



EW-18

Owner's Manual



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## PREFACE

Please read this Owner's Manual before operating your scooter for the first time. Improper use or unfamiliarity of the scooter may result in harm, injury, or traffic Accidents.

This Owner's Manual includes operation instructions, assembly instructions, and best Practices to ensure maximum use from your scooter.

The symbols used throughout this Owner's Manual are explained below. Read Carefully, and fully understand the sections marked with these symbols:

WARNING – Improper use could lead to death, serious injury, hazardous Conditions or product malfunction.
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ATTENTION – Improper use could lead to injury and/or damage to your Scooter.
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SUGGESTION – Follow these instructions for best practices, and to keep Your scooter in prime operating order.
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This Owner's Manual includes a repair maintenance record chart and warranty. Please Keep it in a safe place, or with the scooter.

If someone else uses the scooter, please provide a copy of the Owner's Manual for Their consideration.

This Owner's Manual is composed from the product design and specifications at the Time of publication. As designs change, some illustrations and pictures in the manual may not correspond to the scooter that you purchased. We reserve the right to make design modifications.

The manufacturer disclaims all responsibilities for any personal injury or property damage which may occur as a result of improper or unsafe use of this product.

## II. SAFETY NOTICES

Read and follow the information in the owner's manual.

- Fully charge the battery after every trip and prior to using the scooter. If you do not frequently use the scooter fully charge the batteries every two weeks to prevent battery failure.
- If the battery gauge drops to red, charge the scooter as soon as possible. Completely discharging the batteries may damage the batteries, or shorten the expected life of the batteries.
- Batteries contain lead and lead compounds. Wear proper safety attire when handling batteries.
- Only use sealed lead acid batteries in this product.
- Keep metal objects away from the battery terminals, electric shock may occur.
- Always replace all batteries at the same time for optimum performance.
- Always make sure the power is turned off when getting in and out of the scooter.
- To ensure the user's familiarity with the scooter's operation, practice driving at low speeds in a spacious hazard-free area traveling forward, backward, left, right, decelerating, maneuvering up inclines, and down inclines.
- Avoid unnecessary movement of the scooter.
- Never reach, lean or bend when driving your scooter.
- For adults only (ages 18+) 12. Product shall not be modified from the manufacturer's original design and configuration and should not be operated with any modifications made to the product or its components.
- When powering on the scooter, ensure the throttle is in the neutral position and one hand is on the brake lever with the brake engaged.
- Product shall not be operated to perform racing, stunt riding, jumps, spin-outs, donuts, or other maneuvers, which may cause loss of control, or may cause uncontrolled operator or scooter actions or reactions, as such activities are likely to result in possible injury to the operator or bystanders.
- Prior to each cycle of operation, an owner shall perform the preoperational checks specified by the manufacturer, and further verify
- Smooth throttle operation and positive return of the throttle linkage to a closed throttle position;

- That the throttle stop operates properly and that the throttle cable or other linkages be adjusted properly;
- That the steering linkage is adjusted and operates properly;
- That the motor key switch is properly functioning;
- That all guards and pads originally supplied by the manufacturer are in proper place on the scooter and in serviceable condition;
- That the area that the scooter is to be operated in is safe and suitable for scooter operation;
- That, on those scooters equipped with restraints, such restraints are in good condition, functioning properly, and used appropriately;
- That the braking system on the scooter is functioning properly;
- That all safety labels are in place and understood by the operator;
- That any and all axle guards, chain guards, torque converter covers, or other covers or guards supplied by the manufacturer are in place and in serviceable condition;
- That tires are in good condition, inflated properly, and have sufficient tread remaining; and
- That all fasteners are in place and tightened properly.
- No person shall allow hands, feet, hair, body parts, clothing, or similar articles to come in contact with moving parts of the scooter, wheels or drive train.
- Do not operate your scooter if hair, clothing, or other articles can extend past the scooter seat back or under the scooter's wheels.
- Do not operate your scooter while smoking.
- The owner shall provide continuous supervision during scooter use.
- Scooter shall operate only on recommended surfaces or terrain.
- Scooter shall not be operated on roads, streets, highways, or at any other location where road vehicles are intended to travel.
- Scooter shall be operated only with adequate lighting and under conditions of suitable visibility.
- Scooter shall be used by the operator only, passengers are not permitted.
- Scooter operators always shall use appropriate protective clothing, including but not limited to a helmet and eye protection, with appropriate certification, and any other equipment recommended by the scooter manufacturer.

- No operator shall contact any portion of the motor, wheels, or drive train for any purpose including maintenance until the scooter is turned off, the key is removed, and parts have allowed cooling, and the scooter is in a stable and stationary position.
- Where a manufacturer equips its scooters with restraints, the use of the restraints shall be in accordance with, and limited to, the manufacturer's guidelines.
- Scooter components shall be maintained and repaired in accordance with the manufacturer's specifications and utilizing only the manufacturer's authorized replacement parts with installation performed by dealers or other skilled persons.
- Scooters shall not be modified from the manufacturer's original design and configuration.
- The owner shall allow the use and operation of the unit after a demonstration that such operators can understand and operate all components of the unit before use.
- Operators shall adhere to all manufacturer's recommendations and instructions, as well as comply with all laws and ordinances.
- Owners are encouraged to highlight their scooter using lighting, reflectors, and for low-riding units, signal flags on flexible poles.
- Avoid sharp bumps, drainage grates, and sudden surface changes.
- Avoid streets and surfaces with water, sand, gravel, dirt, leaves, and other debris. Wet weather impairs traction, braking and visibility.
- Avoid exposure to moisture, standing water, rain, snow, ice or salt when possible.
- Always wear shoes when operating the scooter.
- Never use near motor vehicles.
- Do not ride your scooter at night.
- User should keep their weight forward on the deck while operating.
- Be cautious when operating in reverse, and watch for obstacles that may cause you to lose balance or stability.
- Familiarize yourself with the braking of the scooter. Sudden stops may cause your weight to shift forward quickly or unexpectedly.
- Familiarize yourself with the throttle and acceleration of the scooter. When starting out, slowly engage the throttle until you are comfortable with its operation.
- Do not use the scooter while it is charging.
- Be sure to lock the hand brake in the engaged position when not in use.

- For outdoor use only, not for indoor use. Product has rubber tires which can damage indoor floor surfaces.
- Persons with the following conditions shall not ride in or operate the scooter:
  - Those with heart conditions;
  - Pregnant women;
  - Persons with head, back, or neck ailments, or prior surgeries to those areas of the body; and
  - Persons with any mental or physical conditions, which may make them susceptible to injury or impair their physical dexterity or mental capabilities to recognize, understand, and perform all of the safety instructions, and to be able to assume the hazards inherent in scooter use.
- Scooter shall not be used to:
  - Transport a passenger;
  - Transport materials or equipment
  - Transport animals.
- Store in a clean and dry condition.
- Do not remove the anti-tip wheels.
- Keep your feet on the foot board at all times during operation.
- Do not connect an extension cord to the battery charger.
- Disassembling the controller, motor, or charger by anyone other than an authorized Drive Medical service agent is prohibited, and voids any applicable warranty.
- Do not operate your scooter when you are tired, or after consuming alcohol.
- Be cautious when driving your scooter in busy areas.
- Under no circumstances should the scooter be used as a seat in a motor vehicle.
- Do not attempt to lift your scooter by any parts other than the frame.
- If you will be seated in your scooter for an extended period of time, power off the scooter. This will prevent inadvertent movement from unexpected throttle contact.
- **WARNING** - The items and packaging in this shipment contain chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.



## **GENERAL GUIDELINES**

Before operating your scooter fully read and understand this Owner's Manual.

Be sure to follow the setup instructions prior to using your scooter for the first time.

Users may encounter difficult maneuvering situations such as narrow areas, traveling up and down ramps, cornering, and traveling on uneven terrain. Be sure to lower the speed, take your time, and carefully maneuver the scooter.

## **MODIFICATIONS**

Do not modify, remove, disable, or add any parts, features, or functions on your scooter. E-Wheels offer a wide variety of accessories for your scooter to help accommodate your needs.

**WARNING** – Do not modify your scooter in any way; doing so will void the warranty.

## **SAFETY CHECK**

ATTENTION – Inspect the following components before each use:

- Electrical connections – secure and free from corrosion
- Batteries – fully charged and free from corrosion

## **III. SAFETY GUIDELINES**

### **WEIGHT CAPACITY**

This scooter has a maximum weight capacity that should never be exceeded. Please refer to Section X. SPECIFICATIONS for this information. The maximum weight capacity includes the user and any accessories.

**WARNING** – Exceeding the maximum weight capacity will void your warranty. E-Wheels will not be held responsible for injuries and/or damages resulting from failure to observe weight capacities.

**WARNING** – Do not carry passengers on your scooter. Your scooter is designed and tested for one user to operate while seated.

### **INCLINE GUIDELINES**

Use caution when approaching inclines or declines; if necessary lower the speed before traveling on a slope.

When traveling up an incline try to keep the scooter moving forward. If you must come to a stop, use caution and slowly accelerate the scooter forward.

### **INCLINE GUIDELINES**

When traveling down an incline lower the speed on your scooter to the slowest setting, and proceed cautiously. If the scooter is traveling down the incline faster than you expected, slowly release the throttle and apply the hand brake, then slightly push the throttle forward to continue safely down the incline.

WARNING – Drive your scooter straight up or down an incline, never backwards. Erratic movements, or back and forth patterns may increase the chance of tipping.

### **III. SAFETY GUIDELINES**

WARNING – Do not travel up an incline with the seat completely reclined without an attendant. Inclines vary, and doing so may decrease stability.

WARNING – Do not, under any circumstances, travel on a slope greater than the maximum climbing angle for this scooter. Exceeding the climbing angle may cause unstable conditions.

### **BRAKES & STOPPING**

Coming to a stop in your scooter can simply be done by releasing the throttle. The throttle will automatically return to the center position, and the scooter will come to a stop.

ATTENTION – Switching the throttle in the opposite direction of travel will cause the scooter to come to an abrupt stop, and if held continuously in the opposite direction may cause erratic movements if you are unfamiliar with the controls.

### **OUTDOOR OPERATION & INCLEMENT WEATHER PRECAUTIONS**

ATTENTION – When operating outdoors avoid uneven terrain, soft surfaces, tall grass, loose gravel, loose sand, fresh water, salt water, edges of streams, lakes or oceans. If you are unsure about a surface, avoid it.

Exposure to inclement weather should always be avoided. If you find yourself caught in inclement weather while operating your scooter, proceed to the closest shelter immediately. Completely dry your scooter before operating, charging, or storing.

### **STEPS, CURBS & FIXED OBSTACLES**

Use extreme caution when operating your scooter near curbs, porches, stairs, escalators, drop-offs, unprotected ledges, and raised areas.

WARNING – Never attempt to navigate your scooter over a fixed obstacle taller than the maximum ground clearance.

WARNING – Never attempt to navigate your scooter backwards over an obstacle.

WARNING – Never attempt to operate your scooter on steps or escalators.

ATTENTION – Refer to the following guidelines and diagrams when traveling over a fixed obstacle lower than the maximum ground clearance of your scooter: To maneuver up a fixed obstacle – Approach slowly, and make sure the front of the scooter is perpendicular to the obstacle. Increase the forward speed until the scooter has cleared the obstacle, and then you may reduce the speed or return the throttle to neutral.

To maneuver down a fixed obstacle – Approach slowly, and make sure the front of the scooter is perpendicular to the obstacle. Reduce the forward speed just before the front wheels come in contact with the obstacle, and remain at the reduced speed until scooter has cleared the obstacle, and then you may increase the forward speed.

### **TRANSPORTING YOUR SCOOTER**

When transporting your scooter by vehicle it should be securely stowed in the back of a van, truck, or trunk of a car. Adjustable parts should be removed or properly secured during transport.

WARNING – Do not sit in your scooter while in a moving vehicle.

### **PHYSICAL LIMITATIONS, Rx DRUGS, ALCOHOL & SMOKING**

You must exercise awareness, caution, care, and common sense when operating your scooter. Always keep in mind your own limitations, and substance use when operating your scooter.

WARNING – Never use your scooter while under the influence of alcohol or mind altering substances.

WARNING – Never smoke while seated in your scooter. Damaged or worn upholstery increases the risk of fire hazard, and should be replaced immediately.

ATTENTION – Be aware of your own physical limitations when familiarizing yourself with the scooter.

ATTENTION – Be aware of precautions, warnings, and safety issues when taking prescribed or over-the-counter drugs while operating your scooter.

### **IV. EMI Information**

Electromagnetic interference (EMI) tests have shown to produce adverse effects on the performance and control of electrically powered mobility devices.

EMI can be produced from different sources such as cellular phones, two-way radios, radio stations, television stations, amateur radio transmitters (HAM), wireless computer links, microwave signals, paging transmitters, and transceivers used by emergency vehicles.

The EMI waves can cause unintentional movement of the scooter, or damage to the controller. Every electrical powered mobility device has a resistance to EMI. The higher the resistance level the greater the protection. The intensity of the interference can be measured in volts per meter, V/m.

At this time, current technology is capable of achieving an immunity level of 20 V/m, which provides protection from more common sources of EMI. Your scooter, with no modifications, has an immunity level of 20 V/m.

EMI becomes more intense as you move closer to the source. The EMI produced from hand-held radios are of special concern. It is possible to unintentionally bring high levels of EMI very close to the scooter's control system, effecting your movement and braking. The warnings listed below are recommended to prevent possible interference with the control system of your scooter.

WARNING – Do not operate hand-held transceivers such as CB (citizens band) radios, or turn on personal communication devices, such as cellular phones, while the scooter is powered on.

WARNING – Be aware of nearby transmitters, such as radio or television stations, and avoid close proximity.

WARNING – If you experience unintended movement or brake release occurs, power off as soon as it is safe. Please report EMI incidents to E-Wheels.

Please refer to the diagram below to identify your scooter parts. Familiarize yourself with the terminology to better understand part references throughout the Owner's Manual.

1. Control Panel
2. Tiller
3. Front Wheel & Motor Assembly
4. Battery Compartment
5. Floorboard
6. Rear Wheels
7. Hand Brake
8. Horn
9. Throttle Handle
10. Forward/Reverse Switch
11. High/Low Speed Switch
11. High/Low Speed Switch



## **V. OPERATION**

After your scooter is assembled, and adjustments have been made you are now ready to operate your scooter.

The key switch applies power to the control system electronics, which in turn supplies power to the motors. Turn the key switch with the key inserted to turn on your scooter.

**ATTENTION** – Do not use the key switch to stop, or as a brake. Doing so may shorten the life of the drive components.

**SUGGESTION** – It is recommended you start at slow speeds when familiarizing yourself with your scooter controls. Once you feel comfortable with the controls, and movement of the scooter you may then increase the speed.

Engage the throttle slowly, and begin steering to drive forward, backward, left or right. If you want to stop the scooter, release the throttle and engage the hand brake.

**ATTENTION** - Only releasing the throttle without engaging the hand brake will cause the scooter to coast, it will not engage any braking mechanism.

When the scooter is turned on, the battery gauge will display red and green indicators:

Red: Your scooter should be charged as soon as possible.

Green: Your scooter has low to full battery capacity.

## **VI. BATTERIES & CHARGING**

### **CHARGING YOUR SCOOTER**

To charge your scooter, position the front of the unit next to a standard electrical outlet. Be certain the power is turned off. Plug the charger into the scooter, and then into the electrical outlet. When the batteries are fully charged remove the charger from the scooter.

**SUGGESTION** – The lights on your charger indicate different charge statuses. The light indicators can be found on the charger itself, or the manual provided with the charger. In most cases your charger will show a red or orange light when charging, and a green light when fully charged.

### **INITIAL BATTERY CHARGE**

To ensure maximum use from your new batteries fully charge the scooter prior to initial use for 8 to 12 hours. Operate your scooter until the battery gauge shows half capacity, and then give your scooter another full charge for 8 to 12 hours.

## **BATTERY MAINTENANCE & CHARGING HABITS**

To ensure maximum life from your batteries, and continued use of your scooter please follow these charging guidelines based on your usage:

SUGGESTION – If you use your scooter on a daily basis, charge the batteries as soon as you are finished with the day’s activities, and leave it on the charge until you are ready to use the following day.

SUGGESTION – If you use your scooter infrequently, charge the batteries once a week for 10 to 14 hours.

## **BATTERY RANGE**

There are many factors that affect the range of your batteries, including the surfaces, inclines, curves, or wind you encounter when operating your scooter. If not ideal conditions, all of these factors will reduce the travel time or distance between charges. Follow these suggestions for maximum range:

SUGGESTION – Fully charge the batteries prior to any trip, and plan your trip in advance to avoid inclines.

SUGGESTION – Limit baggage and accessory weight to essential items, and maintain an even speed avoiding stop-and-go driving.

## **PUBLIC TRANSPORTATION**

Sealed lead acid AGM or gel-cell batteries are designed for use in scooters. These batteries are Federal Aviation Administration (FAA) approved. Since there is no danger of spillage or leakage, this allows for safe transportation on aircraft, buses, and trains.

SUGGESTION – When transporting your scooter on public transportation contact your carrier’s ticket counter in advance to determine their specific

## **VII. INSPECTION & MAINTENANCE**

### **GENERAL GUIDELINES**

Your scooter is an advanced mobility device, and with the correct routine maintenance you can ensure years of maximum use. While some of the maintenance can be done by yourself, you may need assistance from an authorized distributor.

Preventative maintenance is the key to keeping your scooter in prime operating condition.

Follow the Maintenance Schedule at the end of this section to periodically inspect your scooter for serviceable items.

- Avoid abuse to the throttle and control functions.
- Avoid prolonged exposure to extreme heat or cold.

- Keep the scooter clean and free from moisture.
- Never use a conditioner on the tread of the wheels.

## **EXPOSURE TO MOISTURE**

Should your scooter come in contact with water or moisture, dry your scooter thoroughly with a towel. Allow your scooter to sit in a dry place for 8 to 12 hours to allow unseen moisture to evaporate. Check the throttle operation and brakes before using your scooter again. If any items require service please contact E-Wheels Service department 888 571 2845.

## **OPERATING TEMPERATURES**

Your scooter is designed to operate ideally between 18°F and 122°F. In extremely cold conditions your batteries may freeze depending on the battery charge, usage, and composition of the batteries. In extremely hot conditions your scooter may operate at a lower speed. This is due to the safety mechanism built into the unit to prevent damage to the gearbox and other electronic functions when operating too hot.

## **VIII. INSPECTION & MAINTENANCE**

### **STORAGE**

If you need to store your scooter, be sure it is stored in a dry place free from extreme temperatures. Always fully charge, and then disconnect the batteries prior to storage.

**ATTENTION** – Infrequently charged batteries, or batteries stored without a full charge are susceptible to permanent damage, causing unreliable performance from your scooter.

If your scooter is stored for a prolonged period flat spots may develop in the wheels. This will cause an uneven sensation when driving, but should work itself out over time. If you still notice the flat spots after continued use, replace the wheels on your scooter immediately.

**SUGGESTION** – You can place a sturdy platform under the frame of your scooter to bring the wheels off the ground, and weight off the wheels. This will prevent flat spots from developing while storing your scooter.

**WARNING** – Improper storage of your scooter may result in permanent damage to the frame and electronics.

### **CLEANING & DISINFECTION**

To clean your scooter uses a damp cloth with a mild, non-abrasive cleaner on the plastic and metal parts. If necessary, clean your scooter with an approved disinfectant safe for use on your unit.

**WARNING** – Never hose off your scooter or expose it to direct contact with water.

WARNING – Never use any chemicals on the upholstery of your seat, this may cause the seat to dry out and crack.

## **IX. INSPECTION & MAINTENANCE**

### DISPOSAL OF YOUR SCOOTER & PARTS

You must follow applicable local and national regulations when disposing of your scooter, or defective scooter parts. Contact your local waste agency, recycling center, or E-Wheels for information on proper disposal.

The following conditions may indicate a serious problem with your scooter. Contact E-Wheels if one of the following conditions occurs:

- Motor or gearbox noise
- Frayed electrical harnesses
- Cracked or broken connections
- Uneven wear on the tires
- Veering to one side
- Bent or broken wheel assemblies
- Will not power on
- Loose seat or seat components

### MAINTENANCE SCHEDULE

- Inspect your scooter routinely for service issue or wearable items.

### INSPECTION DAILY WEEKLY MONTHLY

- Inspect the throttle is not bent when in neutral or rest position.
- Inspect electrical harnesses are not frayed or have exposed wires. Check for flat spots on tires
- Inspect seat, armrests, and frame for loose hardware or damage
- Inspect batteries are free from corrosion
- Inspect all harnesses to the controller are securely fastened
- Check the brakes for functionality at lowest speed setting
- Check the anti-tip wheels for wear, and contact with the ground while at rest
- Check for sufficient tread on the tires
- Check for proper tire inflation, if applicable to your scooter
- Check for proper front wheel alignment
- Check the entire scooter for loose hardware or changes in performance
- Check the entire scooter and clean any mud, dirt, hair, food, drink, etc. on the unit



## X. SPECIFICATIONS

Weight Capacity	300 Lbs.
Top Speed	15 mph
Estimated Range	20 miles
Max Climbing Angle	10°
Turning Radius	22"
Ground Clearance	4.25"
<b>Overall Dimensions</b>	
Length	41"
Width	27"
Height	28.5"
<b>Seat Dimensions</b>	
Width	14.5"
Depth	10"
Back Height	N/A
<b>Power</b>	
Motor	350W Brushless Hub
Controller	350W
Batteries	12V x 10AH
Battery Charger	Off board Smart Charger
Brakes	Handbrakes & Electromagnetic
Front Wheels	16" x 2x"
Rear Wheels	4" x 2"
Base Weight	78 lbs.

\* Speed and range vary with user weight, type of terrain, battery charge and condition. The information contained herein is correct at the time of publication; E-Wheels reserve the right to alter specifications without prior notice.