

HARO



SKWAD

OWNER'S MANUAL

Contents

Introduction	3
Using this manual	4
Anatomy of your bike	4
Tools and recommended torque values	5
Adjusting for comfort and safety	6
Fine-tune the brake lever positioning	6
Ensure all hardware is tightened properly	7
Battery information	8
Removing and installing the battery	9
Before you charge	9
Charging procedure	10
Estimated charging time	11
Long-term battery storage	11
Operation	12
How the electrical system works	12
Handlebar features	12
Quick-Start Guide	13
Electrical controls and operation	14
Start-up procedure	14
Headlight/Brake light features and operation	15
Battery capacity display	15
Riding range	16
Best practices for extending range and battery life	16
Parking, storage, and transport	16
Weight limits	17
Carrying loads (cargo) safely	17
Maintenance	18
Check and service your bike regularly	18
Safety checklists	19
Recommended service intervals	21
Checking brakes & motor cutoff switches	22
Tire and wheel care	23
Guard against rust, corrosion, and water damage	24
Troubleshooting	25
Error detection	26
Ride as safely as possible	27
Be thoroughly educated about your bike before riding it	27
Age and ability requirements	27
Know and obey all relevant local laws	27
Safety check before each ride	28
Ride appropriately for conditions	28
Wear a helmet and appropriate safety gear	30
Limited warranty and other terms	30
Assembly instructions	32

Introduction

Thank you for purchasing the SKWAD from Haro Bikes!

We take pride in bringing you a quality product that will offer years of enjoyment. Please read and understand this manual fully before assembling and riding your bike; the latest version of your manual is available at www.harobikes.com/manual.

Haro Bikes cares about your safety and the safety of those around you. We want you to thoroughly enjoy your amazing ebike safely and reliably for many years to come.

Please read, understand, and follow all safety notices, cautions, and warnings in this manual and for any accessories or attachments you add to make your ebike perfect for you.

If you're not sure you have the skills, experience, and special tools required for assembly and maintenance, get help from a local, certified, and reputable bike mechanic. Be sure to check all hardware for correct torque (see "Tools and recommended torque values" on page 5) during assembly. Before each ride, follow the recommendations in the "Safety checklists" on page 19. Finally, take care of your new Skwad by following the guidelines in "Recommended service intervals" on page 21.

WE ARE HERE TO HELP! If you have questions after reading this manual, please contact us by email (productservices@harobikes.com), and/or give us a call on the phone 1-800-289-4276 or 760-599-0544. Thanks for riding Haro!



WARNING: DO NOT alter or modify anything in your ebike's electrical system, battery, digital controls, physical components, or drive train. Doing so will void your warranty. Any such modifications may result in damage to your bike, other property, or injury or death to you or others.



WARNING: This ebike is not to be operated by anyone under the age of 16. Children under the age of 16 may lack the necessary judgment and skill to safely operate the ebike, potentially resulting in damage to the bike, damage to other property, serious injury, and/or death. Please also check your local laws, which may require a higher age.



Using this manual

This manual contains critical details about how to safely operate and maintain your Skwad. Read it carefully and familiarize yourself with your ebike before riding it. Pay special attention to safety messages shown here.

NOTICE: A “notice” is important information that can help you avoid bike/property damage or extend the life of parts and the bike.



CAUTION: A “caution” statement indicates a hazardous situation that, if not avoided, could result in minor or moderate injury or property damage.



WARNING: A “warning” statement indicates a hazardous situation that, if not avoided, could result in death, serious injury, or property damage.



DANGER: A “danger” statement indicates a hazardous situation that, if not avoided, will result in death, serious injury, or property damage.

Riding any bike or other vehicle always involves some risk of serious injury or death. Your safety depends on many factors including your bike knowledge, your bike’s maintenance, foreseeable riding conditions, etc. There are also factors we cannot control or anticipate in every situation or condition while riding. This manual makes no representations about the safe use of bikes under all conditions. If you have any questions you should contact a Haro authorized dealer immediately.

Assembly and first adjustment of your bike from Haro Bikes requires special tools and skills. We recommend that you have this done by a certified, reputable bike mechanic.



WARNING: Incorrect assembly, adjustments, maintenance, or use of your ebike can cause component or performance failure, loss of control, serious injury, or death. Even if you’re an experienced bike rider, you must read and understand the entire manual and any documentation provided for subcomponents or accessories before riding. If you are not sure you have the experience, skills, and tools to correctly perform adjustment steps in the manual, consult a local, certified, reputable bike mechanic.

Keep this manual and any other documents that came with your Skwad. All content in this manual is subject to change or withdrawal without notice. Visit www.harobikes.com/manual to view and download the latest version. Haro Bikes makes every effort to ensure the accuracy of its documentation and assumes no responsibility or liability if any errors or inaccuracies appear within.

Anatomy of your bike



Tools and recommended torque values

The tool sizing listed below is a general guide, but it is possible that the head of a particular bolt on your bike may vary, requiring a different tool (e.g., a 4 mm Allen wrench instead of a 5 mm Allen wrench). If so, use whatever tool fits the bolt head. Such differences will not affect the recommended torque for that piece of hardware. If you are installing accessories from Haro Bikes, any necessary instructions, important safety information, and torque specifications will come with your accessory and/or be available online at www.harobikes.com.

		Tool	Rec. torque
Handlebar area	Stem clamp bolts (two bolts that secure the stem to the fork steerer tube)	6 mm Allen	20 Nm
	Stem faceplate bolts (four bolts)	6mm Allen	20 Nm
	Headlight angle adjustment bolt	4 mm Allen	8 Nm
	Locking grip adjustment bolt	2.5 mm Allen	8 Nm
	Front fender mounting bolt	5 mm Allen	5 Nm
	Front fender mounting arm eyelet bolts	4 mm Allen	6 Nm
	LCD display clamp bolts	3 mm Allen	3 Nm
	Brake lever clamp bolts	4 mm Allen	8 Nm
	Shifter clamp bolt	4 mm Allen	5 Nm
	Thumb power assist clamp bolt	3 mm Allen	3 Nm
Brake area	Brake area caliper to frame mounting bolt (rear wheel)	5 mm Allen	6-8 Nm
	Brake caliper mounting bolt (front)	5 mm Allen	6-8 Nm 90°
	Brake pads to calipers	Needle-nose pliers	bend at tip of cotter pin
	Brake rotor to hub	T-25 Torx bit	7 Nm
Rear wheel and dropout area	Rear axle nut	18 mm wrench	40 Nm
	Folding foot peg mounting bolts	6 mm Allen	10 Nm
	Derailleur mounting bolt	5 mm Allen	10 Nm
	Derailleur hanger mounting bolt	Built-in	n/a
	Rear fender mounting arm eyelet bolt	4 mm Allen	6 Nm
	Derailleur/shifter cable clamp bolt	5 mm Allen	6 Nm
	Taillight mounting bolt	8 mm Bolt	5 Nm
Kickstand mounting bolt	4 mm Allen	6 Nm	
Bottom bracket and crank area	Pedal into crank arm	15 mm pedal wrench	35 Nm
	Crank arm removal info	CCP-22 Park Tool	n/a
	Freewheel removal info	FR-1.3 Park Tool	n/a
	Crank arm bolt into bottom bracket spindle	8 mm Allen	35 Nm
	Chainring bolts	n/a	
	Crank chainring guard	5 mm Allen	
	Bottom bracket and cups	BBT-22 Park Tool	60 Nm

See “Anatomy of your bike” on page 4 and “Handlebar Area & Features” on page 12 for name and location of parts listed in the Tools and recommended torque values chart above.

Adjusting for comfort and safety

Adjusting the handlebar angle

Most riders will feel comfortable with the handlebar angled so that it is roughly parallel with the front fork, as shown in the center position in the illustration below. Once you sit on the bike, you may decide that you would like the handlebar to be angled slightly closer to the seat. To change the angle, loosen the stem faceplate bolts just enough to allow the handlebar to pivot, and position it as you prefer. Re-tighten the stem faceplate bolts according to the value listed in "Tools and recommended torque values" on page 5.

Sit on the bike and test the fit and positioning, making sure the handlebar can turn freely without touching your body. Be sure the gap between the faceplate and stem is even and torque all faceplate bolts according to the value listed in "Tools and recommended torque values" on page 5. While seated you should be able to put your feet flat on the ground. If you cannot reach the ground with your feet flat and stable Haro Bikes recommends you do not operate this bike.

Fine-tune the brake lever positioning

The angle of the brake levers can be adjusted for the most comfortable hand position possible. For most riders, this will allow them to rest two or three fingers comfortably on each brake lever while keeping their wrists in a neutral position. To adjust the angle, follow these steps:

1. Loosen the brake lever clamp bolt using the appropriate Allen wrench. See illustration on page 7 for bolt location. Ensure all hardware is tightened properly according to the values in "Tools and recommended torque values" on page 5.
2. Adjust the angle of the brake lever so it's comfortable for the rider.
3. Re-tighten the brake lever clamp bolt according to the value listed in "Tools and recommended torque values" on page 5.

TIP! The locking grip adjustment bolts are located on both ends of each grip. If you need to tighten, adjust or replace them, follow the value listed in "Tools and recommended torque values" on page 5.



Ensure all hardware is tightened properly

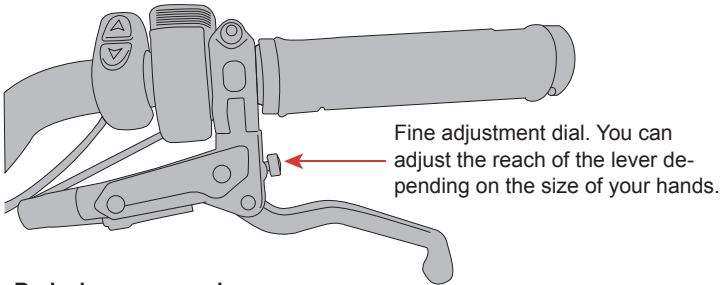


DANGER: A brake lever that can touch the handlebar grip when squeezed can result in the brake caliper not pressing the pads into the brake rotor fully or at all, which means that the brake will not function properly or at all. Not being able to bring the bike to a complete stop puts the rider at a high risk of serious injury or death. Always make sure that squeezing the brake lever does not cause it to touch the handlebar grip. Also make sure that a squeeze of the brake lever to halfway between the lever's neutral position and the handlebar grip results in the brake caliper pressing the brake pads against the brake rotor.

If you do not own a torque wrench or you do not have the skills to check the tightness of your hardware, consult a local, certified, reputable bike mechanic for help. Ensure all hardware is tightened properly according to the values in "Tools and recommended torque values" on page 5. This is a critical safety step that you must not skip. See the illustration below for additional information about adjusting brake lever clearance from the handlebar grip. If you are not sure you have the experience, skills, and tools to correctly perform adjustment steps in the manual, consult a local, certified, reputable bike mechanic.

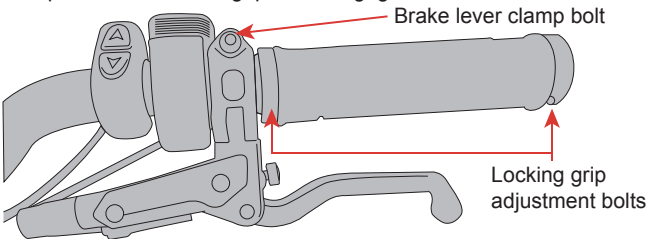
Brake lever

Clearance from grip is adjustable when disengaged

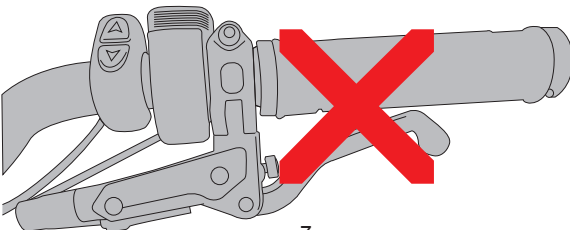


Brake lever engaged

Proper clearance from grip when engaged



Improper clearance from grip. Brake lever should never touch grip when engaged



Battery information

The battery that comes with your Skwad is a state-of-the-art, lithium-ion battery that's designed to give you years of power with proper care and use. Follow the recommendations here for the best possible performance.

- The battery should be fully recharged after each use. That way, you'll get the maximum range on your next ride and reduce the chance that you'll over-discharge the battery, which can reduce its lifespan. There is no memory effect on this type of battery, so charging after short rides will not cause damage.
- Charging the battery after a ride generally takes 3 to 7 hours (see "Estimated charging time" on page 11). In rare cases, charging may take longer to allow the battery management system to balance the battery, particularly when the bike is new, after long periods of storage, or if the battery has been completely depleted.
- Do not operate the bike with the key in the keyport. Not only do you risk injuring your leg, but damage to the electrical system can occur.



DANGER: Never open the battery housing, which will void the warranty and can result in battery damage. It can also expose you to caustic substances and electrical shock or it could create a fire hazard, which can lead to serious injury or death.



WARNING: Using aftermarket battery accessories or products that have not been tested by Haro Bikes for safety and compatibility may void your warranty, create an unsafe riding condition, result in bike/property damage, or cause serious injury or death. If you use products not tested and recommended by Haro Bikes, you do so at your own risk.



WARNING: Never immerse or submerge the battery (including the battery mount) in water or liquid, which can cause damage, serious injury, or death.



WARNING: Using a damaged battery or charger can create additional bike damage or a fire hazard. Stop using your battery and charger and contact Haro Bikes immediately if any of the following occur: (1) Your charger's flexible power cord or output cable or any of the electrical cables on your bike is frayed, has broken insulation, or any other signs of damage, (2) Your battery or charger is physically damaged, non-functional, or performing abnormally, (3) Your battery or charger experienced a significant impact from a fall, crash, or shipping damage, with or without obvious signs of damage, or (4) Your charger becomes too hot to touch (it's designed to get warm with normal use), makes an unusual smell, or shows other signs of overheating. Store any damaged battery or charger in a safe location and, as soon as possible, recycle or otherwise dispose of it according to local rules. Contact Haro Bikes Product Services if you have any questions or to purchase a compatible replacement battery or charger.

NOTICE: Always follow any safety information attached to the battery or charger. A sample label for the battery that shipped with your bike is shown on page 9, although some details may differ by manufacturing location.

NOTICE: Failure to follow the battery-charging best practices outlined here and in the following sections could result in unnecessary wear to the charging components, battery, and/or charger, and could lead to an underperforming or non-functional battery. Batteries damaged due to improper care will not be replaced under warranty.

Removing and installing the battery

You can charge your battery when it's on or off your bike. If you choose to remove it for charging, storage, transportation, security, or some other reason, keep the following best practices in mind to prevent battery damage.

BATTERY REMOVAL

- To remove the battery, insert the key into the keyport, turn the key clockwise to the unlocked position and carefully pull the battery up until the battery detaches from the battery mount inside the down tube (see illustration below).
- Be careful not to drop or damage the battery when removing it from the bike.

NOTICE: When the battery is off its mount, protect the battery terminal contacts from damage and be sure not to touch them. If terminals are damaged, please discontinue use and contact Haro Bikes Product Support immediately.

BATTERY INSTALLATION/MOUNTING

- To install the battery, insert the key into the keyport and make sure the keyport is in the unlocked position.
- Do not force the battery into the battery mount; carefully align and slowly slide the battery down until it's in place.
- Ensure the battery is properly secured to the bike before each ride by locking the battery and then carefully pulling up on it with both hands to test the security of the battery's attachment to its mount.

Before you charge

Before you charge your battery, make sure to first check the battery, charger, and electrical cables for signs of damage. Store and use the charger in a safe place—away from children, direct sunlight, dirt, debris, liquids, tripping hazards (including electrical cords), or any materials that could ignite in the unlikely event of a charger or battery malfunction. Position the charger and battery where they're not at risk for falls or other impacts.



WARNING: Letting the charger's plug contact metal objects could cause a power discharge (a spark), which could injure you or create a fire hazard.



WARNING: Letting a battery charge unattended increases the risk that a charging problem will go undetected and lead to component damage or a fire hazard. Always charge your battery where you can monitor it. Your battery needs to charge at room temperature or a bit cooler (10°C to 25°C (50°F to 77°F)). It generates heat while charging, but it's designed to air-cool; keep it uncovered and the lights facing upwards on a flat, stable, hard surface.

NOTICE: Charging your battery in excessively hot conditions or interfering with its ability to air-cool can damage your battery or charger. Always charge your battery at room temperature: 10°C to 25°C (50°F to 77°F). Charging your battery at low temperatures may slow charging or prevent a full charge. Keep the battery and charger uncovered, make sure the charger is on a hard, flat, stable surface, and use the charger right-side-up (with charging lights facing upwards).



NOTICE

Do not connect the positive and negative terminals of the battery.
Do not expose the battery to high temperature such as heating or in strong sunlight.
Do not submerge the battery in liquid of any kind and avoid drenching with rain.
Do not disassemble the battery without professional guidance.
Keep the battery in the cool and dry place and charge it for two hours every two months if the battery is stored for a long time.

Use specified charger only.

Do not dispose of the battery in household waste and return to supplier or authorized recycle base if the battery is out of use.



Charging procedure

To charge your battery, mind the advice in “Before you charge” on Page 9 and then follow these steps.

1. Ensure the battery power is off. Push the power button on the controller until the screen goes blank.
2. Open the rubber cover on the charging port on the on the side of the battery, near the keyport (see image on page 11). Note that the keyport does not have a cover.
3. Plug the charger into the battery’s charging port. Keep the battery installed on the bike, or remove the battery and place it on a hard, smooth, flat surface with the charging indicator lights facing up. Connect the DC output plug from the charger (round barrel connector) to the charging port on the side of the battery.
4. Plug the charger into a power outlet. Connect the charger input plug (120-volt plug) to the power outlet. Charging should initiate and will be indicated by the LED charger light turning red. When charging is complete, the indicator light will turn green.
5. Once fully charged, indicated by the charging indicator light turning green, unplug the charger from the wall outlet first and then remove the DC output plug (round barrel connector) from the battery charging port. Be sure to pull gently on the plugs, not on the cables themselves.

NOTICE: The charger is designed to stop charging automatically when the battery is full. Nevertheless, leaving your battery charging longer than necessary can cause needless wear. We recommend you remove the charger from the battery within one hour of the green light indicating a complete charge. Store the charger carefully, making sure its plug does not come in contact with liquids, dirt, debris, or metal objects, which can damage the plug and interfere with future operation.

TIP! We recommend you follow these steps when plugging in and unplugging your charger.

To plug in your charger:

1. Start with the charger unplugged from both the power outlet and battery.
2. Plug the charger into the battery.
3. Plug the charger into the power outlet.

To unplug your charger:

1. Start with charger plugged into both the power outlet and battery.
2. Unplug the charger from the power outlet.
3. Unplug the charger from the battery.



WARNING: Charging your battery with a charger other than one supplied by Haro Bikes and designed for your specific bike’s serial number can cause damage to your bike’s electrical system or create a fire hazard. Only use a battery charger designed for your bike and supplied by Haro Bikes.



CAUTION: An unlocked or improperly attached battery can fall off a moving bike, causing damage or injury. Always check that the battery is properly attached and locked to the frame before moving or riding your bike.

Estimated charging time

The time the charger takes to fully charge the battery depends on distance travelled, riding characteristics, terrain, payload, battery age, and other factors. The table below provides a rough estimate of charge time based on common distances travelled in regular operation.

NOTICE: The battery may take longer to charge when fully depleted, when very new, and after 3–5 years of regular use. If your battery doesn't seem to be charging normally, is taking longer to charge than expected, or you're experiencing substantial reduction in range, discontinue use and please contact us by email (productservices@harobikes.com), and/or give us a call on the phone 1-800-289-4276 or 760-599-0544.

Distance	Recharge time
8 km (5 mi)	1 hour
16 km (10 mi)	1.5 hours
24 km (15 mi)	2.5 hours
32 km (20 mi)	3.5 hours
40 km (25 mi)	4.5 hours
48 km (30 mi)	5.5 hours
72 km (45 mi)	7 hours

Long-term battery storage

If storing your bike for longer than two weeks at a time, follow the recommendations below to maintain the health and longevity of your battery.

- Power off the battery and keep the battery installed on the bike, or remove the battery from the frame for storage.
- Store the battery in a dry, climate controlled, indoor location between 10°C to 25°C (50°F to 77°F).
- We recommend that you store your battery at approximately 40-75% charged. Check the battery's charge level monthly. If necessary, charge the battery to about 40-75% charged.
- Storing your battery for long periods at full charge can cause range decline over time.
- Storing your battery for long periods at very little or no charge can cause permanent range decline or a non-functional battery.

NOTICE: Incorrect storage of your battery can result in a damaged or non-functional battery. Follow the above recommendations to reduce such risk.



CAUTION: Always charge your battery in a clean, clear, dry and safe space, away from direct sunlight. Do not cover or leave unattended. Never charge for more than 12 hours at a time.



Operation

HOW THE ELECTRICAL SYSTEM WORKS

Your Skwad is equipped with two ways to use power assistance from the motor to propel the bike forwards: a pedal assist system (PAS) and a thumb activated throttle assist.

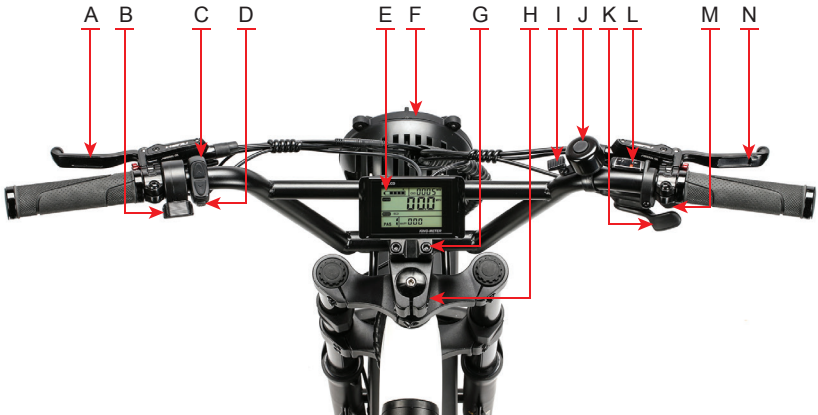
HOW PEDAL ASSIST WORKS

Engaging pedal assist while pedaling will call up assistance from the motor to help propel the bike forwards. Pedal assist uses a cadence sensor built into the drivetrain of the bike. The cadence sensor detects when you pedal and signals the electric motor to provide the level of pedal assistance (0-5) you have selected. When at a stop, be careful not to put pressure on the pedals or the bike will move forward. To reduce this risk, always keep at least one hand ready to squeeze the brake lever to cut off power to the motor. When you dismount, power off the bike before moving it.

HOW THUMB THROTTLE ASSIST WORKS

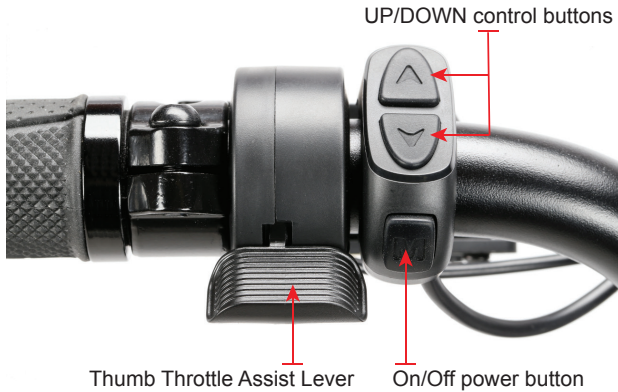
To engage the thumb throttle assist while pedaling, slowly and carefully depress the thumb throttle assist button and it will call up assistance from the motor to help propel the bike forwards. When the bike is on and you are pedaling at an adequate cadence, the thumb throttle assist acts as an on-demand pedal-assistance boost. Choosing between assist levels (1-5) will increase/decrease speed. When at a stop, be careful not to put pressure on the thumb throttle or the bike will move forward. To reduce this risk, always keep at least one hand ready to squeeze the brake lever to cut off power to the motor. When you dismount, power off the bike before moving it.

HANDLEBAR AREA & FEATURES



A	Left brake lever (for front brake)	H	Stem/Stem Pinch Bolts
B	Thumb throttle assist lever	I	Bell lever
C	UP/DOWN control buttons	J	Bell
D	On/Off power button	K	Up shift button
E	LCD display	L	Down shift button
F	Headlight	M	Shifter
G	Stem faceplate/Bolts	N	Right brake lever (for rear brake)

Quick Start Guide



Powering On:

Press the power button on left control to turn the bike on. If the bike doesn't turn on, the battery may need to be woken up. In this case please press and hold down the battery power button on the battery until the light illuminates (see pictures below).

Selecting Pedal Assistance:

Use the left control Up/ Down control buttons to switch between the desired amount of pedal assistance. There are five modes of assistance.

Walk Mode:

Hold the down arrow for 5 seconds to engage walk mode (note: make sure you change to mode "0" before you use walk mode for safety). *Only use walk mode after you ensure both yourself and any nearby obstacles or people are clear from being struck by the bike.

Throttle:

The throttle is located to the left of the power button and is operated by using your left thumb. This will power the bike on demand from a complete stop.

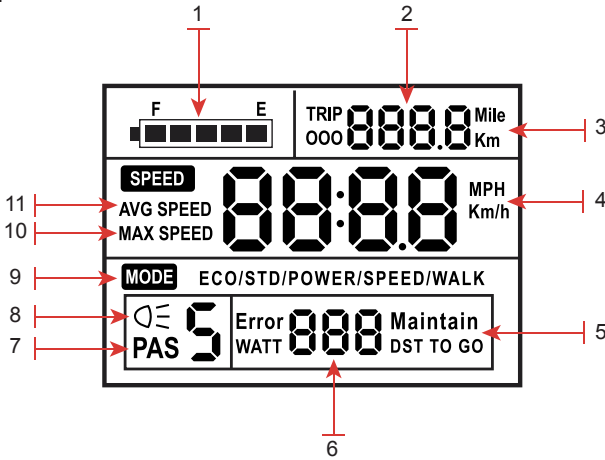
Battery Removal:

You can choose to charge the battery when installed on the bike, or when removed. To remove the battery, unlock it using the key provided; it will automatically pop out of the bike's downtube. When re-installing battery simply insert it towards the rear wheel first, then push down lightly on the front of the battery until it clicks into place.



LCD Electrical controls and operation

The table and image below show the various features and information displayed on the LCD display.



1	Battery Level Indicator	7	Pedal Assist Level
2	Distance (Odometer, Trip)	8	Light Indicator
3	Distance Unit (MPH), (Km/h)	9	Mode Indicator
4	Speed Unit (MPH), (Km/h)	10	Max Speed Indicator
5	Distance to go (Estimated)	11	Average Speed Indicator
6	Watt Meter, Error Code Indicator		

CAUTION: Using walk mode inappropriately can cause you to lose control of the bike, causing bike damage or injury. Use walk mode only while dismounted from the bike, with both hands on the handlebar, and with at least one hand on a brake lever so that you can quickly cut off power to the motor if necessary.


Start-up procedure

After you have read this manual, your bike has been assembled according to the assembly instructions, all components are secured correctly, and you are wearing proper safety gear, follow the steps below to power on the bike and select a pedal assist level.


CAUTION: Getting onto the bike or riding it with the key in the battery can cause injury to your leg and damage to the key or lock mechanism. Always remove the key before riding the bike.

1. Check that the battery is locked securely.
2. Turn on the bike. Press the power button on the left hand control for approximately two seconds until power is delivered to the LCD display and display information appears. If the bike doesn't turn on, the battery may need to be woken up. Wake up the battery by pressing and holding down the power button on the battery until the light illuminates (see figure on page 13).
3. Try out your bell if you haven't already! It's an important safety tool for alerting others to your presence, especially when passing. The bell is near the right brake lever on your handlebar. To ring it, flick the bell lever; see the illustration "Handlebar features" on page 12.
4. Select your desired level of pedal assistance (PAS) from 0 through 5 using the UP/DOWN control buttons; see the illustration "Handlebar features" on page 12.

Level 0 provides no pedal assistance, level 1 provides the lowest amount of pedal assistance, and level 5 provides the highest amount. Start in PAS level 0 or 1 and increase PAS levels one at a time as you get comfortable.

 **WARNING:** Engaging the pedal assist feature, especially at a high setting, will cause acceleration that may be greater than expected, especially for relatively new riders, and that can cause loss of control, serious injury, or death. To reduce risk, always start at PAS level 0 or 1.

4. Begin riding carefully. With the proper safety gear you may now operate your bike. Begin by pedaling on flat ground, clear of obstacles and people, with the bike in an easy (low) gear and at pedal assist level 0 or 1. You may also use the thumb throttle assist to accelerate and maintain your desired speed. The rear derailleur is controlled by the right shifter (the side with the crank or if sitting on bike). The function of the rear derailleur is to move the drive chain from one gear sprocket to another. The smaller sprockets on the gear cluster produce higher gear ratios. Pedaling in the higher gears requires greater pedaling effort but takes you a greater distance with each revolution of the pedal cranks. The larger sprockets produce lower gear ratios. Using them requires less pedaling effort but takes you a shorter distance with each pedal crank revolution. Moving the chain from a smaller sprocket of the gear cluster to a larger sprocket result in a downshift. Moving the chain from a larger sprocket to a smaller sprocket result in an upshift. In order for the derailleur to move the chain from one sprocket to another, the rider must be pedaling forward.
5. Use the thumb throttle assist (next to the left handlebar grip) by slowly and carefully pressing it downwards. Do not use the thumb throttle assist unless you're on the bike, and note that the thumb throttle assist can be activated with downward pressure any time the bike is powered on.

 **WARNING:** Be careful not to accidentally press the thumb throttle lever, which can cause sudden acceleration. If you're not prepared for this acceleration, you can lose control of the bike, which can lead to serious injury or death. To reduce this risk, always keep at least one hand ready to squeeze the brake lever to cut off power to the motor. When you dismount, power off the bike before moving it.

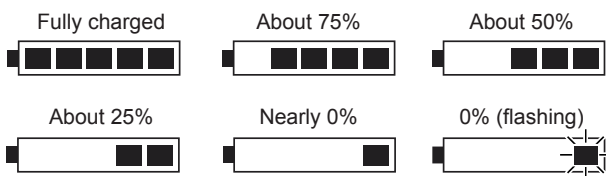
Brake light & headlight features and operation

Your Skwad is equipped with a headlight & taillight/brake light that is integrated into the electrical system. When you turn on your bike, press and hold the UP control button for two seconds, both the headlight and taillight will illuminate to make you more visible to other vehicles. Any time the bike is powered on, squeezing one or both brake levers on the handlebar will activate the brake light, causing the taillight to illuminate additional areas.

Battery capacity display

The LCD display on the handlebar features a battery capacity gauge (like a fuel gauge on a car). This gauge calculates the remaining battery charge based on the current battery power output (instantaneous voltage reading), and can fluctuate while riding as power demand and/or output changes. When only one bar is illuminated, you should charge the battery as soon as possible. At lower states of charge, the bike may limit power output to make the remaining power last a little bit longer. When the battery is fully depleted, the last bar will begin to flash, alerting you that you're about to lose all electrical power. Any time your power is off or depleted, you can still propel your bike by pedaling it.

Battery capacity indicators



Riding range

We suggest that you select a lower pedal assistance level when you're getting to know your Skwad and travel routes. Once you become familiar with your range requirements and the capabilities of your bike, you can adjust your riding characteristics if you desire.

The table below provides range estimates under example conditions to help you understand the factors that can increase or decrease range. Haro Bikes makes no claims about the range that you might experience in a particular situation.

Range Estimates Under Example Conditions

40 km (25 mi):	<ul style="list-style-type: none">• Hilly terrain• Windy	<ul style="list-style-type: none">• Light pedaling• Heavy payload	<ul style="list-style-type: none">• High pedal assist level, high thumb throttle assist use
52 km (32 mi):	<ul style="list-style-type: none">• Flat terrain• Not windy	<ul style="list-style-type: none">• Light pedaling• Heavy payload	<ul style="list-style-type: none">• Low pedal assist level, minimal thumb throttle assist use
88 km (55 mi):	<ul style="list-style-type: none">• Flat terrain• Not windy	<ul style="list-style-type: none">• Moderate to heavy pedaling• Normal payload	<ul style="list-style-type: none">• Low pedal assist level, minimal thumb throttle assist use

Best practices for extending range and battery life

Follow the best practices listed below to help extend your range and battery life.

- Whenever possible, avoid applying thumb throttle assist when the bike has slowed to very low speeds, has stalled, or is stopped.
- Reduce your use of pedal/throttle assist whenever possible.
- Avoid climbing hills steeper than 15% in grade.
- Avoid sudden starts and stops.
- Accelerate slowly.

Parking, storage, and transport

Please follow these tips to ensure your bike is well cared for when you're not using it.

PARKING AND STORAGE

- Park in accordance with local rules and regulations.
- Park indoors whenever possible. If you must park outdoors in rain or wet conditions, do not do so for an extended period of time, and afterwards park in a dry location to allow the bike systems to dry out. When any bike is exposed to wet conditions, it will need a more frequent maintenance schedule to prevent rust and corrosion and to ensure all systems work safely.
- Avoid parking or storing your bike in direct sunlight, which can cause damage to the display.
- Do not park or store your bike in excessive heat, such as inside of a parked car on a hot day. Never exceed the temperature range of: -20°C to 60°C (-4°F to 140°F).
- After you park, power off the battery and lights to conserve battery power. Ensure that the battery is locked to the frame or remove the battery and bring it with you for security. Remove the key from the keyport and take it with you.
- Register your bike at harobikes.com to increase the chance you'll get your bike back in the unfortunate event it's stolen.
- Lock up your bike to reduce risk of theft. Consult a local, certified, and reputable bike shop for more information how to protect your bike from theft.

- Power off the bike before pushing or carrying it to avoid accidental acceleration from activating pedal assist or thumb throttle assist.
- Only use racks (such as a bike rack for your car or other vehicle) designed for the size and weight of your ebike. Pay particular attention to whether the rack can accommodate the width of your ebike tires.
- When carrying your ebike on a rack for transport, remove the battery, and place/wrap it securely inside your vehicle with a fireproof electric bike battery bag (not included), making sure it can't roll around and that its plugs and contacts are protected. This will reduce the weight of the bike, make lifting and loading it easier, and protects your battery from damage. Check your online or local retailer.
- Do not leave the battery in direct sunlight or any location that is or may become excessively hot or cold, like a parked car, for extended periods.
- Before using public transportation (buses, trains, etc.) to transport your ebike, check with the relevant transportation authority for any rules that might pertain to ebikes, including rules governing weight limits, tire widths, lithium-ion batteries, etc.
- Avoid transporting the bike on a vehicle rack during rain, which may cause water damage to the electrical components.

Carrying loads (cargo or a passenger) safely

Total maximum payload of the Skwad: 136 kg (300 lb).

- Carrying extra weight significantly affects braking, acceleration, turning, balancing, etc. These effects can be increased by challenging riding conditions, such as when roads are wet or slick. Hills that are normally easy to climb or descend without cargo can become challenging or even dangerous once extra weight is loaded onto the bike. Extra weight will increase the time it takes to slow the bike when braking.
- Practice riding with light cargo in a flat, open area that's free of obstacles before attempting to ride with heavier loads, or in wet or hilly conditions.
- With extra weight on your bike, it's more important than ever to use both front and rear-brakes, and always apply the rear brake first to prevent excessive strain on the front wheel and fork and to prevent loss of control. Ensure both front and rear brakes are properly adjusted, and maintained.
- Load cargo as low as possible to keep the bike's center of gravity low and improve stability.
- Always support the bike when loading or when it is loaded with cargo or a passenger. The kickstand is not designed to be used for supporting cargo or passengers. Do not assume the bike is stable and balanced when using the kickstand.
- Ensure cargo loads are properly secured and periodically check that no cargo loosens, risks interfering with any moving parts, or risks touching or dragging on the ground.
- When carrying heavy loads or a passenger, plan your routes to avoid challenging hills and other hazards.
- It is always your responsibility to ensure that anything loaded on the ebike will not interfere with your ability to safely operate the bike.



WARNING: Failure to ensure that cargo or a passenger can't interfere with your rider's control of the bike can lead to serious injury or death. You are always responsible for securing loads, loose straps, and assessing passenger's ability to ride safely.



WARNING: Carrying cargo or a passenger significantly affects braking, acceleration, turning, and balancing, which can increase the risk of falls and other accidents, potentially leading to property damage, serious injury, or death. To reduce such risk, practice riding with light cargo in a flat, open area before attempting to carry heavier cargo or a passenger, especially on roads or hills and in wet conditions.



WARNING: Loading cargo or a passenger without supporting your bike can cause the bike to tip, leading to damage or serious injury. The kickstand is designed to support an unoccupied, unloaded bike on a hard, flat, stable surface, not to support your weight, the weight of a passenger, or cargo. Always support your bike when loading or unloading cargo or a passenger.



WARNING: Using the front brake by itself can cause excessive stress on components, damage to the bike and parts, loss of control, injury, or death. Always apply the rear brake before applying the front brake, using both brakes for all operations.

Carrying a passenger

Your Skwad is designed to carry one rider and one passenger. Ensure that you and your passenger always wear properly fitted and approved helmets while riding.

- Your passenger must be large enough to rest their feet on the foot pegs, and they must understand that they cannot stand on the foot pegs, which have a payload capacity of 30 lbs (18 kg) per side.
- Keep all body parts and clothing clear of moving parts.
- Do not allow your passenger to stand or kneel on the rear seat or any other bike components.
- Your passenger should sit directly over or forward of the rear wheel.
- Do not allow your passenger to sit sideways or backwards on the seat.



WARNING: To reduce the risk of injury, always closely supervise children when using your bike near them.



WARNING: Serious injury or death can occur if clothing or body parts contact either wheel or other moving parts while the bike is in motion. Check yourself and your passenger for any clothing or body part coming in contact with either wheel or any other moving part before riding. It is your responsibility to make sure that you and your passenger are safe and clear of any moving parts.

Maintenance

Follow these maintenance guidelines to ensure your Skwad is safe and fun to ride.

Check and service your bike regularly

On any bike, certain parts need to be replaced periodically due to wear, and sometimes parts become damaged for various reasons. Check your bike before each ride by following the directions in “Safety checklists” on the next page. Have your bike regularly serviced by a certified, reputable bike mechanic.

Components of any ebike are subject to higher wear compared to the components of bikes without power assistance. This is because ebikes can travel at higher average speeds than regular bicycles and generally weigh more. Higher wear is not a defect in the product and is not subject to warranty. Typical components affected are the tires, brake pads and rotors, suspension forks, spokes, wheels, and the battery. If you need to replace a part on your bike, visit harobikes.com. If you want something that isn't listed there, contact Haro Bikes Product Support. Be extremely careful about using parts or accessories that Haro Bikes has not tested for safety and compatibility with your specific bike model.



WARNING: Using aftermarket accessories or components (trailers, stands, vehicle racks, etc.) that have not been tested by Haro Bikes for safety and compatibility with your specific bike may void your warranty, create an unsafe riding condition, result in bike/property damage, or cause serious injury or death. If you use replacement parts or accessories not tested and recommended by Haro Bikes, you do so at your own risk.

Safety checklists

BEFORE YOUR FIRST RIDE

- Make sure handlebar cables were routed correctly when the handlebar was installed. Turn the handlebar fully to the left and right and make sure this doesn't pull any of the cables or wires taut.
- Make sure your pedals are secure using a pedal wrench. Torque to 35 Nm. (see "Tools and recommended torque values" on page 5).
- Check that the cable connectors on the bike are all plugged in securely.
- Check the brake functions per the illustrations on page 7 but note that brakes can rub a little the first few times you ride. This is okay and normal; any squeak or noise should go away with use.
- Check everything on the "Before every ride" list below.

BEFORE EVERY RIDE

Check the items on the checklist below before every ride or every 40-72 km (25-45 miles), whichever comes first. If you find anything amiss with your bike, don't ride it until you're sure it's fixed. Consult a local, certified, and reputable bike mechanic or contact a Haro Bikes authorized dealer if you have any questions.

Brake system

- Check brake pads and ensure the brake pad material isn't thinner than the backing plate it attaches to.
- Ensure brake pads are correctly positioned in relation to the brake rotors.
- Ensure brake cables are correctly adjusted, and show no obvious wear.
- Ensure brake levers are properly positioned and tightly secured to the handlebar.
- Ensure the brake lever tension is appropriate.
- Check that the taillight brightens when you squeeze each brake lever.

Wheels & tires

- Ensure tires are holding air and inflated to within the PSI limits displayed on the tire sidewalls.
- Ensure tires have good tread, have no bulges or excessive wear, and are free from any other damage.
- Check the axle nuts on the rear wheel to ensure they are correctly tightened (see "Tools and recommended torque values" on page 5).
- Check the security of the front-wheel and the rear wheel axle hardware. The wheel security and hardware torque should also be checked on a regular basis (see "Tools and recommended torque values" on page 5). Either wheel can become loose or unsecured with normal use.



WARNING: An improperly secured front or rear wheel can cause loss of control, accidents, serious injury, or death. Check that both wheels are properly secured during assembly and before each ride.

Steering

- Ensure the handlebar and stem are correctly aligned, adjusted, and tightened for proper steering. See “Adjusting the handlebar angle” on page 6.
- Perform a handlebar twist test to ensure the stem clamp bolts are secure. See “Handlebar twist test” on page 24.
- Ensure the handlebar is set correctly in relation to the fork and the direction of travel.
- Ensure the handlebar grips are secure and undamaged.

Bearings

- Check that headset, wheel, pedal, and bottom-bracket bearings are lubricated, run freely, and display no excess movement, grinding, or rattling.

Drivetrain: cranks, pedals, chain, derailleur, shifter

- Ensure pedals are securely tightened to the cranks. See “Tools and recommended torque values” on page 5.
- Ensure the cranks are not bent and are securely tightened to the bottom bracket. See “Tools and recommended torque values” on page 5.
- Ensure the chain is clean, lubricated, and runs smoothly. Take extra care with chain maintenance if the bike is used in wet, salty, dusty, or otherwise damaging conditions.
- Check that the derailleur is adjusted and functioning properly.
- Ensure the shifter is attached to the handlebar securely and is shifting properly.

Frame, fork, and seat

- Check that the frame and fork are not bent or broken.

Motor drive assembly & thumb throttle power assist

- Ensure the hub motor is spinning smoothly and is in good working order.
- Ensure the power cable running to the hub motor is secured and undamaged.
- Check the axle nuts to ensure they are correctly tightened (see “Tools and recommended torque values” on page 5).
- Ensure thumb throttle assist and pedal assist are operating normally.

Battery

- Ensure the battery is charged.
- Ensure there is no damage to the battery.
- Lock the battery to frame and check that it is secured. Remove the key from the keyport before riding.
- Ensure the battery gauge on the LCD Display and the charge status indicator on the battery display similar readings.

Cables

- Look over electrical cable connectors to make sure they are fully seated and free from debris or moisture.
- Check cables and cable housing for obvious signs of damage.
- Ensure cables are secured away from moving parts.
- Ensure headlight, taillight, and brake light are functioning, adjusted properly, and unobstructed.

Accessories & safety gear

- Ensure all reflectors are properly fitted and not obscured.
- Ensure all accessories and components installed on the bike are properly secured and functioning.
- Check all safety gear, clothing, cargo, and accessories for loose or potentially loose straps/elements and secure them.
- Ensure you and your passenger wear helmets and other required riding safety gear, and inspect these items for signs of damage. If your bike has fender/mudguards: Ensure they are centered over the wheels, adjusted properly, properly secured (see “Tools and recommended torque values” on page 5), and have no cracks or holes.



WARNING: Riding your bike when any component’s useful life is surpassed can cause that component to fail, resulting in loss of control, serious injury, or death. Pay attention to signs of wear such as cracks, scratches, component color change, and operational changes that could indicate a component needs replacing. Before each ride, check your bike using the “Safety checklists” on page 19. Perform regular maintenance according to “Recommended service intervals” below. If you’re not sure you have the experience, skills, and tools to perform safety checks and regular maintenance, consult a local certified, reputable bike mechanic for help.

Recommended service intervals

Regular maintenance of any bike is key to ensuring the best possible performance and reducing wear and tear on systems. Ideal service intervals vary depending on use conditions. We generally recommend inspections, service, and necessary replacements be performed at the time or distance intervals described below, but you should have your bike serviced more frequently if you ride with heavy payloads or in harsh conditions. Have your bike inspected immediately if you notice problems if your bike has been involved in a fall or other accident.



WARNING: Have your bike inspected by a certified, reputable bike mechanic after any fall, crash, or accident, as these can cause damage (visible or internal/not readily apparent), make your bike unsafe, and lead to serious injury or death. Be particularly cautious about using a battery that has experienced a significant impact from a fall or crash; a damaged battery may not show external signs of damage. Using a damaged battery or charger can create additional bike damage or a fire hazard. For more information, see “Battery information” on page 8.

AFTER BREAK-IN PERIOD OF 80–160 KM (50–100 MILES)

Inspect

- Check all cables and the chain for stretch.
- Check spoke tension and the trueness of the wheels. See “Wheel trueness” on page 23.
- Check all bolted connections for loosening and ensure they are tightened to recommended torque values (see “Tools and recommended torque values” on page 5).

Service

- Have a certified, reputable bike mechanic perform a thorough tune-up.



WARNING: Certain components can stretch or loosen during your bike’s break-in period, which can lead to component failure and potential injury or death. Be sure to have a certified, reputable bike mechanic perform a thorough tune-up after this break-in period or sooner if you notice any problems or if you ride with heavy payloads or in harsh conditions.

WEEKLY or 160–320 KM (100–200 MILES)

Inspect

- Check hardware for proper torque (see “Tools and recommended torque values” on page 5).
- Check drivetrain for proper alignment and function (including chain, freewheel, chainring, and derailleur).
- Check wheel trueness and spoke tension, and check for quiet wheel operation (without spoke noise). If applicable to your model.

Check frame for any damage.

Service

- Clean frame by wiping frame down with damp cloth. If needed, adjust the brake tension.
- Clean and grease the chain.

Replace

- Replace any components confirmed to be broken or damaged beyond repair by Haro-Bikes Product Support or a certified, reputable bike mechanic.

MONTHLY or 400–1200 KM (250–750 MILES)

Inspect

- Check brake pad wear, alignment, and the brake lever tension.
- Check for proper shifting and proper derailleur cable tension.
- Check chain stretch.
- Check brake cables for corrosion and fraying.
- Check shifter cables for corrosion and fraying.
- Check wheel trueness and spoke tension, and check for quiet wheel operation (without spoke noise). See “Wheel trueness” on page 23.

Checking brakes & motor cutoff switches

All vehicles, including your Skwad, need reliable brakes. Test your brake levers, brakes, and motor cutoff switches as described below for proper functioning before every ride. If anything seems wrong, take your bike to a local, certified, and reputable bike mechanic, or contact Haro Bikes Product Support.



WARNING: Touching the brake rotor, which has sharp edges and can get very hot while you're riding, can cause serious injury, slicing damage, or burns. The brake rotor heats up from normal friction when the brake pads press against the brake rotor to slow or stop the bike. Touching the brake rotor with bare skin can also transfer natural oils to the rotor, which can decrease braking performance. Do not touch the brake rotor when it's in motion or right after you've ridden your bike. Touch the brake rotor only for necessary maintenance when it is cool, not moving, and while you are wearing gloves or using other appropriate protective equipment.

1. Test the brake levers.

- a. Fully squeeze each lever, and ensure the front and rear brake levers do not touch the handlebar grips.
- b. Make sure each lever is properly oriented and firmly secured to the handlebar. See brake lever adjustment instructions on page 7.

2. Test each brake.

- a. Squeeze the left brake lever to lock the front brake, and then try to push the bike forward using the handlebar. The front wheel should not spin.
- b. Squeeze the right brake lever to lock the rear brake. Again, push against the handlebar to try moving the bike forward. The rear wheel should not spin.

3. Test the motor cutoff switches.

The front and rear brake levers contain motor cutoff switches, which cut off power from the motor whenever the brakes are applied.

- a. In a clear, open area, turn on the bike. With appropriate safety gear and clothing, sit on the bike.
- b. Squeeze the front brake lever (on the left side of the handlebar) to engage the front brake.
- c. Lightly apply the thumb throttle assist. The bike should not move since the brake is applied.
- d. Release the thumb throttle assist.
- e. Release the brake.
- f. Test that the thumb throttle assist now operates with the brake not engaged.
- g. Release the thumb throttle assist.
- h. Perform steps “a”–“g” again, this time with the rear brake lever (on the right side of the handlebar).

Tire and wheel care

The tires and inner tubes that came with your ebike are designed for durability and safety for regular cycling activities. Wheels and tires need to be checked before each use as described below, to make sure they're in good condition. Always replace tires and inner tubes that have punctures, cuts, bulges, damage, or excessive wear before you ride.

TIRE INFLATION

Inflate tubes and tires to within the PSI range stamped onto the tire sidewall.



WARNING: Underinflating your tires can result in loss of control. Overinflating can make tires burst. Either scenario can lead to serious injury or death. Always maintain the correct air pressure of your tires listed on the tire sidewall, and use a regulated air source with a pressure gauge so that you can measure pressure accurately.

WHEEL “TRUENESS”

Your wheels should always spin straight (“true”) and must be repaired or replaced if they wobble side to side or up and down when spinning. To test them, do this:

1. Spin the wheel.
2. Brace a dull pencil against the frame or fork, with the tip just touching the rim.

If the gap between the spinning rim and pencil changes more than 5 mm, your wheels may need truing. If your wheels become untrue or if spokes loosen, which can happen with normal use, we recommend that you have a certified, reputable bike mechanic perform wheel tuning & truing operations. Do not attempt to true wheels or tighten spokes unless you have the highly specialized skills and tools to do so.

TIRE REPLACEMENT

Even tires equipped with built-in flat-preventative tire liners can and do get flats from punctures, pinches, impacts, and other causes. If you get a flat tire or see evidence of tire wear, you must replace your tire and/or tubes before operating the bike again. Otherwise, you risk bike/property damage, serious injury, or death.



WARNING: Removing a tube from your wheel rim before the air has been released from it can cause the tube to burst, potentially causing serious injury. Always release air pressure before removing your tube.



WARNING: Aftermarket tires or inner tubes not provided by Haro Bikes may not be compatible with your wheels or the performance requirements of your ebike. Such tires can fail or create unsafe riding conditions, causing serious injury or death. Always use replacement tires and tubes that are sized to be compatible with your bike frame. For safety and, required by law, ensure replacement tires have sufficient reflective sidewall striping. For more information on tire or tube replacement, consult a local certified, reputable bike mechanic.

Handlebar twist test



WARNING: An improperly secured wheel and/or handlebar stem can cause loss of control, accidents, serious injury, or death. Check that the front wheel and handlebar stem are properly secured during assembly and before each ride, as described below.

1. Stand at the front of the bike, facing the handlebar, and brace the front wheel between your feet and lower legs.
2. Try to twist the handlebar. Hold both handlebar grips and push forward with your right hand while pulling back with your left hand. Push and pull at the same time with about 20 lbs (9kg) of force with each hand.
3. Ensure the handlebar and wheel stay properly aligned. The handlebar and handlebar stem should be tightly secured, and the handlebar should be perpendicular to the front wheel.
4. Repeat the twist test pushing forward with your left hand while pulling back with your right hand, using about 20 lbs (9kg) of force with each hand.
5. To tighten, align the handlebar and stem and torque the stem clamp bolts evenly. Be sure to torque the stem clamp bolts evenly to the specification listed in “Tools and recommended torque values” on page 5. After torquing the stem clamp bolts to the proper specification, perform the twist test again. If the handlebar still moves, contact Haro Bikes Product Support.



WARNING: If you are not sure you have the experience, skills or tools to correctly perform all steps to secure and verify the security of the handlebar, front wheel, and handlebar stem, consult a certified, reputable bike mechanic.

Guard against rust, corrosion, and water damage



WARNING: Damage to your ebike’s electrical system caused in any manner, including water intrusion, can lead to battery failure, electrical system malfunction, or electrical fire and consequent property damage, injury, or death. Follow all recommendations to reduce chance of water damage. If you have any questions, contact Haro Bikes Product Support.

Like any vehicle used outdoors, your Skwad needs care to ensure it isn’t damaged by the elements. Follow these steps for a long, healthy life for your ebike:

- Store under shelter and in an upright position; avoid leaving the bike in the rain or exposed to corrosive substances such as water, salt, or de-icing substances. If exposed to rain, dry your bike afterwards, and apply an anti-rust treatment to the chain and other unpainted steel surfaces.
- To clean your ebike, power off the bike and battery and wipe the frame with a clean, damp cloth. If needed, apply a mild, non-corrosive detergent mixture to the damp cloth and wipe the frame. Dry by wiping with a clean, dry cloth. Never use high-pressure water

on your bike. Wipe down your bike frequently and wipe or spray all unpainted metal parts with anti-rust treatment.

- If painted metal parts become scratched or chipped, use touch up paint or nail polish to prevent rust.
- Never immerse or submerge the bike or any components in water or liquid, which can damage the electrical system.
- Avoid riding on the beach, in coastal areas with high-salinity fog, or on surfaces treated with salt or de-icing compounds. Doing so exposes your bike to salt or other substances that are very corrosive. Corrosion of electrical components can lead to permanent damage that can cause battery failure, electrical system failure, or electrical fire. Damage from corrosion is not covered under warranty.

Troubleshooting

Problem	Most common solutions
Bike doesn't power on:	
Insufficient battery power Battery won't wake up	Charge the battery Wake up battery by pressing and holding the battery button for at least three seconds (feature available on some models)
Battery not fully secured in mount Faulty connections Improper turn-on sequence Brakes are squeezed	Install battery correctly Clean and reconnect connectors Turn on bike with proper sequence Disengage brakes
Irregular acceleration and/or reduced top speed:	
Insufficient battery power Loose or damaged thumb throttle	Charge or replace battery Tighten or replace
When powered on, the motor does not respond:	
Loose wiring Loose or damaged thumb throttle Loose or damaged motor plug wire Damaged motor	Reconnect or replace Tighten or replace Reconnect or replace Replace
Reduced range:	
Low tire pressure Low battery Driving with too many hills, headwind, frequent braking, or excessive load Battery discharged for long period without regular charges Brakes rubbing Faulty, damaged, or aged battery	Inflate tires to PSI stamped on sidewall Charge battery Assist with pedals or adjust route Recharge the battery Adjust the brakes Contact Haro Bikes Product Support to replace battery. Disconnect and store damaged battery in a safe location and recycle or dispose of as soon as possible according to local rules.

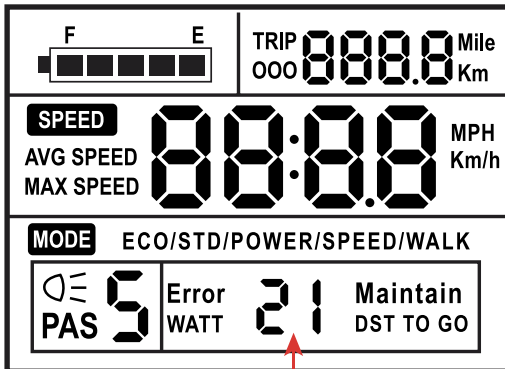
Problem	Most common solutions
The battery won't charge:	
Charger not well connected	Adjust the connections
Charger damaged	Replace the charger
Battery damaged	Disconnect and store battery in a safe location and recycle or dispose of as soon as possible according to local rules. Contact Haro Bikes Product Support to replace battery.
Wiring damaged	Replace
Wheel or motor makes strange noises:	
Loose motor cable connection	Reconnect cable
Damaged wheel spokes or rim	Repair or replace
Damaged motor wiring	Replace motor

Error detection

Your Skwad is equipped with an error detection system integrated into the display and controller (see “Electrical controls and operation” on page 14 for more information). In the rare event of an electrical issue with the bike, you may see a specific code on the display. If this happens, we recommend that you cease operation, take a short video of the display if possible, and contact Haro Bikes Product Support.

The following errors are the most common and can aid in troubleshooting.

PAS lights	Error type
21	Abnormal current
22	Throttle abnormal
23	Motor phase problem
24	Motor hall defect
30	Abnormal communication



Error type

Ride as safely as possible

Ride by taking the sensible measures outlined in this section to increase your safety. Bicycling is an exciting, delightful, and practical way to get around, but like any sport, it involves risk of injury and death. By choosing to ride a bike, you assume responsibility for those risks.



WARNING: Incorrect assembly, maintenance, or use of your ebike can cause component or performance failure, loss of control, serious injury, or death. Even if you're an experienced bike rider, you must read and understand the entire manual and any documentation provided for subcomponents or accessories before riding. If you are not sure you have the experience, skills, and tools to correctly perform all steps in this manual, consult a local, certified, reputable bike mechanic.

Be thoroughly educated about your bike before riding it

Practice riding your bike, braking, shifting gears, and using the power assist systems in a controlled location before venturing into traffic or other risky conditions.

The electrical system on your ebike (see “Electrical controls and operation” on page 14) offers various levels of power assistance and lighting for different operating conditions and user preferences. Be sure you understand these features before riding. If power assist or lighting is functioning abnormally, intermittently, or not at all, please discontinue using your ebike immediately and contact Haro Bikes Product Support for assistance or consult a local, certified, reputable bike mechanic.

Take extreme care getting to know and learning to control the power assist and brake systems. Your Skwad is probably heavier than other bikes you've ridden, and it will handle quite differently from lighter bikes, especially when you're accelerating or decelerating. Learn to maintain a comfortable stopping distance from all other objects, riders, and vehicles at different speeds, conditions, and with varying payloads.

Age and ability requirements



WARNING: This ebike is not to be operated by anyone under the age of 16. Children under the age of 16 may lack the necessary judgment and skill to safely operate the ebike, potentially resulting in damage to the bike, damage to other property, serious injury, and/or death. Please also check your local laws, which may require a higher age.

It is your responsibility to know and obey local regulations regarding rider age and other qualifications. You must also have the physical ability, reaction time, and mental capability to understand and obey all local laws governing ebike usage and to manage traffic, variable road conditions, and sudden situations. If you have an impairment or disability (e.g., visual impairment, hearing impairment, physical impairment, cognitive or language impairment, seizure disorder) or any other condition that could affect your ability to safely operate a vehicle, consult your physician before riding any bike.



DANGER: Riding any bike under the influence of alcohol, drugs, or any substance or condition that could impair your motor function, judgment, reaction time, or ability to safely operate a vehicle puts you at very high risk of serious injury or death. Operate bikes and other vehicles only when you're sober and otherwise physically and mentally prepared to ride safely.

Know and obey all relevant local laws

The Skwad is a Class 2 ebike and has a 750 watt hub motor. Please check relevant rules in the locations you intend to ride for a full understanding of all necessary legal rules for operating your Skwad. This manual will refer to your Skwad as a “bike,” “ebike,” or “electric bike.” It is your responsibility to know the local laws that govern any type of vehicle you use.

Safety check before each ride

Before each ride, you must check your bike to ensure everything is working properly. Follow the instructions on the “Safety checklists” on page 19 and ground your safety checks in a solid understanding of bike maintenance, which is explained in “Maintenance” on page 18, a section that includes an important chart, “Recommended service intervals” on page 21, which you should follow as well. If you are ever unsure about how to check or maintain your bike or if you find any problems with it, take it to a certified, reputable bike mechanic or contact Haro Bikes Product Support.

Ride appropriately for conditions

Always travel at speeds appropriate for local terrain and conditions as well as your experience level. When in doubt, slow down.



WARNING: Using the front brake by itself can cause excessive stress on components, damage to the bike and parts, loss of control, injury, or death. Always apply the rear brake before applying the front brake, using both brakes for all operations.

Always use a low pedal assist level until you are comfortable with your Skwad and confident about controlling its power, weight, and responsiveness (e.g., during start-up, turns, and braking) at different speeds, in different conditions, and with whatever payloads you might carry.

Riding with your headlight on will make you more visible in any conditions. The headlight will turn on when the bike is powered on. We recommend you keep it on whenever you ride.

Concentrate on the path ahead. Avoid potholes, gravel, ice, wet or oily roads, wet leaves, curbs, train tracks, speed bumps, drain gates, thorns, broken glass, and other obstacles, hazards, and puncture-flat risks.



WARNING: Crossing train tracks or similar grooved or raised surfaces at a diagonal can make the surface “grab” or deflect your wheel, causing your bike to suddenly get stuck or crash, leading to serious injury or death. Always cross such hazards at a perpendicular angle or, when in doubt, dismount and walk your bike across.

PATH RIDING

Be a good citizen of shared-use paths and facilities. Keep your speed reasonable and below path speed limits, pass carefully and kindly. Use your voice and/or bell to signal your presence to others, especially when passing.

ROAD RIDING

When riding on streets, obey the same road laws as all other road vehicles as well as local rules governing bike or ebike usage. Sharing the road with other vehicles present many hazards. Always take these precautions:

- Expect the unexpected such as opening car doors or cars backing out of driveways.
- Be extra careful at intersections and when preparing to pass other vehicles or other cyclists.
- Ride predictably, in a straight line, and with the flow of traffic. Never ride against traffic.
- Use correct hand signals to indicate turning, and do so well in advance of turning.
- Ride defensively. To other road users you may be hard to see.
- Increase your visibility by following the tips in “Low-visibility conditions” on page 29.

OFF-ROAD RIDING

Riding off road requires close attention and specific skills, and it presents variable conditions and hazards. Don't ride off road unless you have the appropriate skills. If you choose to ride off road, wear appropriate safety gear and do not ride alone in remote areas.

HOT OR COLD CONDITIONS

Riding, parking, or storing your bike in excessively hot conditions can cause damage to the display and other components.

Do not park or store your bike in direct sunlight for extended periods. For more information on safe and recommended storage conditions. See “Parking, storage, and transport” on page 16.

LOW-VISIBILITY CONDITIONS



WARNING: Riding at night or in other low-visibility conditions (dawn, dusk, fog, rain, mist, snow, etc.) makes it harder to see and avoid hazards and makes it harder for others to see and avoid you, which increases risk of accidents, serious injury, or death. Wet, slippery surfaces will compound your risk of injury or death. Avoid these conditions whenever possible. If you must ride in these conditions, following the guidelines below can reduce risk.

- Wear reflective and brightly colored clothing.
- Slow down.
- Use familiar routes with street lighting, if possible.
- Ensure tire wall, pedal, and other reflectors are installed and unobstructed.
- Ensure headlight and taillight/brake light are turned on, functioning correctly, and unobstructed.

WET CONDITIONS

This electric bike is not meant for use in puddles, heavy rain, or streams. Never immerse or submerge this product in water or liquid as the electrical system may be damaged. See “Guard against rust, corrosion, and water damage” on page 24.



WARNING: Riding in wet conditions means slippery hands, feet, and riding surfaces, which greatly increases your risk of accidents, serious injury, or death. Low-visibility conditions (night, dusk, dawn, fog, mist, rain, snow, etc.) will compound your risk of injury or death. If you must ride in wet conditions, following the guidelines below can reduce risk.

- Decrease riding speed to help you control the bike in slippery conditions.
- Brake earlier since it will take longer to slow down in wet conditions.
- Take care to be more visible to others on the road, following the tips in “Low-visibility conditions” above.
- Remember that road hazards are more difficult to see when wet, so proceed with extra caution.

EXTREME RIDING

The Skwad is not appropriate for extreme riding. Haro Bikes strongly recommends against such use.



DANGER: Extreme riding puts you at very high risk of serious injury or death. Extreme riding includes but is not limited to jumps, stunts, or any riding that exceeds your capabilities or the strength and integrity limitations of bike components or otherwise leads to dangerous situations. Never engage in extreme riding or any type of riding that exceeds your capabilities.

Wear a helmet and appropriate safety gear

We strongly advise that you wear a properly fitting, certified ebike safety helmet while riding your bike, which may be required by law in your area.

Wear appropriate safety gear including closed-toe shoes. If you are wearing loose pants, secure the bottom using appropriate leg clips or bands to prevent the fabric from flapping and getting caught in the chain or other moving parts. Never use items such as headphones or hoods that can compromise your hearing or field of vision. A local, certified, and reputable bike shop can help advise you on what gear is best for the weather and other riding conditions in your area.

Increase your visibility with bright colors and reflective outerwear or vests. Never compromise your ability to be seen or heard by removing your bike's reflectors, blocking or removing the headlight or taillight, or removing the bell.



DANGER: Riding any bike without a helmet puts you at very high risk of serious head injury or death. Always wear a properly fitted helmet that covers the forehead. Many locations require specific safety devices. It is your responsibility to familiarize yourself and comply with the laws, rules, and regulations where you ride.

Limited warranty and other terms

Your bike's warranty and other binding legal terms (e.g., terms of purchase, etc.) are subject to change at any time. To view the current Haro Bikes warranty, please go to <https://harobikes.com/pages/warranty>.

Warranty

Let's face it, all the wonderful things a brand might say about their product are just empty words if they aren't backed up by a promise to help get you back on the street when things don't go as planned. At Haro, we believe in our product and we have one of the best warranties on the market. Your Haro frame and fork is backed by a limited lifetime warranty to guard against any issues that may result from non-conforming material or workmanship. Read on for more details.

LIMITED LIFETIME WARRANTY-FRAMES & FORKS

Provided you are the original owner, your frame and fork are both warrantied against non-conforming issues related to material or workmanship for life, beginning from date of purchase. This lifetime warranty does not apply to paint and finish or any parts attached to the bicycle including, but not limited to drive train components, brakes, seats, seat posts, handlebars, stems or wheels and their components.

PAINT, FINISH, AND OTHER STUFF

Paint, finish and the other parts attached to your Haro bicycle are covered under a limited one-year warranty for the original owner. Warranty is limited to the part(s) only, and labor and transportation charges are the responsibility of the original owner. As with any warranty, there is a requirement that the bicycle has been properly maintained and operated under normal conditions and use. This warranty is void if the bicycle or frameset has not been purchased and assembled through an authorized Haro service provider.

HERE IS THE "LIMITED PART" - WHAT IS NOT COVERED:

Failure due to accident, abuse, neglect, normal wear & tear, improper assembly, improper fit, maintenance by anyone other than an authorized Haro service provider or use of parts inconsistent with the use originally intended for the bicycle as sold are not covered by this warranty. Haro defines the intended use of its bicycles as riding in a controlled, smooth manner in a location approved for bicycles with both wheels on the ground. Riding in a manner other than that voids this warranty.

WHY IT'S NOT COVERED

Like all bicycle warranties, ours protects you against non-conforming manufacture and material issues, the mistakes that happen from time to time and is not a "No Fault" warranty. Rider mishaps, carelessness, and hazards you may encounter while riding which result in damage to your bike are not covered by this warranty, including competitive or professional events where things like this can occur.

WHAT WILL HARO DO IF YOU HAVE A WARRANTY CLAIM

Haro will replace or repair any part that is determined to be covered by this warranty. This Limited Warranty is made only to the original owner and is not transferable. All claims must be made through an authorized Haro service provider and must be accompanied by an original bill of sale or proof of purchase that identifies the bicycle or frame by the serial number—please be sure to keep a copy in a safe place away from the dog.

WHAT IF YOUR FRAME OR PARTS ARE NOT COVERED UNDER THE WARRANTY

The good news! If the warranty claim on your Haro frame is determined to be invalid, Haro will offer a replacement frame of at least equal value at a reduced price. This transaction will be offered only through an authorized Haro service provider. The replacement frame must be assembled/installed by an authorized Haro service provider to maintain the Haro warranty. All transportation and labor charges are the responsibility of the original owner.

LEGAL STUFF (we have to say it)

There are no warranties of guarantees expressed or implied made by the Haro Bicycle Corporation on this bicycle. The sole and exclusive liability of Haro and/or any of its authorized dealers, service providers, or affiliates of agents pursuant to this warranty shall be for the repair and replacement of the defective part; incidental or consequential damages are expressly excluded hereunder. This warranty gives you specific legal rights, and you may also have other rights which may vary depending on state, province or country where you purchased this Haro bicycle.

Bicycling is fun but can be a potentially dangerous activity. The user assumes the risk of any personal injury, damage to or failure of the bicycle and any other losses if Haro bicycles are used in any competitive event, including bicycle racing, or similar activities or training for such competitive activities or events. This bicycle is not manufactured, marketed, designed or intended to be altered for use at any time in stunt riding or similar activity. Haro, its dealers, affiliates or agents shall not be liable under this warranty nor under any state or federal law or the common law or otherwise for any damage, failure, including personal injury, resulting from such use and/or alteration.

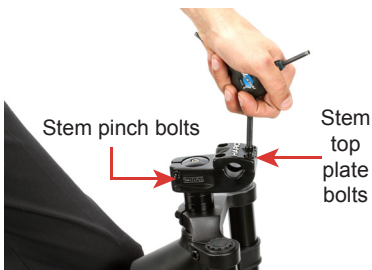
Assembly Instructions



WARNING: Incorrect assembly, adjustments, maintenance, or use of your ebike can cause component or performance failure, loss of control, serious injury, or death. Even if you're an experienced bike rider, you must read and understand the entire manual and any documentation provided for subcomponents or accessories before riding. If you are not sure you have the experience, skills, and tools to correctly perform adjustment steps in the manual, consult a local, certified, reputable bike mechanic.

1. Open Box.
2. Remove component box and set aside.
3. Remove foam inserts.
4. Remove secondary component box
5. Remove all packaging material, except bubble wrap from seat to prevent damage during assembly.
6. With a second person, lift and remove bike from box and set upright on ground.
7. Be sure to leave foam packaging on bottom of forks.
8. Remove battery box from bike box – take battery out of box and plug in to fully charge. See “Charging procedure” on Page 10.
9. Cut tie strap holding keys to bars – place keys in safe place.
10. Remove front wheel and fender by cutting zip ties holding the wheel to the bike, place wheel to the side.
11. Leave forks sitting on foam insert.
12. Remove 4 allen bolts from stem top plate to stem - do not remove the two pinch bolts from stem (see Fig 1).

Fig 1



13. Place bars into stem slot, center bars within stem (see Fig 2).

Fig 2



14. Replace stem plate back onto stem and install the 4 allen bolts, arrange the bars into the position of your preference.
15. Once bars are positioned, tighten allen bolts using cross pattern. Ensure all hardware is tightened properly according to the values in “Tools and recommended torque values” on page 5. (see Fig 3).

Fig 3



16. Remove packaging from front fender
17. Remove fender mounting bolt and nut from fork bridge.

18. Install fender from back of the forks, place fender hanger on fork bridge bolt. (see Fig 4).

Fig 4



19. Install nut onto bridge bolt, holding fender in place, do not fully tighten (See Fig 5).

Fig 5



20. Remove fender strut hardware from backside of the forks, install the fender struts and reinstall strut hardware, holding in place (See Fig 6). Ensure all hardware is tightened properly according to the values in "Tools and recommended torque values" on page 5.

Fig 6



21. Place front wheel flat on the ground, with rotor side facing up. Set rotor on wheel up, warning label facing out and be sure to match the indicated rotor direction with the forward rotation of the front wheel (See Fig 7).

Fig 7



22. Thread on rotor hardware hand tight at first, then once all have been installed, snug up bolts in a star pattern using T wrench. Ensure all hardware is tightened properly according to the values in "Tools and recommended torque values" on page 5.
23. Remove packing spacer from front brake caliper (See Fig 9).

Fig 9



24. Remove front axle from accessory box and install axle in front wheel, place washers / spacers on both sides of axle (See Fig 8).

Fig 8



25. Have second person hold up front end using handle bars, and place front wheel in forks being sure that the spacers are kept on the inside of the forks, be sure to install the wheel rotor between front caliper brake pads (See Fig 10).

Fig 10



26. Tighten front axle nuts. Ensure all hardware is tightened properly according to the values in "Tools and recommended torque values" on page 5.

27. Lower kickstand to stand up bike on its own.

28. Center front fender and fully tighten fender hardware. Ensure all hardware is tightened properly according to the values in "Tools and recommended torque values" on page 5.

29. Remove headlight from accessory box.

30. Use light mount hardware, install bolts on light bracket, then add the long bolt spacer to each bolt, then mount to fork crown (See Fig 11).

Fig 11



31. Mount light to fork crown – tighten both crown bolts (See Fig 12).

Fig 12



32. Connect light cable to power cable on bike (See Fig 13).

Fig 13



33. Use bolts on side of light to adjust and tighten light angle. Ensure all hardware is tightened properly according to the values in "Tools and recommended torque values" on page 5 (see Fig 14).

Fig 14



36. Place allen bolts in foot pegs and install on frame (See Fig 16). Ensure all hardware is tightened properly according to the values in "Tools and recommended torque values" on page 5.

Fig 16



34. Remove pedals from accessory box and install. Be sure to note the L and R on each pedal and install accordingly. Use clockwise pattern to tighten drive side and counterclockwise pattern to tighten non-drive side (See Fig 15).

Fig 15



37. Install battery into frame by sliding the front of the battery in the frame first, snapping the back of the battery in place (See Fig 17).

Fig 17

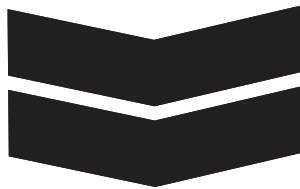


35. *Optional Foot peg installation – Remove foot peg hardware from the frame's chainstay

38. Ensure headset is tight by loosening the stems pinch bolt, tighten up the top cap allen bolt, and then tighten the stem pinch bolts. Ensure all hardware is tightened properly according to the values in "Tools and recommended torque values" on page 5.



WARNING: Disc brakes should come adjusted from the factory. In the event they are not adjusted properly see "Adjusting for comfort and safety" on page 6 and "Ensure all hardware is tightened properly" on page 7. If you are not sure you have the experience, skills, and tools to correctly perform adjustment steps in the manual, consult a local, certified, reputable bike mechanic.



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