Nm).
- 18** Put the primary chain back on motor pinion gear and screw in all 3 bolts, that were removed during step #10.



- 19 By moving the motor up or down adjust the primary chain tension. Do not tighten the chain too much that there is no slack at all. It should be 'taught', not 'tight'.
- 20 Tighten 3 motor bolts to secure its position in the frame (9,5 - 10,5 Nm).
- 21 Insert the rear wheel and both spacers carefully into the swing arm and put the secondary chain on the rosette. This step may require another person to help. The brake disc must slide easily and gently between brake pads.
- 22 Insert the rear axle including both washers, removed in step #5 and put on the rear axle nut (do not tighten it yet)
- 23 Turn the adjustment nuts on the rear axle evenly on both sides. Very small movements make a big difference. Again, do not tighten the secondary chain too much that there is no slack at all. It should be 'taught', not 'tight'. Check the wheel for alignment and both chains for tension.
- 24 Tighten the rear axle nut (78 - 80 Nm), check the rear sprocket for tightness and ensure all bolts are tight.
- 25 Lubricate both chains with the offroad motorcycle chain lube spray, spin the rear wheel by hand at least 10 times around and wait a few minutes for a spray to dry.
- 26 Remove the excess lubricant using a cloth. If the wheel does not spin freely, go to page 23 and follow the brake adjustment instructions.
- 27 Check once more the rear wheel for alignment and both chains for tension.
- 28 Install the primary chain guard using the remaining 3 bolts and 3 spacers (9,5 - 10,5 Nm).
- 29 **DOUBLE CHECK THAT ALL MOTOR, FRAME, REAR WHEEL AND CHAIN GUARD BOLTS ARE TIGHTEN PROPERLY!**

## The Reclining seat

Your KUBERG Ranger is equipped with the reclining seat, controlled from the handlebar. Whenever you feel the need for extra moving space during the riding, you can lower the seat by pulling down the locking lever on the handlebar and using your own weight to move the seat down at the same time. The seat can be engaged back simply by pulling the adjustment lever once again without any load.



### **⚠ WARNING!**

Pay extra attention when engaging the reclining seat from its lower position. The up-movement is done by a powerful gas spring with accumulated energy and it can cause an injury if used or set improperly. Do NOT let the children or teenagers sit on or use the

reclining seat as it can hurt them due to their lower weight. Keep your hands away from the lower side of the reclining seat.

The engaging speed can be set-up by 2 adjusting bolts - one is located on the adjustment lever on the handlebar and the other one just below the seat. When the adjustment cable is set-up properly, the seat will engage slowly.

Check the speed of the reclining seat once every two weeks. If it's too slow, unscrew the adjusting bolt on the handlebar by 2 turns anticlockwise, check the speed again and repeat this step if necessary. When finished with adjusting, tighten the securing nut to fix the cable length.

If the reclining speed is too high, screw in the adjusting bolt on the handlebar by 2 turns clockwise, check the speed again and repeat this step if necessary. When finished with adjusting, tighten the securing nut to fix the cable length.

**⚠ WARNING!**

Do not operate your KUBERG Ranger if any damage is apparent. Immediately contact your local retailer/distributor or KUBERG Customer Service.

**⚠ WARNING!**

There are no user serviceable elements incorporated into the motor, motor controller, batteries, battery charger, throttle or wiring harness of your KUBERG electric motorcycle.

**DO NOT ATTEMPT TO DISASSEMBLE OR ADJUST ANY OF THESE COMPONENTS.**

Doing so may cause extensive damage to these components, will void your warranty and may result in danger to persons and/or property. If you cannot resolve any problem using this owner's manual, contact your KUBERG authorized dealer, or call the KUBERG Customer Service for assistance.

## Front wheel removal and installation

- 1 Make sure the power is switched OFF.
- 2 Lift the motorcycle onto a block or stand so that both wheels are off the ground.
- 3 Using the Allen wrench #6 loosen and remove the locking axle bolt, located on the brake-disc side of the fork.
- 4 With the Allen wrench #5 loosen 4 front axle bolts, located on the bottom of the front fork.
- 5 While holding the wheel, slowly remove the axle and both spacers.



- 6 Lower the wheel carefully away from the front fork.
- 7 To re-install the wheel, insert the front wheel and both spacers carefully into the front fork and insert the axle. This step may require another person to help. The brake disc must slide easily and gently between the brake pads.
- 8 Insert and tighten the axle locking bolt (3,4 - 4,5 Nm) and then tighten all 4 axle bolts (10,7 - 12,4 Nm). Ensure the wheel is aligned correctly and all bolts are tight.
- 9 Spin the front wheel to ensure it is centered and spins freely. If not, go to page 23 and follow the brake adjustment instructions.

## Rear wheel removal and installation

- 1 Make sure the power is switched off.
- 2 Lift the motorcycle onto a block or stand so that both wheels are off the ground.
- 3 Using the Allen wrench #10 and the open wrench #24 loosen and remove the rear axle nut. Don't remove the rear axle yet.
- 4 With the open wrench #10 loosen both rear wheel tensioners enough for the rear wheel to move forward and for the secondary chain to be able to slip to the outer side of the sprocket.
- 5 Notice the position of 2 silver axle spacers and 2 black washers.
- 6 While holding the wheel, slowly remove the rear axle, spacers and washers on both sides.
- 7 Pull the wheel carefully back to remove it. From this point on, do not push the rear brake lever until the assembly is complete.
- 8 To re-install the wheel, reverse the above procedure and ensure the wheel is aligned correctly and the axle nut is tightened properly (78 - 80 Nm).
- 9 Spin the rear wheel to ensure it is centered and spins freely. If not, go to the bottom of this page and follow the brake adjustment instructions.



## Front and rear brake adjustment

- 1 Check whether the brake disk and the brake pads are not worn-out and don't need a replacement.
- 2 Using the Allen wrench #5 loosen the two brake caliper bolts.

- 3 Pull and hold the corresponding brake lever firmly for the caliper to get centered with the brake disc and re-tighten the caliper fixing bolts (9,5 - 10,5 Nm), then release the brake lever.
- 4 Test the brake by pulling hard on the lever a number of times.
- 5 If the wheel does not spin freely with the brake lever released, the caliper position itself needs to be fine adjusted again repeating the steps 1 to 3. Remember that the new brake pads are thicker and need to break-in first.

## Brake squeal

Dirt and humidity can cause noisy or squealing brakes. These are normally temporary and should gradually disappear with regular use. Repair is not required. If you hear a metallic "screaching" sound you might need to replace the brake pads. Visit your KUBERG dealer to replace the brake pads.

## Adjusting the suspension

The KUBERG Ranger features both front and rear suspension.

### Front suspension

The front suspension on your KUBERG Ranger is adjustable, the RST KILLAH front fork has settings for damping.

#### Air spring pressure



##### Set up notes

- Recommended air pressure 50–90 psi [3,4–6,2 Bar]
- Max pressure not to exceed 110 psi [7,58 Bar]
- The fork should be unweighted when adjusting air pressure.
- Static Sag should be 25–35 % of travel
- See owners manual for sag measurement procedure
- All damper adjustment positions are taken from full-closed/clockwise (Position 0 = Maximum damping)

Rider weight	Spring pressure, PSI [bar]				
	lbs	kg	soft	standard	firm
>220	>100	85 [5,8]	92 [6,3]	100 [6,9]	
200–220	92–100	75 [5,2]	82 [5,7]	92–100	
170–199	77–91	65 [4,5]	72 [5,0]	77–91	
140–169	64–76	55 [3,8]	62 [4,3]	64–76	
120–139	54–63	50 [3,4]	55 [3,8]	54–63	

#### Damping adjustment



**REBOUND**  
Controls the speed at which wheel returns to sagged position after compression event.



Adjustment clicks (open-closed)	+ 18 - 0 -
Standard tuning (mixed terrain)	9
DH race tuning (rooty/rocky)	14
Freeride tuning (burms & jumps)	6

##### Tuning tips

- For best performance it's important to balance the rebound damping in the front fork and rear shock; front and rear wheels should return at the same speed.
- If fork is losing travel in repeated impact situation eg. (rocky terrain) reduce the rebound damping)



**HIGH-SPEED**  
Controls the damping force for short travel unsprung wheel movement; roots, rocks, braking bumps, etc.



Adjustment clicks (open-closed)	+ 16 - 0 -
Standard tuning (mixed terrain)	8
DH race tuning (rooty/rocky)	4
Freeride tuning (burms & jumps)	12

##### Tuning tips

- Turning the High Speed adjuster knob will not change the TPC+ Adjustment. Although it follows the rotation of the HS knob, the TPC+ Adjuster must be turned independently from High-Speed Adjuster to change the TPC+ setting.
- If fork is losing travel with repeated impacts, increase the High-Speed Damping.
- If the fork is still diving with the High Speed adjuster fully closed, the TPC+ adjuster may be increased to compensate.



**TPC+**  
Controls the damping force for deep travel sprung chassis movement; jumps, drops, etc.



Adjustment clicks (open-closed)	+ 16 - 0 -
Standard tuning (mixed terrain)	8
DH race tuning (rooty/rocky)	12
Freeride tuning (burms & jumps)	4

##### Tuning tips

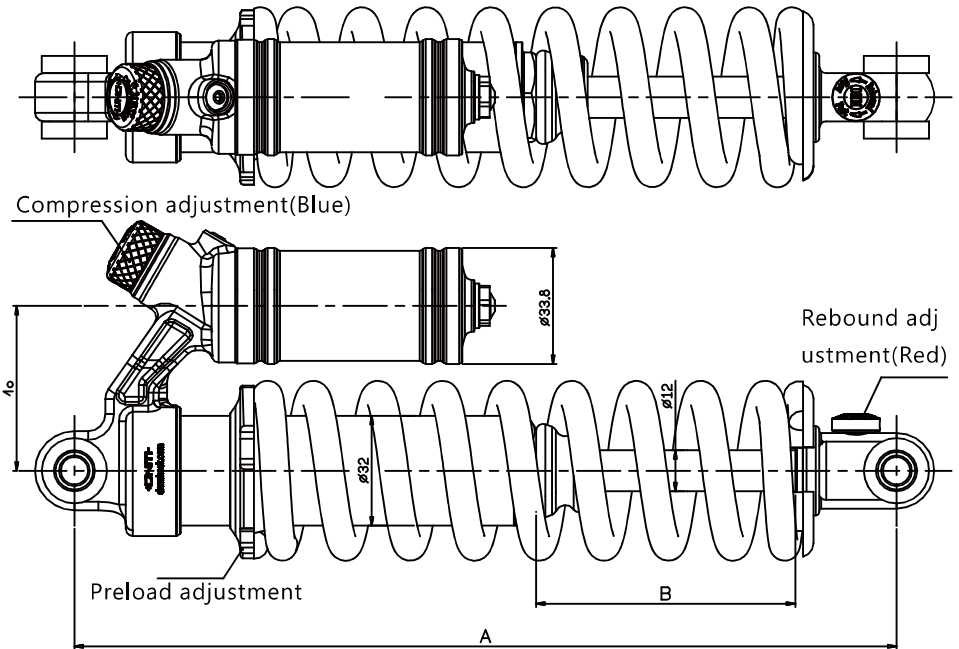
- If fork is bottoming frequently, try increasing TPC+ Damping before diverting from recommended air spring pressure.
- If fork is "spiking" mid-travel, decrease TPC+ Damping, or increase High-Speed Damping to smooth the transition.



## Rear suspension

Your KUBERG Ranger is equipped with a single coil spring and a DNM Burner RCP-3 shock. For a harder/stiffer ride at the rear tighten the adjustment ring in a clockwise direction. For a softer ride, loosen the adjuster by turning anti-clockwise.

## DNM Spring Shocks BURNER-RCP2S Description

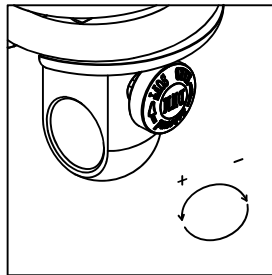
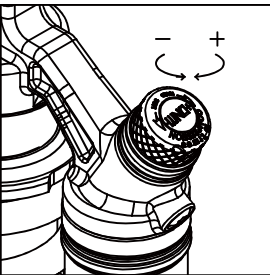


### Compression adjustment

- + direction rotation, pressure increase
- direction rotation, pressure decrease

### ⚠ Rebound adjustment

- + direction rotation, damper increase (slow)
- direction rotation, damper decrease (fast)



# Battery use, care and maintenance —

For the proper use, maintenance and storage of the battery, it is critically important that you follow and understand the instructions in this manual.

If you have any questions about the battery or its usage, please do not hesitate to contact the KUBERG Customer Service Department.

## **WARNING!**

Failure to properly use, charge and store this battery will void the warranty and may cause danger or damage. **DO NOT** use this battery with any other vehicle or appliance. Use of this battery with any other product will void the warranty and may create a hazardous situation that may cause a fire resulting in severe injury or death, and/or damage to property.

**i NOTE:** The battery has an advanced battery management system (BMS) watching over cell-voltages, currents, temperatures etc. If any error on the battery module occurs, the BMS will keep the motorcycle safe. However, you must always park your KUBERG Ranger away from any flammable objects

## **CAUTION!**

Minimum distance between the parked vehicle and any flammable object must be at least 3 meters (10ft.)

## **WARNING! NEVER SHORT CIRCUIT THE DISCHARGE TERMINALS OF THE BATTERY.**

A short circuit will damage the battery and may cause a fire resulting in severe injury or death, and/or damage to property.

## **WARNING!**

Never mechanically manipulate the battery, never open the battery pack and do not puncture the battery cover or the battery itself.

## **CAUTION!**

Keep the battery away from excessive heat and/or open flames. Avoid long term exposure to direct rays from the sun.

## **CAUTION!**

Protect the battery from water or other moisture. If the battery becomes wet from rain during use, dry as soon as possible. Remove the battery from the motorcycle before washing.

## **CAUTION!**

To avoid damage to the battery, never expose it to intense physical shock or severe vibration.

# Charging instructions

Always follow these steps when charging your KUBERG Ranger:

- 1 Make sure your KUBERG Ranger is turned OFF.



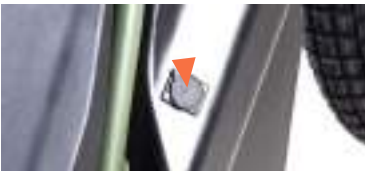
- 2 Connect your charger to an electrical outlet (AC) 110 V or 230 V.



- 3 Turn on the power switch on the charger.



- 4 Wait for 30 seconds.
- 5 Connect the charger cable to the battery connector on your motorcycle.



## ! CAUTION!

If the charger is plugged into the motorcycle with the charger switched OFF, a potential in-rush of electrical current from the motorcycle battery to the charger may damage the charger.

- The recommended charging time for a fully discharged battery is 2.5 hours, respectively 5 hours for the double pack battery version.
- After 2 hours, respectively 4 hours of charging, the battery should be charged from zero to about 80 % of its capacity.

### **WARNING!**

Only use the supplied battery charger. Using any other battery charger will void the warranty and may damage the battery.

- The LED light on the charger will illuminate RED while charging.
- The LED light on the charger will illuminate GREEN when the battery is fully charged.

### **CAUTION!**

The battery charger supplied with your KUBERG Ranger is for INDOOR use only.

## Important notes about battery charging

### **WARNING!**

- Do not cover the charger or its fan while charging, this can cause the charger to overheat and may damage the charger and/or the motorcycle electrical components.
- Avoid any contact with water or other fluids while charging the battery. If the battery, charger or any connections become wet, immediately unplug the charger and thoroughly dry all components.
- Only charge under the constant supervision of an adult. Children must not operate the charger.
- Keep the charger and the motorcycle at least 3 m (10 ft) away from flammable items and direct sunlight during charging.
- Never dismantle or disassemble the supplied charger. Never use the supplied charger for any purpose other than charging a KUBERG Ranger motorcycle.

## Battery removal and installation

If you need to replace the battery or remove it, KUBERG highly recommends taking the motorcycle to a certified technician or a KUBERG dealer.

If you choose to remove or replace the battery yourself, please follow the following instructions carefully:

- 1 Ensure the power switch is in OFF position and engage the motorcycle stand.
- 2 Using the Allen wrench #3 and #4 loosen and remove the 3 bolts holding the inspection lid.
- 3 Note the colors of both battery terminals. When reconnecting, each wire must be connected to the correct terminal - **red** to **red** and **black** to **black**. Disconnect the two main battery connectors (red and black), one at a time, and the BMS (battery management system) connector (**yellow**) and the small black connector for the main ON/OFF switch.
- 4 Push the remaining positive and negative wires to the front and sides of the motorcycle, so the battery pack can be carefully pulled out.
- 5 Using the Allen wrench #5 loosen and remove 2 bolts from the right lower battery holder.

6 With the same Allen wrench loosen the battery pressure pad. This bolt is visible only when the reclining seat is engaged.

7 **Double battery pack version only (skip this step for single battery pack version):** Using the Torx wrench #25 unscrew all the 7 bolts that hold the right side panel/battery cover and remove the panel.



8 With the help of another person gently remove the battery out from the frame. Be extra careful to the wires and connectors and avoid any contact with the frame and other conductive parts.

9 To install the battery, reverse the procedure above and ensure all connectors are secured and all bolts are tightened properly. For the pressure pad use the tightening torque 9,5 - 10,5 Nm.

**⚠ WARNING!**

Incorrect connecting the battery wires to motorcycle terminals may cause irreparable damage to motorcycle electrical components.

## Short term and long term storage

If you do not plan to use your Ranger for an extended period of time (2 weeks or more), disconnect the battery from the controller, also disconnect it from the charger and keep your battery pack at 50 - 60% of its capacity (48,3 - 49,6 Volts). Store the motorcycle in a dry and cool place at temperatures between 5 - 15°C (41 - 59°F). The battery MUST be stored in a place that is NOT warm. It is not advised to place the battery in a freezer, since the battery voltage would sag badly. If you decide to remove the battery and store it in a cooling box, please wait until the battery warms to room temperature prior to the reinstallation of the battery back into the motorcycle.

**⚠ WARNING!**

- Our motorcycles can be stored indoors only if the battery is physically disconnected.
- Keep the motorcycle and the battery away from excessive heat and/or open flames.
- Avoid long term exposure to direct rays from the sun.
- Keep the charger, the battery and the motorcycle at least 3 m (10 ft) away from flammable items and direct sunlight during charging and/or storage.

If you have any questions about the batteries or their usage, please do not hesitate to contact the KUBERG Customer Service ([kuberg@kuberg.com](mailto:kuberg@kuberg.com)).

## Battery disposal

We are confident that you will enjoy many kilometers or miles of thrilling riding with your KUBERG motorcycle. But, batteries can eventually wear out. When this happens, we urge you to properly dispose of your used batteries. For guidance regarding proper disposal of your batteries, please contact the KUBERG Customer Service ([kuberg@kuberg.com](mailto:kuberg@kuberg.com)). Also, you can find useful information regarding used battery drop-off sites from the Rechargeable Battery Recycling Corporation (RBRC) at [www.rbrc.org](http://www.rbrc.org).

# Riding instructions & safety tips (novice riders) —

With the motorcycle set up correctly, your KUBERG Ranger is ready to ride! For novice riders, please follow these tips and instructions. The riders will get the most enjoyment if they feel safe and in control. Do not be tempted to start the rides too quickly. Make sure the speed and power settings are set slow to begin with. For the first time riders, this should be near the walking pace.

## First ride (novice riders)

Stand astride the motorcycle and locate the controls while the motorcycle is switched OFF. After you understand the controls and are comfortable with them, it's time for the first ride. For this, make sure you are dressed correctly in suitable safety gear. Boots, gloves, helmet and eye protection are necessary. The area for riding must be flat, open and safe, with no obstacles of any kind. The motorcycle must be set up correctly, with the speed and torque tuned to a slow setting.

- 1 Ensure the power is turned OFF.
- 2 Sit down on the motorcycle, keep your feet on the ground and move the motorcycle from side to side, forward and back, to get comfortable with the handlebar position and weight distribution.
- 3 Switch the motorcycle ON by switching the power switch to the ON position (magnetic kill switch).
- 4 Before twisting the throttle, you should have one foot on the ground and the other one on the corresponding side of the foot rail.
- 5 Twist the throttle smoothly and slowly and set off.
- 6 Once comfortable, lift both your feet onto the foot rail as you ride.
- 7 Once stopped, turn the power switch to the OFF position and unplug the magnetic kill switch.

## Learning to stand up

Once the basics are mastered, the speed and torque settings can be switched to faster and more powerful settings, step by step, to match the improving skills of the rider. Before you get going too quickly, it's a good idea to learn to ride the motorcycle 'correctly'. This means changing the riding position and in control. Learning to change the riding position is difficult if a rider does not have good throttle control. While the speed setting is set to low, the rider must learn to rotate his/her wrist 'around' the throttle so that when he/she

moves forward or backwards, the wrist is in the correct position. As the power and torque settings get higher, the 'dead-zone' in the throttle diminishes, so it becomes easier to stand up and work the throttle.

## Correct riding technique

Learning the correct riding techniques will prepare the rider for all forms of riding that come later. The rider needs to learn to control the motorcycle at slow speeds and use the correct technique to execute tight turns. The natural approach of many riders is to turn the handlebars but this is not a correct riding technique. The correct technique is to lean and use so-called counter-steering.

Counter-steering is turning the handlebars in the opposite direction as the rear wheel intends to travel outwards of the corner (over-steering). This will cause the motorcycle to lean and turn in the desired direction. Counter-steering needs to be taught slowly and smoothly, sudden movements of the handlebars may cause an accident. If tight turns are mastered correctly, many other skills will follow naturally.

## Protective equipment —

Always follow these instructions for protective equipment for every ride in order to limit the risk of injury in case of an accident. The KUBERG Ranger is intended for OFF ROAD use and therefore there is a high likelihood of dirt and other debris being thrown into the air, which presents a risk of injury. Also, there is a high possibility of an accident or a fall.

The rider should use and wear:

- 1 A high quality helmet approved by your country's governing body
- 2 A helmet face-shield or goggles
- 3 Protective clothing that covers rider's legs, ankles, torso and arms
- 4 Wrist, knee and elbow protection
- 5 Solid motorcycle boots
- 6 Gloves made from tear resistant materials (leather or kevlar)
- 7 Motorcycle jacket made from tear resistant materials (leather or kevlar)
- 8 Clothing that is brightly colored so other vehicle users and pedestrians can see you

### **WARNING!**

**THE RIDER MUST WEAR PROTECTIVE EQUIPMENT, ESPECIALLY HELMET, BOOTS AND EYE PROTECTION.**

# Helmets

There is no single factor that works best for reducing the severity of injuries sustained in accidents more than a quality helmet. Don't ever allow your KUBERG motorcycle to be ridden without a helmet.

# Clothing

Motorcycle leathers and padded protection for knees, back and arms can prevent abrasion injuries in the event of a fall. Failure to use appropriate safety equipment greatly increases the likelihood of death or serious injury in the event of an accident.

- Never wear loose-fitting clothes as these may catch on wheels, chains, control levers or footrests.
- Do not wear shoes or boots with laces as these can get caught in the motorcycle's chain or wheels and result in serious injury.

# Accessories —

Adding accessories or cargo to your KUBERG motorcycle can negatively affect its stability and handling. To avoid the risk of an accident, use extreme caution when adding accessories or cargo to your KUBERG motorcycle. Use additional care when riding with added accessories or cargo.

## CAUTION!

The total weight of the rider, accessories and cargo must not exceed the maximum load limit 100 kg (220 lbs).

## WARNING!

Never attach any large or heavy items to the handlebar, front fork, or front fender.

Genuine KUBERG accessories have been specifically designed for use on this motorcycle. Since KUBERG cannot test all other accessories that may be available, you are personally responsible for the proper selection, installation and use of non-KUBERG accessories. Use extreme caution when selecting and installing any accessories.

# Towing a trailer

Your KUBERG Ranger can be equipped with the original KUBERG trailer, capable of towing max. 30kg (66 lbs) of load.



# Attaching and detaching the trailer

- 1 Loosen the locking nut and divert the locking mechanism.
- 2 Check that the trailer coupler is greased sufficiently from its inner side. Deploy the small amount of grease if necessary.
- 3 Deploy the trailer to the motorcycle by pulling the trailer coupler onto the towing ball of the Ranger. It should be done without a resistance.
- 4 Close the locking mechanism and tighten the locking bolt by hand.
- 5 Move the motorcycle forward and backwards, from left to right. Ensure the connection between the motorcycle and the trailer is firm and enables the trailer rotation at the same time.
- 6 To remove the trailer, reverse the procedure above.



## **⚠ WARNING!**

- Maximum speed with an attached trailer is 25 kmph (15 mph).
- Never exceed the maximum load of the trailer 30 kg (66 lbs).
- Never perform any jumps or hazardous driving with the trailer attached.
- Never carry any other person or animal.
- Pay an extra attention to fix the load safely onto the trailer using fixing straps (sold separately).

## **! CAUTION!**

When riding with the trailer attached to the Ranger, regardless of whether it is empty or fully loaded, always be EXTRA CAREFUL. The additional weight may greatly affect the riding behavior, especially when going down the hill, in turns and/or in wet conditions. Depending on the amount of an additional load, the braking distance of your motorcycle with the trailer attached will vary. It is greatly advised to brake much sooner than with the trailer detached.

# Limited warranty

Kuberg motorcycles are warranted to the original retail purchaser to be free from defects in materials and workmanship in the frame and components except for batteries, tires, and inner tubes for a period of thirty (30) days from the date of purchase. An upgrade to a three (3) month Limited Warranty is available to the original retail purchaser who registers his/her motorcycle via the registration form on [www.kuberg.com/bike-registration](http://www.kuberg.com/bike-registration) within thirty (30) days from the date of purchase. A further optional Extended Warranty is available for a fee.

Warranty is valid for 3 months from the purchase date of the motorcycle via a Kuberg dealership. Warranty is non-transferable. All warranties are voided upon secondhand resales.

Batteries are warranted to the original retail purchaser to be free from defects in materials and workmanship for the first 300 charging cycles where they have to keep more than 80% of their initial capacity, provided charging, maintenance and storage instructions are properly followed.

Tires and tubes are warranted to be free of manufacturing and material defects for thirty (30) days. Such tire and tube warranty shall not include flat tires, tire cuts, skid through, over-inflation blowouts, or other such misuse or normal hazards.

Warranties are limited to repair and/or replacement of motorcycle and/or parts found by Kuberg to be defective, at the sole discretion of Kuberg. Kuberg Limited/Extended Warranty does not cover or apply to the following:

- normal wear and tear
- damage, failure and/or loss caused by accident, shipping, misuse, or neglect
- damage due to improper transportation
- exceeding the weight limit of the vehicle
- use by the operator not specified in the age range vehicle was designed for
- abuse and/or failure to follow instructions or warnings as stated in the applicable owner's manual or other printed materials provided with the product
- damage, failure and/or loss caused by the use of the product for stunt riding, ramp jumping, speed competition, inappropriate off-road use, acrobatics, trick riding or other similar activities, or in any other manner for which such products were not specifically designed

This warranty does not apply to any products or components, mechanical and/or electrical, which have in any way been altered from their original configuration by any person. Kuberg will not be liable and/or responsible for any damage, failure or loss caused by any unauthorized service or use of unauthorized parts. Warranties do not cover or apply to any Kuberg product used for rental or commercial purposes unless the specific product is designated, labeled, or marketed by Kuberg as acceptable for rental or commercial use.

All warranty claims must be made directly to the original selling retailer. The selling retailer is the primary provider of warranty support and customer service. Kuberg may choose to perform warranty service at the sole discretion of Kuberg. The original owner of the product must provide proof of purchase prior to the approval of any warranty claim.

Under no circumstances do our warranties include any costs associated with the shipment and/or transportation to or from retailer, distributor or Kuberg. Kuberg, at its sole discretion, has the option of replacing with a new part, a factory recertified part, or repairing any defective product and/or component thereof, or to pay to the owner of such product an amount equal to the original purchase price of such product.

The original owner shall pay for all costs of labor associated with any warranty claims. This warranty supersedes all previous warranties. The warranties stated herein are in lieu of and expressly exclude all other warranties not expressly set forth herein, whether expressed or implied by law or otherwise, including, but not limited to, any warranties for merchantability and/or fitness for any particular purpose. Kuberg shall in no event be liable or responsible for incidental or consequential losses, damages or expenses in connection with their electric dirt motorcycle products. The liability of Kuberg hereunder is expressly limited to the replacement of goods complying with this warranty or at the sole election of Kuberg to the repayment of an amount equivalent to the purchase price of the product in question. **CAUTION!** Some states may not permit the exclusion or limitation of consequential damages and therefore, such limitations may not apply to the consumer in which such impermissible exclusions are involved.

The Customer's Responsibility under the warranty shall be to:

- Operate and maintain the motorcycle as specified in the appropriate Owner's Manual
- Give notice to an authorized Kuberg dealer of any and all apparent defects within ten (10) days after discovery, and make the machine available at the time for inspection and repairs at the dealer's place of business.

Contact information on the back of this manual.

# Kuberg Motorcycle Service Log

Kuberg motorcycles are designed for extreme riding conditions which can cause a lot of stress to the bike's components. Because of this, Kuberg warranties require scheduled maintenance at 3, 6, and 12 months in order to maintain optimal performance.

Please keep this service log in your records to present to your dealer at each service visit.

## Recommended services

3 <sup>RD</sup> MONTH			
DATE		DEALER	
NOTES (DESCRIPTION OF SERVICES PERFORMED AND PARTS REPLACED)			SIGNATURE

6 <sup>TH</sup> MONTH			
DATE		DEALER	
NOTES (DESCRIPTION OF SERVICES PERFORMED AND PARTS REPLACED)			SIGNATURE

12 <sup>TH</sup> MONTH			
DATE		DEALER	
NOTES (DESCRIPTION OF SERVICES PERFORMED AND PARTS REPLACED)			SIGNATURE

## Other services needed

DATE	DEALER	
<b>NOTES</b> (DESCRIPTION OF SERVICES PERFORMED AND PARTS REPLACED)		<b>SIGNATURE</b>

DATE	DEALER	
<b>NOTES</b> (DESCRIPTION OF SERVICES PERFORMED AND PARTS REPLACED)		<b>SIGNATURE</b>

DATE	DEALER	
<b>NOTES</b> (DESCRIPTION OF SERVICES PERFORMED AND PARTS REPLACED)		<b>SIGNATURE</b>

DATE	DEALER	
<b>NOTES</b> (DESCRIPTION OF SERVICES PERFORMED AND PARTS REPLACED)		<b>SIGNATURE</b>

DATE	DEALER	
<b>NOTES</b> (DESCRIPTION OF SERVICES PERFORMED AND PARTS REPLACED)		<b>SIGNATURE</b>

DATE	DEALER	
<b>NOTES</b> (DESCRIPTION OF SERVICES PERFORMED AND PARTS REPLACED)		<b>SIGNATURE</b>



**RANGER**



**KUBERG s.r.o.**

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