

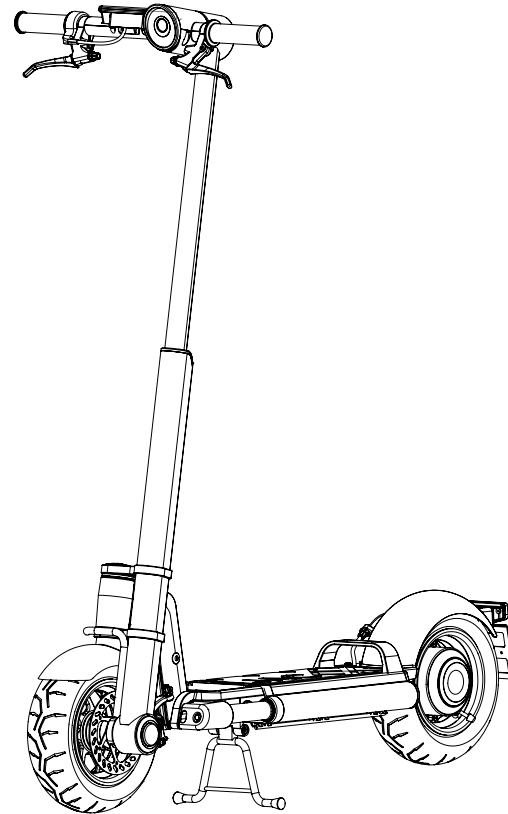


User Manual

JACK 

JACK

User Manual



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Contact Information

For support, please contact the company from which you bought the products. For a listing of Authorized Mantys Dealers and Distributors, refer to the JACK website at: www.jack-electric-scooter.com.

JACK

User Manual

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Chapter 1.

INTRODUCTION

Congratulations on the purchase of your JACK.

JACK is carefully designed to provide you with a comfortable ride. The adjustable handlebar allows for an ergonomic riding position for everyone. The 6,5 inch wheels and 92cm wheel base guarantee a comfortable ride. And with the 350W hub motor, things never gets dull.

JACK is a compact, foldable electric powered scooter. An environmentally friendly, modern personal transporter for traveling short distances in urban areas. A high-tech electric design product, that is easy to fold and to bring along, because of its low weight and compact dimensions.

JACK – Mobility Unfolds

JACK is a brand by LEEV mobility.

LEEV is involved the development and marketing of innovative light electrical vehicles for personal use in short and medium range. Applications include inner city mobility, commercial services, and leisure activity. All vehicles are based on proprietary and patented technologies.

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Chapter 2.

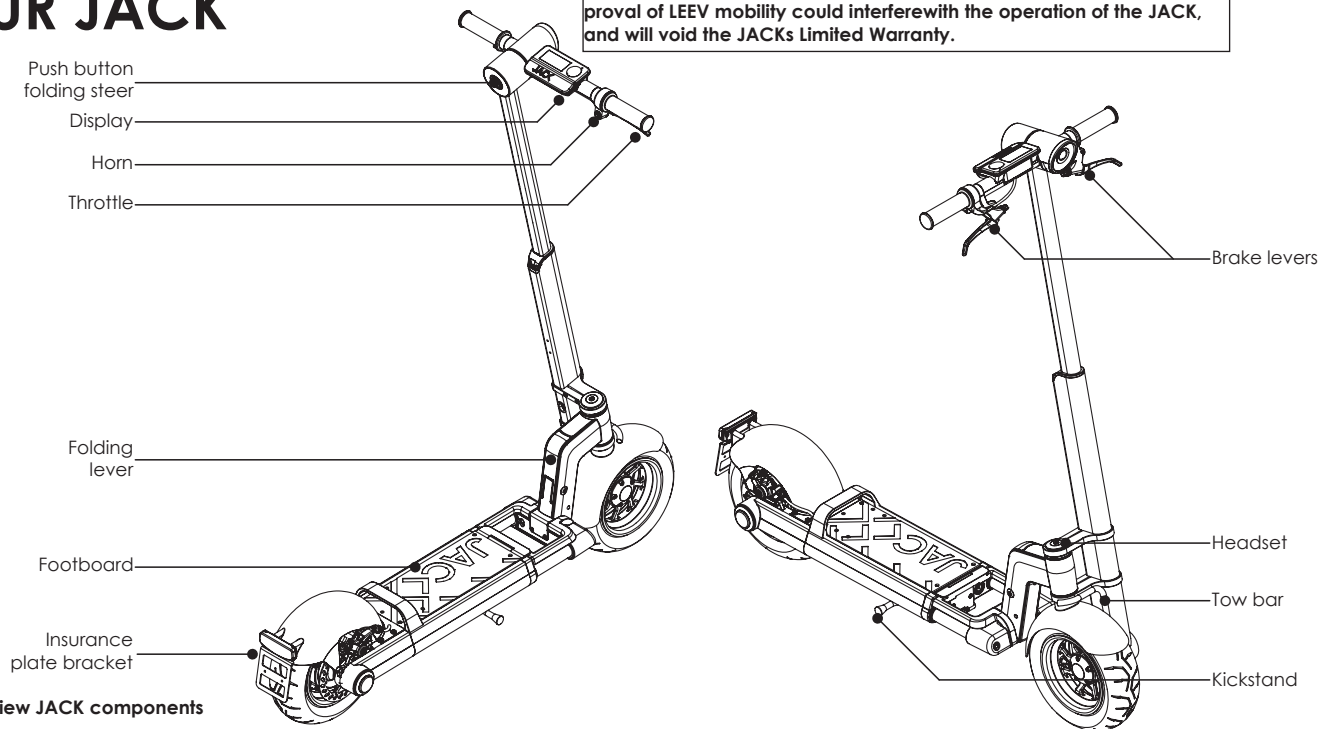
COMPONENTS – GETTING TO KNOW YOUR JACK

! CAUTION

All JACK parts must be approved by LEEV Mobility, and properly installed. using your JACK without all parts properly installed could damage your JACK and result in serious injury from loss of control, collisions and falls.

! CAUTION

Do not modify the JACK. Any modifications without prior written approval of LEEV mobility could interfere with the operation of the JACK, and will void the JACKs Limited Warranty.

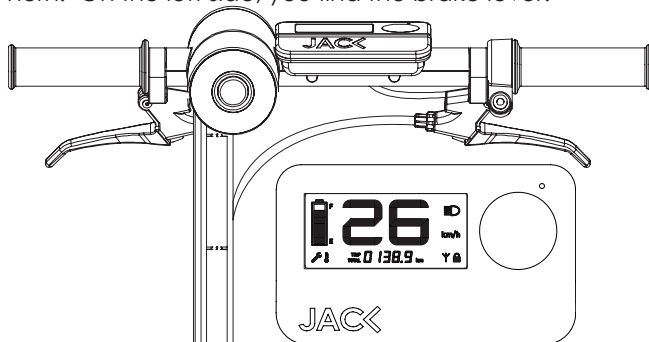


2-1: Overview JACK components

Chapter 3.

USING THE CONTROLS

All controls are located on the two handlebars. On the right side (display) you will find the main switch, battery level indicator, speedometer and ODO meter. Further on the right you will find the throttle, brake lever and the horn. On the left side, you find the brake lever.



3-1: JACK handlebar

3-2: JACK display

Main Switch / lock

To unlock your JACK and prepare it for riding, an RFID switch is provided at the top of the display. With the RFID tag you can switch the jack on/off, by holding the tag onto the RFID spot.

Battery level indicator

Fully charged, the JACK has a range of 25 Km. In this situation, all 6 blocks of the battery will be visible on the display. When the battery level drops, first the upper block will turn off than the one underneath that etc.

Throttle

The throttle is the main control on the JACK and is used to control the speed of the vehicle. Turn the throttle with your wrist to go faster. Release the throttle and and squeeze the brake levers to stop or slow. Do not continue holding down the throttle while squeezing the brakes as this can reduce battery life or cause damage to your JACK.

Brake levers

The JACK is equipped with disk brakes on the front and back, operated by two levers. Just like a bicycle or motorcycle, the harder you squeeze, the harder the brakes operate. Take time to get used to the braking power before using the brakes at full speed. In certain conditions, squeezing the brakes too hard at speed could cause the operator or unit to lose control.

Horn

The horn is situated at the right side. Use your thumb to operate the horn (button).

Lights

The lights will automatically turn on when the JACK is switched on. Please note that the JACK only uses dipped beams and has no switch for high beams!

Display

Central in the display you will find your speed (km/h)
Underneath the speed you will find your total distance covered (trip total) (km).

On the left side of the display you have got your battery status. 6 blocks light up is totally full, all blocks of means your battery is empty.

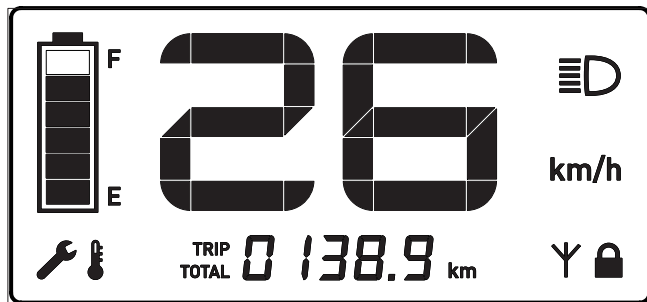
The wrench sign means that your JACK needs service.

Next to the wrench you will find the temperature. When this sign goes on, your JACK is overheated.

On the right side you will find the light symbol (this is always on).

The lock indicates when you swipe with a wrong RFID tag.

Next to the lock (left) is the network icon. This will go on when there is a communication error. (wires damaged).



Chapter 4.

HANDLING

As the JACK is a totally new vehicle, with a unique steer and handling, we recommend that you take time to familiarize yourself with the vehicle and to gradually explore the limits of performance with each ride. For the safety of friends and others who will try your new JACK it is your responsibility to guide them how to ride safely. Make sure you have read and understood all warnings and safety information contained in this owner's manual before riding.

Your first ride

CAUTION

Exceeding the weight limits for driver plus cargo as stated in the specifications, will increase risk your risk of damaging the JACK

Before taking off

1. Select an appropriate outdoor area for your first ride. This area should measure at least 4 by 4 meter. (13 by 13 feet). It should have a level, smooth riding surface with good traction and should be free of obstructions and away from vehicles, bicycles, pets, small children, and other distractions.

2. Position the steer on the right height; make sure that your arms are not over-stretched but slightly bent.
3. Make sure that your handlebar folding lock is tight.
4. Put one foot on the footboard of the JACK and put your other foot next to the jack on the ground, to hold balance.
5. Hold the handlebar firmly, make sure to not twist the throttle.

Now you are ready to take off

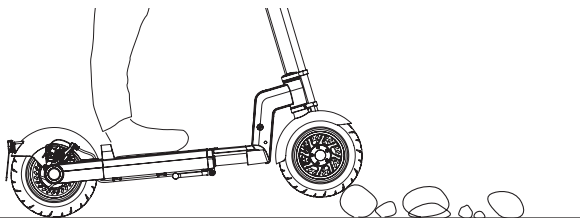
1. Switch on the electronic system with your RFID tag.
2. Step slowly besides the JACK to get it going.
3. While stepping use the throttle gently (by turning it back gradually).
4. When using the throttle and making speed, put your other foot also on the footboard.
5. Try getting comfortable on the JACK by searching a good position for both of your feet.
6. Once in position rotate the throttle gently to get used to the acceleration and higher speeds.

Stopping

1. Use the brakes gently, until you're at a comfortable speed.
2. When almost at stand still, get 1 foot of the footboard and use it to help you stop and stand still.
3. When standing still, get your other foot of and put the JACK on its kickstand and turn the JACK off.

Avoiding hazards

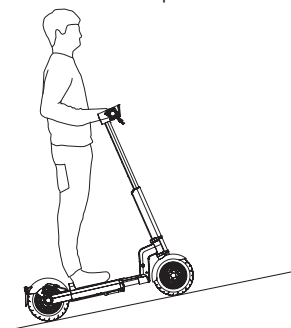
1. The JACK is a 1-person vehicle. Do not take passengers
2. Do not step off a riding JACK; always come to a complete standstill before stepping off the vehicle
3. Do not exceed the maximum weight limit (rider plus cargo) as described in the specifications
4. Avoid braking and operating the throttle at the same time; this will result in unexpected vehicle behavior, reduce battery life and could cause damage to the JACK.
5. In case of an emergency, reduce the throttle immediately and apply the brakes.
6. Avoid riding on slippery surfaces in order to keep sufficient traction and control over your vehicle.
7. Avoid abrupt maneuvers, such as fast starting, steering and stopping.
8. Avoid riding over loose objects such as stone and branches



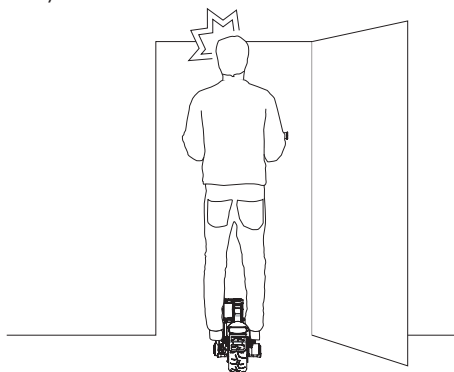
4-1: Loose objects

9. Avoid holes, curbs, steps and other obstacles higher than 10 cm/4 inches. This may damage the height mechanism and steer lock.
10. Avoid riding on slopes steeper than 20 percent.

11. Lean uphill when climbing a hill.



12. Avoid riding indoors because head clearance may be limited.



13. When climbing a hill, it is best to have some speed before starting the climb.
14. Follow the instructions for servicing your JACK in order to fully enjoy your vehicle.
15. Be safe...and enjoy the ride!

Maximizing range

Maximum range distances are provided in the specifications. The range of your JACK is affected by many variables, including:

1. Terrain: Riding on smooth, flat terrain improves range and riding on hilly terrain and unpaved surfaces reduces range
2. Speed and riding style: Riding at a consistent, moderate speed will increase range. While frequent starting, stopping and accelerating and deceleration will reduce the range.
3. Tire inflation pressure: Riding with tire pressures below the specified limit reduces range.
4. Rider weight and cargo: Lighter riders with less cargo experience better range than heavier riders with more cargo.
5. Temperature: Storing, charging and riding in temperatures to the median of the recommended temperature range improves range. Riding in colder temperatures reduces range significantly.
6. Battery condition: Properly charged and maintained batteries provide greater range. Old, cold, heavily used and or poorly maintained batteries provide less range.
7. Wind: Riding with a tailwind increases range. Riding against a headwind reduces range.

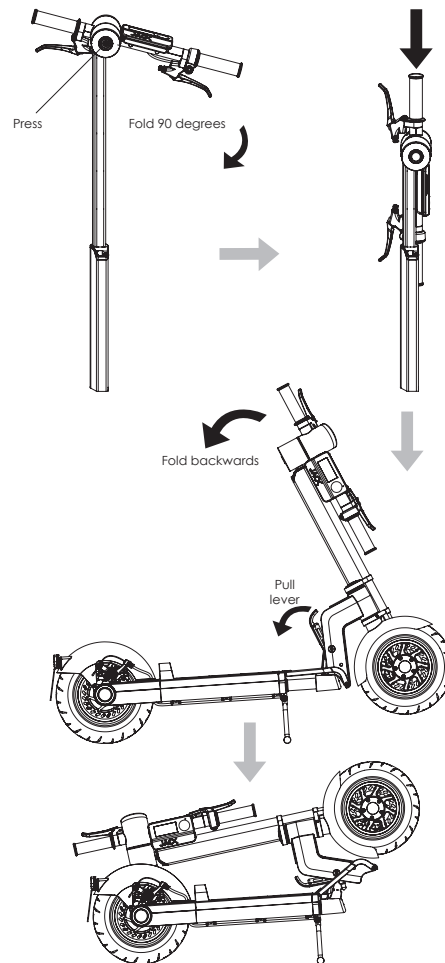
Chapter 5.

FOLDING AND UNFOLDING

The JACK can be folded for transportation or compact storage in a few easy steps. Always fold in a gentle and controlled manner and make sure no clothing or body parts can get trapped between hinging parts.

1. Make sure to have the JACK on its kickstand before and while folding.
2. Press the central button on the handlebar. When pressed, fold the steer 90 degrees.
3. When the steer is folded 90 degrees, you will be able to slide the steerer tube down.
4. Now you can use the lever at the bridge. Tilt this towards you. While doing so, you will be able to fold the steering column to the foodboard.

Make sure the JACK is turned off while folding.



Chapter 6.

USING THE BATTERY

! CAUTION

For your safety and the safety of others, and to maximize battery life and performance, follow the instructions in this manual.

! CAUTION

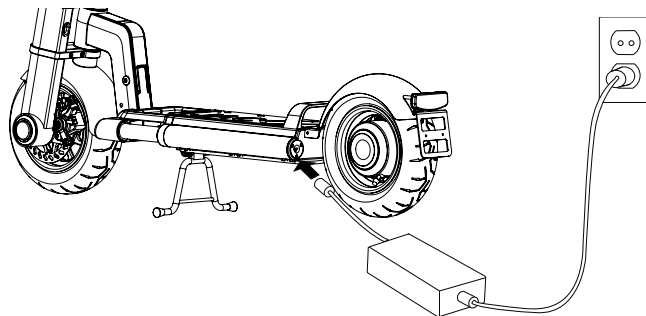
Do not use the batteries if the casing is:

- Broken
- Emits an unusual odor or excessive heat
- Leaks any substance

Avoid contact with any substance seeping from the batteries.

Keep Batteries out of reach of children and pets. Exposure to Battery voltage could result in death or serious injury. Unplug and disconnect your JACK from AC power before removing or installing Batteries or performing any service. It is hazardous to work on any part of your JACK when it is plugged into AC power. You risk serious bodily injury from electric shock as well as damage to your JACK. The cells within the Battery contain toxic substances. Do not attempt to open the Battery. Do not insert any object into the Battery or use any device to pry at the Batteries casing. If you insert an object into the Batteries' port or openings you could suffer electric shock, injury, burns, or cause a fire. Attempting to open the Batteries casing will damage the casing and could release toxic and harmful substances. Only charge the Battery using charging devices approved by LEEV Mobility. Comply with all local and federal and individual country laws when disposing of and transporting the JACK Batteries.

The JACK has 1 battery in its foodboard. For charging the JACK you will need a JACK charger (included). Follow these simple steps for charging:



6-1: charging components

1. Place your JACK in a dry environment within the recommended charging temperature range.
2. Make sure the main switch (RFID) is off.
3. Verify that the charge port, power cord and AC power outlet are clean, dry and free of debris.
4. Plug the connector into the charge port of the JACK.
5. Plug the charger into a AC power outlet or surge protector.

Charging takes about 5 hours for a full charge. During charging, 1 red LED is lit on the charger. When the battery is fully charged, the LED turns green. After charging, unplug the connector from the charge port. The JACK is ready to go!

To maximize the performance and life of your batteries, fully charge them for at least 12 hours, once a month, or after every 12 hours of operation—whichever comes first. Charge your batteries only when they are within the specified charging temperature range.

! CAUTION

Do not insert the plug if the Charge Port, Power Cord or AC Power outlet is wet.

! CAUTION

Always keep the charge port cover closed, except when you are charging the JACK. Closing the charge port cover prevents water, dirt, dust and other contaminants from entering the charge port and causing damage to your JACK.

Battery status indicator

There are 6 blocks of battery on the display. When the battery level drops, first the upper block will turn off then the one underneath that etc. Until the last block is only visible, indicating low Batteries.

Shipping the batteries

Li-polymer batteries are considered hazardous materials under shipping regulations. Comply with all local, federal and individual country laws when transporting the JACK battery. When shipping a whole JACK, make sure to detach the battery.

! CAUTION

Do not use or transport a Battery if the casing breaks open, leaks any substance, becomes excessively hot, or if you detect an unusual odor. Do not handle a damaged or leaking Battery unless you are wearing disposable rubber gloves, eye protection, and are in a well-ventilated area. Dispose of the rubber gloves and damaged Battery properly in accordance with regulations governing disposal of toxic materials.

Chapter 7.

MAINTENANCE

The JACK is designed to be virtually maintenance free. Make sure it is clean, all parts are installed and functioning properly, the battery is charged, and tires are properly inflated prior to riding. Never open the throttle, motor or battery compartments. These are not user-serviceable parts.

CAUTION

Before you perform any of the following procedures, verify that the JACK is powered off and unplugged. It is not safe to perform these procedures while the JACK is powered on or charging.

Checking the tire/wheel assembly

To check the tires and wheels:

1. Make sure the JACK is unplugged and powered off.
2. Check for wheel wobble by grasping the tire/wheel assembly and attempt to move it side-to-side. The tire/wheel assembly should not move laterally. If you detect wheel wobble, check the Wheel bolts and tighten them.

Checking Tire Inflation Pressure

The tires on the JACK provide suspension and traction. Both functions are affected by the tire inflation pressure.

Be sure to:

1. Make sure the JACK is unplugged and powered off.
2. Check tire inflation pressure regularly. Improperly inflated tires will result in less than optimal range.
3. If tire inflation pressure in any of the tires is not at the level stated in the Specifications, inflate the tire to the specified pressure.
4. Check that all tires are inflated equally and are free of debris or contaminants.

CAUTION

Higher pressure reduces suspension performance and traction, and increases risk of loss of control, collisions, and falls. Lower pressure reduces range and increases risk of damage to the Tire/ Wheel Assembly.

Checking the Brakes

To check your brakes:

1. Make sure the JACK is unplugged and powered off.
2. First check the brake levers. Are they still tight on the handlebar, if not, tighten the bolts to .. Nm
3. Check if the brake calipers have no movement. If they are loose, tighten the bolts with .. Nm.
4. Check if the brake pads are still sound. (note the brakepads should be renewed every 2500 Km.).
5. Regularly check if the disc brake is in place or shows no movement. If it does show movement, retighten the bolts with 12 Nm.

Checking the headset

Regularly check if the headset bolt is still tightened. The headset top cap should not be able to be rotated. If it could get rotated, make sure that the bolt on top is re tightened with 5 Nm

Checking the display

The display is secured with 4 screws on the bottom. Make sure to check these screws when you see that the display is loose or feels loose. The screws should be tightened with 4 Nm.

Checking the foodboard

The foodboard is tightened with 4 bolts. Make sure that the foodboard is tightened. Check the foodboard every month. If its loose, retighten the bolts with 5 Nm.

Cleaning your JACK

To clean your JACK:

1. Make sure the JACK is unplugged and powered off.
2. Always close the charge port cover after charging, and prior to cleaning.
3. Gently clean your JACK with soap and water and a soft cloth.

Avoid submerging your Mantys

Do not submerge the batteries or any other electronic components in water.

1. Avoid exposure to heavy downpours or extended periods of heavy rain (when riding, storing, or transporting the JACK).
2. Do not use a power washer or high pressure hose to clean your JACK. Use of these devices could force water into components that must stay dry.
3. Do not allow water to get into the charge ports.

CAUTION

Do not use a power washer or high pressure hose to clean your JACK. Use of these devices could force water into components that must stay dry. Do not allow water to get into the Charge Port.

Chapter 8.

TROUBLESHOOTING

! CAUTION

Always shut down your Mantys and unplug the AC Power Cord before performing any maintenance or installing any part or accessory.

The JACK will not power on.	<ol style="list-style-type: none"> 1. Make sure the battery is charged. 2. Make sure the Display is turned on with the RFID.
A tire is flat and will not maintain inflation pressure.	<ol style="list-style-type: none"> 1. Check for tire damage. If the tire is damaged, contact an authorized JACK dealer or distributor. 2. If there is no visible tire damage, check to make sure the tire valve stem core is tight. Tighten the valve stem if necessary 3. Inflate the tire and check for leaks. If the tire still goes flat or will not maintain inflation pressure, contact an authorized JACK dealer or distributor.

Tire/wheel assembly is loose and wobbles.	Tighten the wheel bolts.
The Jack handles poorly	<ol style="list-style-type: none"> 1. Check the tire pressure and inflate if necessary. 2. Check the headset bolt and retighten if necessary.
Play at the footboard	Tighten the bolts on the footboard.
The steerer tube can't be moved down.	Make sure that the steer is folded 90 degrees until the pushbutton snaps back.
The JACK will not fold.	Make sure to press the upper plastic part and then lift the middle plastic part (lever) towards you. Then move the front section backwards.
Poor/uneven braking	Adjust the cable tension with the adjuster rings at the brake lever.
The JACK will not charge	First connect all cables in charger than see if it is actually plugged in.

If, after reviewing the troubleshooting procedures, you are still unable to resolve the problem, contact an authorized JACK dealer or distributor. For a list of Authorized Dealers and Distributors, visit www.jack-electric-scooter.com.

Chapter 9.

SPECIFICATIONS

Dimensions	1000 x 530 x 1380 (L x W x H) mm.
Dimensions folded	1000 x 300 x 400 (L x W x H) mm.
Weight	20 Kg.
Top speed	25 Km/h.
Range	20 Km. (12 miles)
Battery	20V Lithium polymer
Motor	350 Watt geared electronic hub motor
Wheels	90/50-R6.5 Road tires
Braking	Dual disc brakes
Tire pressure	Max. 2,5 bar / 36 Psi
Weight limit	Driver + baggage should not exceed 120 Kg. / 265 lbs.

