FECUNICAL INFORMATION

TECHNICAL INFORMATION					
PECIFICATIONS	METRICS	IMPERI			
Drive Train	2 x 1kW motors				
Veight (excl Battery)	50.7kg	112lbs			
leight	1,025mm	40.4in			
Seat Height	815mm	32in			
Vidth (Handlebars)	840mm	33in			
ength.	1,820mm	72in			
Vheelbase	1215mm	47.8in			
Payload (incl rider)	150kg	330lbs			
Suspension - Front	130mm adjustable	5.12in			
Suspension - Rear	120mm adjustable	4.72in			
Range (Max Tested)	120km	75mi			

50km/h (EU 45km/h limited)

WMC PIN coded off road vehicle. **NOT** road registrable: • CE Compliant for off-road use in Europe. Can be registered as a

- farm/work vehicle in some European jurisdictions.
 RVCS approved for off-road use in Australia. Can be approved
- for a conditional registration for farm use.

 Compliant for off-road use in NZ.

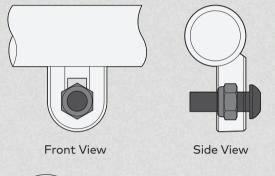
Note: Check your local licensing laws to determine license requirements. All information in this publication is based on the latest production information available at the time of approval for printing. UBCO Ltd reserves

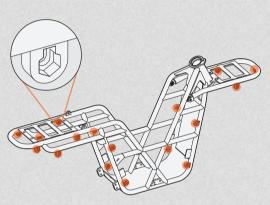
the right to make changes at any time without notice.

ACCESSORY LUGS

The 2×2 features 19 individual accessory lugs that are strategically placed across the frame to provide flexibility and adaptability. The lugs use standard M8 nuts and bolts for attaching tie downs, mounts, and accessories. Inside each lug is a cavity to hold an M8 nut in place, preventing it from spinning as the bolt is tightened or loosened

The front rack is attached via two lugs at the front of the main frame. These lugs can be utilized for other attachments when the front rack is removed.





SUSPENSION RECOMMENDATIONS

	FRONT REBOUND	FRONT SPRING	REAR REBOUND	REAR SPRING
Hard Ground Rider Only (90kg)	Max fast	Full soft	Max fast	20mm thread exposed
Hard Ground + Load (125kg)	Max fast	1 full turn to hard	4 clicks towards slow	20mm thread exposed
Soft Ground Rider Only (90 kg)	Max fast	Full soft	2 clicks towards slow	30mm thread exposed
Soft Ground + Load (125kg)	Max fast	1 full turn to hard	6 clicks towards slow	30mm thread exposed

Note: Hard Ground refers to dry tracks; soft ground might be tall grass, mud, or sand.

WHEELS

Each tire on your 2×2 uses a standard, car style valve for

The 9-gauge stainless steel spokes in a tangential double-crossed pattern provide extra wheel strength on DOT

Tires: Supplied with 17x2.75" off-road knobbly tires. Only use tires with a minimum load capacity of 37 and minimum speed

Recommended Tire Pressure: 207 kpa | 25 psi or as specified on

MEASUREMENTS

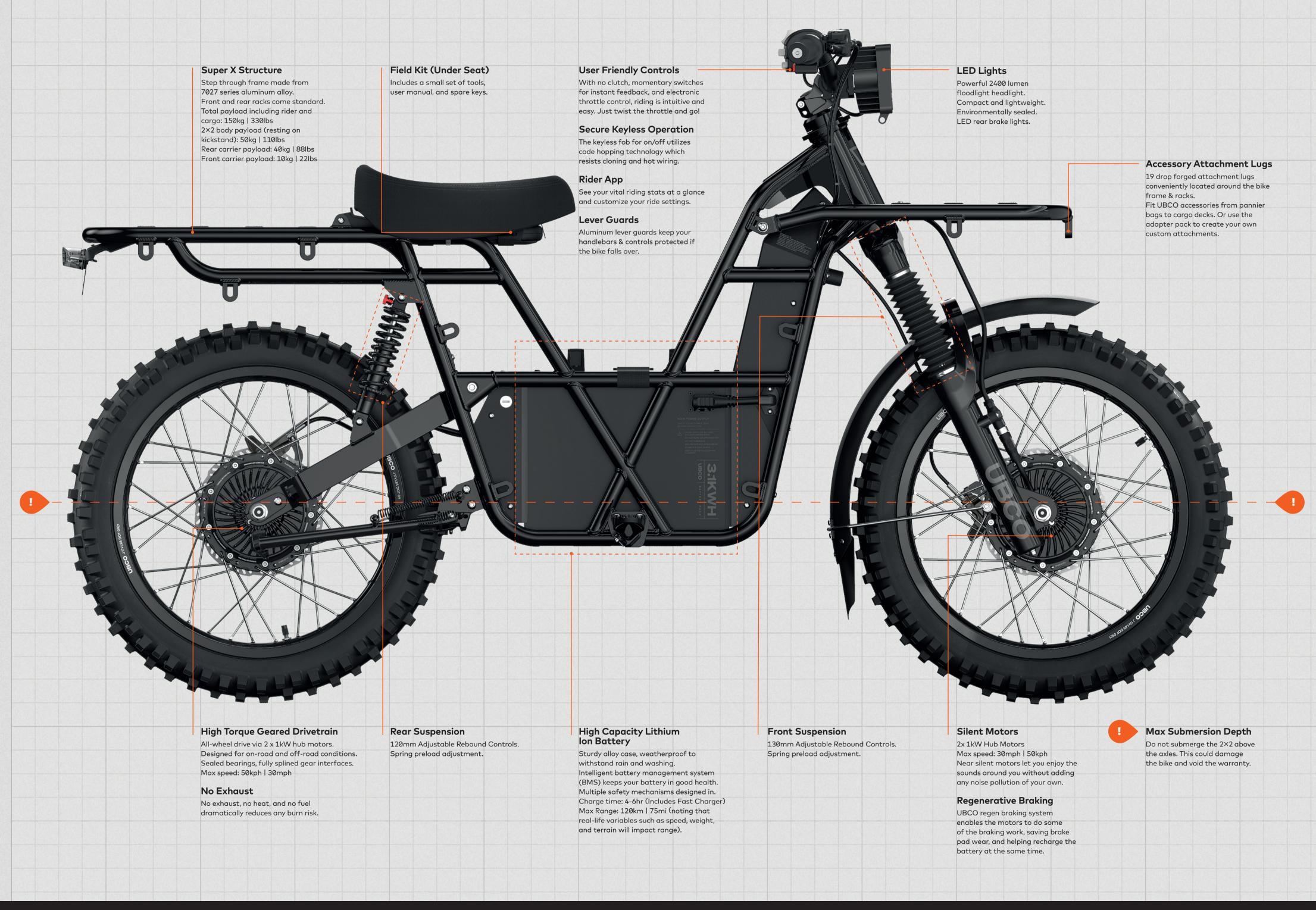


LENGTH: 1.8m | 6ft WIDTH: 0.84m | 33in WHEELBASE: 1.2m | 4ft

HEIGHT: 1.02m | 3.37ft SEAT HEIGHT: 0.8m | 32in

Key Features of Your 2×2 Electric Motorbike

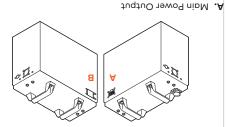
2023 WORK MODEL



paffery can take up to 6 hours to fully charge. Depending on capacity and remaining charge, the

clean before attaching. is located opposite side. Be sure the plugs and ports are the battery (when sitting on the 2×2). The charge port power output socket is located on the right-hand side of When placing the battery into the bike, ensure the main

B. Charge Socket



and all the mud and dust. this results in a robust battery that can handle the ride certified to provide safe operation, use, and transit. All They are UN38.3 certified and the charger is UL/CE within an alloy case, and screwed shut.

18650 Cylindrical Cells, mounted into cell holders, sealed Each 2x2 battery is constructed from high quality LG

the Li-ion battery delivers a large capacity in a sturdy is tully water and aust resistant. A solid work norse, the hard work. Tested to an IP66 standard, the battery The UBCO 2x2 battery and connections are made to do

5. YOUR BATTERY

pressure of the tires.

(nuts & bolts) are done

up correctly and secure

parts of the bike are not

obstructed by any load

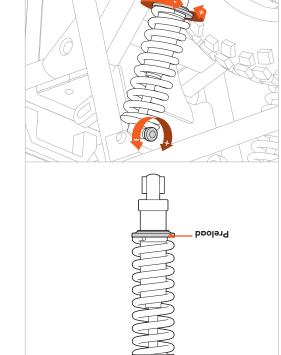
wear a helmet and appropriate riding gear

key fob with you (unless

you've turned security mode off).

9. Wear Safe

10. Keys



ser edually on both sides of the bike. rear suspension preload and rebound controls should be twist counter-clockwise to increase the spring force. The page of the spring clockwise to lessen the spring force; To adjust the rear spring preload, wind the disk at the

opposite to the front fork). to slow the rebound; clockwise speeds it up (this is the top of the spring. I wist the dial counter-clockwise Rebound control can be adjusted using the red dial at

4.2 Rear:

4.1 Front:

force; counter-clockwise will increase the spring force. On the left side of the fork, the spring preload is repound; counter-clockwise to speed it up. the fork crown. Twist the dial clockwise to slow the Rebound speed is adjusted on the right-hand side of

> situations on reverse side. Please see recommendations for various riding prevent harsh bottom out forces.

cabacity, we recommend increasing the preload to For more demanding terrain, or higher load carrying handling and capability of the vehicle. height for various use cases and terrains to improve the These adjustments allow the rider to set the loaded ride

bottoming out (AKA setting the Sag). determine the suspension's ability to prevent setting the loaded ride height of the vehicle and help eature spring preload adjustment that are helpful for ensbeusion re-extends after an impact. They also eponud courrols that change the rate at which the The front and rear suspensions have adjustab

4. ADJUSTABLE SUSPENSION

tightened to 7Nm torque setting. screws on the brake lever mount. Ensure they're re-Tip: The brake lever angle can be adjusted using the

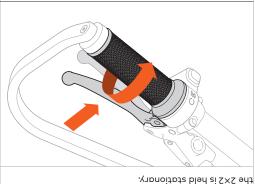
maximise range. It's a win-win! rransfers energy back into the bike's battery, to This system not only saves brake pad wear, but also

are engaged fully. 4. The bike can now be turned on using only the kill adding more motor braking when the brake levers buessed, just prior to the mechanical brake pads, held and then give one final long beep to indicate Level 2 kicks in when the brake levers are initially

3. The bike will beep a few times while the buttons are Level 1 is a gentle "engine braking" effect when the 2. Press and hold both the key fob button and the kill braking is adjustable in the UBCO Rider's App. themselves apply controlled braking prior to the mechanical brakes taking effect. The amount of regen egenerative braking system, where the motors This process can only be performed using a fob that The UBCO drive system incorporates a two-level

left = rear, right = front. position and then apply the brakes: To slow down, allow the throttle to return to neutral

2.5 Brakes



Note: Do not continuously power the throttle when txt will start to decelerate.

a constant position. If you let go of the throttle, the To maintain a constant speed, hold the throttle in acceleration from start to top speed (excluding gravity). are no gears or clutch, so the throttle controls all To accelerate, twist the throttle towards you. There

2.4 Throttle

To ensure the 2×2 can be ridden, retract the kickstand activated, the bike will change to Meutral. is the kill switch for the motors. When the kill switch is On the right side of the handlebar, next to the throttle

and press the kill switch to deactivate it (Drive).

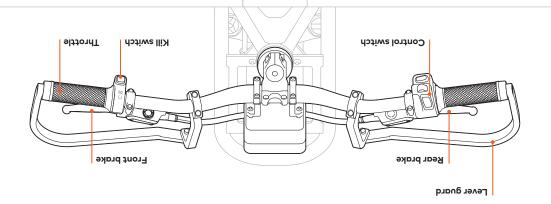
2.2 Kill Switch

the throttle is inactive. in Neutral for when temporary lighting is required while Holding the high beam switch will activate the headlight

in the UBCO Rider's App and turn lights off, or hold the low, beam switch until it turns off (repeat to turn back either switch to Neutral using the key fob, open settings when the 2×2 is in Drive. To turn off the headlight, The headlight and tail lights automatically come on ndicator switch is inactive.

witch with buttons for the headlight and the horn. The On the left side of the handlebar you will find a control

2.1 Control Switch



2. HANDLEBAR CONTROLS

Drive or when the throttle is turned. motors and **will not rev** when it is turned to The 2×2 is very quiet due to its electric drive

button or the kill switch button for 2 seconds. To turn bike off from Drive, press either the key fob

key fob button for I second or hold the kill switch for 2 back to Neutral. To turn bike off from Neutral, hold the Once stopped, press the kill switch to turn the bike Twist the throttle towards you to go.

The headlight will turn on. cickstands, then press the kill switch to enable Drive. It you're ready to ride, straddle the bike and retract the

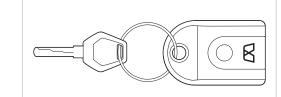
Hold the key fob button 1.5 seconds to turn the bike on Drive: Throttle is activated and the lights turn on. **Neutral:** The bike will turn on but the throttle is inactive.

> used to change between Neutral and Drive. 1.1 Powering the Bike

The key fob will turn the 2×2 on but the kill switch is

and the battery lock. off, while the securing key activates the steering lock ecuring key. The key fob is used to turn the bike on or The 2×2 comes with two types of keys: a key tob and a

J. YOUR KEYS



Manual 2X2 User

2. HANDLEBAR CONTROLS

care to read text with this warning.

and proper function of the 2×2 . Please take

information following is important for safety

IMPORTANT: When you see this symbol, the

should be considered a permanent part of the 2×2 and should remain with your bike if it is resold.

Read this manual carefully. Pay special attention to the

safety messages that appear throughout. This manua

and ensure your 2×2 is turned on and in range before

Fuaple Biuetooth and location services on your phone

Download the UBCO App from any app store. Keep the

engraved on the right-hand side of the frame head tube

to this manual, and record your serial number, which is

Registration your information at www.ubco.com/register

receipt of purchase somewhere safe, such as stapled

required for any future warranty claims. Keep your

Lhis ensures we know about your purchase and is

First things first:

8. ALERT CODES

6. RIDING SAFETY

5. YOUR BATTERY

4. SUSPENSION

3. LCD DISPLAY

1. YOUR KEYS

CONTENTS

7. LOADING THE 2×2

app updated and it will keep your pike up to date.

Pre-Ride Checklist

Before you head out on your 2×2, always check that your bike is ready to ride.

charge to carry out your work or journey. Check secured tightly

2. Brakes Check the brakes are working and inspect their brake pads for wear. light, and brake light are

4. KickstandCheck the kickstands are the bike is loaded up, and kickstand before riding.

check it stays up when **5. Horn**Sound the horn to ensure

defective in operation, damaged, or missing safety-related equipment. Physically check

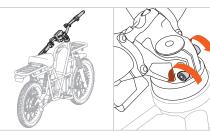
How to Get Your 2×2 Assembled



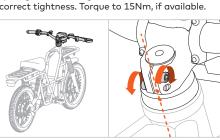
Jnder your seat with the Field Kit, ou'll find all the tools to assemble the bike. Feel free to contact us for help assembling the bike or scan the QR

1. ALIGN THE HANDLEBARS

Loosen the side bolts on the stem with a 5mm Allen key Straighten the handlebars in line with the front wheel and so the orange dots align.



Once the handlebars are straight, re-tighten the stem bolts, alternating as you go to prevent damage to the clamp. Align the marking on the bolt head to achieve the correct tightness. Torque to 15Nm, if available.



2. FIT THE KICKSTAND

Remove the kickstand from the packaging and remove the two mounting bolts.

Fit the kickstand on the outer side of the right-hand kickstand mount and insert bolts with the washer on

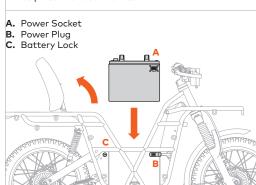
Tightly fasten the bolts using a 5mm Allen key and 13mm spanner. (Tighten to 22Nm if you have a torque wrench). Remove any additional packaging or protective film.



3. INSTALL THE BATTERY

IMPORTANT: inspect the battery; contact UBCO if there is any damage from transit.

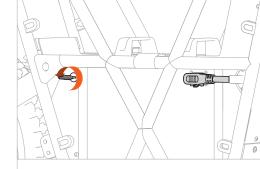
If the battery is not already in place, remove the battery strap from the frame and set aside. With the power socket on the right-hand side of the bike, carefully lower it into place with both hands.



4. SECURE THE BATTERY

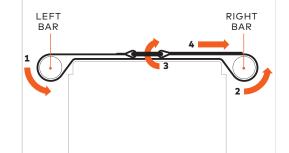
Plug the bike's power plug into the power socket on the righthand side of the battery.

Use the securing key to lock the battery in place.



5. ATTACH THE BATTERY STRAP

Velcro side down, tuck the end of the battery strap under the left hand bar, central to the battery Carry the strap over the battery and tuck it under the right hand bar. Feed the strap back through the clip and center the clip. Tighten the strap and secure closed.



How to Get Your 2×2 Started

Turning off **Security Mode** will allow anyone with access to the bike to turn it on and use it.

To turn Security Mode back on, repeat the above steps.

programming is complete.

Turn off the bike.

is already paired to the bike.

To turn Security Mode OFF:

2.3 Security Mode

switch for approximately 10 seconds.

tob; the bike is only turned on using the kill switch.

This enables the bike to be powered without the key

default, meaning the key fob is required to turn the

required to power the bike. Security Mode is on by

Security Mode determines whether the key fob is

Turn On Bike

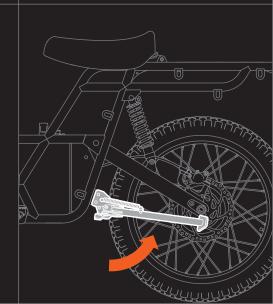


Hold the key fob button for 1.5 seconds Listen for a short beep.

Before you head out on your 2×2, always complete the preride checklist. For your safety, please wear a helmet and appropriate riding gear.

STEP 2

Hop on and retract the kickstand

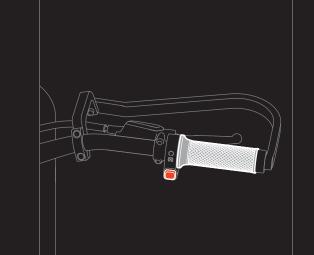


If you're ready to ride, hop on the bike with the kickstands out.

Download the UBCO rider's app to help you along the way:

STEP 3

Engage the bike and go!



Press the red button to enable Drive. throttle towards you to go.

2×2 Electric Adventure Motorbike

USER MANUAL MODEL: 2×2 WRK

UBCO Service Agents. Visit: www.ubco.com/dealer-locator for a full list of service agent or support@ubcobikes.com. If you're unsure about anything contact your local Check/update firmware using the UBCO rider's app. tor damage. Inspect relevant wiring harnesses and connectors signs of wear and tear.

Visually inspect relevant components for damage or Check battery connection for cleanliness and Check and confirm charge level of the battery.

Basic Inspections:

It tault persists, contact your local service agent. Stop riding and allow motors to cool before continuing on. Lhese codes can be caused by the hub motors becoming -- T023, F-2023 High Motor Temperature

If fault persists, contact your local service agent. Cycle power to clear fault memory and continue riding. These codes can be caused by an impact or shock loading mpact/Shock to wheel

> If fault persists, contact your local service agent. $^{(2)}$ Carry out basic inspections. C-0011' E-0001' E-0003' E-1054' E-505¢

If fault persists, contact your local service agent.(2)

Hub Motor/Controller System

Carry out basic inspections.

Lighting Systems

C-000T' C-0005' C-000t' C-0002 C-0009

If fault persists, contact your local service agent. Carry out basic inspections. $^{(1)}$ 7907-1 '790T-E-1025' E-5025' E-1023' E-5023' E-1029' E-5029' E-102\' E-502\' -1059' E-5019' E-1017, F-2017, F-1018, F-2018, F-1028, F-2028, C-1095' C-5091' C-1093' C-5093' E-1001' E5001' E-1012' E5012'

:-1028' C-5028' C-1091' C-5091' E-1011' E5011 Battery Systems If fault persists, contact your local service agent. $^{(2)}$

This table provides a list of potential codes and the **Rear:** Codes start with either C-2XXX or F-2XXX. • Front: Codes start with either C-1XXXX or F-1XXXX. applicable to the front or the rear of the bike: In addition, the first digit of the code indicates if

and may require servicing by an UBCO-certified operation. They require immediate attention specific fault on the bike that may lead to incorrect Faults: These start with F-XXXX and relate to a may no longer meet safety or compliance standards.

There are two types of codes:

your 2×2 is operating as effectively and efficiently as remporary) so we recommend regular checks to ensure system alerts you of any issues or concerns (often LCD dashboard and/or the UBCO rider's app. This Your 2x2's intelligent electronics system provides

ecommended remedial actions.

operating. They still require attention, as the bike as cantionary as they will not stop the bike from

Cautions: These start with C-XXXX and are labeled

8. ALERT CODES



E. Ensure plugs and ports are clean before reinstalling D. Check the bike is secure before driving your vehicle. bike (where it forms an X shape).

excess movement while travelling. B. Lift the bike onto the rack and lock steering to avoid

afteries inside your vehicle. A. Remove the battery before transporting and carry

afraid to tackle those hills!

7.2 Riding with a load

7.3 Carrying the bike



and the 2x2 frame through the center section of the C. Attach rachet straps around both the towbar rack

towhitch-mounted carry rack. The 2×2 can be carried on a vehicle using a standard

the world's steepest street at 19° or 35% - so don't be here. For perspective, Baldwin Street in Dunedin, NZ is Estimated limits for various gradients are illustrated continuous gradients must be reduced accordingly. Mith a load up to 100kg / 220lbs, the max gradient is 15%5%. With loads exceeding 100kg, maximum and

Rider + Cargo 100-150kg



Rider Only ≤ 100kg

based on testing. Each rider's abilities and limitations should be considered when loading up the 2×2 . NOTE: These load limits are estimated suggestions steering, or the view from your wing mirrors. parts on the 2×2 . Do not obscure lights, suspension, Balance your load evenly. Do not impede any moving

on the kickstand. It is rated to support the 2×2 and a Your body weight and cargo. Do not put your full weight We recommend you do not exceed 150kg, including handling. Ride with caution when your 2×2 is loaded up. Improperly loading your 2×2 can affect its stability and 7.1 Loading Safety

50kg load. If load exceeds 50kg, support the 2×2 while

7. LOADING THE 2×2

jegs and other body parts clear of the kickstand's path retracting the kickstand, it is important to keep your kickstand that must be retracted before riding. Wher The UBCO 2×2 comes with a manually retracted 6.2 Kickstand Safety

If you are unsure about the type of riding you are doing against submersion. The 2×2 should not ford water protected against mud, heavy rain, surface water, The battery, motors, and electrical components are

please check with your service provider or the team at

UBCO and we can advise you.

system and will likely void the warranty. Using the 2×2 like an MX bike may damage the drive The 2×2 is not designed to be a MX/Motocross bike. instantly when it hits the ground again. accelerates rapidly in the air and then decelerates the hub motors, causing gear shock when the motor Do not 'wheelie' or jump the 2×2. This can damage

Use your horn as a warning signal where

Abide by local off-road riding laws and regulations. Watch for changes in terrain. Children should NOT operate the 2×2 . Inexperienced riders must take care. Only one person should ride the 2X2 at any one time. gloves, and eye protection.

Wear appropriate apparel such as close-toed shoes,

provides good visibility and meets law requirements Wear a well-fitting helmet, securely fastened, that under the influence of drugs or alcohol. • Never operate the 2×2 when fatigued, impaired, or ride within your limits. Follow your local riding laws and regulations and

described in this section. Ride the 2×2 within its loading and gradient limits as animals, and other vehicles. Ride to the conditions. Be aware of your surroundings, other people, Your life depends on it.

The 2×2 is nearly silent, always assume you are 6.1 General Safety

invisible to all other road and off-road users.

safety concerns associated with internal combustion The electric drive eliminates many of the inherent activation of the throttle. nse' pe ante to turn the bike off to prevent accidental when on and very quiet in operation. When not in Due to its electric drive motors, the UBCO 2×2 is silent

6. RIDING SAFETY

cell damage, reducing its life. battery with either full or too low a charge can cause has between 50% and 90% charge. Storing the If storing for an extended period, ensure the battery

flammable surface (on a concrete floor, steel shelf,

the battery must always be charged on a non

As lithium is deemed a Class 9 Dangerous Good, damage your battery or affect performance and life the battery outside of this temperature range could temperature between 0-40°C $\times 32^{\circ}-104^{\circ}F$. Charging Always charge your 2×2 indoors and at a

the warranty. If you have any issues, please contact Do not attempt to open the battery. This will void Keep away trom children. ароле 80°С / 176°F.

Do not burn the battery or place it near heat sources

Store in a cool place indoors when not in use.

Secure the battery in place when riding.

• Do not submerge the battery or the 2×2 . Lower it into place carefully. Do not drop the battery into the 2X2 from a height. Charge your battery at least once a month to ensure therefore they can be topped up at any time.

Lithium-ion batteries do not suffer from the from UBCO Ltd or your UBCO dealer. UBCO. Extra batteries and chargers can be purchased any battery or charger other than those supplied by work exclusively with the $2\times2.$ Do not attempt to use I he lithium-ion battery and charger are designed to

plug is reinstalled correctly. battery is removed, ensure that the battery To operate properly, the **plug and sockets** need to stay **clean** and in **agod condition** 16 +k-

proper lifting techniques when moving.

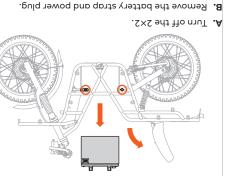
10 avoid muscle strain or back injury, use

5.5 Battery Care & Safety

petween 14-18kg / 30-40lbs. HEAVY OBJECT. The batteries weigh between 14-18ka / 30.401kg E. Store on a stable, cool, dry surface. D. Lift the seat. Lift the battery with two hands.

C. Using the securing key, unfasten the lock located on

the rear right-hand side of the battery.



Extra batteries are available from UBCO Ltd or your on cau swab them out to avoid charging downtime. 2×2 batteries, meaning that if you have more than one, The 2×2 's battery is interchangeable with other GenX5 5.4 Removing the Battery

socket on the battery.

adequate ventilation.

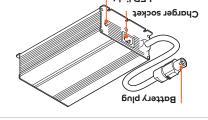
not charge if cables, charger, or battery are Install a smoke alarm near your charging area. Do

If a charge error occurs, disconnect the charger from

GREEN: Battery is fully charged D. The LED indicator lights on the charger will signal: socket and switch on at the wall (where required).

C. Plug the provided charger into any standard wall partery and twist to lock. B. Plug the charger into the charge socket on the

> 5.3 How to charge the battery: LED light



state. Doing so can void the warranty. Never store the battery in an uncharged ame charge memory problems as other batteries,

> WARNING: Only use the charger under cover and on a clean, dry surface, the charger under cover aug ou a cjeau' qt/ snttace; the charger is

Replace the waterproof cap over the charging When finished charging:

Use charger in dry, indoor conditions only and with

Keep away from any sparks or flames. When charging: persists, contact your UBCO dealer. the battery and wall socket. Reconnect. It flashing

BLUE - Flashing: Reverse polarity BLUE – Solid: Battery voltage fault **RED – Flashing:** No battery connected RED - Solid: Charging as normal

A. Turn off the 2×2 using the key fob.