



**EW-46**

**Owner's Manual**



**[www.ewheelsdealers.com](http://www.ewheelsdealers.com)**

**(888) 305-0881 Sales**

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## **Intended Use**

Your scooter is a recreational scooter and is to be used for improving mobility in your daily activities such as walking. It is not a medical scooter or medical and does not and is not intended to provide medical benefits, medical assistance, medical therapy, or treat or alleviate any medical condition or disability.

## **Quick-Start Warnings**

The below warnings and instructions caution against some activities. Reviewing this list is not a substitute for reading the entire Manual. Use common sense when operating your scooter.

- Do not disassemble your scooter on your own.
- Avoid touching hot parts of your scooter during or after operation.
- Avoid touching hot parts of your scooter that may have become hot from exposure to sunlight.
- Do not touch any chemicals in the scooter.
- Keep your hands and other body parts away from moving parts of the scooter.
- Do not operate the scooter with any loose clothing or dangling which wires which could become trapped in the wheels or other moving components of the scooter.
- Do not use any battery which is not approved by eWheels for use with your scooter.
- Do not allow children to play on the scooter or use it without supervision.
- Single-person scooters should only be used by one person at a time.
- Do not operate the scooter while under the influence of alcohol, drugs, or other medications which may impair your ability to operate a vehicle.
- Do not operate the scooter while using a mobile phone or other mobile device.
- Do not operate your scooter if it is not functioning properly.
- Never try to operate your scooter beyond the its limitations as described in the manual.

## **Size and Weight Limits**

Your scooter was designed to accommodate users up to a specified size and weight. As each scooter is designed and rated differently, ensure you check your particular scooter model's limits. Periodically check your weight against your scooter's limits, as your weight may fluctuate over time. Ensure other users of your scooter are within the weight limits. Operation of the scooter by a user over the weight limit can damage the scooter and can cause hazardous situations, including increased braking distances and times, decreased steering responsiveness, tip-overs, and other dangers which may cause injury. Further, modifications which increase the riding height of the scooter, which raise the user's riding height on the scooter, or which otherwise change the center of gravity of the scooter can damage the scooter and cause the hazardous situations identified above. eWheels is not responsible for damage to the scooter or personal injury caused by exceeding weight limitations or modifying the center of gravity of your scooter. Do not adjust your seat while the scooter is in motion or operating.

## **General Operation – Safety Belt**

If your scooter is equipped with a safety belt, use it all times when seated in the scooter. Do not operate your scooter without wearing the safety belt. Have the belt replaced by an authorized repair technician if the safety belt becomes frayed, cut, or shows other signs of wear or damage.

### **General Operation - Mirrors**

If your scooter is equipped with mirrors, orient them so that you can see behind you. Orient the mirrors while sitting on the scooter but while the scooter is not moving and is not in operation. Never attempt to adjust the mirrors while operating the scooter. Proper orientation of the mirrors should allow you to see behind you and should minimize blind spots.

### **General Operation – Lights and Signals**

If your scooter is equipped with headlights and turn signals, use them. Using headlights at night, and even at day, increases your visibility to other vehicles. Using turn signals provides warning to vehicle and pedestrian traffic near you.

### **General Operation – Driving Outdoors**

Your scooter is designed to be driven on clean, even, dry surfaces. eWheels does not recommend you store your scooter outdoors. Your scooter is susceptible to damage to electronic, mechanical, or other components if exposed to water. If you are caught outside during inclement weather, seek shelter or ask someone for assistance.

Always ensure that the power is switched off when getting on or off the scooter. Never attempt to mount or dismount the scooter if it is operational or moving. Do not switch the power off when the scooter is still moving forward or in reverse. Always check that the variable speed switch is set to the desired speed setting. Always check that the desired direction of forward or reverse travel is selected when ready to drive.

### **General Operation – Public Roads**

Unless specifically permitted or authorized by the state, do not drive your scooter on public roads. If you need to drive along a public road, use the sidewalk adjoining the road. Always use care when driving near to or around public roads, as you may be less visible to motor vehicles when riding the scooter because of your smaller relative size and slower relative speed. Always be aware of state and local rules of traffic, and take those rules into account when operating your scooter; it is your responsibility to know those rules, obey them, and understand how other traffic will operate in accordance with such rules. eWheels recommends that you gain your first experiences with your scooter well away from public roads, so that you can learn and understand how the scooter operates and handles in a comfortable and quiet environment.

### **General Operation – Alternate Surfaces**

Do not drive your scooter onto stairs or escalators; serious injury will result. Do not attempt to drive your scooter onto stairs or escalators. Most elevators are safe for use with the scooter. When confronted with stairs or escalators, navigate to the closest elevator instead. Conduct a visual inspection and assess the quality and condition of the elevator before using it. Use care; some elevators have awkward entrance angles that can make ingress and egress difficult.

### **General Operation – Curbs**

Curbs generally are formed in two manners: abrupt, vertical curbs and gradual, smooth curbs. Your scooter cannot drive over or off of an abrupt, vertical curb. Do not attempt to do so, as this will cause serious damage to your scooter and likely injury to yourself. Do not drive over a curb or object exceeding 4 inches in height. Your scooter can drive over most gradual, smooth curbs. Approach such curbs head-on, so that the scooter is oriented perpendicular to the curb. Consistently apply speed over the curb until the rear wheels of the scooter have moved just past the curb. Do not approach the curb at an oblique angle; doing so can increase the risk that your scooter tips over. Likewise, when moving down a curb, approach the curb perpendicular to it and not at an oblique angle. Avoid stopping completely when going over small objects, curbs, or other obstacles and obstructions.

### **General Operation – Incline Control**

Your scooter can handle a wide range of inclines and declines. The scooter is safe for operation on most handicap-accessible ramps. However, do not use the scooter on inclines of a degree which makes operation of the scooter difficult; if the scooter does not readily climb the incline, move off of the incline and/or ask for assistance. Likewise, do not use the scooter on declines of a degree which makes operation of the scooter difficult; if the scooter moves too quickly on an incline, fully apply the brakes, move off of the decline, and/or ask for assistance. eWheels recommends that you only use ramps which have a roughened surface to prevent slipping. Never drive in a transverse direction across an incline or turn sharply on an incline. Never drive in a reverse direction down an incline. Because the capability of your scooter to climb an incline or descend a decline depends on a number of factors, such as the scooter's specifications, your size and weight, the quality of the surface, and your personal setup of the scooter, eWheels does not guarantee the scooter's safety on a specific angle of incline or decline. However, eWheels does not recommend you use your scooter on inclines or declines greater than 10 degrees, while making no guarantees of performance and safety on angles less than 10 degrees.

### **General Operation – Cornering**

Always reduce your speed when making sharp turns. Always control your speed when cornering. As with any vehicle, maneuvering a corner at a high speed increases the risk of tipping the scooter. You should maneuver at a speed which is reasonable for the scooter, its specifications and conditions, your size and weight, your angle of approach, the type of turn, and the surface conditions.

### **General Operation – Influences**

Do not operate the scooter while under the influence of alcohol, drugs, or other medications which may impair your ability to operate a vehicle. The scooter is heavy and can reach significant speeds, but even at low speeds it is dangerous to operate under the influence of alcohol, drugs, or other medications which may alter or impair your coordination, reaction time, reflexes, and other capabilities.

### **General Operation – Ingress and Egress**

Exercise care when moving onto your scooter. Ensure the scooter is braked on level ground and the switch is in the off position. Brace yourself against a sturdy piece of furniture, or use a cane or other walking assistive equipment. Use your upper body to assist your legs in lowering you onto the scooter seat. Move downwardly slowly. Apply

and buckle the safety belt. Sit for a few minutes before operating the scooter. Also exercise care when moving off of your scooter. Ensure the scooter is braked on level ground and the switch is in the off position. Unbuckle the safety belt. Getting up quickly or the wrong way could lead to injury. Look around for a sturdy piece of furniture, or use a cane or other walking assistive equipment. Use your upper body to assist your legs in lifting you. Lift slowly and pause for a few moments if you feel unsteady. Stand for a few minutes before moving further.

### **Regular Maintenance**

Always check your scooter for normal operation, loose parts, and defects before operating. If you find a problem, have it repaired before operating.

Keep your scooter clean and dry. Do not use a high-pressure water sprayer to clean the scooter. If you wash your scooter, use a damp sponge or cloth, and dry the scooter thoroughly before operating. Do not immerse any components in water.

Always check your scooter for wear or damage to the tires before operating.

Keep tires inflated to their recommended tire pressure at all times. Regularly check tires for wear, cracks, nails, or other damage. Keep tires clean and replace them when damaged. Failure to maintain the tires at the recommended tire pressure will cause premature wear, and failure to maintain the tires could lead to damage or personal injury.

### **Use Within a Motor Vehicle**

Do not sit in or operate your scooter in a motor vehicle such as a train, bus, or large van. Stow or rack your scooter according to the motor vehicle's guidelines before entering or when entering the motor vehicle. Never sit in your scooter while it is on or in a motor vehicle which is operating or in motion.

### **Batteries**

Do not use automotive batteries with your scooter. Always charge your scooter's batteries in a well-ventilated area. eWheels recommends that you periodically charge your batteries, such as once a month, when your scooter is not in regular use. Ensure the switch is in the off position when the batteries are charged. Ensure that the power plug is inserted and plugged firmly into the battery during charging. Do not use an extension cord while charging the batteries. Do not use a battery which is cracked, leaking, or otherwise damaged. Do not use your scooter if the battery is cracked, leaking, or otherwise damaged. Keep tools and other metal elements away from the contact terminals of the batteries. Remove the batteries when transporting your scooter.

### **Modifications to the Scooter**

Do not disassemble or modify your scooter on your own. Do not remove or disable any element or feature of your scooter. Do not modify the programmable controller governing the scooter's electric, electronic, and electro-mechanical operations. While there are a wide range of after-market products available to modify and alter scooters, some may make your scooter more dangerous to operate or may impair your ability to operate the scooter safely. eWheels makes no claim or warranty as to the safety, effectiveness, and operability of any

aftermarket product added to your scooter, or as to any modification you make or have made to your scooter, which are not performed by eWheels or eWheels approved vendors. eWheels is not responsible for damage to the scooter or personal injury caused by disassembly, modification, or other alteration of your scooter.

## **Table of Contents**

**Page 7** - Feature Guide

**Page 8** - Technical Specifications

**Page 9-11** - Operation of Scooter

**Page 12-13** - Charging and Battery Information

**Page 13** - Ramps and Curbs

**Page 14** - General

**Page 14** - Use While Under Influence

**Page 15-16** - Safety Requirements

**Page 17-18** – Warranty





## Technical Specifications

|                         |   |
|-------------------------|---|
| Model:                  | EW-46   |
| Weight Capacity:        | 400 LBS   |
| Speed:                  | Up to 13 MPH  |
| Distance:               | Up to 35 miles per charge (distance varies on terrain, riders weight, road surface, etc.) |
| Front Seat: Type:       | Adjustable Comfort Seat With Headrest   |
| Front seat: Size:       | 18" x 18" x 28" (LxWxH)   |
| Turn Radius:            | 73"   |
| Controller Type:        | BLDC Controller   |
| Swivel Seat:            | N/A   |
| Steering Height:        | 42" From Floor  |
| Recommended Tire PSI:   | 32 – 40 PSI   |
| Power:                  | Electric 48 volts   |
| Motor Wattage:          | 500 Watts   |
| Motor Type:             | Brushless Motor   |
| Amps:                   | (4) 20 AH Batteries   |
| Volts:                  | 48 Volts  |
| Dimensions:             | 63" x 28" x 42" (LxWxH)   |
| Floor Clearance:        | 4.5"  |
| Rear Basket:            | 10" x 20" x 11" (LxWxH)   |
| Batteries:              | (4) 12 Volt, 20 AH, Deep Cycle, Maintenance Free, SLA                                     |
| Forward/Reverse switch: | Yes   |
| LED Lighting Package:   | LED Front Fender Reflectors   |
| Front Tire Size:        | 16"   |
| Rear Tire Size:         | 16"   |
| Charger:                | 48 Volt Smart Charger   |
| Throttle Type:          | Variable Twist Throttle   |
| Climbing Angle:         | Up To 12 Degrees  |
| Braking System:         | Electromagnetic Brakes  |
| Folded Height:          | N/A   |
| Headlight:              | Headlight With High and Low Beam  |
| Rear lights:            | Yes, Running Lights   |
| Electric Horn:          | Yes   |
| Scooter Weight:         | 260 LBS   |
| Battery Indicator:      | Yes   |
| Front Suspension:       | Two Front Suspension Springs  |
| Rear Suspension:        | Two Rear Suspension Springs   |
| Reflectors:             | Yes   |
| Warranty:               | 3 Year Limited Warranty   |

## Operation of Scooter

### 1. Turning on The Scooter

Insert key into ignition and turn clockwise to turn the scooter on. The battery indicator bars will display the current charge level when on. Turn the key counterclockwise to power off when stopped.



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### 2. Battery Power Indicator Lights

The battery power indicator bars will light up when turned on. The battery indicator bars will only be displayed when the scooter is turned on. The bars represent the scooter's current charge level.



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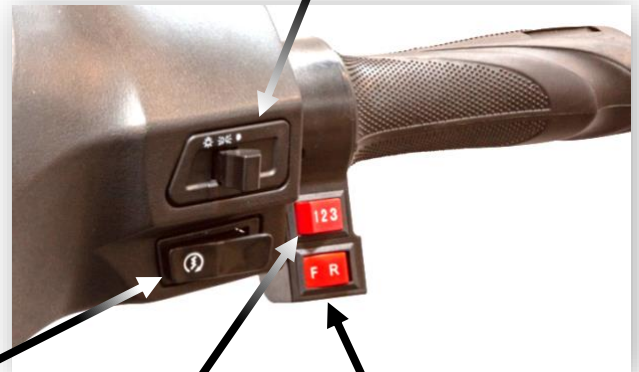
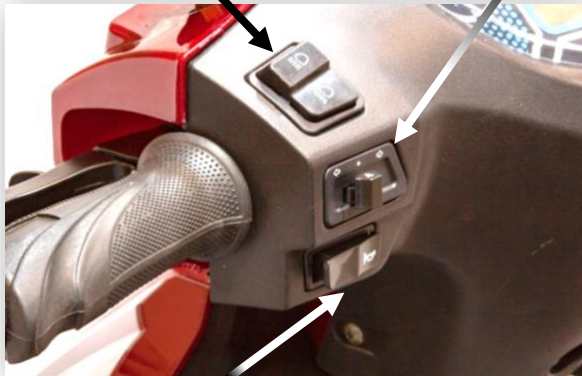
### 3. Tiller Controls

See below for all tiller functions labeled below. Status lights on the top of the tiller will illuminate or flash when the feature is activated.

High/Low Headlight Button

Turn Signal Switch

Lights Switch



Horn Button #1

Horn Button #2

Speed Selector Switch

Forward/Reverse Button

### 4. Circuit Breaker

The blue circuit breaker switch underneath the seat must be turned on to operate the scooter, and must remain on while charging.

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### 5. Emergency Brake Tab

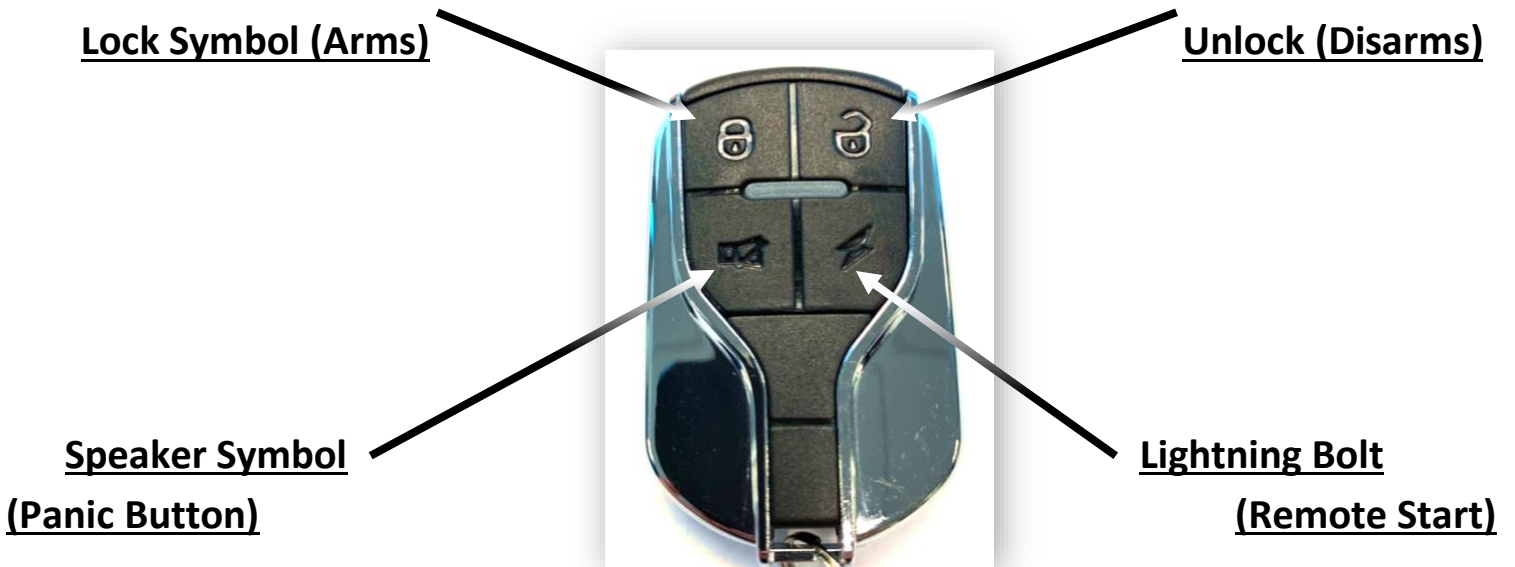
The emergency brake is located on the brake handle. The tab holds tension in the brake lines to keep the unit stationary while not in use. Activate by depressing towards the brake handle, while squeezing the brake handle. The tab will click inwards and active once the brake handle is pulled approximately halfway. Squeeze the brake handle to deactivate.



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### 6. Alarm System Key Fob

There is a key fob for the alarm system attached to both keys. See the graph below for the function of each button on the key fob (Remote start is turning on the ignition without having to use the key).



## **Charging Instructions:**

The smart charger included with your scooter will shut off its high current mode when the scooter is fully charged. When the light on the charger is red, the scooter is still charging. When the light turns green, this means the scooter is fully charged. Once fully charged, unplug within two hours to avoid overcharging.

The charging time varies depending on how charged the batteries are. If almost empty, the charge time may take up to 8 hours. If the red light stays on for more than 8 hours, unplug the charger. Do not exceed 8 hours charge time.

## **Batteries and Battery Maintenance:**

Only use the recommend batteries for your scooter. Do not use lithium-ion batteries. The batteries can be charged as needed without causing damage. You can wait until low or charge right after a short ride. Avoid leaving on the charger for an extended period to avoid potential damage.

Specification of the battery that we recommend:

Type: (4) 12 volt, 20 AH, Deep Cycle, Maintenance Free, Sealed Lead Acid

Note:

- Do not use automotive starter batteries. They are not designed to handle long deep discharge and are unsafe for use in your scooter.
- The useful life of a battery is quite often a reflection of the care it receives.
- Always charge the batteries in a well-ventilated area.
- The charger is intended for indoor use only.
- Replace all batteries at the same time if weak.
- Recharge the scooter at least once every month when not in use to avoid deterioration of the batteries.

**Ramps and Curbs:**

1. Check that the ramp surface is roughened to prevent slipping. Never drive across a slope or turn sharply on a slope.
2. When driving up curbs, always check the height of the curb to ensure that it does not exceed 4" height.
3. Always go forward up ramps and curbs.
4. Avoid stopping completely when going over small objects or obstructions.

## **General:**

1. Always keep your feet on the scooter while riding.
2. Do not exceed the weight capacity of 400 LBS.
3. Do not attempt to lift or move the scooter by any of its removable parts. Personal injury and damage to the scooter may result.
4. Never try to use your scooter beyond its limitations as described in the manual.
5. Do not connect any electrical or mechanical device to the scooter. Failure to obey this instruction may result in injury and will void the warranty.
6. Always comply with local laws and regulations.

## **Use While Under the Influence of Medication or Alcohol:**

1. Check with your physician if you are taking any medication that may affect your ability to operate your scooter safely.
2. Do not operate your scooter while you are under the influence of alcohol as this may impair your ability to operate your scooter in a safe manner.

## **Safety Requirements:**

### Driving Surface

The EW-46 has the best stability and performs the best under the normal driving conditions (dry, level ground with concrete or asphalt). Extra care must be taken when riding on other surfaces (grass, gravel, etc.).

DO NOT exceed the specified climbing angle. Do not operate the scooter before you have fully read and understood the manual.

- Always turn the scooter off before getting on or off the scooter.
- Avoid driving in loose gravel, covered soil and sandstone.
- Do not drive the scooter in unknown road conditions.
- The scooter can ride over small obstacles within a certain height, but you must minimize the speed and slowly drive over the obstacle.
- Do not operate the scooter under the influence of drugs or alcohol.
- Do not park on steep slopes.
- Changing the initial setting of refitting your scooter is forbidden.
- Use caution when operating near busy streets, markets or shopping centers. Do not operate in unsafe areas.
- Consult local authorities about the traffic rules for scooters in your city.



- Hold the handlebar with both hands and put both feet on the floorboard while driving the scooter.
- Never sit on the scooter in a moving vehicle.
- Do not drive on uneven slopes or uneven ground; be careful when passing over slopes.
- Never take the scooter on an escalator.
- Do not operate on frozen, slippery, or salty roads.
- Never let the batteries freeze; do not charge when frozen.
- Do not let the batteries ever go completely dead. When low, do not let sit for an extended period or damage may occur.
- Always use required safety equipment while operating.
- Do not modify or change the electrical system and frame. Doing so will void the warranty.

## **Warranty:**

### **Three Year Limited Warranty**

Three (3) years from the date of purchase on all structural frame components; Seat post and frame.

### **One Year Limited Warranty**

One (1) Year from the date of purchase, if any part or electronic component of the scooter is found upon examination to be defective in material and/or workmanship, it will be replaced at E-Wheels' discretion.

The batteries are warranted by E-Wheels for 2 months after the purchase of the Unit.

Labor and service calls are NOT included: The purchaser is responsible for the delivery to the authorized repair facility. Satisfactory proof of purchase is always required for warranty service. Please contact the dealer/company from whom you purchased your E-Wheels product.

**SHIPPING - DOMESTIC:** Parts will be provided under warranty at no charge. All warranty items will be shipped via UPS Ground. Shipping fees will be at the expense of the purchaser.

**SHIPPING - INTERNATIONAL:** Parts will be provided under warranty at no charge, but shipping to any offshore and/or international location will be the responsibility of the purchaser. International and offshore end-users must contact E-Wheels directly to initiate the warranty process.

### **ONE-YEAR WARRANTY EXCEPTIONS**

**MOTOR:** In cases where there is an increase in the operational noise level, the warranty does not apply.

(An increase in operational noise level usually occurs due to excessive strain on the scooter).

**SERVICE:** Warranty service can be performed by E-Wheels or by an authorized service facility. Do not return faulty parts to E-Wheels without prior consent. A request for a Return Authorization is required prior to returning items. All transportation costs and shipping damage incurred while submitting units and/or parts for repair or replacement are the responsibility of the original purchaser.

**WARRANTY EXCLUSIONS:** This warranty is only given to the original purchaser of the Scooter.

This Warranty excludes:

Battery Charger: The charger carries a 30 day warranty.

Consumable items which may need replacing due to normal wear and tear (tires, tubes, belts, bulbs, upholstery and seating, throttle, brakes, motor brushes, fuses, plastic shrouds and footrest covers)

Damaged caused by: battery fluid spillage or leakage, abuse, misuse, accident, negligence, improper operation, excessive loading, maintenance, storage, commercial use, or use other than normal.

Used other than for the purpose of the purchaser's mobility.

Repairs and/or modifications made to any part of the scooter without specific and prior consent from E-Wheels.

Labor, service calls, shipping (including warranty claims), and other charges incurred for repair of the product are not approved by E-Wheels unless authorized.

Batteries: Batteries carry a limited warranty which is subject to a stringent wear and tear clause. Any battery faults due to a defect in the original manufacture will normally become obvious within the first two months of use. Any gradual deterioration in performance after this period is normally associated with fair wear and tear, misuse or accidental damage and as such is not covered by the manufacturer's warranty. There is no other express warranty.

Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to one (1) year from the date of the original purchase and to the extent permitted by law. Any and all implied warranties are excluded. This is the exclusive remedy. Liabilities for consequential damages under any and all warranties are excluded