



**Razor®**

# RAVEN™

## FOLDING ELECTRIC SCOOTER



**⚠ NOTE:** The unit must be traveling at least 3 mph (5 km/h) before motor will engage.  
Kick to start to at least 3 mph (5 km/h) while applying the throttle to engage motor.

## OWNER'S MANUAL

**Read and understand this entire manual before allowing child to use this product! For assistance contact Razor.  
DO NOT RETURN TO STORE.**

**NOTE:** Manual illustrations are for demonstration purposes only.  
Illustrations may not reflect exact appearance of actual product.  
Specifications subject to change without notice.

**Please have your product along with the 19 character product I.D. code with you  
before contacting Razor for warranty assistance and/or replacement parts.**

**Product I.D. Code:** \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_



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## SAFETY WARNINGS

**⚠WARNING:** Riding an electric scooter does present potential risks and caution is required. Like any riding product, an electric scooter has inherent hazards associated with its use (for example, falling off or riding it into a hazardous situation). Like any riding product, electric scooters can and are intended to move and it is therefore, of course, possible to lose control or otherwise get into dangerous situations. Both children, and adults responsible for supervising them, must recognize that if such things occur, a rider can be seriously injured or die even when using safety equipment and other precautions. RIDE AT YOUR OWN RISK AND USE COMMON SENSE.

**⚠WARNING: PARENTAL AND ADULT RESPONSIBILITY AND SUPERVISION IS NECESSARY:** Because products, like electric scooters, can and do present potential hazards plainly associated with their use, it is well recognized that THE NEED FOR EXERCISE OF PARENTAL RESPONSIBILITY IN SELECTING RIDING PRODUCTS APPROPRIATE TO THE AGE OF A CHILD, OR PARENTAL SUPERVISION IN SITUATIONS IN WHICH CHILDREN OF VARIOUS AGES MAY HAVE ACCESS TO THE SAME RIDING PRODUCTS, IS IMPORTANT. Not every product is appropriate for every age or size of child, and different age recommendations are found within this category of product which are intended to reflect the nature of the hazards and the expected mental or physical ability, or both, of a child to cope with the hazards.

**The recommended minimum rider age is 13 and older.** Any rider unable to fit comfortably on the scooter should not attempt to ride it. A parent's decision to allow his or her child to ride this product should be based on the child's maturity, skill and ability to follow rules.

**Keep this product away from small children and remember that it is intended for use only by persons who are, at a minimum, completely comfortable and competent while operating the scooter.**

Persons with any mental or physical conditions that may make them susceptible to injury, impair their physical dexterity or mental capabilities to recognize, understand, and follow safety instructions, and to be able to understand the hazards inherent in scooter use, should not use or be permitted to use products inappropriate for their abilities. Persons with heart conditions, head, back or neck ailments (or prior surgeries to these areas of the body), or pregnant women, should be cautioned not to operate such products.

**DO NOT EXCEED THE WEIGHT LIMIT OF 155 lb (70 kg) – including backpacks and other items that might be carried. Exceeding the weight limit could injure the rider and damage the electric scooter.**

Razor recommends that children under the age of 13 not be permitted to use this product. This recommendation is based not just on age or weight or height; it reflects consideration of expected maturity and skills as well as physical size. The recommended rider age of 13 years or older is only an estimate and can be affected by the rider's size, weight, or skills – not every rider 13 years old or older will be suited to the product. Certainly, any rider unable to fit comfortably on the Raven should not attempt to ride it, but a parent's decision to allow his or her child to ride this product should be based on the child's maturity, skill, and ability to follow rules. Razor emphasizes that adults are strongly advised not to disregard Razor's recommendations or permit younger children to ride the Raven.

### CHECK AND MAINTAIN SCOOTER CONDITIONS

Before use, check to confirm that covers and guards are in place and in serviceable condition. Check that the brakes are functioning properly, and that the front tire is inflated properly and has sufficient tread remaining. The scooter should be maintained and repaired in accordance with the manufacturer's specifications, using only the manufacturer's authorized replacement parts, and should not be modified from the manufacturer's original design and configuration.

### ACCEPTABLE RIDING PRACTICES AND CONDITIONS

**Always check and obey any local laws or regulations which may affect the locations where the electric scooter may be used. Keep safely away from cars and motor vehicle traffic at all times. Only use where allowed and with caution.**

Do not activate the throttle unless you are on the scooter and in a safe, outdoor environment suitable for riding. **The electric scooter must be moving at least 3 mph (5 km/h) before the motor will engage.** Once the throttle is activated the Raven will move forward.

The normal powered top speed of this scooter will be approximately 12 mph (19 km/h), which can be affected by conditions, such as rider weight, inclines, tire inflation and battery charge level. Avoid excessive speeds that can be associated with downhill rides.

Maintain a hold on the handlebars at all times. Do not touch the brakes or motor on your scooter when in use or immediately after riding, as these parts can become very hot.

Ride defensively. Watch out for potential obstacles that could catch your wheel or force you to swerve suddenly or lose control. Be careful to avoid pedestrians, skaters, skateboards, scooters, bikes, children or animals who may enter your path, and respect the rights and property of others.

The electric scooter is intended for use on flat, dry surfaces, such as pavement or level ground, without loose debris, such as sand, leaves, rocks or gravel. Wet, slick, bumpy, uneven or rough surfaces may impair traction and contribute to possible accidents. Do not ride your scooter in mud, ice, puddles or water. Avoid sharp bumps, drainage grates, and sudden surface changes.

Do not attempt to do stunts or tricks on your electric scooter. The scooter is not made to withstand abuse from misuse, such as jumping, curb grinding or any other type of stunts. Racing, stunt riding, or other maneuvers also enhance risk of loss of control, or may cause uncontrolled rider actions or reactions.

Never allow more than one person at a time to ride the product.

Riding at night or when visibility is limited increases risks of accident or injury. Should the Raven scooter be ridden in such conditions, use of lights and additional measures to increase rider visibility and scooter conspicuity are advised.

Never use near steps or swimming pools.

The Raven electric scooter can operate more quietly than other motorized products may operate. Use care when in the vicinity of pedestrians or others who may have difficulty hearing your approach. Use handbell (not included) to sound warnings when appropriate.

**Need Help?** Visit our website for replacement parts, product support, a list of authorized service centers in the US and customer service contact information at [www.razor.com](http://www.razor.com). Please have the product I.D. code (located on the white label of your product) available for better assistance. Additional Customer Service contact information is listed at the back of this manual.

# SAFETY WARNINGS

Do not allow hands, feet, hair, body parts, clothing, or similar articles to come in contact with moving parts or wheels while the motor is engaged.

Do not touch hot brake or electric motor when in use or immediately after riding.

Never use headphones, a cell phone or text when riding.

Never hitch a ride with a vehicle.

Do not ride your scooter in wet or icy weather and never immerse the scooter in water, as the electrical and drive components could be damaged by water or create other possibly unsafe conditions. Never risk damaging surfaces, such as carpet or flooring, by use of an electric scooter indoors.

## PROPER RIDING ATTIRE

Always wear proper protective equipment, such as an approved safety helmet (with chin strap securely buckled), elbow pads and kneepads. A helmet may be legally required by local law or regulation in your area. A long-sleeved shirt, long pants, and gloves are recommended. Always wear athletic shoes (lace-up shoes with rubber soles) and keep shoelaces tied and out of the way of the wheels, motor and drive system. Never ride barefooted or in sandals.

## USING THE CHARGER

The charger supplied with the electric scooter should be regularly examined for damage to the cord, plug, enclosure and other parts. In the event of such damage, the scooter must not be charged until the charger has been repaired or replaced.

Use only with the recommended charger.

Use caution when charging.

The charger is not a toy. Charger should be operated by an adult.

Do not operate charger near flammable materials.

Unplug charger and disconnect from scooter when not in use.

Always disconnect from the charger prior to wiping down and cleaning your scooter with damp cloth.

**FAILURE TO USE COMMON SENSE AND HEED THE ABOVE WARNINGS FURTHER INCREASES RISK OF SERIOUS INJURY. USE AT YOUR OWN RISK AND WITH APPROPRIATE AND SERIOUS ATTENTION TO SAFE OPERATION. USE CAUTION.**



# BEFORE YOU BEGIN

Remove contents from box. Remove the separators that protect the components from damage during shipping. Inspect the contents of the box for scratches in the paint, dents or kinked cables that may have occurred during shipping. Because the scooter was partially assembled and packed at the factory, there should not be any problems, even if the box has a few scars or dents.

**MAKE SURE POWER BUTTON IS TURNED "OFF" BEFORE CONDUCTING ANY ASSEMBLY OR MAINTENANCE PROCEDURES.**

## Estimated Assembly and Set-Up Time

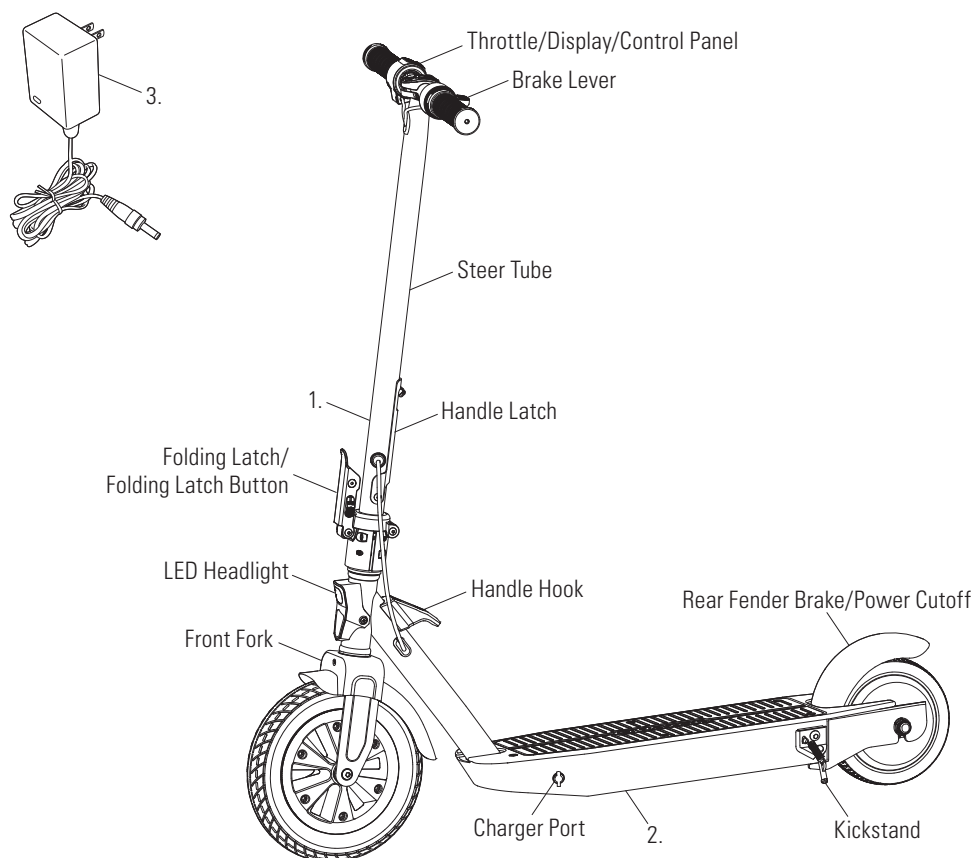
Razor recommends assembly by an adult.

Allow up to 15 minutes for assembly, not including initial charge time.

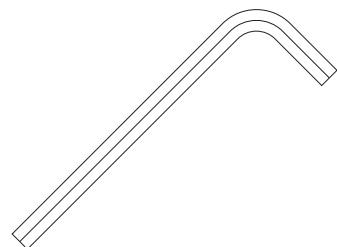
Allow up to 5 hours for charge (**see page 5 for charging information**).

Charger

(Note: Charger design may vary from one shown)



## Required Tool



5 mm Allen Wrench  
(included)

**WARNING:** DO NOT USE NON-RAZOR PRODUCTS WITH YOUR RAZOR ELECTRIC SCOOTER. The scooter has been built to certain Razor design specifications. The original equipment supplied at the time of sale was selected on the basis of its compatibility with the frame, fork and all other parts. Certain aftermarket products may not be compatible and will void the warranty.

**Note: Electric scooter must be moving at least 3 mph (5 km/h) while applying throttle to engage motor.**

### Product ID Locations:

(See locations to the left)

1. Handlebar Stem
2. Underneath Battery Tray
3. Charger
4. UPC side of box (not shown)

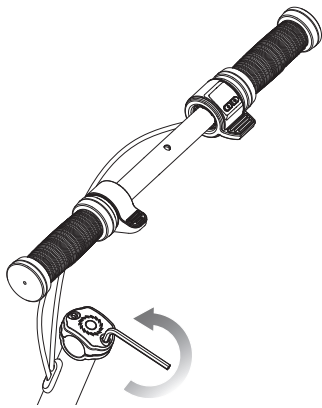
### Plastic Bag Contents:

- Charger
- Tool
- Owner's Manual

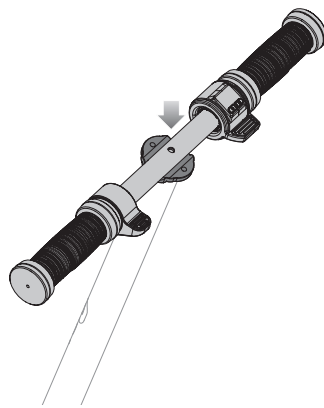
# ASSEMBLY AND SET-UP

## ❑ Attaching the Handlebars

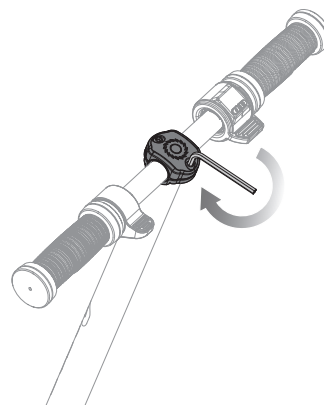
**Required Tool:** 5 mm Allen Wrench (included)



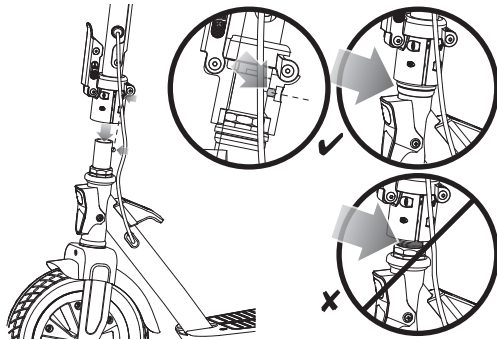
**1** Using a 5 mm Allen wrench, remove the two (2) screws from the top of the clamp. Remove the top of the clamp. Set aside screws and the top of the clamp.



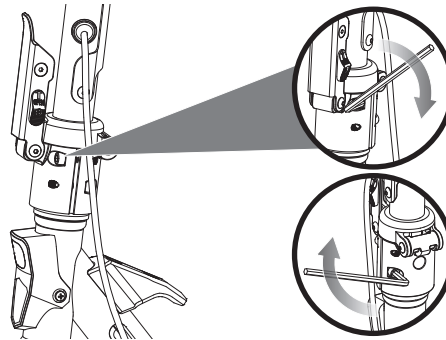
**2** Place the handlebar onto the bottom of the clamp.



**3** Replace the top of the clamp. Tighten the two (2) screws using 5 mm Allen wrench.



**4** Depress the spring button while sliding the T-bar assembly over the steer tube of the fork. Align the T-bar with the spring button so the button reengages through the hole and properly locks the T-bar into position.

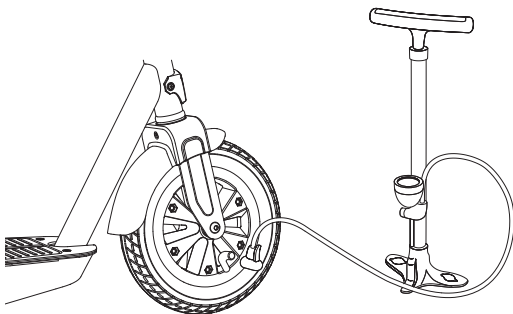


**5** With the front wheel pointed straight ahead and the steer tube square to the front wheel, tighten bolt on the collar clamp as shown with a 5 mm Allen wrench. Tighten securely.

## ❑ Inflating the Front Tire

The front tire is inflated when shipped, but it invariably may lose some pressure between the point of manufacturing and your purchase. **Always inflate tire to the correct PSI before first time use.**

Lower air pressure can result in a shorter ride time. Periodically check front tire. Reinflate when needed.



Remove the valve cap and using a bicycle style tire pump equipped for a Schrader-type valve, inflate the front tire to the correct PSI indicated on the sidewall of the tire. Replace the valve cap.

**⚠WARNING:** Do not attempt to thread the stem into the front fork thread.

**⚠WARNING:** Failure to properly tighten the collar clamp may allow the handlebars to dislodge while riding and may cause you to lose control and fall. When correctly tightened, the handlebars will not rotate out of alignment with the front wheel under normal circumstances.

**⚠WARNING:** Make sure that the cables and/or wires are not pinched or damaged when installing handlebars.

**⚠WARNING:** Do not use the electric scooter for the first time until you have inflated the front tire to the correct PSI. Failure to do so may damage your electric scooter and void your warranty.

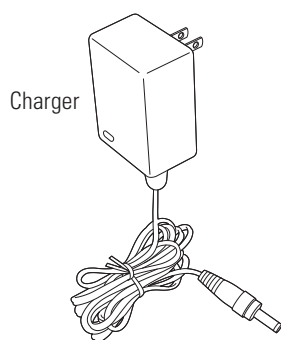
**⚠WARNING:** Do not overinflate, as this could damage tire or wheel.

**Note:** The pressurized air supplies found at gasoline stations are designed to inflate high-volume automobile tires. If you decide to use such an air supply to inflate your electric scooter tire, first make sure the pressure gauge is working, then use very short bursts to inflate to the correct PSI. If you inadvertently overinflate the tire, release the excess pressure immediately.

# CHARGING THE BATTERY

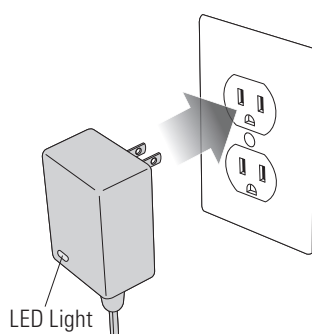
**Your electric scooter may not have a fully charged battery; therefore you must charge the battery prior to use. Be sure to charge the battery in a clean, dry location away from direct sunlight, flames or sparks.**

- Initial charge time: 5 hours.
- Recharge time: up to 5 hours, even if the light turns green.
- Always charge the battery immediately after riding.
- Fully charge battery before storing for extended periods of time.
- Unplug charger from the wall outlet when not in use.
- Failure to recharge battery periodically may result in a battery that will not accept a charge.
- Make sure the power button is turned **OFF** when product is not in use. If the power button is left on for an extended period of time, the battery may reach a stage at which it will no longer hold a charge.
- Run time: Up to 50 minutes of continuous ride time. Run time may vary depending on riding conditions, rider weight, climate, and/or proper maintenance.
- Constant starting and stopping may shorten ride time.
- Battery life can vary depending on proper maintenance and usage of the product.
- Do not charge at or below 32°F (0°C).



Charger

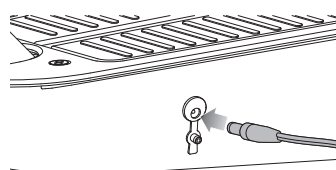
**Note:** Charger design may vary from one shown



LED Light

**1** Plug the charger plug into wall outlet. The light on the charger should be green.

**Note:** If green light (LED) does not turn on, try a different outlet.



**2** Note: Make sure power button is in the **OFF** position. Plug the charger into the charger port. The light on the charger should turn red during charging. The light will turn green again when charging is complete.

**Note:** This product contains a lithium ion battery. If the battery overheats or leaks, there is a strange odor or noise emitting from the battery, or the battery changes size, shape, or color stop using immediately and unplug it if it is being charged. If safe to do so, move the device away from anything that can catch fire and call 911. Contact Razor customer support for replacement battery. Always replace with a battery recommended by Razor. <https://razor.com/support/>

**⚠WARNING:** Use **ONLY** with the recommended charger. Batteries are only to be charged under adult supervision. The charger is not a toy. Always disconnect the charger before wiping down and/or cleaning the electric scooter with a damp cloth.

The charger supplied with the electric scooter should be regularly examined for damage to the cord, plug, enclosure and other parts. In the event of such damage, the electric scooter must not be charged until it has been repaired or replaced.

Chargers have built-in overcharge protection to prevent battery from being overcharged.

**Note:** If the charger gets warm during regular use, this is a normal response and is no cause for concern. If your charger does not get warm during use, it does not mean that it is not working properly.

Wall outlet - Green (stand by) Wall outlet and unit - Red (charging) Wall outlet and unit - Green (charged)

**Note:** Continue charging unit even if light turns green prior to 5 hours.

**⚠WARNING:** Battery charge can deplete over time. Periodically recharge the battery when not in use.

Model	Voltage (Nominal) Vdc	Capacity (Nominal) Ah	Charge Temperature Range	Operating Temperature Range
Raven	21.6	7.5	0° to 40°C 32° to 104°F	-10° to 40°C 14° to 104°F

# PRE-RIDE CHECKLIST

## **Light**

Check the headlight for proper function. When you activate the lights (reference “How to Ride” on page 7 of this manual), the headlight should illuminate.

## **Brake**

Check the brake options for proper function. When you press the electronic brake (on handlebar) or step on the rear-fender brake, the brake should provide positive braking action. When you apply the brake with the throttle on/engaged, the brake cut-off switch should cut power to the motor.

## **Wheels**

Periodically inspect the wheels for excessive wear.

## **Tire**

Periodically inspect the tire for excess wear and replace as needed. Regularly check the front tire pressure and inflate as needed.

## **Frame, Fork and Handlebars**

Check for cracks or broken connections. Although broken frames are rare, it is possible for an aggressive rider to run into a curb or object, and wreck and bend or break a frame. Get in the habit of inspecting your scooter on a regular basis.

## **Hardware/Loose Parts**

Before every ride, check all parts, such as nuts, bolts, cables, fasteners, etc., to ensure they are secure and assembled correctly. There should not be any unusual rattles or sounds from loose parts or broken components. If the product is damaged, do not ride. **Reference “Safety Warnings” on pages 1 and 2 of this manual.**

## **Safety Gear**

Always wear proper protective gear, such as an approved safety helmet. Elbow pads and kneepads are recommended. Always wear athletic shoes (lace-up shoes with rubber soles) and keep shoelaces tied and out of the way of the wheels, motor and drive system. **NEVER RIDE BAREFOOTED OR IN SANDALS.**

## **Laws and Regulations**

Always check and obey any local laws or regulations.

## **Insurance**

Do not assume that your existing insurance policies necessarily provide coverage for product use. Check with your insurance company for information regarding insurance.

## **Storage**

Prolonged exposure to UV rays, rain and the elements may damage the enclosure materials, store indoors when not in use.

# USAGE

## ❑ How to Ride

Do not activate the thumb throttle unless you are on the Raven and in a safe, outdoor environment suitable for riding.

Put kickstand up.

Press the power button **(A)**, the LEDs on the battery display will light up. Press and hold the power button **(A)** for two (2) seconds again to turn the unit off.

The default speed is set as the Sport speed at the factory.

**Changing Speed Modes:** Press the power button **(A)** twice consecutively to switch between Sport, Normal and Eco speed modes. (**S** for high speed, **N** for medium speed and **E** for low speed.)

**Sport Speed Mode:** Up to 12 mph (19 km/h)

**Normal Speed Mode:** Up to 10 mph (16 km/h)

**Eco Speed Mode:** Up to 7 mph (11.3 km/h)

**Activating Cruise Mode:** Press the power button **(A)** four times to turn on the cruise control function. The speed mode icon on the display will flash **slowly** when cruise mode is active.

**Setting the Cruise Speed:** To set speed when riding, keep your desired speed constant for 5 seconds, the speed mode icon with flash **rapidly** when the speed is set.

**Canceling Cruise Speed:** To cancel speed setting, simply operate the electronic brake, fender brake or press the throttle to cancel the speed setting. You'll now be able to adjust the speed manually using the throttle. Repeat the process to reset the speed.

**Exiting Cruise Mode:** Press the power button four (4) times to exit the cruise control function.

There is no memory function. Each time the scooter is turned on, the rider needs to repeat the same steps to activate the cruise control function.

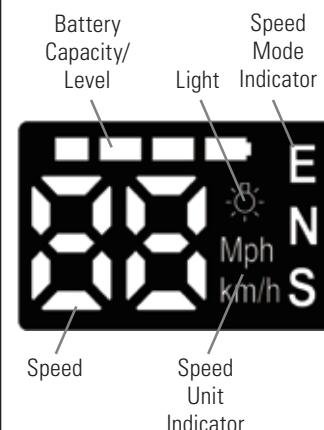
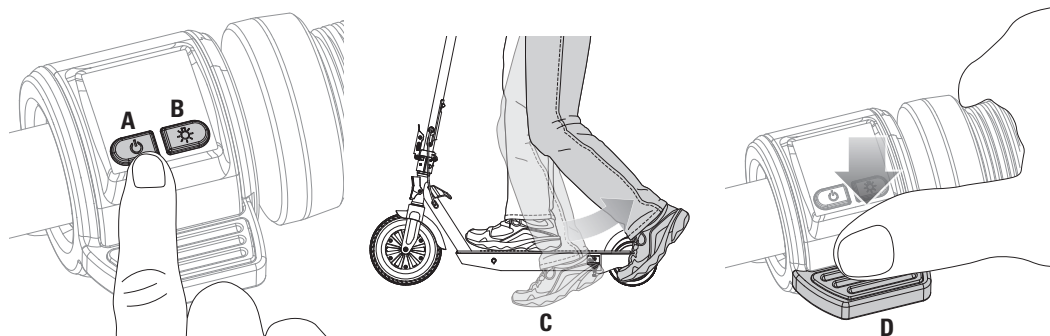
**Headlight:** To activate the headlight the product must be powered **ON**. Press the light button **(B)** once to activate the headlight. To deactivate the headlight, press the light button once again.

**To Start Your Ride:** Place both hands on the handlebars. Kick to start **(C)**, and then press down on the thumb throttle **(D)** to accelerate. **Note: Electric scooter must be moving at least 3 mph (5 km/h) while engaging throttle to engage motor.**

**Power Down the Scooter:** Press and hold the power button **(A)** for two (2) seconds to turn off the scooter.

**Note: Electric scooter must be moving at least 3 mph (5 km/h) while engaging throttle to engage motor.**

Speed mode will flash slowly when cruise mode is active.



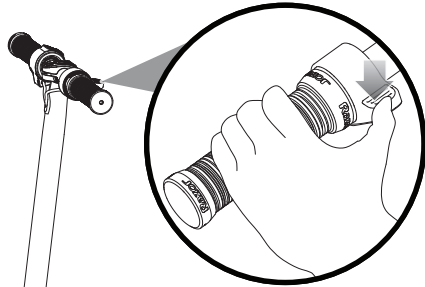
## USAGE

### □ How to Stop

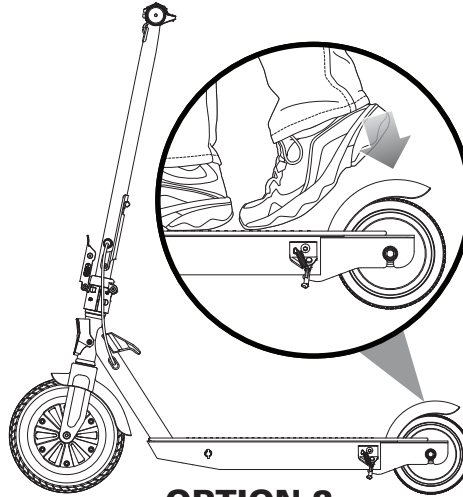
For controlled stops, release the throttle and apply the brake by pressure on the rear-fender brake or electronic brake (on handlebar). Razor recommends that you practice applying the brake options at various speeds and in an open area free from obstructions before riding your scooter around others.

**Option 1** - Press the electronic brake (on handlebar), the power will be interrupted and then product will slow to a stop.

**Option 2** - Step on the rear-fender brake, the power will be interrupted and then product will slow to a stop.



**OPTION 1**



**OPTION 2**

**⚠ WARNING:** The brakes are capable of skidding the rear tire and throwing an unsuspecting rider. Practice in an open area free from obstacles until you are familiar with the brake function. Avoid skidding to a stop as this can cause you to lose control and/or damage the rear tire.

**Note:** As an additional safety feature, the scooter is designed to cut power to the motor when the brakes are applied.

**Note:** Motor will re-engage, (without having to kick to start), if brakes are released and throttle is applied **before** scooter has slowed down to **under 3 mph (5 km/h)**.

**Note:** Practice riding only in wide open areas clear from curbs, parking blocks and other obstacles. Impacting the wheels against any hard surface can damage the wheels. Wheels are not covered under the limited warranty.

## USAGE

### ❑ Changing the Speed Mode

There are three modes for speed. The Raven is set on the Sport (12 mph (19 km/h)) speed setting at the factory. Press power button to scroll through and select the speed mode.



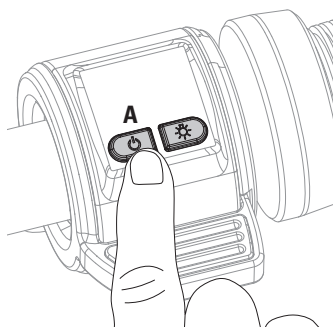
**1** The Eco mode max speed is up to 7 mph (11.3 km/h) as shown by an "E" on the display.



**2** The Normal mode max speed is up to 10 mph (16 km/h) as shown by an "N" on the display.



**3** The Sport mode max speed is up to 12 mph (19 km/h) as shown by an "S" on the display.



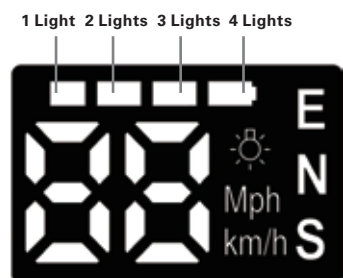
**Note:** The Raven display default setting is in miles per hour (mph). If you would like to change the display setting to kilometers per hour (km/h), press the power button (**A**) three times quickly to select the preferred unit of speed. The set unit of speed will default to miles per hour (mph) each time the Raven is turned **OFF** and back **ON**.

### ❑ Battery Power Level Indicator

**4 Indicator Lights** - Battery is sufficiently charged.

**2-3 Indicator Lights** - Charge product as soon as possible.

**1 Indicator Light** - Stop riding and charge product immediately.

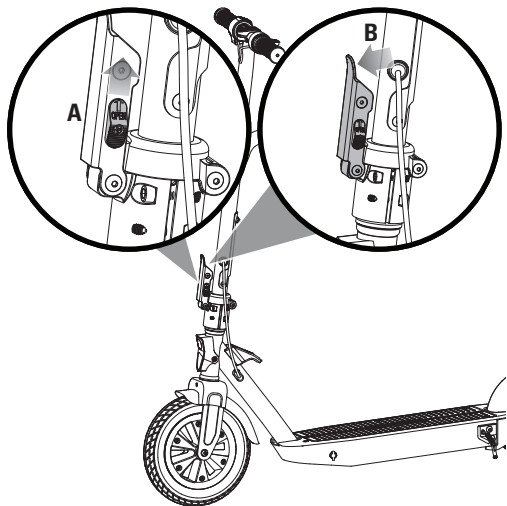


**Need Help?** Visit our website for replacement parts, product support, a list of authorized service centers in the US and customer service contact information at [www.razor.com](http://www.razor.com). Please have the product I.D. code (located on the white label of your product) available for better assistance. Additional Customer Service contact information is listed at the back of this manual.

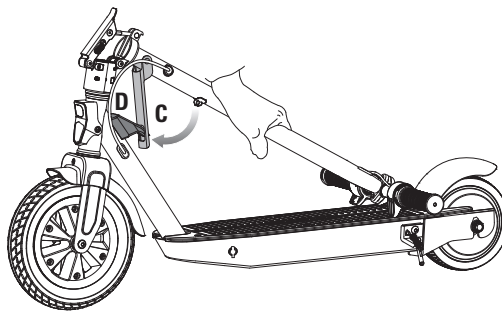


# USAGE

## ❑ Folding Scooter

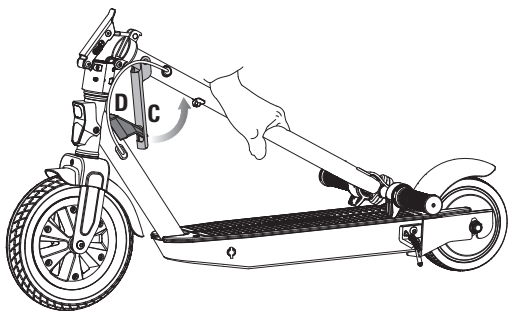


**1** Push the release (A) upwards in the direction of the arrow, while pulling the latch down (B), and fold the T-bar to the body.



**2** To use the T-bar as a carrying handle, deploy the handle latch (C) and engage the handle hook (D) on the frame clip.

## ❑ Unfolding Scooter



**1** Disengage the handle latch (C) from the handle hook (D).

**⚠WARNING:** Keep fingers clear of the pivoting mechanism when folding or unfolding the scooter. Make sure others are standing clear.

**Note:** The Folding Latch will make a clicking sound when it is locked into the Steer Tube properly.



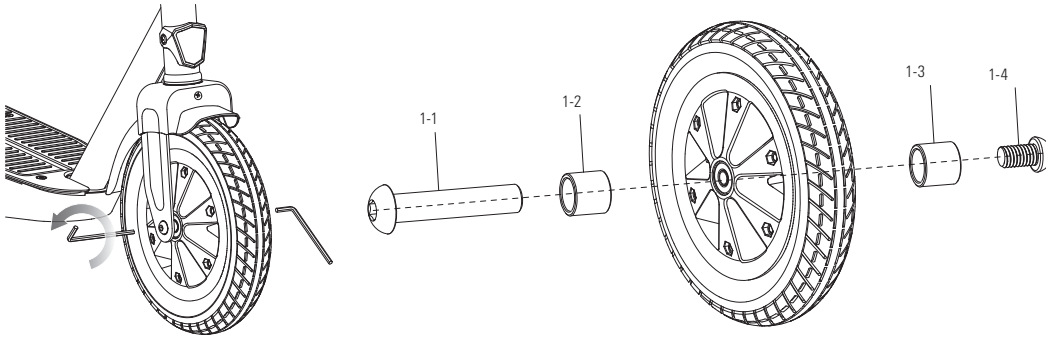
# REPAIR AND MAINTENANCE

**Turn power button "OFF" before beginning repair or maintenance:**

- Read the instructions
- Remove charger plug
- Turn the power button **OFF**
- Secure the product under repair
- Exercise caution around exposed parts
- Contact Razor customer service if unsure about any repair or maintenance
- Repair and maintenance should be performed by an adult only

## □ Front Wheel Replacement

**Required Tools:** Two (2) 5 mm Allen wrenches (not included)



Using two (2) 5 mm Allen wrenches, loosen the axle bolts by turning the wrenches counter clockwise. Remove wheel and install replacement wheel. Note the sequence of the hardware.

**Note:** Front wheel hardware sequence.

### Right Side (Throttle)

- 1-1 Coupling bolt
- 1-2 Spacer

### Fork

- 1-3 Spacer
- 1-4 Bolt

## REPAIR AND MAINTENANCE

**⚠WARNING:** Risk of Fire – no user serviceable parts. Please contact Razor Customer Service for further repair and maintenance support.

### ❑ Cleaning Your Scooter

Wipe with a damp cloth to remove dirt and dust. Do not use industrial cleaners or solvents as they may damage the surfaces. Do not use alcohol, alcohol-based or ammonia-based cleaners as they may damage or dissolve the plastic components or soften the decals or decal adhesive.

### ❑ Battery Care and Disposal

Do not store in freezing or below freezing temperatures. To properly maintain your battery and ensure maximum battery life, carefully read the “Charging the Battery” section on page 5 of this owner’s manual.



CONTAINS LITHIUM-ION BATTERY PACK. BATTERIES MUST BE RECYCLED.

**Disposal:** Your electric scooter uses a lithium-ion battery pack which must be recycled or disposed of in an environmentally safe manner. Do not dispose of a battery pack in a fire. The battery pack may explode.

Do not dispose of a battery pack in your regular household trash. The incineration, land filling or mixing of batteries with household trash is prohibited by law in most areas. Return exhausted batteries to a federal or state approved lithium-ion battery recycler.

### ❑ Charger

The charger supplied with the electric scooter should be regularly examined for damage to the cord, plug, enclosure and other parts and in the event of such damage, the product must not be charged until it has been repaired or replaced.

Use ONLY with the recommended charger.

Not intended for use at elevations greater than 2000 m above sea level.

### ❑ Wheels

Wheels and drive system are subject to normal wear and tear. It is the responsibility of the user to periodically inspect wheels for excess wear and replace hub motor components as required.

### ❑ Repair Centers

For a list of authorized Razor repair centers:

- Check online at [www.razor.com](http://www.razor.com).
- Additional Customer Service contact information is listed on the back of this manual.

### Recycling Lithium-ion

**Batteries:** Lithium-ion batteries are recyclable. You can help preserve our environment by returning your used rechargeable batteries to the collection and recycling location nearest you.



### In the US and Canada only:

For more information regarding recycling of rechargeable batteries, call toll free 1-800-822-8837, or visit <http://www.call2recycle.org>

**Caution:** Do not handle damaged lithium-ion batteries.

**⚠WARNING:** Wheelies and other stunt-type riding reduces your ability to maneuver and control your scooter. Take the necessary precautions, such as wearing appropriate protective gear and practice in an area safe for stunt riding and free from obstructions.

# TROUBLESHOOTING GUIDE

\*Product(s) should be turned **OFF** and fully charged prior to doing any Troubleshooting.

**NOTE:** All troubleshooting steps should be performed by an adult only.

Problem	Possible Cause	Solution
Does not work out of the box	Unit must be traveling at least 3 mph (5 km/h) before motor will engage	Kick to start to at least 3 mph (5 km/h) while pressing down on the thumb throttle to engage motor.
	Undercharged battery	Check lights on charger: Plugged into wall - Green Plugged into wall & unit - Red (charging) Plugged into wall & unit - Green (charging complete) No lights/Blinking lights - Replace Charger
No longer works	No lights on charger	Check power to wall outlet and/or try a different outlet.
	Undercharged battery	Check lights on charger: Plugged into wall - Green Plugged into wall & unit - Red (charging) Plugged into wall & unit - Green (charging complete) No lights/Blinking lights - Replace Charger Charge product - refer to page 5 for charging information.
	Battery will not hold a charge	Call Razor customer service and replace battery.
Short run time/runs slow	Rider's weight	Do not exceed 155 lb (70 kg) maximum weight limit.
	Riding conditions	Use only on flat, dry surfaces. Avoid inclines and areas with heavy debris.
	Battery not fully charged	Charge product - refer to page 5 for charging information. Replace battery.
	Old/damaged battery	Charge battery at least once a month when not in use.

For more troubleshooting tips, a list of available replacement parts or to locate an authorized Service Center in your area, visit our website at [www.razor.com](http://www.razor.com) or call toll free +1 866-467-2967 to speak to a live Customer Service Representative.

**Need Help?** Visit our website for replacement parts, product support, a list of authorized service centers in the US and customer service contact information at [www.razor.com](http://www.razor.com). Please have the product I.D. code (located on the white label of your product) available for better assistance. Additional Customer Service contact information is listed at the back of this manual.

# TROUBLESHOOTING GUIDE

\*Product(s) should be turned **OFF** and fully charged prior to doing any Troubleshooting.

**NOTE:** All troubleshooting steps should be performed by an adult only.

Display Error	Error Explanation	Possible Solution	Relevant Components
E0	Communication error between controller and throttle.	Check the connections between the controller and throttle.	Controller, Throttle
E1	Faulty throttle.	Check throttle connections.	Throttle
E2	Faulty e-brake.	Check connection between e-brake and controller.	E-brake
E3	Controller and motor high temperature protection has been activated.	It may be necessary to wait for the motor and controller to cool down.	Replace the controller.
E4	The controller phase line is faulty.	The MOS transistor of the controller is damaged.	Replace the controller.
E5	Faulty controller.	Check controller connections.	Controller
E6	Low voltage.	Check connection between battery and controller.	Battery, Controller

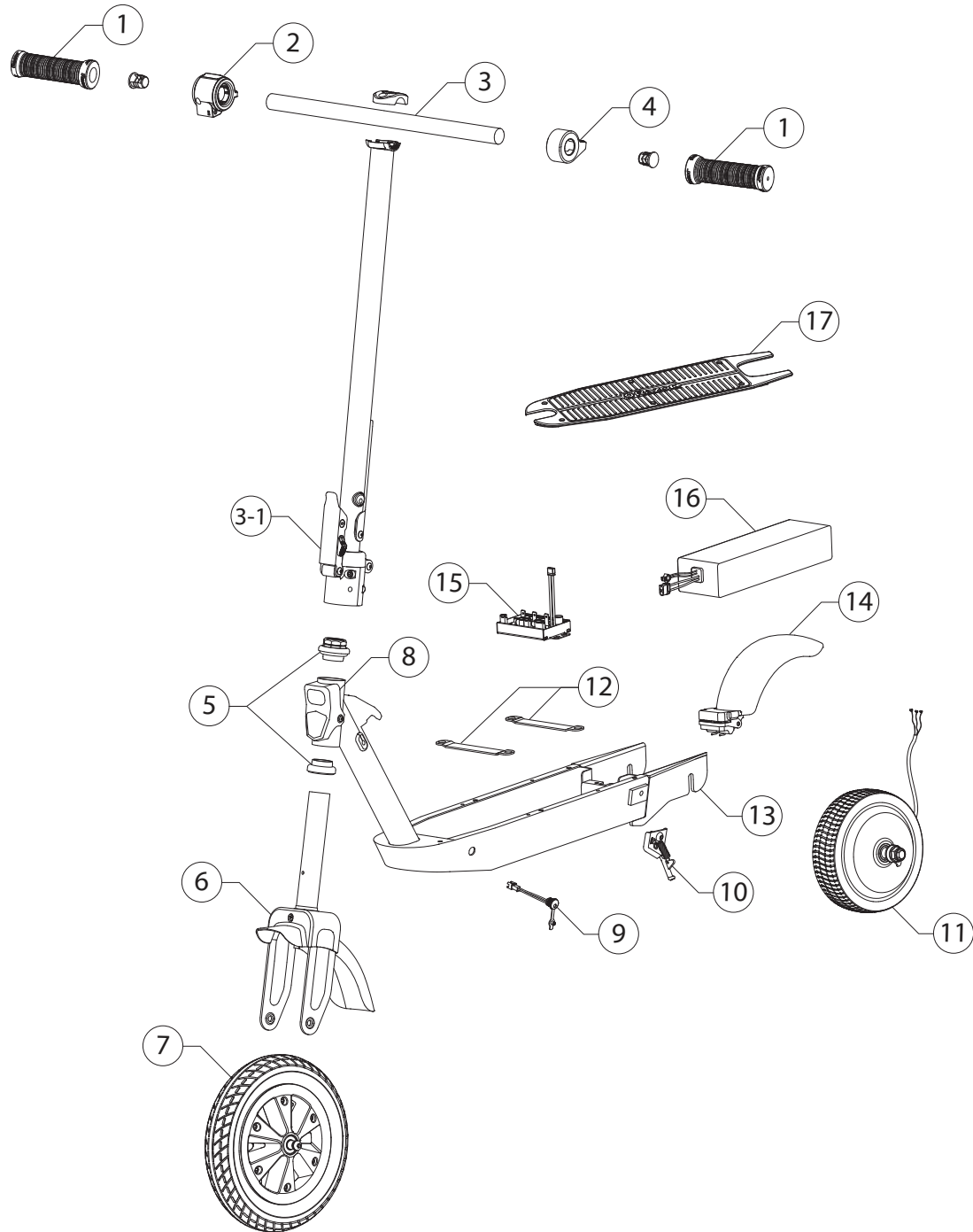
For more troubleshooting tips, a list of available replacement parts or to locate an authorized Service Center in your area, visit our website at [www.razor.com](http://www.razor.com) or call toll free +1 866-467-2967 to speak to a live Customer Service Representative.

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# RAVEN ELECTRIC SCOOTER PARTS

Keep your electric scooter running for years with genuine Razor parts. Visit our website or e-mail us for more information on spare part availability. (Specifications subject to change without notice.)

- |                                 |  |                                    |
|---------------------------------|--|------------------------------------|
| 1. Handlebar Grips (Right/Left) | 7. Front Wheel Complete                | 12. Battery Strap (x2)             |
| 2. Thumb Throttle with Display  | (See page 11 for hardware sequence)    | 13. Battery Tray                   |
| 3. Handlebar                    | 8. Limiter and Front Light             | 14. Rear Fender and Brake Complete |
| 3-1 Folding Mechanism           | 9. Charger Port                        | 15. Control Module                 |
| 4. E-brake Lever                | 10. Kickstand                          | 16. Lithium Battery (21.6V/7.5Ah)  |
| 5. Headset (Upper/Lower)        | 11. Rear Wheel Complete with Hub Motor | 17. Deck Plate                     |
| 6. Front Fork                   |  |                                    |



**NOTICE: INSURANCE**

**YOUR INSURANCE POLICIES MAY NOT PROVIDE COVERAGE FOR ACCIDENTS INVOLVING THE USE OF THIS SCOOTER/ELECTRIC RIDE-ON PRODUCT. TO DETERMINE IF COVERAGE IS PROVIDED, YOU SHOULD CONTACT YOUR INSURANCE COMPANY OR AGENT.**



## FCC COMPLIANCE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**⚠WARNING:** Changes or modifications to this product not expressly approved by Razor USA LLC, could void the user's authority to operate the equipment.

## WARRANTY

### Razor Limited Warranty

The manufacturer warrants this product to be free of manufacturing defects for a period of 90 days from date of purchase. This Limited Warranty does not cover normal wear and tear, wheel, or any damage, failure or loss caused by improper assembly, maintenance, storage or use of the electric scooter.

This Limited Warranty will be void if the product is ever:

- used in a manner other than for recreation or transportation;
- modified in any way;
- rented.

The manufacturer is not liable for incidental or consequential loss or damage due directly or indirectly to the use of this product.

Razor does not offer an extended warranty. If you have purchased an extended warranty, it must be honored by the insurance provider from which it was purchased.

For your records, save your original sales receipt with this manual and write the serial number below.

\_\_\_\_\_

## CUSTOMER SERVICE CONTACT INFORMATION

**Need Help?** Visit our website for product support, a list of authorized service centers in the US and customer service contact information at **[www.razor.com](http://www.razor.com)**. Please have the product I.D. code (located on the white label of your product) available for better assistance. Additional Customer Service contact information is listed below:

### AMERICAS

Razor USA LLC  
P.O. Box 3610  
Cerritos, CA 90703  
USA

+1 866 467 2967  
Monday - Friday  
8:00 AM - 5:00 PM Pacific Time  
[customersupport@razorusa.com](mailto:customersupport@razorusa.com)

### EUROPE, MIDDLE EAST, AFRICA

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Handelsweg 2  
2742 RD Waddinxveen  
Netherlands

+44 (0) 120 267 2702  
[info@razoreu.com](mailto:info@razoreu.com)

### ASIA

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