UBCO

DUTTY User Manual

PART NO. 930-0003272 VERSION: 2.0

Important - Please Read



WARNING Read, understand, and follow all of the instructions and safety precautions in this manual and on all product labels. Failure to follow all recommended precautions and procedures could result in serious injury or death. Always heed all safety precautions and follow all operation, inspection and maintenance procedures outlined in this manual.



WARNING Improper use of a motorbike can result in serious injury or death to you, yourself and/or other road users. To minimise the risk of injury, read and understand the information contained in this manual before operating the motorbike. This manual contains safety information specific to the UBCO DUTY motorbike, as well as information about general motorbike safety. Anyone who rides the motorbike must follow these safety precautions.



IMPORTANT Please ensure that the correct version is used when printing this document. Be advised that a printed copy may not reflect the most current information. Always refer to the digital version for the latest updates. This can be downloaded from the Rider Resources page on the UBCO website: www.ubco.com/rider-resources

All references to RIGHT, LEFT, FRONT or REAR are from the operator's perspective when seated in a normal riding position. If you have questions about the operation or maintenance of your motorbike after you've read this manual, please see your authorized dealer. To locate the nearest authorized UBCO dealer, visit the UBCO website at www.ubco.com

Carefully read and understand the information found in the Safety section on page 23.

Following the precautions and procedures in the manual will add to your enjoyment and help keep you safe. If you lose or damage this manual, please download a copy from our website: www.ubco. com/rider-resources. This rider's manual should be considered part of the motorbike and should remain with the motorbike when ownership changes.

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DUTY User Manual

1. INTRODUCTION

The UBCO DUTY is a rear-wheel hub-driven electric utility motorbike that is practical, robust, easy to ride, and designed to carry equipment. With a higher payload and speed than other UBCO models, this bike is built for duty.

This manual should be considered a permanent part of the DUTY and should remain with the DUTY if it is resold.

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.

First things first

Register your information* at ubco.com/register

This ensures we know about your purchase and is required for any future warranty claims. Keep your receipt of purchase somewhere safe, such as stapled to this manual, and record your VIN number, which is engraved on the right-hand side of the steering tube. *Unless purchased as part of a fleet

Next

Download the UBCO App from any app store.** Keep the app updated and it will keep your bike up to date **Not available for all fleet customers.

Enable Bluetooth and location services on your phone and ensure your DUTY is turned on and in range before opening the app.

Then

Read this manual carefully. Pay special attention to the safety messages that appear throughout. This manual should be considered a permanent part of the DUTY and should remain with your bike if it is resold.

Fleet customers

The app and its associated features may not be available for fleet or commercial customers

The following signal words and symbols appear throughout this manual. Your safety is involved when these words and symbols are used. Become familiar with their meanings before reading the manual.



WARNING indicates a hazard with a medium level of risk which, if not avoided, could result in a serious injury.



CAUTION indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.



NOTICE provides key information by clarifying instructions



IMPORTANT indicates key reminders during inspection of parts and components.

Pre-Ride Checklist

Before you head out on your UBCO, always check that your bike is ready and fit to ride.

Battery

Ensure there is enough charge to carry out your work or journey. Refer to the battery section on charging your battery.

Brakes

Check the brakes are working and inspect the brake pads for wear.

Lights

Ensure the headlights, rear light, brake light, and directional indicators are working.

Kickstand

Check the kickstands are functional, especially if the bike is loaded up (centre stand, left stand, right stand). The left/right kickstands contain a safety switch. The kick stands must be retracted before the throttle can be used.

Mirrors

Check they are securely fastened and adjusted for proper viewing.

Horn

Sound the horn to ensure it's working.

Tyres

Minimum 29psi front and 32psi rear. Check tyre wall for manufacturers recommendation for maximum.

Loose Fixings

Ensure all the fixings (nuts & bolts) are done up correctly and secure.

Load

Ensure all functional parts of the bike are not obstructed by any load you may be carrying.

Safety Gear

For your safety, please wear a helmet and appropriate riding gear.

Keys

Remember to take your key fob with you.

Have Fun!

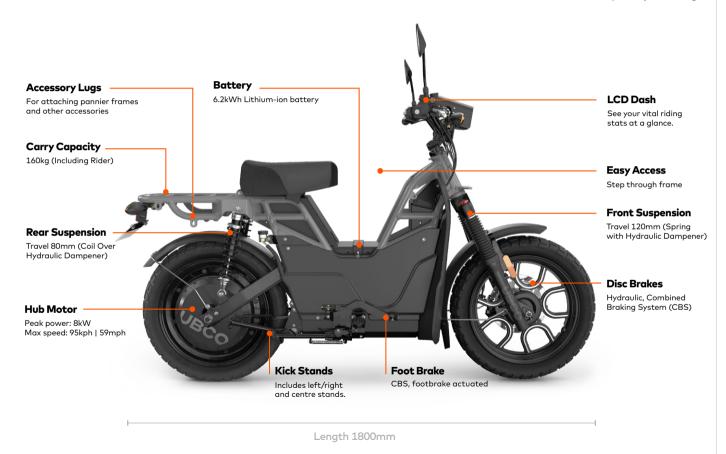


DO NOT ride the bike if it is materially defective in operation, damaged, or missing safety-related equipment. Physically check off each of the above before you ride.

Bike Features



*Decals may be subject to change.



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Technical Specifications

DIMENSIONS

Height	1,360mm	42"
Length	1,800mm	72"
Width (handlebars)	780mm	31.5"
Wheel base	1,205mm	47"
Seat height	840mm	31.5"
Curb weight	120kg	265lbs
Carry capacity (incl rider)	160kg	352lbs

VEHICLE SYSTEM

Motor	Direct Drive Hub Motor, 8kW Peak Power
Controller	1x high power density controllers with over-heating protection
Battery	6.2kWh UBCO lithium-ion 50.4V battery
Charger type	100-240V 450W wall or bench mount
Charge time	10-12 hours
Input	Bluetooth with user app (app not available on all models)
Ports	2x USB charging ports (1A & 2.5A)

CHASSIS / SUSPENSION / BRAKES

Structure	Step through alum single seat, optimi tray and rear post frames	sed for letter
Front suspension	Spring with adjust damper	able gas
Rear suspension	Coil over gas dam	per
Front suspension travel	120mm	
Rear suspension travel	80mm	
Brakes	Hydraulic. Combin System (CBS, foot actuated)	9
Wheels	16 x 2.5" aluminium	n rims
Tyres	Front and Rear 100/80-16 Tyre pressure: Front 29psi/200kPa Rear 32psi/220kPa (Please check the manufacturers recommended pressure)	
LIGHTING		
LED Headlight	120mm 4.	.75" diameter
Low beam	1200 lumens 2	7.6W
High beam	2100 lumens 3	6W
Additional lighting	LED rear, brake, number plate and directional lights	
COMMUNICATION		
Integrated ECU	Directly controls lig controllers, display Bluetooth connect	, rider controls,

PERFORMANCE

Range 100km (may vary depending on

terrain and carry load)

Peak Power 8kW

Max torque 90Nm

Top speed 95km/h 59mph

VEHICLE CLASS

NZ/AUS LC motorcycle
US US - motorcycle

EU - L3e A1 (Low-performance

motorcycle)

WARRANTIES

DUTY Bike 12 months
Battery 24 months
Accessories 12 months
Spare Parts 6 months

Extended warranties available by negotiation.
For warranty terms and conditions please visit ubco.com

*Height / Length measures are approximate.

All product specifications are subject to change without notice to improve performance, function and/or design.



2. YOUR KEYS

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

2.1 Replacing Key Fob Battery

Remove the silicone sleeve. Turn the key fob over so that the button faces down. Separate the two halves of the key fob. Slide the battery out and replace with a new CR2032 battery, observing polarity. Position the rear plate over the base and push down to secure.



INGESTION HAZARD: This product contains a button cell or coin battery.

DEATH: or serious injury can occur if ingested.

A swallowed button cell or coin battery can cause **Internal Chemical Burns** in as little as **2 hours**.

KEEP new and used batteries **OUT OF REACH of CHILDREN**.

Seek immediate medical attention if a battery is suspected to be swallowed or inserted inside any part of the body.



Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.

Even used batteries may cause severe injury or death

Call a local poison control centre for treatment information.

Battery type: CR2032

Battery nominal voltage: 3V

Non-rechargeable batteries are not to be recharged.

Do not force discharge, recharge, disassemble, heat above(manufacturer's specified temperature rating) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.

Ensure the batteries are installed correctly according to polarity (+ and -).

Do not mix old and new batteries, different brands or types of batteries, such as alkaline, carbon-zinc, or rechargeable batteries.

Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations.

Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.



2.2 Powering the Bike

The key fob will turn the DUTY on but the kill switch is used to change between Neutral (\mathbb{N}) and Drive (\mathbb{S} D).

Neutral: The screen will turn on with a green illuminated N showing but the throttle is inactive.

Drive: Throttle is activated and the lights turn on.

To start the bike, hold the key fob button 1.5 seconds to turn the bike on in Neutral (N). The display will turn on and the N is illuminated.

If you're ready to ride, straddle the bike and retract the kickstand, then press the kill switch to enable Drive (⑤D). The headlight will turn on illuminating the green headlight symbol ⑥D.

Twist the throttle towards you to go.

Once stopped, press the kill switch to turn the bike back to Neutral (N) or deploy one of the side stands. To turn bike off from Neutral (N), hold the key fob button for 1 second or hold the kill switch for 2 seconds.





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

2.3 Steering Security Lock

The DUTY has a steering lock on the head tube, which will fix the steering angle of the parked bike. This makes the DUTY very difficult to wheel away as it will only turn in circles.

The steering lock is located on the right side of the steering tube just below the handlebars. The lock is activated with the securing key.

To activate/deactivate the steering lock:

- Turn the handlebars counter-clockwise (to the left) until the lock body lines up with the securing ring on the head tube.
- 2. Put the securing key in and turn clockwise to lock.
- **3.** Unlock the steering by turning the key counterclockwise; use the steering as per normal.



It is important to ensure the **steering lock is disengaged** and the securing key is removed before starting the DUTY.



3. LCD DISPLAY

3.1 Warning Light

If there is a system issue, the warning light will flash and an alert code will be displayed in the odometer area. Find more information in the UBCO App or contact your local UBCO support line.

5.2 Charge Level

Accurate state of charge (SOC) is displayed on the left side of the display, split into 12 segments, with a halfway indicator.

3.3 Power Output Meter

This displays the real-time power output to the motors. Any bars shown above the 0 mark represent power output to the motor and any bars shown under the 0 mark represent power input to the battery through regenerative braking.

3.4 Odometer and Trip Meter

To select between odometer (ODO) and trip meter (TRIP) view, press the left button. To reset the trip meter, press the left button for 8 seconds.

3.5 Switch from Metric to Imperial

To select between metric and imperial units for the speed, odometer, and trip meter, while ODO is showing, hold down the left button. To change between Celsius and Fahrenheit, press the right button.

3.6 Change the Clock

- **1.** Hold down the right button until the time starts flashing.
- 2. Press the right button to change between hours and minutes.
- 3. Press the left button to cycle through numbers.
- **4.** Hold the right button until the numbers stop flashing to set the time.



4. HANDLEBAR CONTROLS

4.1 Control Switch

On the left side of the handlebar you will find a control switch with buttons for the headlight, indicators, & horn.

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

Holding the high beam switch will activate the headlight in Neutral (N) for when temporary lighting is required while the throttle is inactive. Do not use the high beam against oncoming traffic.

4.2 Walk Mode Switch (Optional Feature)

The walk mode switch on the right-hand side of the handlebars puts the bike into walk mode which maintains a steady 10kph/6mph pace. Flick the switch down to engage.

If you are already moving, you will need to reduce your speed to under 10kph/6mph and then the bike will maintain that pace. Flick the switch up to deactivate walk mode.

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Walk Mode is an **optional feature** and may not be part of your bike specification.

4.3 Kill Switch

The red button on the right side of the handlebar, next to the throttle, is the kill switch for the motor. When the kill switch is activated, the bike will change to Neutral (N) on the LCD display.

4.4 Security Mode

Security Mode determines whether the key fob is required to power the bike. Security Mode is on by default, meaning the key fob is required to turn the bike on.

To turn Security Mode OFF:

This enables the bike to be powered without the key fob; the bike is only turned on using the kill switch.

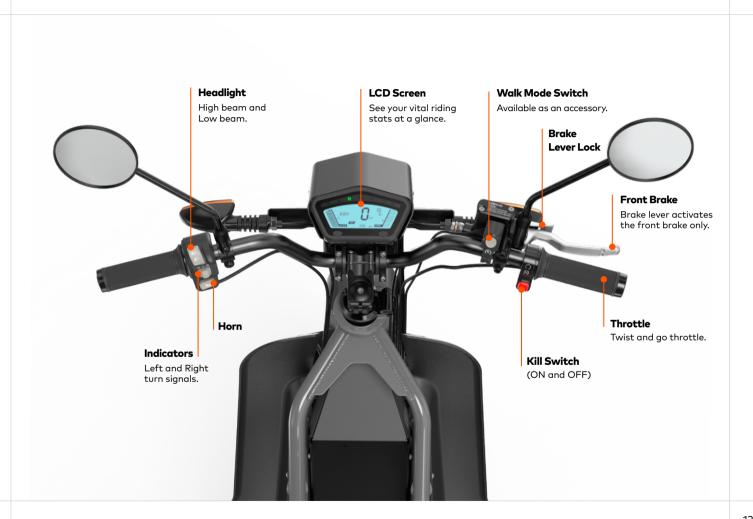
This process can only be performed using a fob that is already paired to the bike.

- 1. Turn off the bike.
- **2.** Press and hold both the key fob button and the kill switch for approximately 10 seconds.
- **3.** The bike will beep a few times while the buttons are held and then give one final long beep to indicate programming is complete.
- The bike can now be turned on using only the kill switch.

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



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



4.5 Throttle

To accelerate, twist the throttle towards you. There are no gears or clutch, so the throttle controls all acceleration from start to top speed (excluding gravity). The throttle delivers instant acceleration. Twist the throttle gently until you get a feel for the torque delivery.

To maintain a constant speed, hold the throttle in a constant position. If you let go of the throttle, the DUTY will start to decelerate.



DO NOT continuously power the throttle when the DUTY is held stationary.

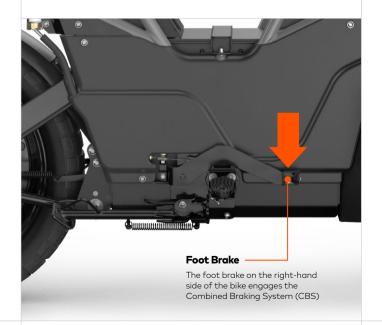


5. BRAKES

5.1 Foot Brake

To slow down, allow the throttle to return to neutral position and then apply the brakes:

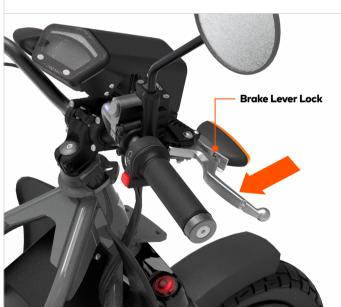
The foot brake on the right-hand side of the bike engages the Combined Braking System (CBS). When you push the foot brake down this engages most of the braking to the rear wheel, but also distributes some to the front.



5.2 Brake Lever

The brake lever on the right-hand side activates the front brake only, and includes a brake lever lock. To activate the brake lever lock, squeeze the brake lever and pull the lever lock into place. To deactivate the lever lock, squeeze the brake lever again.

TIP: The lever lock tension can be tuned using the adjuster on the front with a 4mm allen key and moving the locking wedge left and right.



The DUTY drive system incorporates two-level regenerative braking, where the motor applies braking prior to the mechanical brakes taking effect.

- Level 1 provides an "engine braking" effect when the throttle is released.
- Level 2 kicks in when the brakes are activated, adding more motor braking when the brakes are engaged fully.

This system not only saves brake pad wear, but also transfers energy back into the bike's battery to maximise range.

5.3 Brake Fluid

Brake fluid must be replaced every 10,000km or 24 months which ever comes first. It is recommended that this procedure is carried out by an authorised UBCO Dealer or Service Agent. Use only dot 3 or 4 from a sealed container



WARNING: Brake fluid is highly toxic - keep containers sealed and out of the reach of children. If the fluid contacts the skin or eyes, rinse immediately with plenty of water. If accidental consumption of fluid is suspected, seek medical attention immediately.



WARNING: Do not ride the motorcycle if the brake fluid is below the MIN level mark on either reservoir.



WARNING: If the brake lever or pedal travel is unusually long or feels soft, contact your UBCO Dealer. Riding under such conditions could result in extended stopping distances or complete brake failure.



The DUTY is equipped with a combined braking system (CBS) with front and rear brake fluid reservoirs. The fluid level in the reservoirs may drop slightly during normal use due to brake pad wear, but should not be allowed to drop below the MIN level mark.

5.4 Brake Fluid Replenishment - Front

The front brake reservoir is located adjacent to the front brake lever.

Inspect the level of the front brake fluid, visible through the reservoir window. If the fluid level is below the MIN level mark, add brake fluid.



NOTE: The motorcycle should be in an upright position prior to checking fluid level.

- **1.** Clean any dirt or debris from around the reservoir cap before opening the reservoir.
- 2. Unscrew and remove the reservoir cap.
- 3. Add new DOT 3 or 4 brake fluid.
- **4.** Inspect the cap seal ensuring that it is free of any wear or damage then reinstall the cap.



DO NOT overfill. Overfilling will cause fluid leakage while riding.

5.5 Brake Fluid Replenishment - Rear

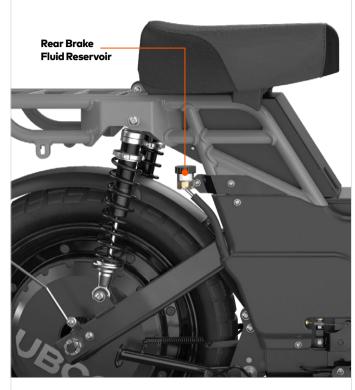
The rear brake reservoir is located on the right side of the bike below the seat.

Inspect the level of the rear brake fluid through the reservoir housing. If the fluid level is below the MIN level mark, add brake fluid.



NOTE: The motorcycle should be in an upright position prior to checking fluid level.

- 1. Clean any dirt or debris from the cap and reservoir opening before opening the reservoir.
- 2. Unscrew and remove the reservoir cap.
- 3. Add new DOT 3 or 4 brake fluid.
- **4.** Inspect the cap seal ensuring that it is free of any wear or damage then reinstall the cap.



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DO NOT overfill. Overfilling will cause fluid leakage while riding.

5.6 Brake Pad Inspection

The brake pads should be inspected regularly. Determine the condition and brake pad material thickness by inspecting the pads through the sides of the brake caliper.

Replace the brake pads if either pad's thickness is less than 0.5mm. If the brake pads are worn, they should be replaced immediately before riding. See your UBCO Dealer or Service Agent to have the brake pads replaced.

5.7 Brake Disc Inspection

The thickness of the brake discs should be checked regularly. Replace brake rotor immediately, if less than minimum thickness of 3mm on the front and 3mm on the rear.

6. SUSPENSION

The front suspension has adjustable rebound controls that change the rate at which the suspension reextends after an impact. The front and rear also feature spring preload adjustment that are helpful for setting the loaded ride height of the vehicle and help determine the suspension's ability to prevent bottoming out (AKA setting the Sag).

These adjustments allow the rider to set the loaded ride height for various use cases and terrains to improve the handling and capability of the vehicle.

For more demanding terrain, or higher load carrying capacity, we recommend increasing the preload to prevent harsh bottom out forces.

6.1 Front Fork/Suspension Adjustment

Rebound speed is adjusted on the right-hand side of the fork crown. Twist the dial clockwise to slow the rebound; counter-clockwise to speed it up.

On the left side of the fork, the spring preload is adjusted. Twist the dial clockwise to lessen the spring force; counter-clockwise will increase the spring force.



WARNING: Uneven adjustment may cause poor handling of the motorcycle, which could result in an accident. Always adjust both the left and right shock preload equally, or have your dealer perform the adjustments.





CAUTION: Make sure the motorcycle is stable when elevated. Personal injury and/or damage to the vehicle may occur if the motorcycle tips or falls

6.2 Rear Shock/Suspension Adjustment

To adjust the rear spring preload, wind the disk at the top of the spring clockwise to increase the spring force; twist counter-clockwise to decrease the spring force. The rear suspension preload controls should be set equally on both sides of the bike. After adjusting suspension settings and using a 3mm Hex Bit, lock each side's Preload Adjustment Disc in place

6.3 Recommended Suspension Settings

The below table outlines recommended suspension settings for on road riding with varied total vehicle load (rider + load). The thread measurement is for the total amount of thread visible at the top of the suspension.

RIDE TYPE / VEHICLE LOAD	FRONT REBOUND	FRONT PRELOAD	REAR PRELOAD
On Road 90kg	Max Fast	Lowest Position	20mm Thread
On Road 140kg	Max Fast	1 Turn Before Highest Position	20mm Thread

6.4 Swing Arm/Rear Axle Inspection

Sit on the seat and slowly bounce the rear suspension a few times. Make sure the suspension moves freely without binding. Listen for abnormal noises.

Use the centre stand to elevate and support the bike with the rear tyre slightly off the floor.

Grasp the rear wheel and attempt to move the wheel side-to- side. If there is side-to-side movement see your dealer or service agent.

With the bike on the centre stand, slowly rotate the rear wheel. If the wheel does not rotate smooth and free see your dealer or service agent.





WARNING: Ensure threads on shock body are clean and clear of debris before adjusting the preload adjustment disc. Before attempting to adjust downward, spin the preload adjustment disc one full revolution upward and then adjust in the downward position.

7. KICKSTANDS

7.1 Centre

To engage the centre stand, step on the stand peg and rock/push the bike backwards. To retract the stand, roll the bike forward.





FOR SAFETY, When operating the kickstands it is important to keep your legs and other body parts clear of the path of movement. When seated do not rest your weight on the kickstands.

7.2 Left and Right

There is a kick stand on both the left and right side of the bike so that you can lean the bike either side. To operate, kick the stand down.





FOR SAFETY, When either side kickstand is engaged, the bike goes into Neutral. The kick stands must be retracted before the throttle can be activated.

8. YOUR BATTERY

The UBCO Duty battery and connections are made to do the hard work. Tested to an IP66 standard, the battery is fully water and dust resistant.

UBCO batteries are UN38.3 certified, and the charger is UL/CE certified to provide safe operation, use, and transit. All this results in a robust battery that can handle the ride.

The charge port is located on the top of the battery on the "port hump" facing forwards into the step through area. Be sure the plugs and ports are clean before attaching.

8.1 Charging

Depending on the remaining charge, the battery can take up to 12 hours to fully charge.

8.2 Checking the Charge

To check battery capacity, press the key fob to turn the bike on. The charge meter on the left-hand side of the LCD display will indicate the remaining charge level. Charge level is also available on the UBCO App. The yellow 'Charge Required' light at the top of the display will also illuminate when the charge is low.

8.3 How to Charge the Battery:

- **1.** Turn off the DUTY using the key fob or kill switch.
- 2. Plug the charger into the charge socket on the battery and twist to lock.
- **3.** Plug the provided charger into any standard wall socket and switch on at the wall (where required).



4. The LED indicator lights on the charger will signal:

GREEN: Battery is fully charged

RED – Solid: Charging as normal

RED – Flashing: No battery connected or you are connecting a fully charged bike.

BLUE - Solid: Battery voltage fault

BLUE – Flashing: Reverse polarity

If a charge error occurs, disconnect the charger from the battery and wall socket. Reconnect. If flashing persists, contact your UBCO dealer.

To display the state of charge press the on-and-off button (kill switch) to illuminate the dash.

When charging:

Keep away from any sparks or flames.

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

Use charger in dry, indoor conditions only and with adequate ventilation.



WARNING: Only use the charger under cover and on a clean, dry surface; the charger is NOT water resistant.



WARNING: Replace the waterproof cap over the charging socket of the battery once charging is complete.



WARNING: Never store the battery in a fully uncharged state. Doing so can void the warranty.

8.4 Battery Care & Safety

The lithium-ion battery and charger are designed to work exclusively with the DUTY. Do not attempt to use any battery or charger other than those supplied by UBCO. Extra batteries and chargers can be purchased from UBCO Ltd or your UBCO dealer.

Lithium-ion batteries do not suffer from the same charge memory problems as other batteries, therefore they can be topped up at any time.

When not in use for a long period, charge your battery at least once a month to ensure its health.

Do not submerge the battery or the DUTY.

Store in a cool place indoors when not in use.

Do not burn the battery or place it near heat sources above 80°C / 176°F .

Keep away from children.



WARNING: Do not attempt to open the battery. This is dangerous and will void your warranty.

Always charge your DUTY indoors, protected from water, and at a temperature between 0-40°C / 32°-104°F. Charging the battery outside of this temperature range could damage your battery or affect performance and life span.

As lithium is deemed a Class 9 Dangerous Good, the battery must always be charged in situ in the bike.

If you have any issues, please contact your local service provider or contact UBCO directly.

8.5 Battery Storage

If storing the battery for an extended period, ensure it has 50-90% charge remaining when you leave it. Regularly check and retain the charge at this level to maintain cell longevity.



WARNING: Do not attempt to remove the battery from the bike. This should only be done by an authorised service agent or dealer.



WARNING: Do not store battery fully charged.



WARNING: Do not store the battery near heat sources or where the temperature could exceed 80C/176°F.

9. RIDING SAFETY

Due to its electric drive motors, the UBCO DUTY is silent when on and very quiet in operation. When not in use, turn the bike off to prevent accidental throttle activation.

9.1 General Safety

- The throttle delivers instant acceleration. Twist the throttle gently until you get a feel for the torque delivery.
- The DUTY is nearly silent, always assume you are invisible to all other road users
- Be aware of your surroundings, other people, animals, and other vehicles. Ride to the conditions.
- Ride the DUTY within its loading and gradient limits as described in this section.
- Follow your local road laws and regulations, and ride within your limits.
- Never operate the DUTY when fatigued, impaired, or under the influence of drugs or alcohol.
- Wear a well-fitting helmet, securely fastened, that provides good visibility and meets law requirements.
- Wear appropriate apparel such as close-toed shoes, gloves, and eye protection.
- Only one person should ride the DUTY at any one time.

- Inexperienced riders must take care and practice before entering traffic.
- Children should NOT operate the DUTY.

9.2 On-road Safety

- Watch for changes in traffic.
- Check your blind spots and signal when turning or changing lanes.
- Abide by your local riding laws, regulations, and posted speed limits.
- Be mindful of other road users; never ride in a way that could cause harm to others.
- Use your horn appropriately.
- Take extra care when riding in wet, frosty, or windy conditions, and when riding over road markings.

9.3 Kickstand Safety

For safety, when either side kickstand are engaged, the bike goes into Neutral (N). The kickstands must be retracted before the throttle can be activated. When operating the kickstands it is important to keep your legs and other body parts clear of the path of movement.

10. LOADING THE DUTY

Improperly loading your DUTY can affect its stability and handling. Ride with caution when loaded.

10.1 Loading Safety

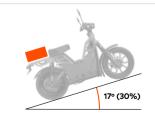
We recommend you do not exceed 160kg / 352lb, including your body weight and cargo. Do not put your full weight on the kickstand. It is rated to support the DUTY and a 70kg / 154lb load. If load exceeds 70kg, support the DUTY while loading.

Balance your load evenly. Do not impede any moving parts on the DUTY. Do not obscure lights, suspension, steering, or the view from your wing mirrors.

10.2 Riding with a Load

With a load up to 100kg / 220lb, the max gradient is 15%25%. With loads exceeding 100kg, maximum and continuous gradients must be reduced accordingly. Motor temperature may increase at a faster rate when riding up continuous gradients.

For perspective, Baldwin Street in Dunedin, NZ is the world's steepest street at 19° or 35% – so don't be afraid to tackle those hills!



Rider + Cargo ≤ 160kg / 353lb



Load Limit 70kg / 154lb on rear



NOTICE: These load limits are estimated suggestions based on testing. Each rider's abilities and limitations should be considered when loading up the DUTY.

10.3 Carrying the Bike

If you need to transport the bike:

- **A.** Use a truck or trailer. Do not tow the motorcycle with another vehicle, as towing will impair the motorcycle's steering and handling. This could also damage the electrical components such as the motor, controller or battery.
- **B.** Position and restrain the motorcycle in an upright position.
- **C.** Do not restrain the motorcycle using the handlebars.
- **D.** Loop tiedown straps (from the front) up and over the triple clamp, using care to not interfere with wiring and brake lines.
- **E.** Place tiedowns as wide apart as possible on the truck or trailer bed for best stability.
- **F.** Do not engage the side stands during truck or trailer transportation.
- **G.** Check the bike is secure before driving your vehicle.



HEAVY OBJECT - 2 PERSON LIFT REQUIRED.

The bike weighs **120kg/265lb.** To avoid muscle strain or back injury, use proper lifting techniques, loading ramps or hoists when moving if any lifting required. It is preferable to roll the bike.

11. ALERT CODES

Your DUTY 's intelligent electronics system provides valuable information while you ride, displayed on the LCD dashboard and/or the UBCO rider's app. This system alerts you of any issues or concerns (often temporary) so we recommend regular checks to ensure your DUTY is operating as effectively and efficiently as possible.

There are two types of codes:

- Cautions: These start with C-XXXX and are labeled as cautionary as they will not stop the bike from operating. They still require attention, as the bike may no longer meet safety or compliance standards
- Faults: These start with F-XXXX and relate to a specific fault on the bike that may lead to incorrect operation. They require immediate attention and may require servicing by an UBCOcertified technician.

In addition, the first digit of the code indicates if applicable to the front or the rear of the bike:

- Front: Codes start with either C-1XXX or F-1XXX.
- Rear: Codes start with either C-2XXX or F-2XXX.

This table provides a list of potential codes and the recommended remedial actions.

Lighting Systems

C-0001, C-0002, C-0004, C-0005 C-0006

Carry out basic inspections.(1)

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

Battery Systems

C-1058, C-2058, C-1061, C-2061, F-1011, F2011

Carry out basic inspections.(1)

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

Hub Motor/Controller System

C-2061, C-2063, F2001, F2015, F-2016, F-2017, F-2018, F-2028, F-2052, F-2053, F-2056, F-2057, F-2064

Carry out basic inspections.(1)

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

Throttle/Vehicle Management System (VMS)

C-0011, F-0001, F-0003, F-2024

Carry out basic inspections.(1)

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

Impact/Shock to wheel

F-2022

These codes can be caused by an impact or shock loading to a wheel.

Cycle power to clear fault memory and continue riding.

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

High Motor Temperature

F-1023, F-2023

These codes can be caused by the hub motor becoming excessively hot.

Stop riding and allow motor to cool before continuing on.

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

(1) Basic Inspections:

Check and confirm charge level of the battery.

Check battery connection for cleanliness and security.

Visually inspect relevant components for damage or signs of wear and tear.

Inspect relevant wiring harnesses and connectors for damage.

Check/update firmware using the UBCO rider's app. (May not be available for commercial fleets.)

If you're unsure about anything contact your approved service agent or support@ubcobikes.com.

(2) **Visit: www.ubco.com/duty** for a more information.

12. SERVICING

12.1 The owner obligations

Ensure that the vehicle has scheduled servicing according to the service schedule. Such servicing should be undertaken at an authorised UBCO dealer;

The owner is responsible for the maintenance obligations and must drop off and pick up the vehicle at his or her cost to an authorised UBCO dealer or service agent.

12.2 Owner operation checks

UBCO recommends the following service schedule. Request your UBCO certified dealer/service agent complete the service log on the following pages.

Insist on only genuine UBCO parts being installed in your product to ensure validity of the warranty.

First Maintenance Service: 2,000km or 10 Weeks whichever comes first.

Intermediate Service: Every 5,000km.

Full Service: Every 10,000km or 12 months whichever occurs first.

12.3 Cleaning the bike

It's important to keep your bike in a good working order so it's ready to go when you are. To ensure it's always in the best condition possible, you should clean your bike regularly.

Incorrect cleaning methods can void your warranty, so take care and make sure you follow these points.

Do

- Clean your bike after each day of use, especially when exposed to dirty terrain or salt water. If you are using the bike in a clean environment, this may not be necessary.
- Before cleaning, turn the bike off. Ensure all power outlets, including the battery, have their rubber seals securely in place. The battery should be plugged into the bike while cleaning to protect the power plug and socket.
- Clean the bike with a low pressure hose and soft automotive cleaning brush or sponge.

Do Not:

- Do not water blast or use a high pressure hose on the bike.
- Do not submerge electrical parts they are protected from the rain and splashes, but should not be left in water.
- Do not use cleaning products that are not specifically designed for cars or motorcycles. They may contain ingredients that could scratch the finish or harm components of the bike.

Service Log

First Service	
☐ Complete	Date serviced:
Odometer:	
Hourmeter:	
Service provider	
Signed:	
9	
J	
J	
Second Service	
Second Service	Date serviced:
Second Service Complete	Date serviced:
Second Service Complete Odometer:	
Second Service Complete Odometer: Hourmeter:	

Thi	rd Service			
	Complete	Date serviced:		
Od	ometer:			
Но	urmeter:			
Ser	Service provider:			
Sig	ned:			
Fo	urth Service			
	Complete	Date serviced:		
Od	ometer:			
Но	urmeter:			
Ser	vice provider: .			
Sig	ned:			

Fifth Service	Eighth Service
☐ Complete Date serviced:	☐ Complete Date serviced:
Odometer:	Odometer:
Hourmeter:	Hourmeter:
Service provider:	Service provider:
Signed:	Signed:
Sixth Service	Ninth Service
☐ Complete Date serviced:	☐ Complete Date serviced:
Odometer:	Odometer:
Hourmeter:	Hourmeter:
Service provider:	Service provider:
Signed:	Signed:
Seventh Service	Tenth Service
☐ Complete Date serviced:	☐ Complete Date serviced:
Odometer:	Odometer:
Hourmeter:	Hourmeter:
Service provider:	Service provider:
Signed:	Signed:

