



OWNER'S MANUAL

Soco TC Max



Version 1.0

May 2019

Congratulations on purchasing your Soco electric motorcycle. We wish you an enjoyable and safe riding experience.

For your safety and comfort, we recommend that you read carefully the whole of this manual before using the motorcycle. If you have any questions, you should contact either Vmoto UK using the details below, or a dealer authorised by Vmoto UK.

The contact details for Vmoto UK are:

Telephone: 0800 133 7304

Email: info@vmoto-uk.com

Address: Vmoto UK Distribution Limited
105 Sumner Street, London SE1 9HZ

You should always follow the instructions, maintenance and riding requirements set out in this manual and have after-sales servicing carried out by an authorised dealer at the correct time. Failure to do so carries a risk of serious injury or death.

Before riding, take time to get acquainted with your motorcycle and how it works. To protect yourself and your investment, you should take responsibility for keeping your motorcycle well maintained. Scheduled servicing, pre-ride and other periodic checks detailed in this manual are a must.

1. Before using your motorcycle

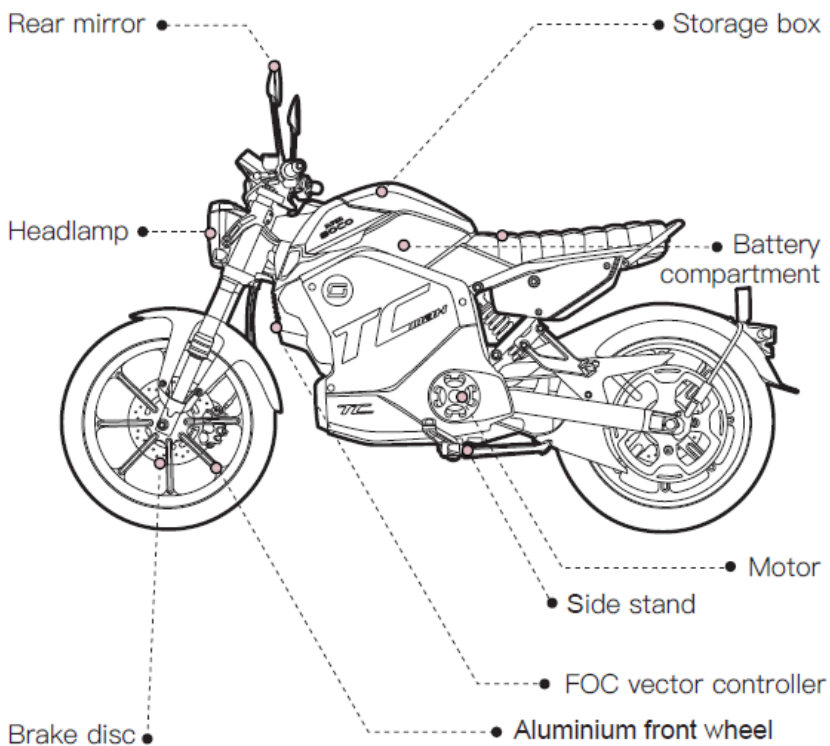
- 1.1 Your motorcycle should be assembled by a properly qualified motorcycle mechanic at a dealer authorised by Vmoto UK.
- 1.2 You should undertake all training and certification that is legally required to ride your motorcycle. Also, if it's your first time riding this type of motorcycle, you should test in a quiet area away from traffic.
- 1.3 Ensure that you know about and obey all traffic laws and regulations.
- 1.4 Always use appropriate clothing, including armoured jacket and trousers, motorcycling boots, gloves and a properly-fitted helmet.

2. Riding style and safety

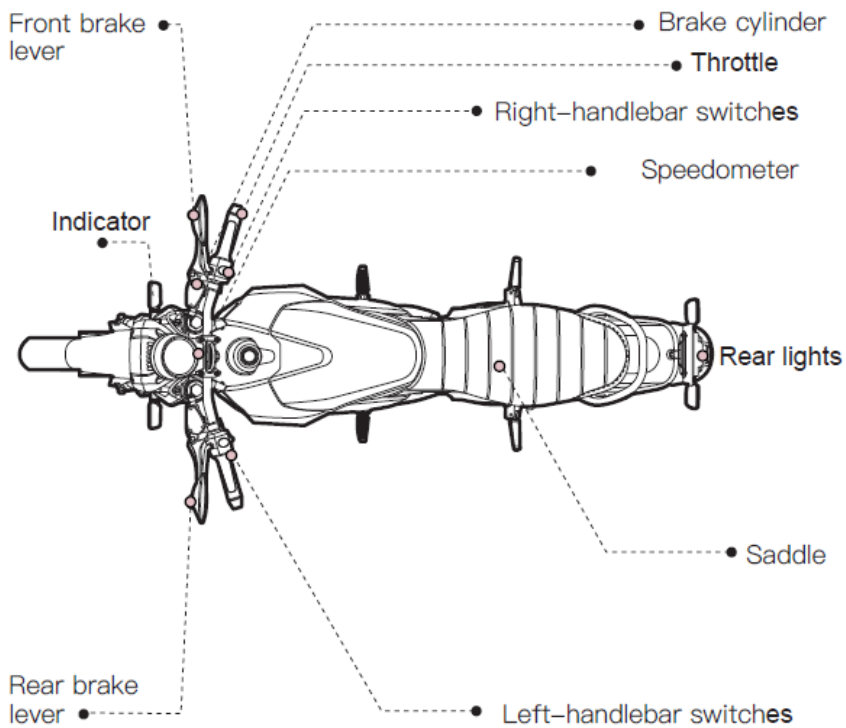
- 2.1 Ride with foresight and consideration for other road users. Always keep both hands on the handlebars while riding and turn the throttle slowly.
- 2.2 Never ride when under the influence of alcohol or drugs which may affect riding capability.
- 2.3 Ride with exceptional care on bumpy, loose or wet surfaces.
- 2.4 Pay attention to any unusual noises or handling of the motorcycle. If in doubt, check it out.
- 2.5 Always undertake the pre-ride checks mentioned in this owner's manual.
- 2.6 The motorcycle has a side stand. Ensure that the motorcycle is on an even, stable surface before using the stand.
- 2.7 Never use your mobile telephone or do anything else which may distract you from riding or from other road users.
- 2.8 Always service your motorcycle at an authorised Vmoto dealer in accordance with the service schedule set out in this owner's manual.

3. Vehicle schematics

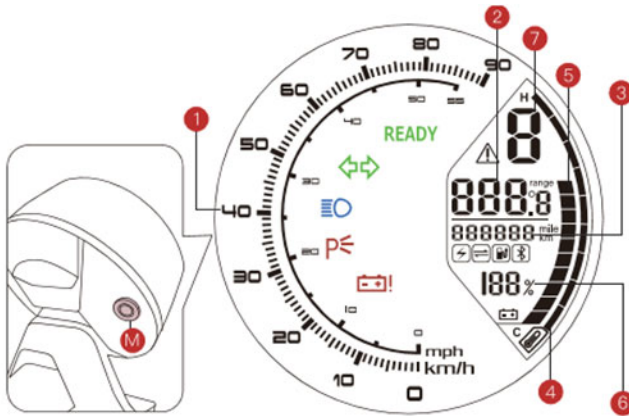
SIDE VIEW



TOP VIEW



4. Instrument cluster



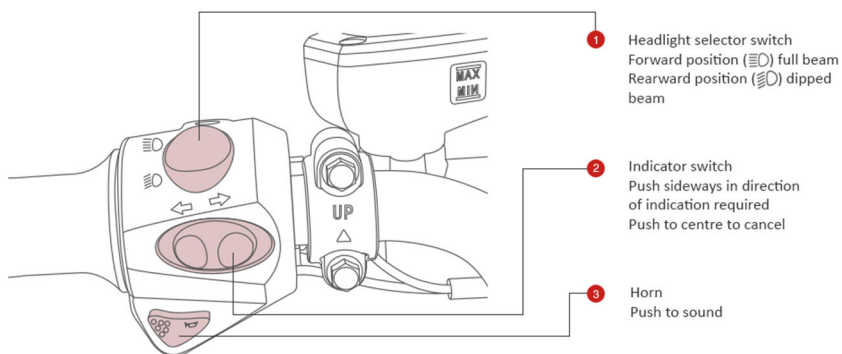
- 1 Speed display - Displays the current speed
- 2 Range / temperature - Indicates the current range or temperature
- 3 Total mileage - Shows the total mileage of the vehicle
- 4 Controller temperature - Real-time temperature of the controller
- 5 / 6 Battery state of charge - Indicates current battery status in bars and as a percentage
- 7 Riding mode - Shows riding mode:
 - Mode 1 – Eco mode
 - Mode 2 – Normal mode
 - Mode 3 – Sport mode
- M Multifunction button - in normal mode:
 - press for less than 2 seconds to toggle range / temperature display

press for more than 2 seconds but less than 8 seconds to manually enable cluster backlight

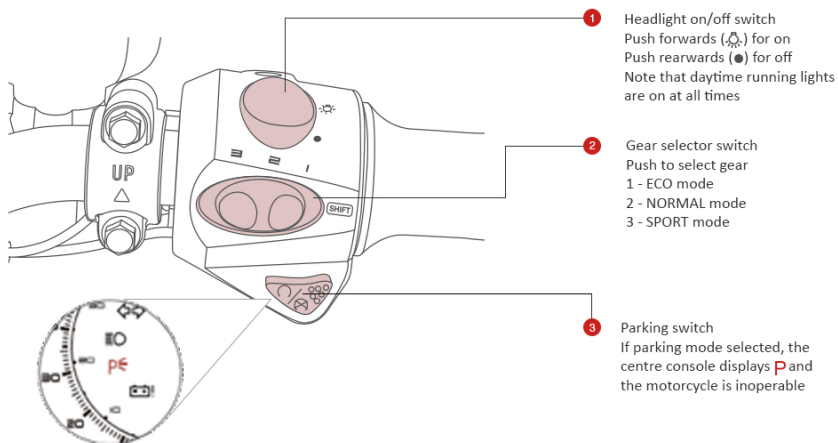
press for more than 8 seconds to change between mph and km/h

5. Handle switches

5.1 Left hand side

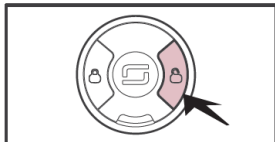


5.2 Right hand side



6. Starting and locking

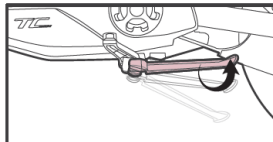
6.1 How to start



1 Press to unlock remote control



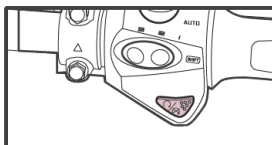
2 Put on helmet.



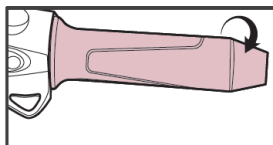
3 Raise the side stand.



4 Press the POWER button



5 Press Parking button so the centre console says READY

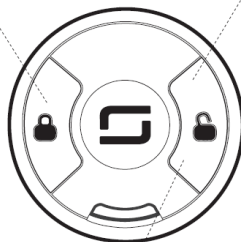


6 Turn throttle gently and ride

6.2 Intelligent key fob

LOCK

When TC-MAX is in standby status, press LOCK, in order to lock the TC-MAX and engage the alarm.



UNLOCK

When TC-MAX is in locked state, press UNLOCK. The POWER button will light continuously and the TC-MAX is ready to start.

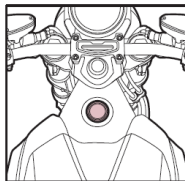
POWER

After unlocking the TC-MAX using the remote control, press the POWER button in order to turn on the TC-MAX. Press again to return to standby status.

If POWER flashes, the TC-MAX is locked.

If POWER is continuously on, it is in standby status

If the red circle is continuously on, the TC-MAX is ready to ride.

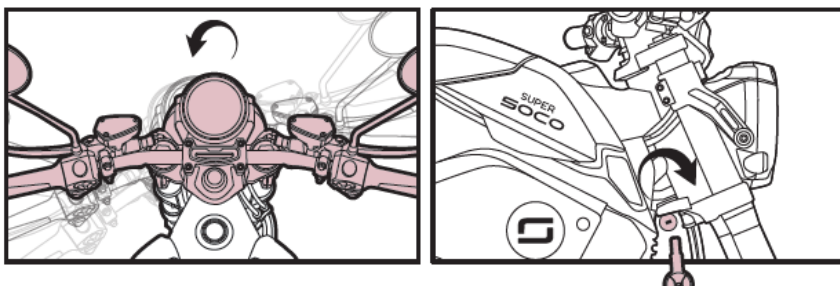


6.3 Safety switch



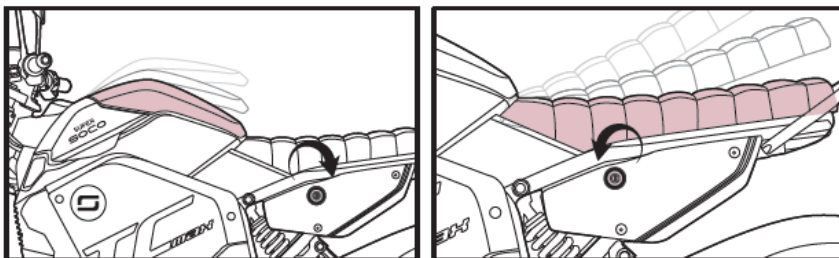
The safety switch is located under the seat. Turn to 'on' to power on the motorcycle. Turn to 'off' to power down. Note that this prevents the alarm and anti-theft from functioning. The motorcycle should always be powered down if not used for a long period of time, to prevent damage to the battery.

6.4 Steering lock



The steering lock is engaged by rotating the handlebars to the far left, then inserting the key into the side of the motorcycle behind the top of the forks. Do not attempt to ride when the steering lock is engaged.

6.5 Battery compartment and seat lock



Insert the key into the side of the motorcycle and turn to the right to open the battery compartment cover. Turn to the left to unlock the seat.

7. Pre-ride checks

- 7.1 Check tyre inflation (see paragraph 11.4), tread and wear and ensure no foreign objects are present. If tyres are worn or punctured, they must be replaced immediately.
- 7.2 Check brake operation and levels of brake fluid (on the handlebars next to the brake levers). Make sure that discs and pads are not worn or damaged and that the disc is not warped.
- 7.3 Move the steering from side to side, ensuring that the movement is smooth and not loose and that there is an equal turn angle in both directions.
- 7.4 Ensure charge level is sufficient for the journey. **Do not start a ride with less than 20% battery.**
- 7.5 While the motorcycle is off or in parking mode, check that throttle operation is smooth.
- 7.6 Check operation of headlights (dipped and full beam), indicators (front and rear) and horn.
- 7.7 Ensure that there are no error messages showing (see paragraph 12).
- 7.8 Make sure that the belt and sprocket are not worn or abraded and that there are no foreign objects present in the belt teeth.

7.9 Ensure that you are wearing a helmet and appropriate motorcycle clothing.

8. Loading

8.1 The maximum loading of a motorcycle is 150kg, including rider, passenger and cargo.

8.2 The motorcycle is certified for a maximum of 2 people and the loading above. **Overloading is extremely unsafe.**

9. Battery

9.1 For the first 3 charges, ensure that the motorcycle is fully charged. **Also, make sure that the motorcycle receives a full charge at least every 2 months.**

9.2 The charger will stop automatically. It is not possible to reverse the polarity. Charging for a long time / overnight will not damage the battery or the charger. However the motorcycle should not be left plugged in for more than 24 hours.

9.3 A full charge takes approximately 7-8 hours.

9.4 Riding with a battery less than 10% can cause the motorcycle to power off. This is normal under-voltage protection for the battery. **If this happens, do not ride again until the battery is charged.**

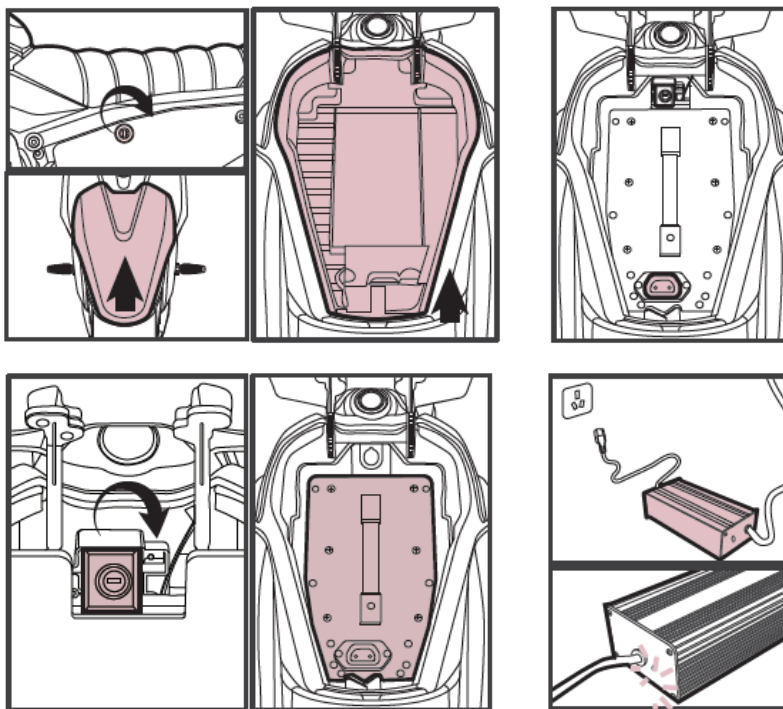
9.5 The battery can deplete over time as the motorcycle systems consume electricity; this is normal. Always charge the battery before use.

9.6 Mileage per charge is stated in ideal conditions; ambient temperature and weather conditions, loading and riding style all influence range. For tips on getting the best range, contact your dealer.

9.7 After completing a ride, charge the motorcycle to ensure full battery for the next ride.

9.8 If storing the motorcycle, ensure that the safety switch is in the off position and that the battery is unplugged. Preferably, remove the battery from the motorcycle for storage and ensure charged at least every two months. Failure to do so will deplete the battery and may lead to it needing replacement. Recharge the battery after storage.

9.9 Charging the motorcycle



- 1 Open the battery compartment
- 2 Turn the safety switch to 'off'
- 3 Take out the battery pack
- 4 Connect the charger to the battery
- 5 Connect the charger to AC current

It is also possible to charge the motorcycle by plugging the charger lead into the side of the motorcycle while the battery is connected internally.

9.10 The charger can become hot in use. For this reason it must be used in a dry, ventilated place and left on a surface which is non-flammable and non-insulating. Do not leave the charger on soft surfaces.

9.11 **Never leave the motorcycle with a depleted battery as this can cause the battery voltage to dip below minimum and require replacement.**

9.12 **Using the motorcycle with a depleted battery will shorten the life of the battery and can make the battery inoperable (requiring replacement).**

9.13 **Do not attempt to modify or disassemble the battery, or perform any diagnostics. This is extremely dangerous and can result in fire and explosion.**

9.14 Do not charge the motorcycle with the ignition turned on.

9.15 The operational temperature range for the battery is -20°C to 65°C. The temperature range for charging the battery is 0°C to 55°C. The temperature range for storage of the battery is -20°C to 35°C, ambient humidity ≤65%RH. Using the motorcycle or charging or storing the battery outside of the stated ranges will damage the battery. If the ambient temperature is outside the stated range for operation or charging, move the motorcycle to a place where it will cool / warm and do not use or charge until the motorcycle temperature is within the stated range.

10. Electrical safety

10.1 Only use the original charger and cables supplied with the motorcycle. Use of other chargers or cables is dangerous. Replace fuses in the charger plug with the same type.

10.2 Only once the charger is connected to the motorcycle, plug the charger into a 13A outlet.

10.3 **Do not plug the other end into the 13A outlet until the charging cable is connected to the motorcycle.**

10.4 The battery lights indicate the level of charge in the battery.

- 10.5 No adaptation should be required to domestic wiring although ensure that miniature circuit breakers (MCBs) are fitted at the distribution box. If in doubt, ask an electrician.
- 10.6 The battery should be stored in a clean, dry, ventilated space. Keep the motorcycle and battery outside residential buildings and away from corrosive substances, fire and heat sources.
- 10.7 Never charge the motorcycle in the wet, or in damp conditions. Never leave extension cables outside or on the ground. Using any electrical appliance (including your motorcycle charger) in the wet is extremely dangerous and can lead to serious injury or death.**
- 10.8 If the motorcycle is involved in an accident, and the battery box is compromised, there is a very small risk of fire and explosion. The battery box is located underneath the motorcycle seat.
- 10.9 If the motorcycle becomes hot to the touch, starts smoking or gives off a strange smell you should stop riding and move to a safe distance from the motorcycle before calling emergency services. Inform emergency services that the motorcycle uses lithium ion batteries.

11. Vehicle maintenance

- 11.1 You should clean your motorcycle regularly, using products specifically designed for motorcycles. Do not use rough or abrasive cleaning products as they will damage the finish.
- 11.2 Vehicles parked outside must be covered with a waterproof cover in order to protect from sun damage and water ingress.
- 11.3 Do not use high pressure cleaners. They can penetrate the seals and cause electrical faults. Cleaning with a high pressure cleaner is dangerous.**
- 11.4 The only other user maintenance that should be carried out is charging and tyre inflation. The correct pressure for the tyres is:
- (a) front: 29 PSI
 - (b) rear: 33 PSI or 36 PSI with pillion passenger

11.5 Low tyre pressure or worn tyres will affect range and handling.

11.6 All other mechanical issues or error messages should be referred to a dealer authorised by Vmoto UK. If an error message appears, in the first instance turn the motorcycle off and then on again using the safety switch.

12. Troubleshooting

Fault	Likely cause of fault	Action
The vehicle is dead and the start button does not light	1. The battery is not connected	1. Connect the battery
	2. The safety switch is in the off position	2. Move the safety switch to the on position
With the power on, upon opening the throttle, the motorcycle does not move	1. The battery is depleted	1. Charge the battery
	2. The side stand is out	2..Put the side stand away
	3. Parking mode is active	3. Deactivate parking mode
	4. The brake is on	4. Release the brake
	5. The throttle switch is faulty	5. Contact after sales care or dealer
	6. Controller plug is loose	6. Contact after sales care or dealer
	7. Controller fault	7. Contact after sales care or dealer
Slow speed or short range	1. Battery is low or depleted	1. Charge the battery
	2. Tyre pressures are too low	2. Check tyre pressures and inflate if necessary; riding with low tyre pressures also causes handling issues
	3. The motorcycle is overloaded	3. Decrease the load; this is dangerous
	4. The brakes require adjustment	4. Check brake pad wear and if necessary contact after sales care or dealer

	5. The battery is old or requires replacement	5. Replace the battery
The battery will not charge	1. Bad connection	1. Check the connections between the battery and the motorcycle and / or the charger
	2. Non-original charger is being used	2. Use the original charger; use of other chargers is dangerous
	3. The battery is old or requires replacement	3. Replace the battery
Console display 99	Controller communication failure	Contact after-sales care or dealer
Console display 98	Controller has suspended operation (owing to possible overcurrent, stall, undervoltage or overtemperature)	Stop for a while and attempt to start again
Console display 97	Controller power tube error	Contact after sales care or dealer
Console display 96	Controller hall sensor error	Contact after sales care or dealer
Console display 95	Controller throttle error	Contact after sales care or dealer
Console display 94	Battery communication failure	Please check whether the charging interface is connected, if not contact after sales care or dealer
Console display 93	Charge overcurrent	Stop charging and check the charger
Console display 92	Charge overvoltage	Stop charging and check the charger
Console display 91	Battery high temperature	Stop charging / stop riding
Console display 90	Battery discharge overcurrent	Stop riding immediately until error resolves

Console display 89	Charging low temperature	Charge battery in a warmer place and wait for it to warm up
Console display 88	Discharge low temperature	Put battery in a warmer place and wait for it to warm up
Console display 87	Network connection is abnormal	Move motorcycle to a more open space; if unresolved contact after sales care or dealer
Console display 86	GPS connection exception	Move motorcycle to a more open space; if unresolved contact after sales care or dealer

Delivery certificate

This certifies that a pre-delivery inspection has been carried out by an authorised dealer / Vmoto UK in accordance with PDI check sheets in force

<p>_____</p> <p>Signature of tester and dealer stamp</p> <p>_____</p> <p>Date</p>

Vehicle identification number (VIN):
Model name
Warranty version
Date of delivery
Dealer name and address

Service history

All of the inspections and services should be carried out either by Vmoto UK or a dealer authorised by Vmoto UK.

Inspections are due within 100 miles of when they are stated to be due. Inspections must be carried out at least annually, no matter what the distance ridden.

The mandatory checks to be carried out at each service are:

- Charge batteries (note battery guidelines) and check contacts
- Check tyre pressure and correct if necessary
- Check tyre wear and replace tyre(s) if necessary
- Check brake pads and discs and correct / replace if necessary
- Check all main screws against torque requirements
- Check screws, nuts and fastening points
- Check motor mountings, stand mountings, suspension struts, fork and handlebar bearing
- Check the functioning of front and rear suspension
- Check that all operating parts are in working order
- Check all lights
- Check directional stability, front and rear brakes and handlebar

<p style="text-align: center;">Inspection 500 miles or 6 weeks</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Inspection 2,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>
<p style="text-align: center;">Inspection 4,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Inspection 6,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>
<p style="text-align: center;">Inspection 8,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Inspection 10,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>
<p style="text-align: center;">Inspection 12,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Inspection 14,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>

<p style="text-align: center;">Inspection 16,000miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Inspection 18,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>
<p style="text-align: center;">Inspection 20,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Inspection 22,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>
<p style="text-align: center;">Inspection 24,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Inspection 26,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>
<p style="text-align: center;">Inspection 28,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Inspection 30,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>

<p style="text-align: center;">Inspection 32,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Inspection 34,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>
<p style="text-align: center;">Inspection 36,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Inspection 38,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>
<p style="text-align: center;">Inspection 40,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Inspection 42,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>
<p style="text-align: center;">Inspection 44,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Inspection 46,000 miles</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>

<p style="text-align: center;">Odometer changed</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Odometer changed</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>
<p style="text-align: center;">Odometer changed</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>	<p style="text-align: center;">Odometer changed</p> <p>miles: _____</p> <p style="text-align: center;">_____ Date, signature, stamp</p>