

Fonzarelli

Owner's Manual

Fonzarelli Fz moped, Fz, S1





Welcome to the Fonzarellis

Welcome to the Fonzarelli community - you've just taken a positive step in reducing your carbon footprint!

Your Fonz is the perfect commuter vehicle. An agile, streamlined body allows you to easily negotiate traffic and park almost anywhere.

The responsive and powerful digitally-controlled powertrain can be optimised to suit your style. Your dynamic ride customisations, can include regenerative braking to improve efficiency, Forza and PowerPack configuration.

Not unlike your laptop or mobile phone, recharging your Fonz is suited to charging in the evening. So you'll probably benefit from off-peak rates.

Now its time to get to know your electric dream!

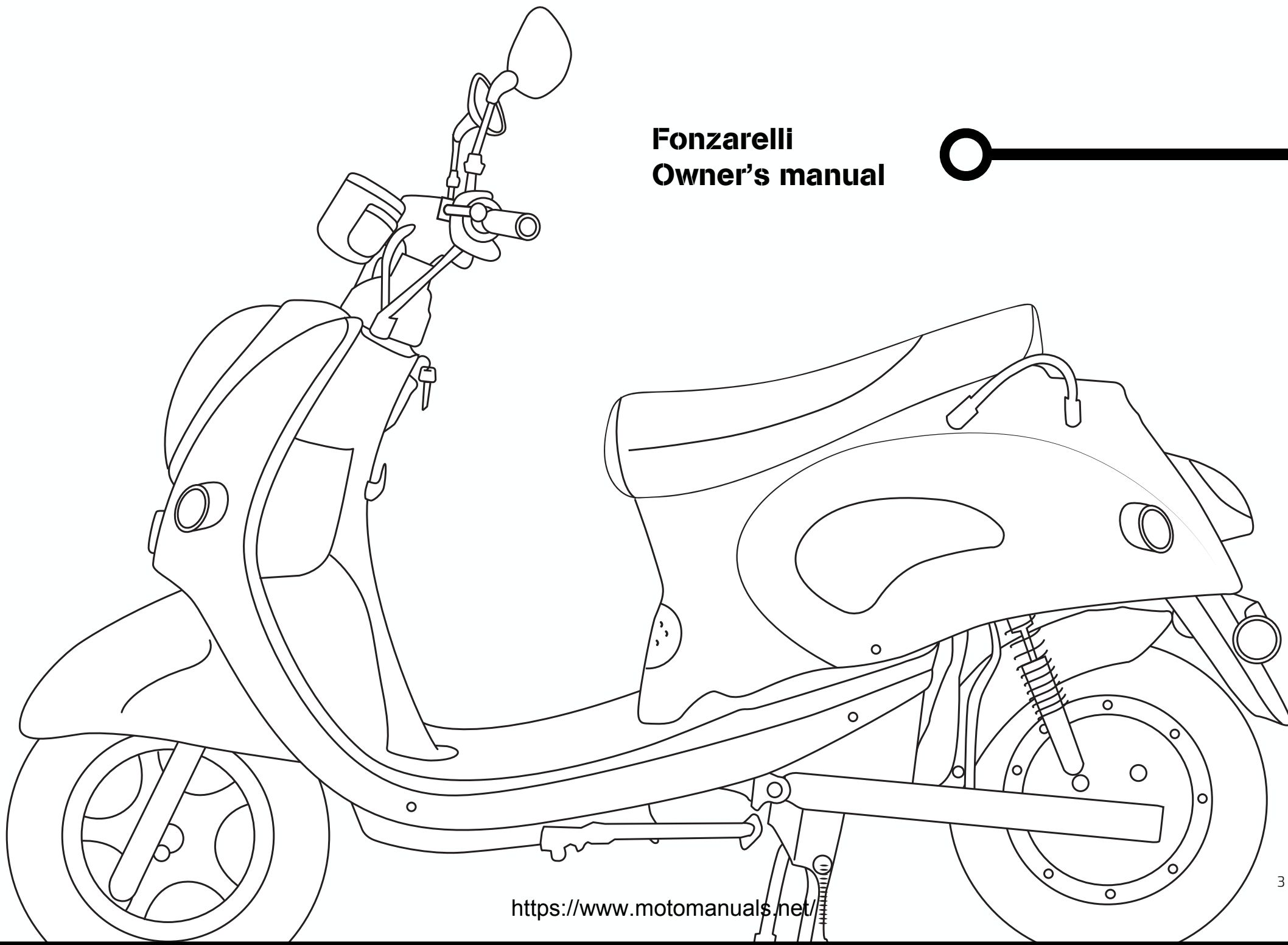
What is Lithium Ion?

The PowerPack in your Fonzarelli utilises the highest quality Lithium Ion Technology; the forefront of rechargeable cell technology, with superior reliability, recharging time, and power to weight ratio.

The PowerPack does not develop "charge memory", so you can recharge as frequently as it is convenient to do so.

Lithium Ion is an environmentally sustainable technology, and does not use heavy metals like mercury or cadmium found in other batteries.

Fonzarelli
Owner's manual



Important notice

The Fonzarelli is rated to carry the operator and up to one passenger. Combined weight of rider, passenger, accessories and cargo must never exceed the maximum rated load capacity of 150kg. Minimising load will improve performance.

The Fonzarelli is designed to travel on sealed roads only.

Personal injury or mechanical damage may result if you do not operate the Fonzarelli in accordance with the guidelines of this document.



This symbol indicates that severe personal injury or damage to equipment may result if instructions are not followed.

Unless specified, 'Fonzarelli' refers to the LA Fonzarelli 100 moped 'Fz moped', LC Fonzarelli 125 Fz and S1 motorcycle categories.

Read this Owner's Manual carefully, and retain it for future reference.



Fonzarelli
Electric Moto

All information in this Owner's Manual is correct at the time of publication.
Fonzarelli Bikes reserves the right to make changes at any time without incurring obligation. ©Fonzarelli Bikes 2016



Running in

Brakes & Tyres

Ride slowly and apply brakes gently to run in tyres and brake pads during the first 100km.

We recommend keeping speed below 45km/h during the run in period

PowerPack: Allow 5 to 8 charge cycles for optimal PowerPack performance as the system learns your PowerPack cells.
During the first 200KM do not to drop your PowerPack below 40%.

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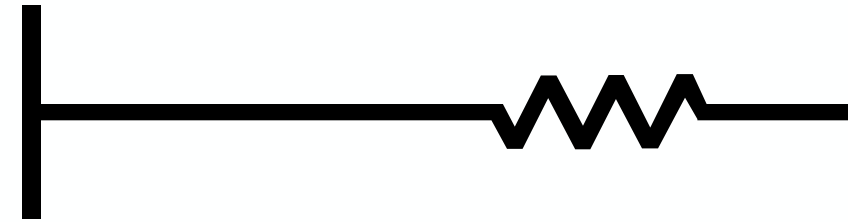


Safe riding

**Always conduct a pre-ride check before you turn on your Fonzarelli.
This will prevent any accidental damage to equipment.**

Safe riding rules

1. Obey all road regulations, and ride in a manner befitting road conditions.
2. Keep your hands and feet fixed firmly to the scooter at all times when riding.
3. Always take extra caution at intersections, in high traffic situations, and when lane filtering.
4. A compliant motorcycle helmet must be worn at all times when riding.
5. Wearing a rider jacket, gloves and boots is strongly advised.
6. Ensure that you hold the required rider licence for your state.
7. Never lend your vehicle to an inexperienced rider.
8. Never ride in another driver's "blind spot". Wear bright or reflective riding gear to increase your visibility.
9. Above all, ride to live; employ common sense in all traffic situations.
Further riding rules and tips can be found on the website of your local transport authority.

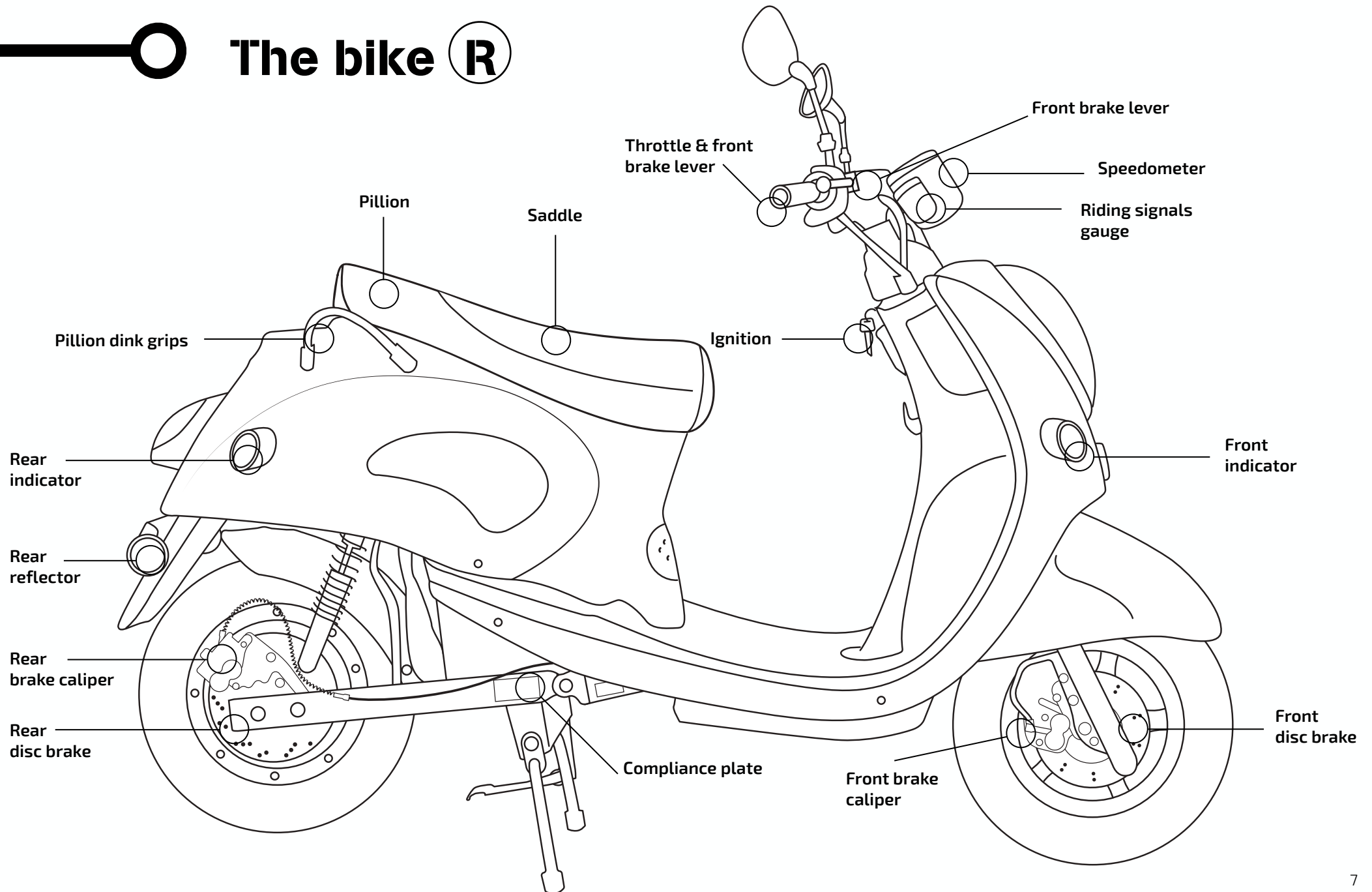


Running in

**See page 4 for information about running
in your Fonz**

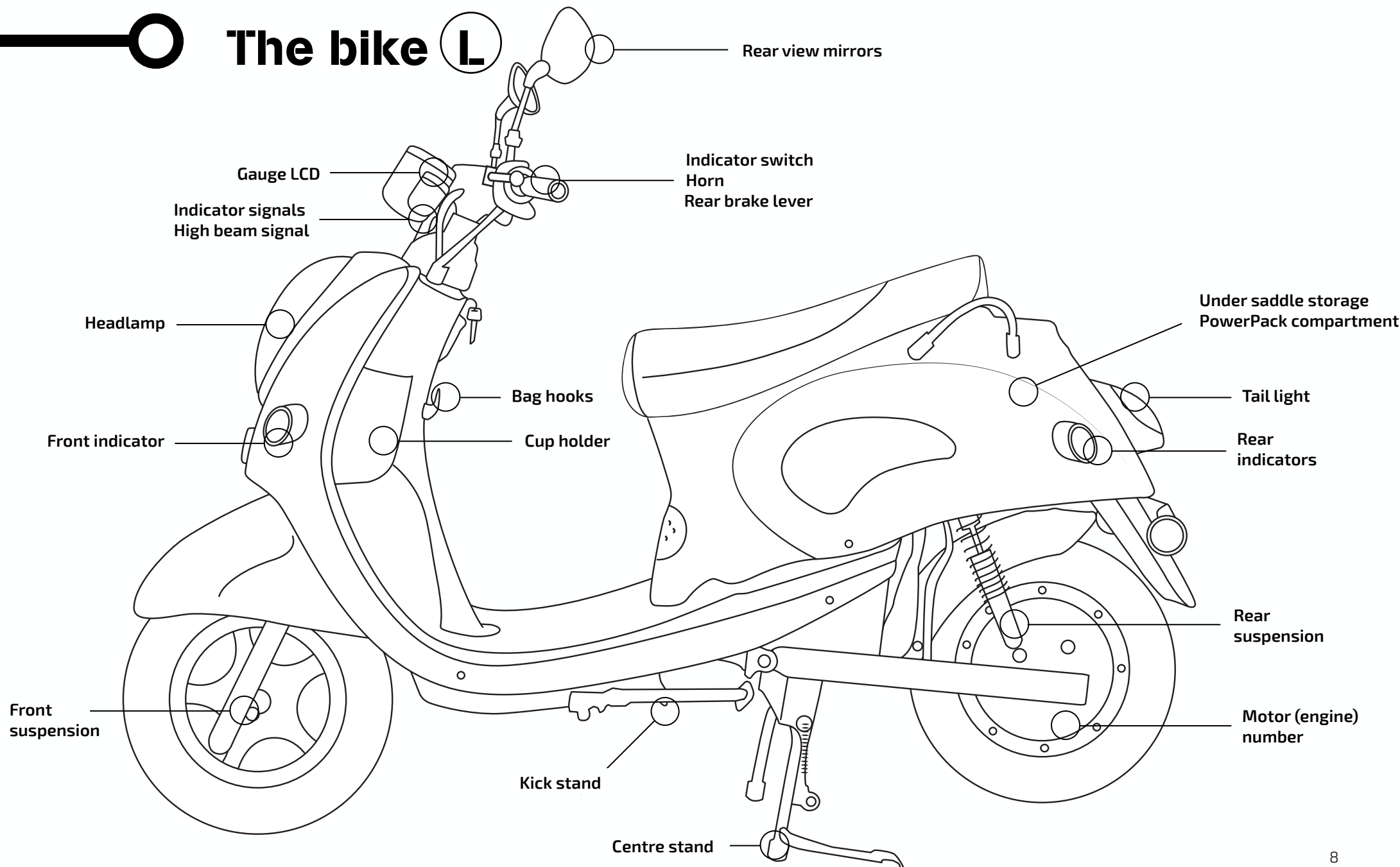


The bike **R**



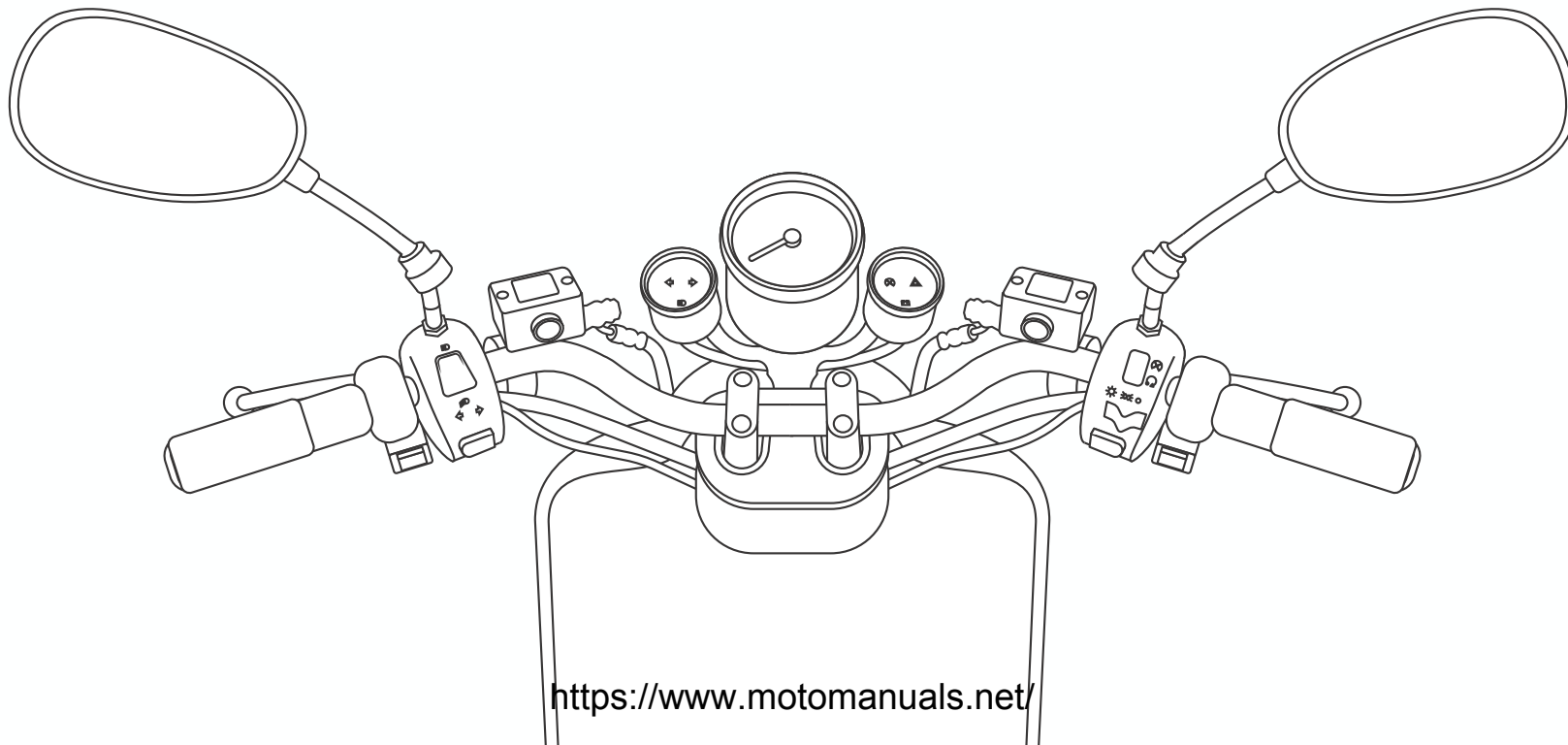
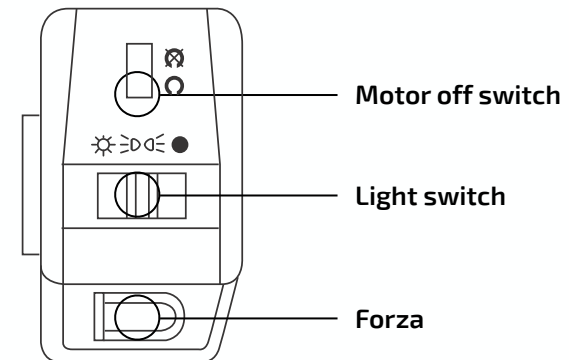
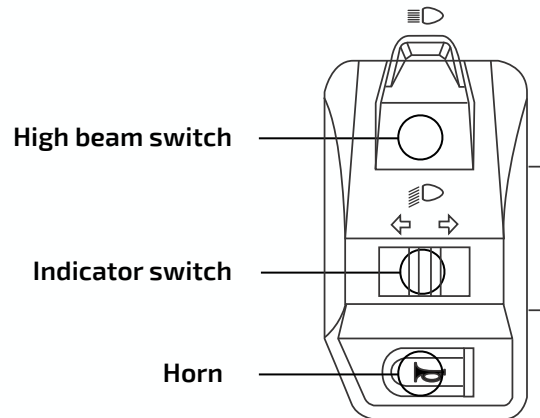


The bike **L**



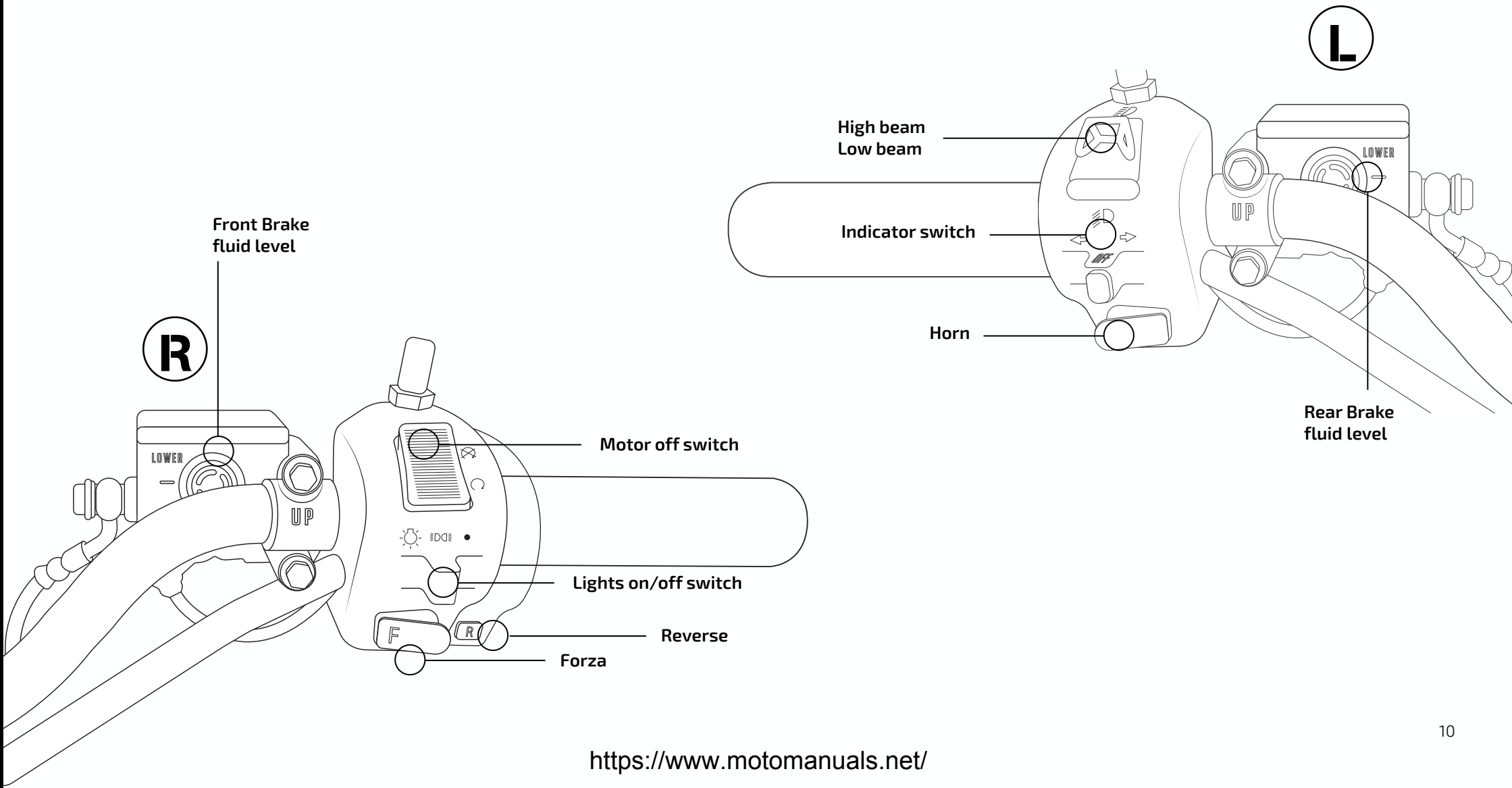


Handle bars





Features



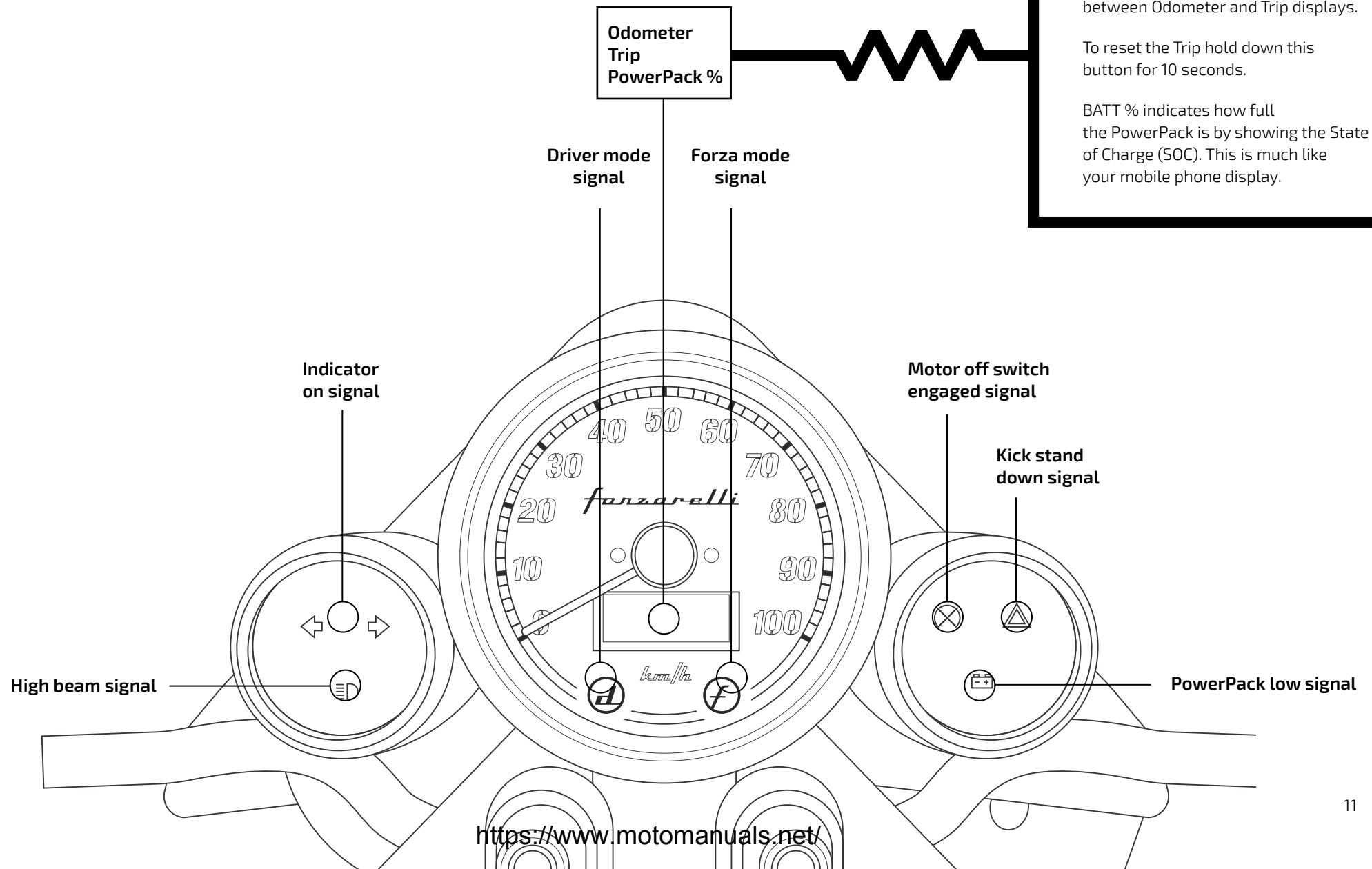


Instruments

TIP: The LCD displays Odometer, Trip and PowerPack %. Press the small rubber button located on the left side of the Centre gauge to switch between Odometer and Trip displays.

To reset the Trip hold down this button for 10 seconds.

BATT % indicates how full the PowerPack is by showing the State of Charge (SOC). This is much like your mobile phone display.



Power On / Off

1. Insert key.
2. Turn key clockwise to ON position. ↻
3. The speedometer needle will move up and down, and the drive mode "D" signal will glow.

Saddle Release

1. Insert key. **O P E N**
2. Gently turn the key slightly further than ON or OFF position to disengage saddle latch.

TIP: do not push down on the key or saddle cannot release.

Steering Lock

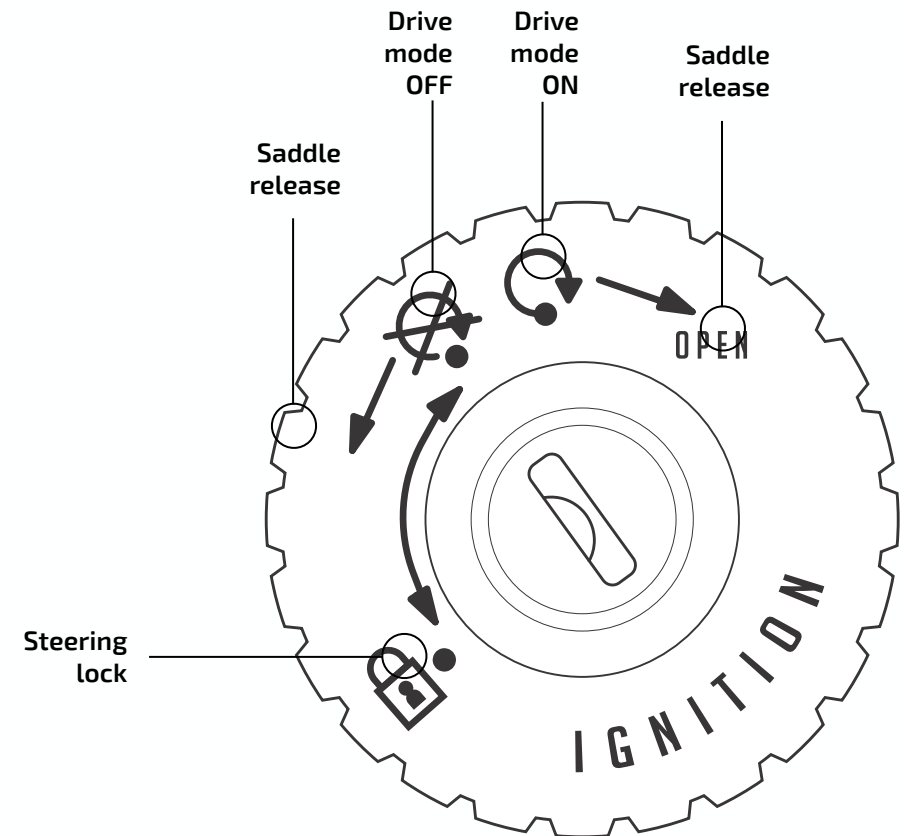
As an anti-theft precaution, this scooter is fitted with a steering lock.

1. Complete the parking procedure.
2. Ensure the handlebars are in the full left position.
3. From the OFF position, push down on the key, and rotate anticlockwise to the STEERING LOCK position. 🔒
4. If the steering lock does not immediately engage, gently rock the handlebars a few degrees left to right while turning the key.

Disengaging Steering Lock

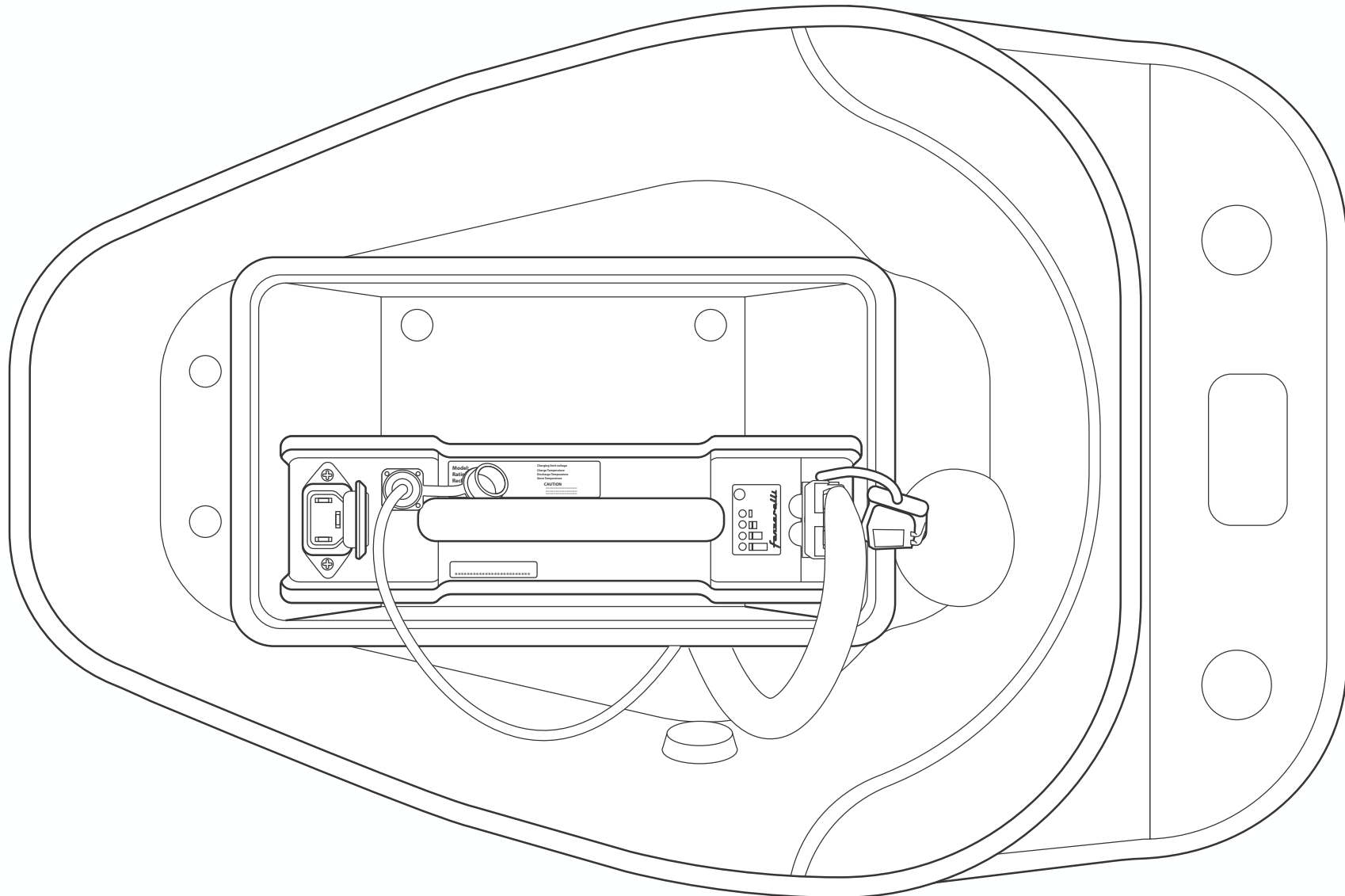
1. Handlebars will be in the full left position.
2. From the STEERING LOCK position, push down on the key, and rotate key clockwise to the OFF position.
3. If the steering lock does not immediately disengage, gently rock the handlebars a few degrees left to right while turning the key.

Ignition





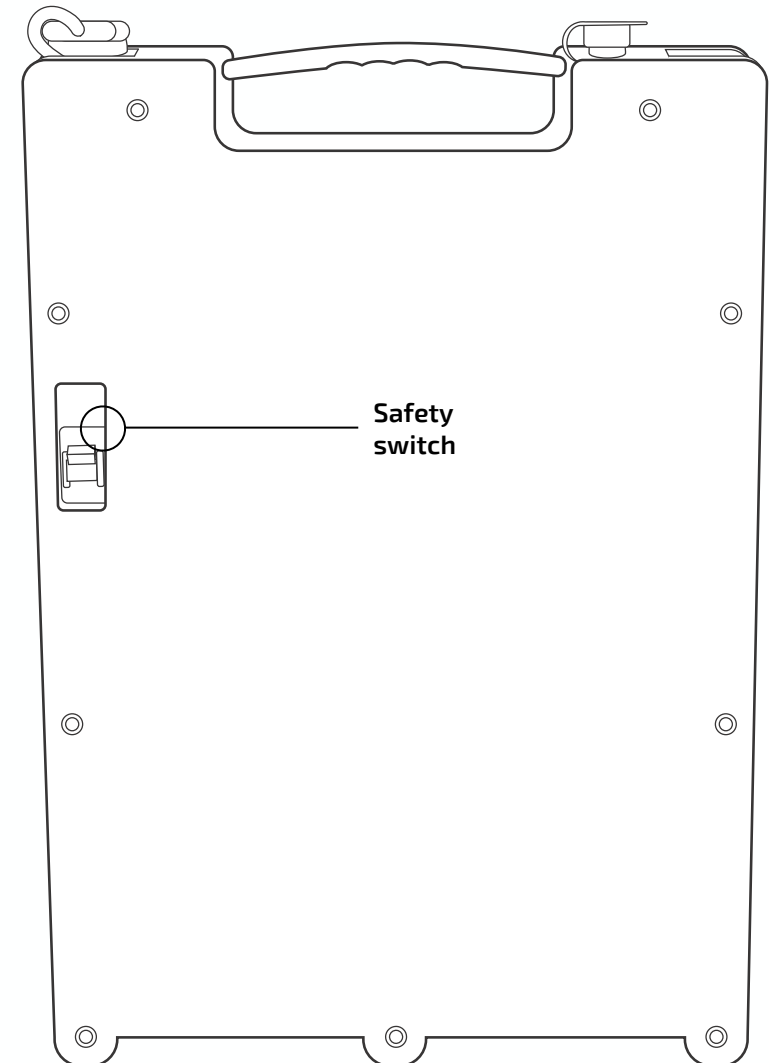
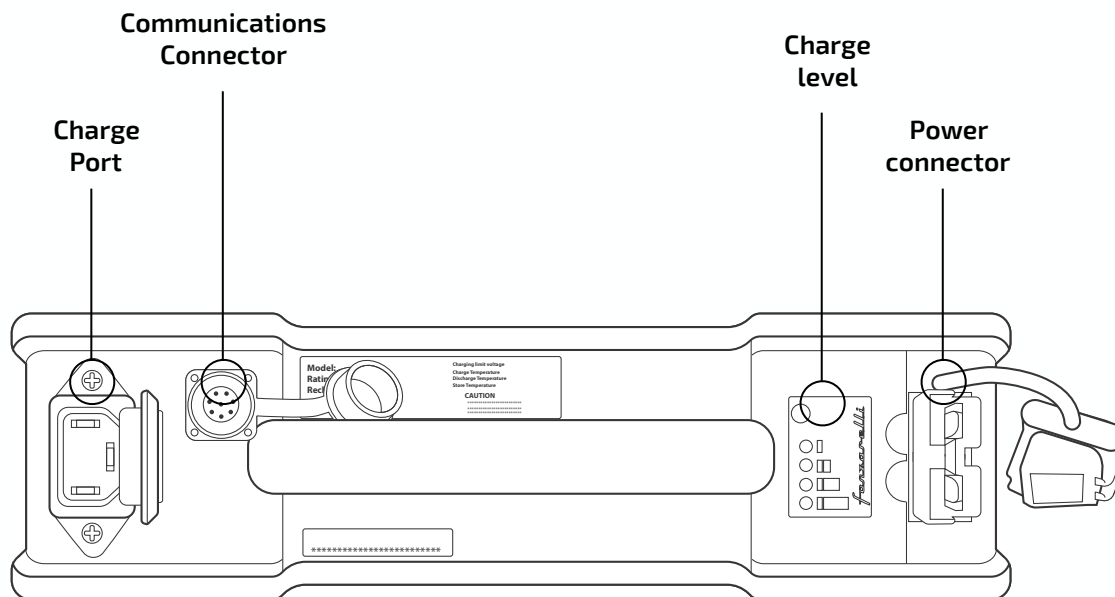
PowerPack



Note: diagram depicts Fonzarelli Fz moped (100) and Fonzarelli Fz (125) with one PowerPack installed. PowerPack configuration will vary depending on powertrain setup

<https://www.motomanuals.net/>

PowerPack equipment



NOTE: Equipment location may vary depending on the PowerPack variant
 Diagram depicts Fonzarelli Fz moped (100) and Fonzarelli Fz
 (125) with one PowerPack installed.
 PowerPack configuration will vary depending on powertrain setup

<https://www.motomanuals.net/>

Installation of PowerPack

1. Insert the key, and turn clockwise to the saddle latch release position.
2. Remove key from ignition.
3. Lift the saddle.
4. Ensure PowerPack Safety Switch is set to the OFF position (down)
5. Insert the PowerPack into the holding bay.
6. Connect Power Connector (red colour).
7. Connect Communications Connector (silver colour). Note this is a latch. Find the keyhole and latch. Do not screw it in.
8. Set Safety Switch to ON position (up)

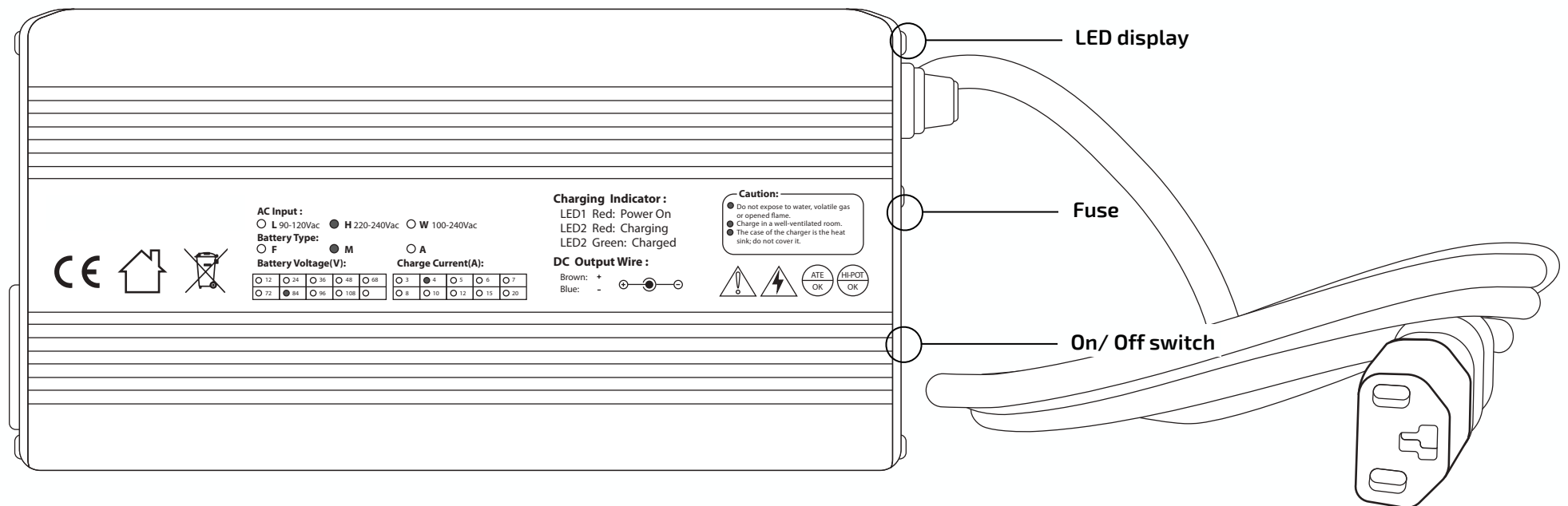
For convenience, and extended range, two PowerPacks may be stowed under the saddle.



TIP: For a longer service life, prevent arcing damage in the Power Connector by turning the Safety Switch to OFF position at any time the Power Connector plug is being connected / disconnected. You can also minimise sparking by ensuring the ignition is turned to OFF.



Charger



TIP: location may vary depending on the Charger model

Charging the PowerPack

Follow these instructions to charge the PowerPack:

1. Following Installation of PowerPack procedure and tips, Disconnect the Power Connector from bike.
2. Connect the Charger to 240V mains power outlet.
3. Turn the Charger switch to the ON position. The Charger will display 1 x Green LED, 1 x Red LED.
4. Connect the plug of Charger to the PowerPack. When the Charger displays 2 x Red LEDs it indicates the PowerPack is charging.
5. Turn the PowerPack Safety Switch to ON position. The Charger displaying 2 X Red LEDs indicates the PowerPack is charging
6. Upon completion of charging, the Charger will display 1 x Green LED, 1 x Red LED.
7. Disconnect the charger from the PowerPack when charging is complete.

PowerPack charge state:

RED + RED = Charging in progress

RED + GREEN = Fully charged

Notes:

For optimal performance and convenience, you can charge the PowerPack as frequently as it suits you

Storage: If you are not riding the bike for extended periods of time, you should leave the charge % between 60-90%.



Never store the PowerPack at 0%.

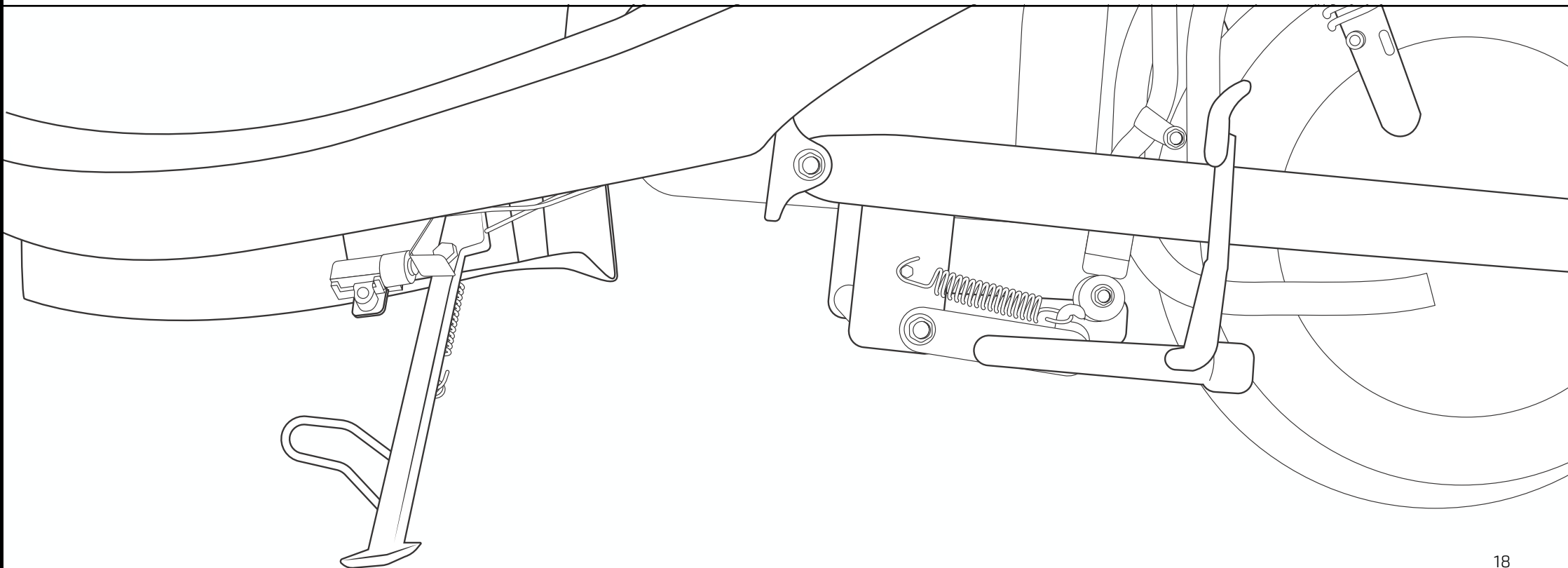
TIP: Charge your Fonzarelli anywhere. The charger may be stowed under the saddle, so you can charge anywhere. Ensure it is secured to avoid damage to the charger while riding.

Kick stand

Use the kick stand when parking the scooter for a short amount of time.

1. Position the scooter such that it is on firm level ground. If you must park on inclined ground, ensure that the front wheel is pointing up-hill.
2. Engage the kill switch.
3. Swing the side-stand down, and support the scooter on the side-stand.
4. Dismount the scooter, and turn the handlebars fully to the left.
5. Turn the key to the OFF position.

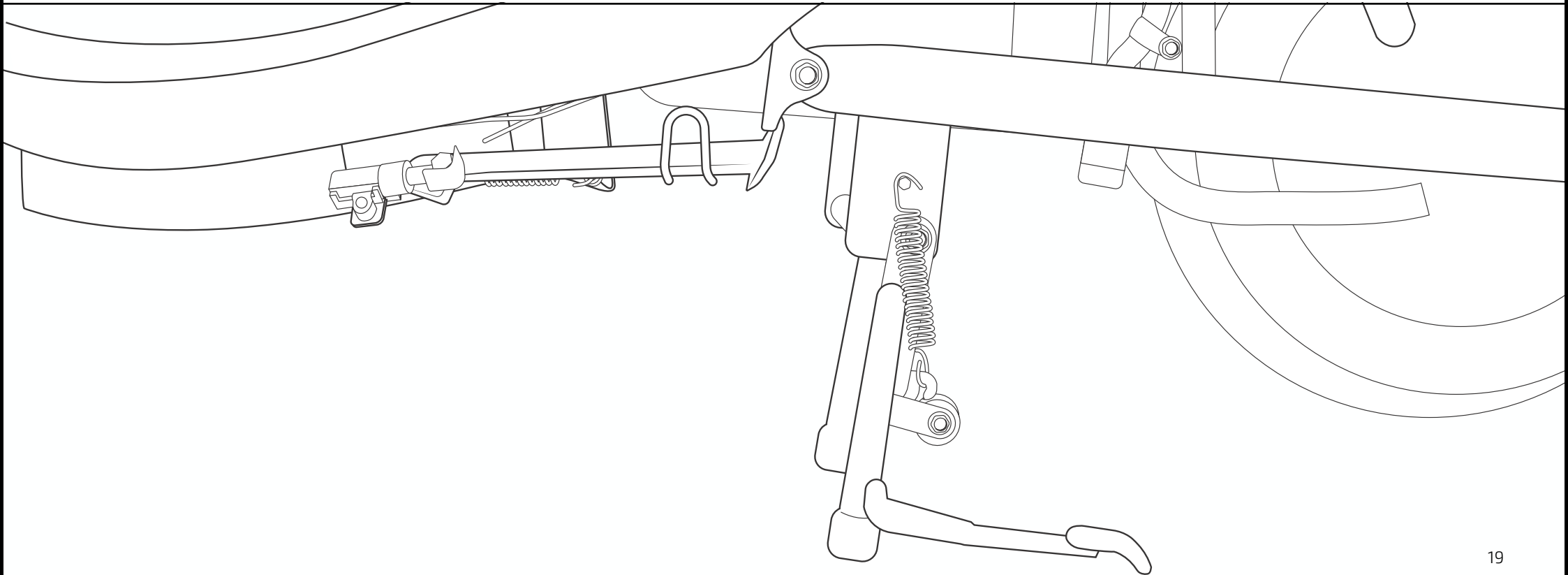
Stands



Centre stand

The centre stand should be employed when parking the scooter for extended periods or when undertaking maintenance.

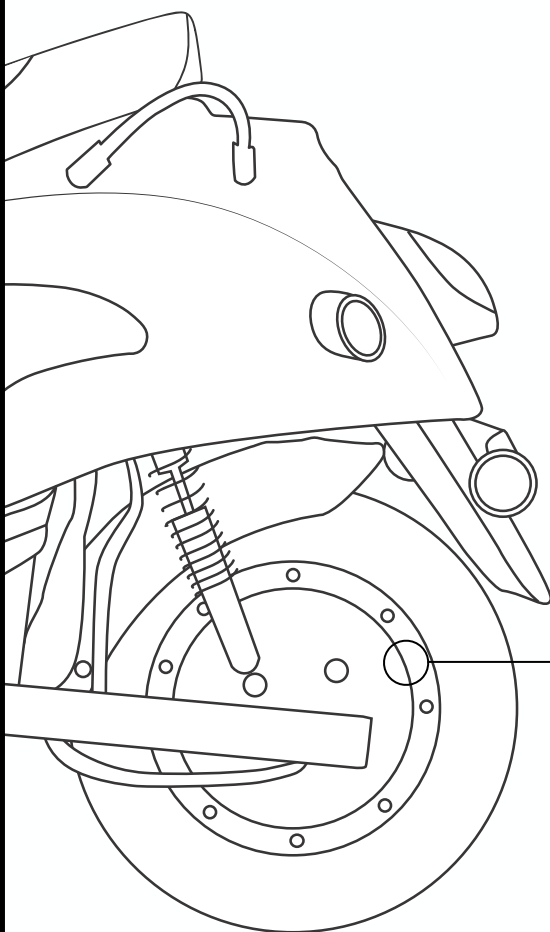
1. While dismounted, hold the left hand grip with your left hand.
2. With your right hand, hold the pillion passenger left hand grip.
3. While applying firm pressure to the main stand foot lever, lift the rear of the scooter.
4. Ensure the weight is fully supported by the main stand before you release grip of the scooter.



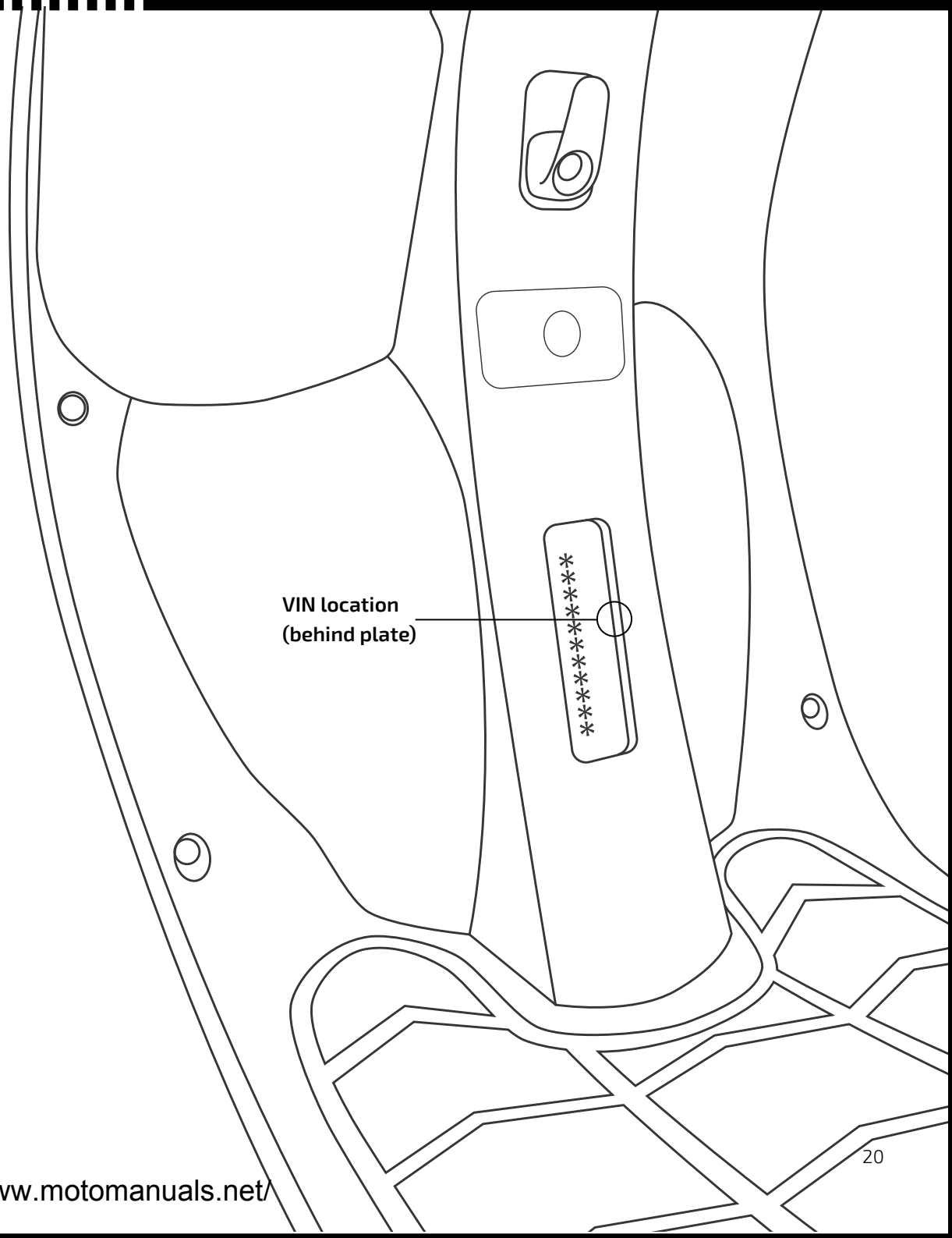


Vehicle Identification

VIN Location and
Motor (engine) number



Motor number
location

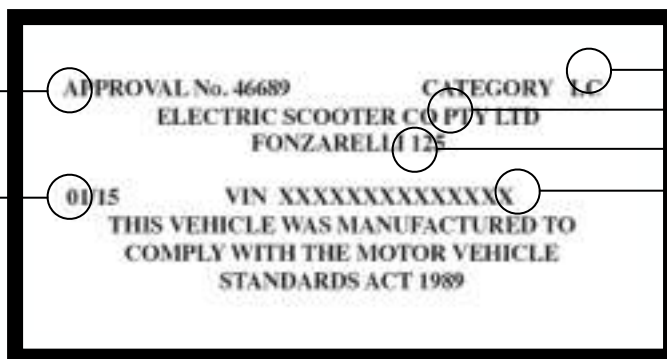


VIN location
(behind plate)

Compliance plate

Vehicle approval No.

Date of manufacture
(Month/Year)

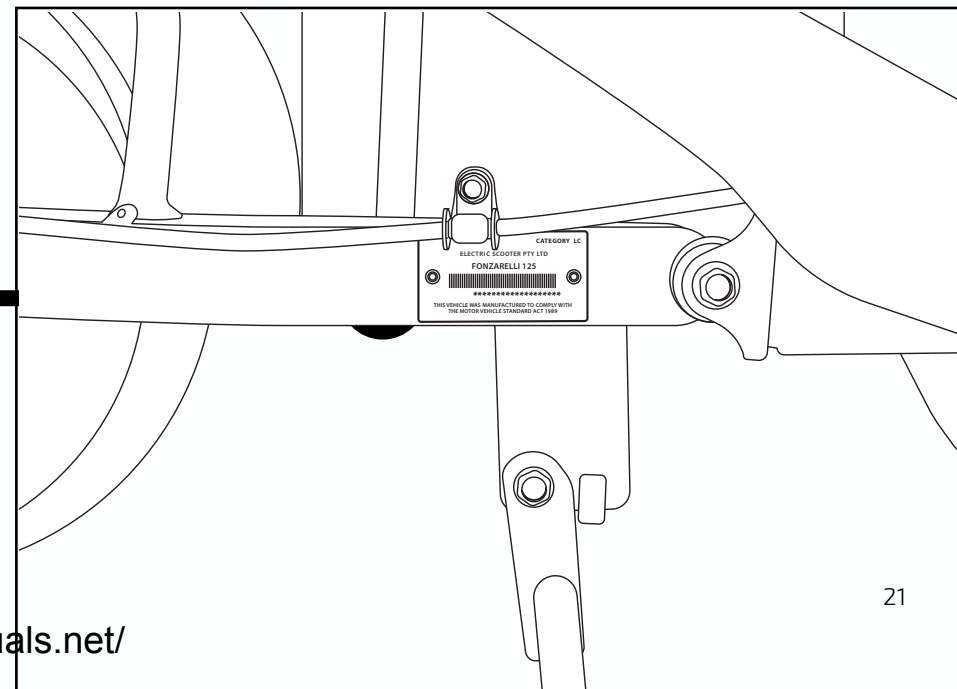


Vehicle category code

Manufacturer

Make/ADR Model name

Vehicle identification number



Pre-Ride inspection

A pre-ride inspection will only take a few minutes, and should be conducted every day before you ride your Fonzarelli.

1. PowerPack – ensure the PowerPack is correctly fitted, and cables correctly attached. Check charge level is sufficient for distance of travel.
2. Brakes – check for correct operation; make sure there is no fluid leakage.
3. Tyres – check condition and pressure.
4. Lights and Indicators – check for correct operation.
5. Throttle – check for correct and smooth operation.

Resolve any problems before you ride. Contact an authorised Fonzarelli representative if you cannot correct the problem.



Warning! If the pre-ride inspection is not conducted before using the Fonzarelli, damage to equipment or severe injury could result.

Starting procedure

1. Insert the key and turn clockwise to the ON position.
2. Mount the scooter, and move side-stand to stowed position.
3. Ensure the kill-switch is in the RUN position.
4. Ensure the kick stand is UP and all warning lights are extinguished
5. Your scooter is now ready to ride.

Riding

Review safety before you ride

After completing the starting procedure, your Fonzarelli is ready for riding.

1. Slowly and smoothly open the throttle to accelerate.
2. Close throttle to coast; momentum will continue to carry you forward.

Braking

1. For slow braking under normal conditions, close throttle and smoothly apply pressure to both front and rear brake control levers.
2. For maximum braking, close throttle and apply firm pressure to both front and rear brake control levers. Ensure that you shift your body weight to a stable position and brace against the force of deceleration to maintain control of the scooter.



Independent use of the front or rear brake reduces performance and control when stopping. Always use both front and rear brakes together. If one wheel begins to lock or slip, reducing pressure to the corresponding brake control lever will correct the action, and maximise control when stopping. This will become more intuitive with experience.

Always brake before entering a turn, as firm application of brakes mid-turn will result in loss of control. When braking in wet conditions or on loose surfaces, all braking manoeuvres must be smooth, as sudden application of brakes will result in loss of control.



RUNNING IN

Brake pads need to be run in during the first 100kms



Forza, Reverse, Regeneration

Forza

Forza is a power and speed boost function intended to be used in situations where additional motor torque or speed is required; for example, traversing a steep incline or riding over a high-speed overpass.

1. Press and hold the BLUE Forza button for a second.
2. Release button to engage boost for 10 seconds

Repetitive, continued use of the Forza button will drain the PowerPack pack and impact life cycles.

Reverse & Parking

1. After coming to a complete stop, hold down the GREEN reverse button.
2. While holding reverse, slowly open the throttle.
3. The scooter will travel in reverse at a slow pace.

TIP: Reverse will only engage after brake has been applied

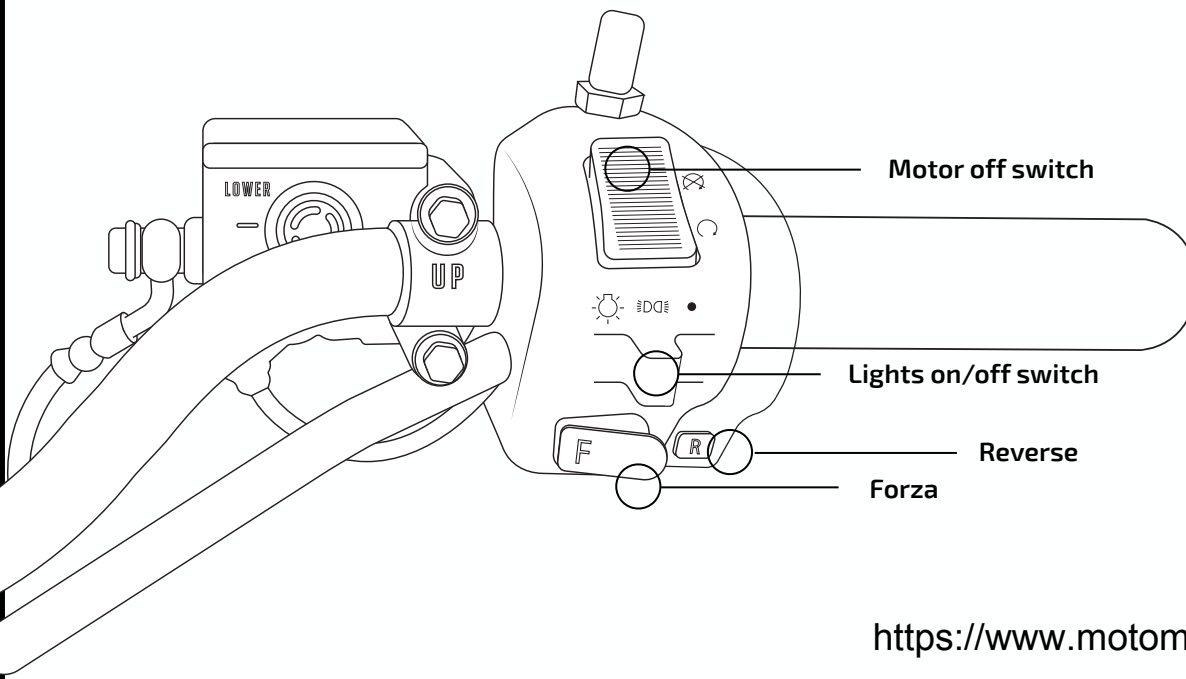
Regenerative braking

Regenerative braking is engaged automatically when rear braking applied, improving efficiency by returning energy to the PowerPack that would otherwise be wasted.

Dynamic regeneration

Dynamic regeneration can be adjusted from Zero to 10, allowing from maximum control when the throttle is released, by automatically slowing the vehicle and returning energy to the PowerPack, to a completely free-wheeling, coasting sensation when releasing the throttle.

Settings are tailored to your riding style and experience level by an authorised FonzLab technician.



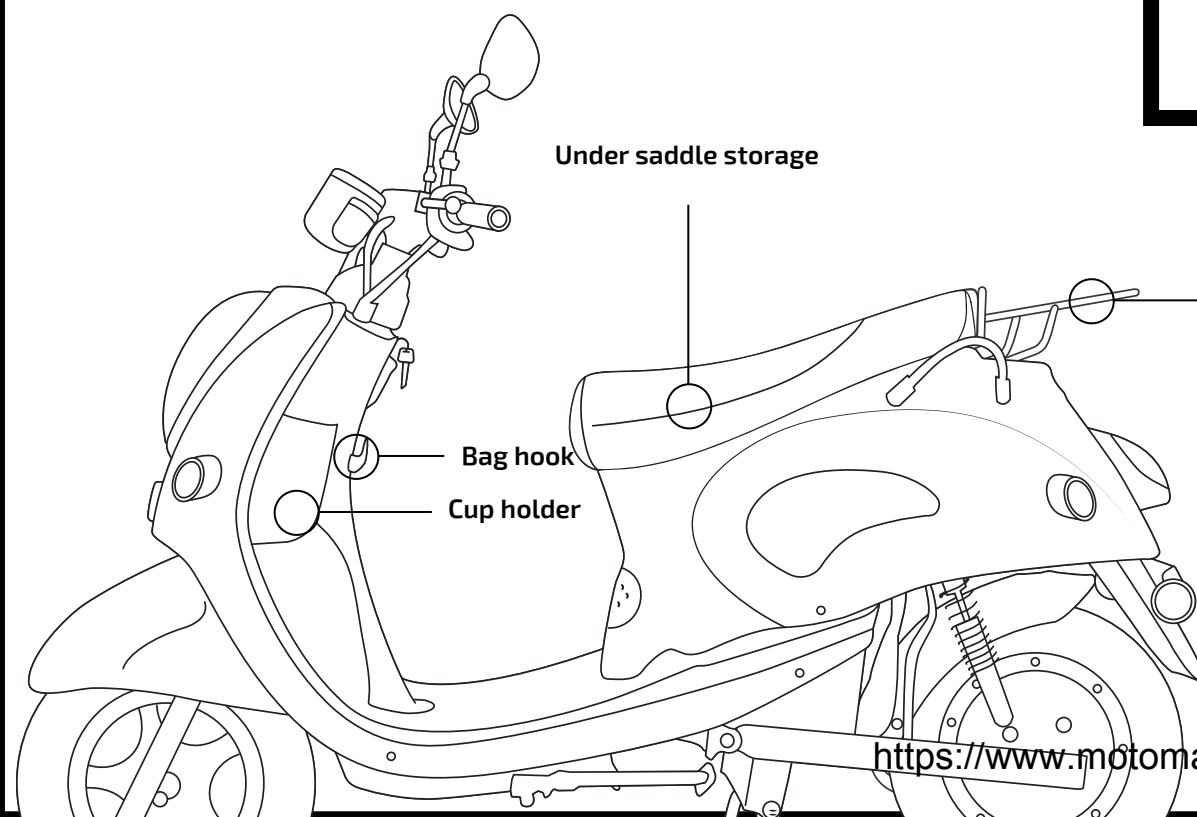
Storage & load

Combined weight of rider, passenger, accessories and cargo must never exceed the maximum rated load capacity of 150kg.

To improve stability when carrying cargo, try to position much of the weight low near the scooter's centre of gravity.

Never attach heavy items directly to the scooter's handlebars, as handling and steering response will be significantly impeded.

TIP: Weight distribution is an important factor in the stability and control of a scooter. Take extreme care when adding accessories or cargo to the scooter, as this can impair the performance of the vehicle.



Pillion passenger

The Fonzarelli 125* is licensed to seat one operator and one pillion passenger.

PowerPack will discharge more quickly while carrying a pillion passenger, due to additional load.

Ensure that the pillion passenger:

1. Hold the pillion passenger grips.
2. Place feet on pillion footrest.
3. Lean into corners with the operator.

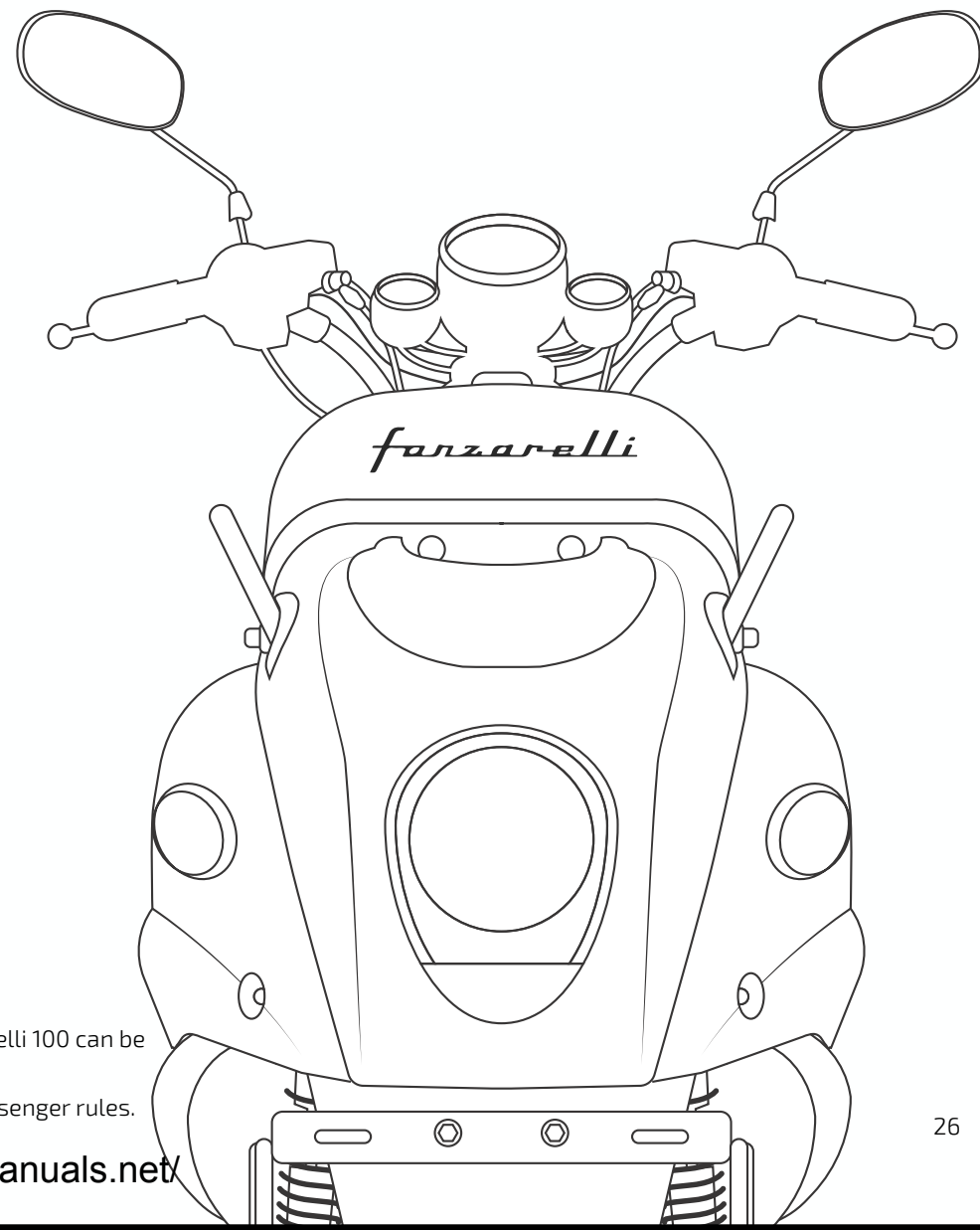
Accessories

All genuine Fonzarelli accessories are designed and tested to ensure that each is fit for use.

Fonzarelli Bikes cannot be held liable for incompatibility, or damages incurred by the use of non-Fonzarelli accessories.

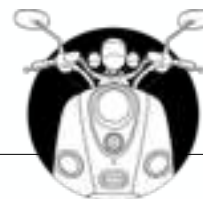


* Note: In general, Australian & New Zealand states whereby the Fonzarelli 100 can be operated under a driver licence only, the operator cannot carry a pillion. Laws vary by region. Be sure to check with your local state on pillion passenger rules.





Specifications



FONZARELLI MODEL	Fz Moped	Fz	S1
Range*	50km / 100 km		80 to 100 km
Speed**	50 km/h	65 km/h 75 km / h	80 km/h
PowerPack	PowerPack 1.65kWh, inbuilt BMS		Powerpack 3.3kWh inbuilt BMS ~20kg
Controller	80A, custom program + onboard diagnostics		150A, custom program + onboard diagnostics
Motor	3000W brushless 3-phase rear wheel		High speed brushless 3-phase rear wheel
Brakes	Front and rear hydraulic disc brakes, front and rear regenerative braking		
Tyres	10 x 3.50		
Layout	1790 x 700 x 1130 mm		
Wheelbase	1170 mm		
Load	150 kg		147 kg
Dry weight	88 / 98 kg		101 kg
Pillion passenger	no		yes
Features	Tech: Forza supercharge / Reverse function / Regenerative braking / Coast Vs Control Regen / Portable easy-charging Hardware: Battery % Display (SOC), Trip Range, Stainless steel pillion dink grips, Side-stand, Centre-stand, Steering lock, Overnight Charger		
Options	PowerPack, Sport motor, Premium Charger, USB Charge Port, Top box (range of colours), Stainless-steel or Chrome luggage rack, Low-profile saddle, Leather & Colour vinyl saddle (range of colours), Whitewall tyres, Helmet locks, Limited edition paint colours, Custom/Fleet paint colours, Delivery boxes, 12V Power outlet, Reflective decal motifs + more		

* Range & Performance is determined by various factors such as software configuration, load weight, SOC speed, rider behaviour, terrain, lifecycle and air temperature. See 'Range & Performance' in the Rider Manual ** Speed refers to cruising speed and top speed in Forza mode. Speed is also determined by the determinants of Range & Performance. **Disclaimer:** All information in this publication is based on the latest product information available at the time of the last version release. Fonzarelli Bikes reserves the right to make changes at any time without notice.



Maintenance

Cleaning

To maintain appearance, and prevent paint and corrosion damage to the Fonzarelli, regularly:

1. Wash with a diluted solution of car wash soap.
2. Rinse with clean water, ensuring water does not enter the PowerPack compartment.
3. Dry with a microfibre cloth.
4. Polish with a wax based spray protectant, and buff with a microfibre cloth.



Warning! Do not allow water to enter PowerPack compartment. If cleaning PowerPack, attach terminal covers, and wipe with a damp cloth.

Do not use hydrocarbon based cleaning products, as paint damage will result.

TIP: Regularly rinse chrome, stainless and aluminium components with fresh water, particularly if you live in coastal areas. If surface rust appears, clean immediately with rust remover. Wipe switches with damp cloth.

Tyres

Standard tyres for the Fonzarelli are 10-3.50 tubeless.

Inflation pressure should be checked on cold tyres 20°C periodically.

Correct pressure is 28PSI Front, 32PSI Rear (240 kPa). Riding with a pillion or heavy load we recommend 30PSI front, 35 PSI rear



Warning! Improper inflation will lead to premature wear of tyres, and can cause reduction of stability, traction and range.

Brakes

The Fonzarelli has front and rear hydraulic disc brakes.

Normal wear of the brake pads will result in a drop in level of the brake fluid reservoir. Brake pad wear and fluid levels must be checked periodically; replenish as necessary.

Warning: brake fluid is corrosive, and may cause irritation. Avoid contact with skin or eyes. In case of contact, flush thoroughly with clean water. Call doctor if eyes were exposed.

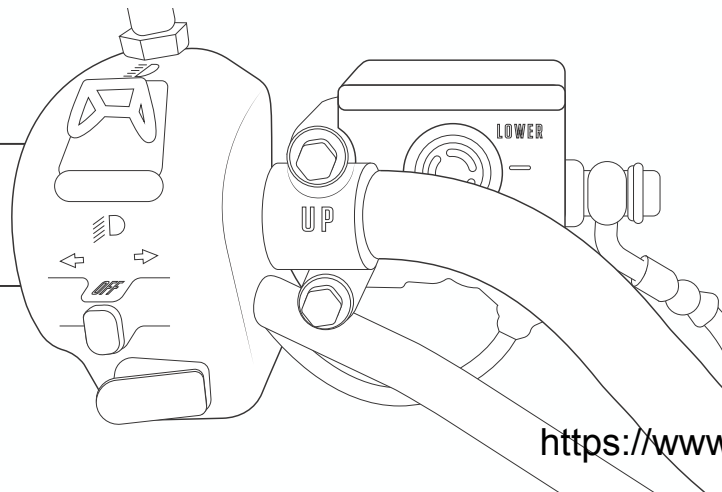
Brake system must be frequently inspected to ensure there are no fluid leaks.

If brake control lever free play becomes excessive, and brake pads are not worn, air may have entered the hydraulic lines, and the hydraulic lines must be bled. See an authorised Fonzarelli technician.

How to check and replace brake fluid

Brake fluid reservoirs are located on the handlebar. Front brake is on the right, and back brake on the left. The procedure for replacing brake fluid is identical for both front and rear brakes.

1. Put the bike on its centre stand for stability.
2. Check the fluid level through the Brake Fluid viewing window.
3. An authorised repairer must replace the brake fluid.



TIP: Brake fluid should be replaced approximately every two years. DOT4 brake fluid only.

Maintenance schedule

Item	Routine	Every Ride	Initial	Scheduled Service Calculated by kilometres run or by time in months since previous service* (whichever occurs first)				
			1,000 kms or 1 month	2,500 kms or 6 months	5,000 kms or 12 months	10,000 kms or 12 months	15,000 kms or 12 months	
Brake Fluid (front & rear)	Check brake fluid level.	✓	✓	✓	✓	✓	✓	
	Replace brake fluid (every 24 months).					Every 24 months		
Front & Rear Disc Brakes	Check operation and for fluid leakage. Replace brake pads if necessary.	✓	✓	✓	✓	✓	✓	
Front & Rear Brake Lever Pivot Shaft	Apply silicon grease lightly. Check operation and for oil leakage. Service as necessary.		✓	✓	✓	✓	✓	
Wheels	Check run-out, and for damage. Replace if necessary			✓	✓	✓	✓	
Tyres	Check air pressure at 20°C. 28PSI Front, 32PSI Rear Correct if necessary.	✓	✓	✓	✓	✓	✓	
	Check tread depth. Replace if necessary.			✓	✓	✓	✓	
Fasteners	Check all fasteners, bearings and fittings operation. Refer to torque adjustment chart. Replace / adjust if necessary.			✓	✓	✓	✓	
Front & Rear Shock Absorber Assembly	Check operation and for oil leakage.			✓	✓	✓	✓	
Throttle Grip	Check operation and adjust if necessary.	✓		✓	✓	✓	✓	
Ignition/Saddle Locks	Check operation. Apply grease on pivot.	✓		✓	✓	✓	✓	
Kick & Centre Stands	Check operation. Apply grease on pivot. Replace if necessary.			✓	✓	✓	✓	
Power connector	Check operation and adjust / lubricate with non-conductive lubricant as necessary	AS REQUIRED						

Repeat maintenance intervals from every 12 months or 5,000kms, whichever occurs first

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PowerPack storage

Storing the PowerPack for extended periods (i.e.; longer than two months) can result in some loss of capacity.

Storing the PowerPack in ideal conditions will obtain optimum safety and minimise the effect of capacity loss:

1. Store the PowerPack in a cool, dry place ~15°C.
2. Charge the PowerPack to 80% before storage.
3. Periodically check PowerPack charge level and charge back to 80% (every few months).



Warning! Storing Lithium Ion cells at 0% SOC for extended periods of time will result in destruction of the PowerPack due to internal shorting.

Operating temperature

0 to 45°C



Warning! If air temperature is 38°C or above and/or high humidity, allow the system to rest for up to three hours prior to charging.

Long-term storage

If the PowerPack is kept stored for a long time (3 months or more), it is strongly recommended that the cell is preserved at dry and low-temperature.

If you do not ride for an extended time (i.e. such as during winter) we recommend to repeat the PowerPack running in procedure for 2-3 cycles (see page 4 of manual)



Warning! the pack must not be stored below 60%.
Optimal storage is 60-80% SOC

Any problems caused by malfunction of the PowerPack due to unsuitable use and care of PowerPack Cells are not covered under warranty. The handling conditions described above must be followed or the warranty will be voided.

Electronics



STORAGE: store PowerPack at 80%

WEATHER: During extremely hot temperature, after riding, allow 1 to 2 hours before recharging your PowerPack. In these conditions its best to remove the PowerPack from your Fonzarelli during charging.



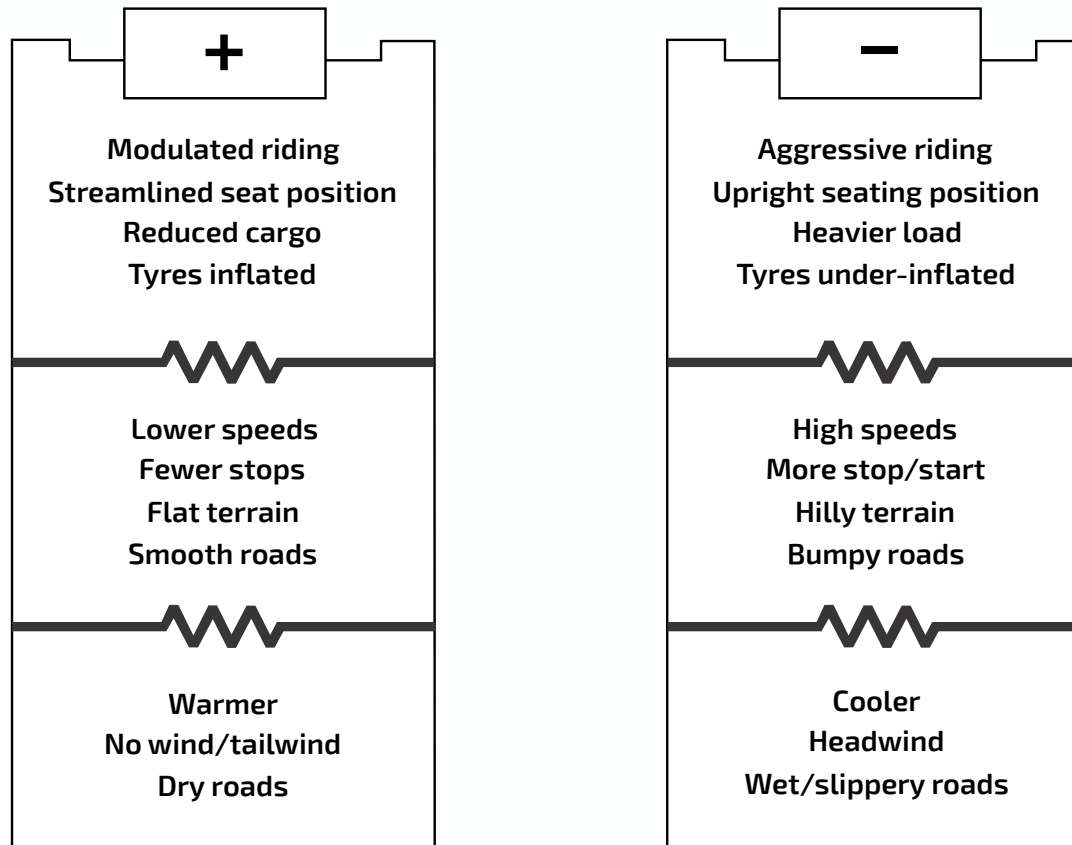
Range & performance

Your range results are a direct reflection of your riding habits.

The more conservative you ride, the better range you can expect from your Fonzarelli scooter.

Key factors that will affect range include speed, acceleration, number of starts / stops, load weight, air temperature and terrain.

Ride conservatively when you first get your Fonzarelli and adjust your riding style to reflect what you want out of your ride.





Warranty

Product Warranty, Returns and Legal

Your Fonzarelli has been subject to careful final checks and test rides before delivery to you.

Subject to the terms of the FONZARELLI ELECTRIC MOTO SCOOTER

LiMited AUSTRALIAN WARRANTY, Fonzarelli will repair or replace any defects in the materials or workmanship of the Fonz that are notified to Fonzarelli during the warranty period as follows:

- Major Components - a 24 month or 10,000 kilometre warranty on the battery pack, controller, gauge and motor; and
- General Components – a 12 month or 5,000 kilometre warranty on all other components of the Fonz.

See the terms and conditions of the Product Warranty, Returns in the FONZARELLI ELECTRIC MOTO SCOOTER LIMITED AUSTRALIAN WARRANTY document at fonzarelli.co/warranty

Disclaimer

All information in this publication is based on the latest production information available at the time of the last version release. Fonzarelli Bikes reserves the right to make changes at any time without notice.

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