



**GROUND  
FORCE**



## **OWNER'S MANUAL**

**⚠ Read and understand this entire manual BEFORE riding!**

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

**For assistance contact Razor. DO NOT RETURN TO STORE.**

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# SAFETY WARNINGS

**⚠ WARNING:** Riding an electric product can be a hazardous activity. Certain conditions may cause the equipment to fail without fault of the manufacturer. Like other electric products, the Ground Force can and is intended to move, and it is therefore possible to lose control, fall off and/or get into dangerous situations that no amount of care, instruction or expertise can eliminate. If such things occur you can be seriously injured or die, even when using safety equipment and other precautions. **RIDE AT YOUR OWN RISK AND USE COMMON SENSE.**

This manual contains many warnings and cautions concerning the consequences of failing to maintain, inspect or properly use your electric product. Because any incident can result in serious injury or even death, we do not repeat the warning of possible serious injury or death each time such a possibility is mentioned.

## APPROPRIATE RIDER USE AND PARENTAL SUPERVISION

This manual contains important safety information. It is your responsibility to review this information and make sure that all riders understand all warnings, cautions, instructions and safety topics and assure that young riders are able to safely and responsibly use this product. Razor USA recommends that you periodically review and reinforce the information in this manual with younger riders, and that you inspect and maintain your children's product to insure their safety.

The recommended rider age of 8 years or older for the Ground Force is only an estimate and can be affected by the rider's size, weight or skills. Any rider unable to fit comfortably on the Ground Force 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 this product is intended for use only by persons who are, at a minimum, completely comfortable and competent while operating the product.

DO NOT EXCEED THE WEIGHT LIMIT OF 140lbs (64kg). Rider weight does not necessarily mean a person's size is appropriate to fit or maintain control of the Ground Force.

Do not touch the brakes or electric motor on your electric product when in use as they can become very hot.

Refer to the following section on safety for additional warnings.

## ACCEPTABLE RIDING PRACTICES AND CONDITIONS

**Always check and obey any local laws or regulations which may affect the locations where the Ground Force may be used.**

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 Ground Force is meant to be used on private property and on closed courses and not on public streets or sidewalks. Do not ride your electric product in any areas where pedestrian or product traffic is present.

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

This product was manufactured for performance and durability, but is not impervious to damage. Jumping or other aggressive riding can over-stress

and damage any product, including the Ground Force, and the rider assumes all risks associated with high-stress activity.

Be careful and know your limitations. Risk of injury increases as the degree of riding difficulty increases. The rider assumes all risk associated with aggressive riding activities.

Maintain a hold on the steering wheel at all times.

Never carry passengers or allow more than one person at a time to ride the electric product.

Never use near steps or swimming pools.

Keep your fingers and other body parts away from the drive chain, steering system, wheels and all other moving components.

Never use headphones or a cell phone when riding.

Never hitch a ride with another product.

Do not ride the Ground Force in wet or icy weather and never immerse the electric product in water, as the electrical and drive components could get damaged by water or possibly create other unsafe conditions.

Wet, slick, bumpy, uneven or rough surfaces may increase risks. Do not ride the electric product in mud, ice, puddles or water. Avoid excessive speeds that can be associated with downhill rides. Never risk damaging surfaces such as carpet or flooring by using an electric product indoors.

Do not ride at night or when visibility is limited.

## PROPER RIDING ATTIRE

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

## USING THE CHARGER

The charger supplied with the electric product should be regularly examined for damage to the cord, plug, enclosure and other parts. In the event of such damage, the product 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.

Make sure power switch is in the "off" position, unplug charger and disconnect from product when not in use.

Do not exceed charging time.

Always disconnect from the charger prior to wiping down and cleaning your product with liquid.

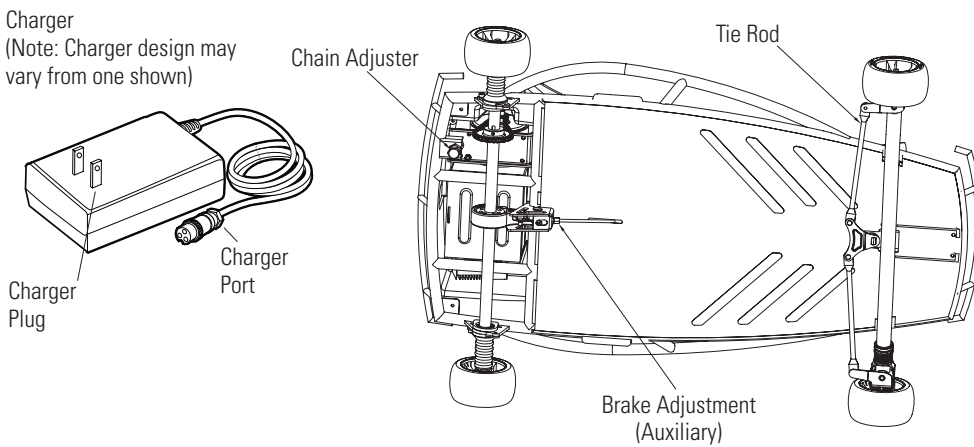
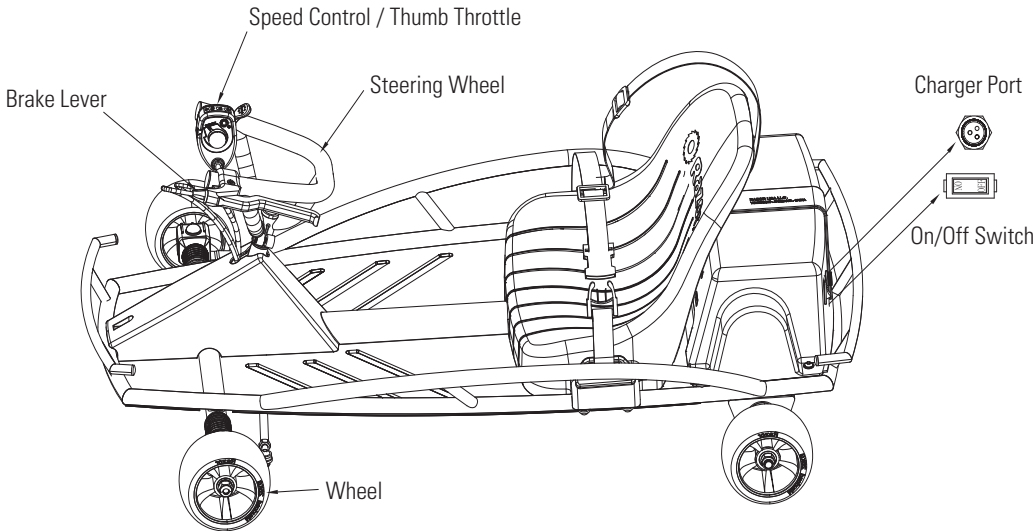
**FAILURE TO USE COMMON SENSE AND HEED THE ABOVE WARNINGS INCREASES RISK OF SERIOUS INJURY. USE WITH APPROPRIATE CAUTION AND SERIOUS ATTENTION TO SAFE OPERATION.**

# BEFORE YOU BEGIN

Remove contents from box. Remove the foam 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 Ground Force was 95 percent assembled and packed at the factory, there should not be any problems, even if the box has a few scars or dents.

## Estimated Assembly and Set-Up Time

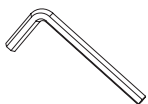
Razor recommends assembly by an adult.  
 Allow up to 45 minutes for assembly, not including initial charge time.  
 Allow up to 12 hours for initial charge (see page 5 for charging information).



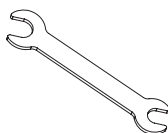
**WARNING:**  
 DO NOT USE NON-RAZOR PARTS WITH YOUR GROUND FORCE.  
 The Ground Force has been built to certain Razor design specifications. The original equipment supplied at the time of sale was selected on the basis of its compatibility with the frame and all other parts. Certain aftermarket components may not be compatible. Use of non-Razor parts will void the warranty.

**WARNING:** Turn power switch off before conducting any maintenance procedures.

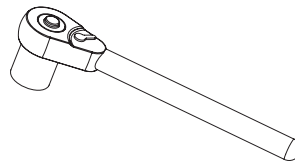
## Required Tools



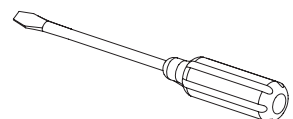
(2) 5mm Allen wrench  
 3mm Allen wrench  
 (included)



8/10/19mm wrench  
 (not included)



13/17mm wrench  
 (not included)



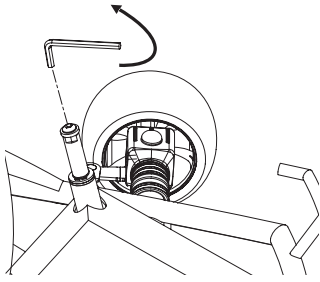
Screwdriver  
 (not included)

**Need Help?** Visit our web site for replacement parts, product support and a list of authorized service centers at [www.razor.com](http://www.razor.com) or call toll-free at 866-467-2967 Monday - Friday 8:00 AM - 5:00 PM Pacific Time.

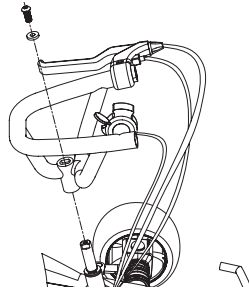
# ASSEMBLY AND SET-UP

Turn power switch off before conducting any maintenance procedures.

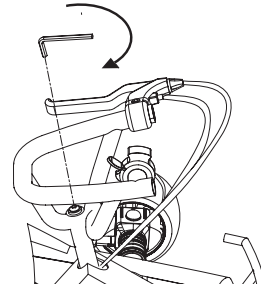
## □ Attaching the Steering Wheel



**1** Using a 5mm Allen wrench, loosen and remove the screw located in the steering column.

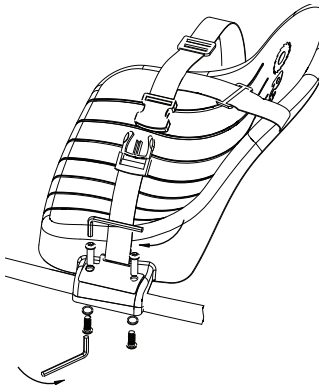


**2** Make sure wires are not tangled. Insert the steering wheel, washer and screw into the steering column as shown.

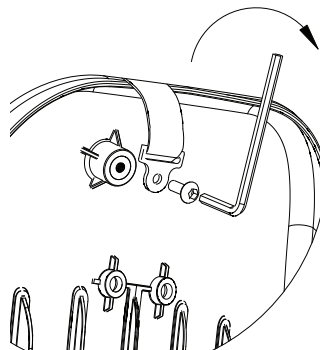


**3** Tighten screw **securely** using a 5mm Allen wrench.

## □ Attaching the Seat



**1** Position the seat over the frame and align it with the holes in the frame. Align the safety belt anchor holes to the holes in the seat and frame with the lap/shoulder assembly on the left and the receiver latch on the right. Insert the screws and tighten securely.



**2** Install the shoulder belt anchor to the back of the seat. Insert and tighten securely.

**! WARNING:** Failure to properly install and tighten the screws, nuts and bolts that affix the steering wheel and seat can cause you to lose control and crash.

**! WARNING:** DO NOT flip the Ground Force upside down to tighten steering axle bolts as it may damage control wires from the steering wheel.

**! WARNING:** The lap belt arrangement supplied with the Ground Force is for "play" use only. It is not an ASTM-approved lap belt system and is not intended to function as an approved lap/shoulder/seat restraining device.

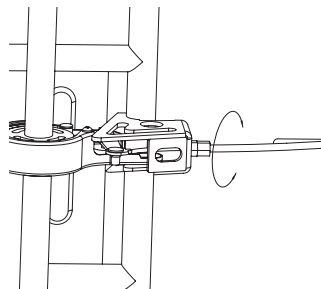
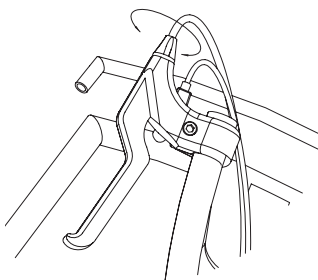
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# ASSEMBLY AND SET-UP

Turn power switch off before conducting any maintenance procedures.

## □ Adjusting the Brake

The brake lever is fitted with a cable adjuster to compensate for cable stretch and/or to fine tune the lever movement to brake engagement.

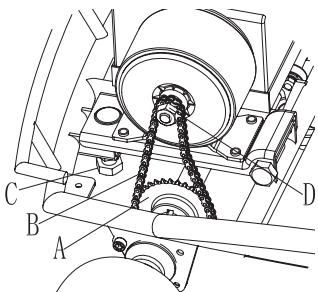


**1** To adjust the brake, thread the adjuster in or out 1/4 to 1/2 turns until the desired brake adjustment is attained.

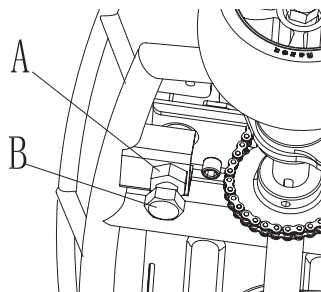
**2** If the adjuster is threaded outward and the brake still has too much slack, use the auxiliary adjuster at the rear brake for additional adjustments.  
**Note:** When properly adjusted, the brake lever will have approximately 3mm of free play before the brake engages.

## □ Adjusting Chain Tension

If the drive system makes loud noises, slips or makes grinding sounds while turned on, this indicates the drive chain is probably making the noise. This can be caused by the chain being adjusted too tight during assembly or coming loose from normal wear-and-tear.

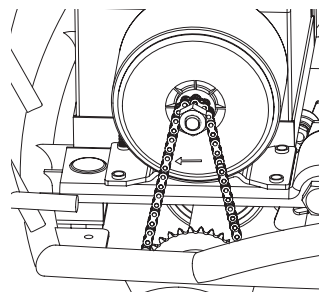


The chain drive system consists of the drive-shaft sprocket (A), the chain (B), the adjusting bolt (C), the motor sprocket (D).



**1** Using a 16mm open wrench, loosen the chain jack-screw locknut (B) and tighten or loosen the adjusting bolt (A) to tighten or loosen the chain as needed.

**Note about chain adjustment:** The chain should not be under tension nor floppy loose. There should be about 3/8-inch (10mm) of slack. **BE CAREFUL NOT TO ADJUST TOO TIGHT.** The tensioning system can easily impart too much tension and snap the chain or bend the motor output shaft. Turn the adjusting bolt by hand 1/8 to 1/4 turn or less at a time and recheck the adjustment each time.



**2** Once the adjustment is good, while holding the adjusting bolt, retighten the locknut securely. Test ride the Ground Force and readjust as needed.

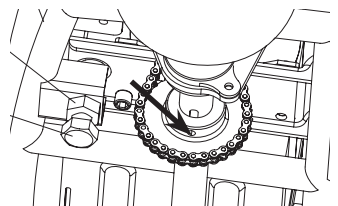
**Note:** If the locknut is not tightened properly, the adjustment will vibrate loose from normal use.

**! WARNING:** Practice in an open area free from obstacles until you are familiar with the brake function. **DO NOT RUN OVER ANY OBJECT AS IT COULD DAMAGE THE BRAKE OR DRIVETRAIN.**

**! WARNING:** To avoid a pinch or injury, keep fingers away from moving sprockets and chain.

**Note:** The motor cover does not need to be removed for this adjustment procedure. The chain adjustment can be checked by tipping the Ground Force on its side and reaching under the cover (with power switched OFF). However, for the first time you make this adjustment we recommend you remove the cover to see exactly what is happening.

**Note:** Proper alignment of the chain must be maintained. If the chain is adjusted properly, but is noisy or rough running, check alignment of the sprockets. The drive-shaft sprocket can be adjusted slightly from side-to-side by loosening the set screw. Note that a key maintains the drive position to the shaft.



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# ASSEMBLY AND SET-UP

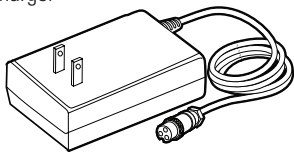
Turn power switch off before conducting any maintenance procedures.

## □ Charging the Battery

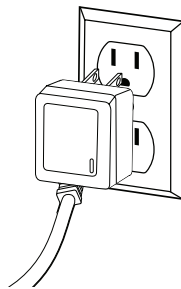
Your Ground Force may not have a fully charged battery; therefore it is a good idea to charge the battery prior to use.

- Initial charge time: 12 hours
- Recharge time: 12 hours, even if the light turns green.
- Fully charge battery before storing.
- When the scooter is not in regular use, recharge the battery at least once a month until normal use is resumed.
- Run time: Up to 40 minutes of continuous ride time. Run time may vary depending on riding conditions, climate and/or proper maintenance.
- Average battery life: 250 charge/discharge cycles
- To ensure long battery life, do not store the battery in temperatures above 75° or below -10° F.

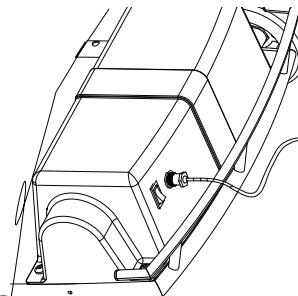
Charger



**Note:** Make sure power is turned **OFF** when unit is not in use. If the power switch is left on for an extended period of time, the battery may reach a stage at which it will no longer hold a charge.



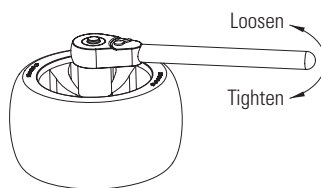
**1** Plug the charger into a wall outlet. If the lights on charger do not light up, check the power to the outlet. If necessary, try a different outlet.



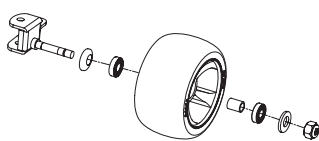
**2** Turn power **OFF** before charging. Plug the charger into the charger port to charge unit.

## □ Replacing the Wheels

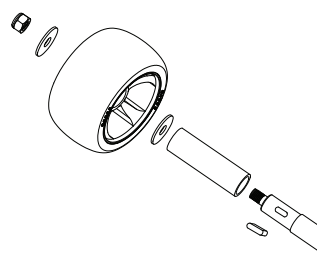
Front and rear wheel installation and removal are the same.



**1** To remove a wheel, remove the self-locking nut (13mm open wrench required for front wheels, 17mm for the rear wheels). Tap the wheel to remove.



**2 Front Wheel:** To replace a front wheel, make sure the bearings are seated and the center spacer is installed. Position the wheel with the Razor logo facing outward. Install the washer and tighten the self-locking nut securely.



**2 Rear Wheel:** To replace a rear wheel, make sure the key is properly seated in the rear axle and aligned with the notch in the wheel. Position the wheel with the Razor logo facing outward. Install the washer and tighten the self-locking nut securely.

**! WARNING:** Use **ONLY** with the recommended charger. Batteries are only to be charged under adult supervision. The charger is not a toy. Always disconnect your Ground Force from the charger before cleaning with liquid.

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

**Note:** If your charger does not look like the one illustrated, your unit has been supplied with an alternative charger. The specifications and charging procedure would not change.

The charger has a small window with one LED to indicate the charge status. Refer to the illustration on the charger unit for the actual "charging" and "charged" status indications for your model charger.

Chargers have built-in over-charge protection to prevent battery from being over-charged.

Charger will get warm during use. This is normal for some chargers 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.

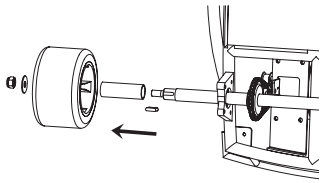
**! WARNING:** Failure to properly adjust and tighten the screws, nuts and bolts that affix the wheels can cause you to lose control and crash.

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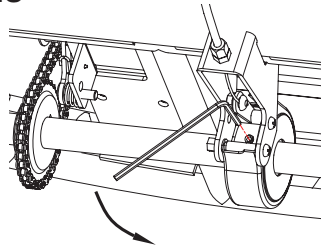
# ASSEMBLY AND SET-UP

Turn power switch off before conducting any maintenance procedures. Before you begin, carefully turn unit upside down for easier access.

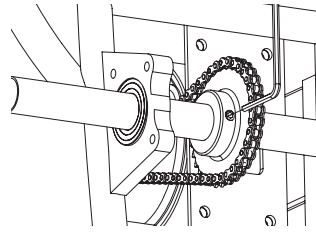
## □ Removing Rear Axle



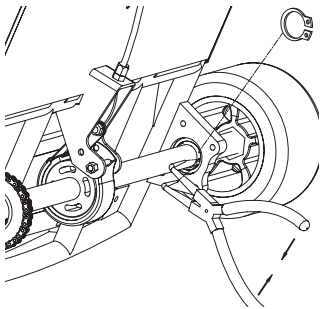
**1** Using a 17mm open wrench loosen locknut and remove rear wheel located closest to the chain.



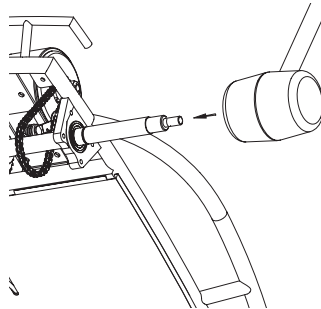
**2** Use a 3mm Allen wrench to loosen the brake.



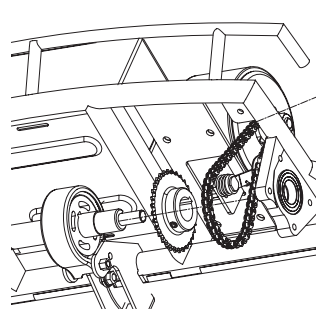
**3** Use a 3mm Allen wrench to loosen the set screw on the sprocket.



**4** Remove both c-clips on the rear axle between the two bearings.

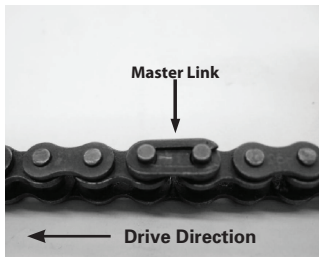


**5** Lightly tap the end of the axle with a rubber mallet. DO NOT USE A HAMMER as this will damage the thread. The brake drum and sprocket must be slid along the axle as your tapping progresses.

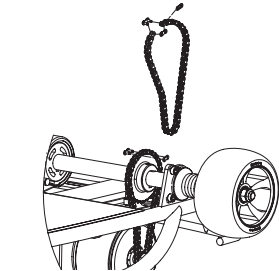


**6** When the axle end is clear of the bearing hanger, remove the axle.

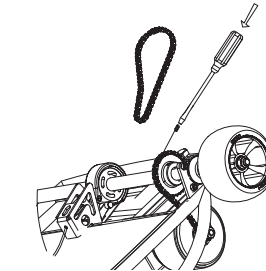
## □ Replacing the Chain



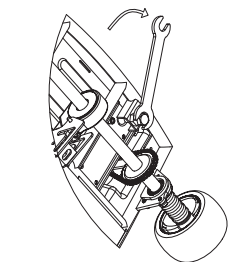
**1** Locate the master link on the replacement chain and with a flat head screwdriver carefully disengage the clip from the chain to remove the link plate and connector link.



**2** Wrap the chain around both sprockets and tension idler. Insert the connector link all the way through the chain and fit the link plate over the connector link.



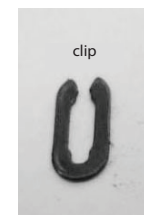
**3** Using a flat head screwdriver, carefully re-attach the clip on to the link plate. The clip must point in the drive direction of chain rotation.



**4** If needed, fine-tune the tension of the chain by using a 19mm open wrench to adjust the screw on the motor mounting. Be careful not to over tighten.

**Note:** Chain should be periodically checked for grime build-up. If necessary remove any dirt and/or debris in and around the chain and re-lubricate with WD-40.

### Master Link:



## REPAIR AND MAINTENANCE

### ❑ Battery Care and Disposal

Do not store the battery in temperatures above 75° or below -10° F.



CONTAINS SEALED LEAD ACID BATTERIES. BATTERIES MUST BE RECYCLED.

**Disposal:** Your Razor product uses sealed lead-acid batteries which must be recycled or disposed of in an environmentally safe manner. Do not dispose of a lead-acid battery in a fire. The battery may explode or leak. Do not dispose of a lead-acid battery in your regular household trash. The incineration, land filling or mixing of sealed lead-acid batteries with household trash is prohibited by law in most areas. Return exhausted batteries to a federal or state approved lead-acid battery recycler or a local seller of automotive batteries. If you live in Florida or Minnesota, it is prohibited by law to throw away lead-acid batteries in the municipal waste stream.

### ❑ Charger

The charger supplied with the Ground Force 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.

### ❑ 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 adjust and replace drive train components as required.

### ❑ Replacement Parts

The most frequently requested replacement parts are available for purchase at some Razor retail partners. For the complete selection of replacement parts visit [www.razor.com/shop](http://www.razor.com/shop).

### ❑ Repair Centers

For a list of authorized Razor repair centers:

- Check online at [www.razor.com](http://www.razor.com).
- Call 866-467-2967 for the center nearest you.

**⚠ WARNING:** If a battery leak develops, avoid contact with the leaking acid and place the damaged battery in a plastic bag. Refer to the disposal instructions at left. If acid comes into contact with skin or eyes, flush with cool water for at least 15 minutes and contact a physician.

**⚠ WARNING:** Battery posts, terminals and related accessories contain lead and lead compounds. **Wash your hands after handling.**



## TROUBLESHOOTING GUIDE

Problem	Possible Cause	Solution
Product does not run.	Undercharged battery.	Charge the battery. A new battery should have been charged for at least 12 hours before using the product for the first time and up to 12 hours after each subsequent use.  Check all connectors. Make sure the charger connector is tightly plugged into the charging port and that the charger is plugged into a functioning wall outlet.
	Charger is not working.	Contact Razor Customer Service to get replacement charger.
Product was running but suddenly stopped.	Loose wires or connectors.	Check all wires and connectors to make sure they are properly connected.
Short run time.	Undercharged battery.	Charge the battery. A new battery should have been charged for at least 12 hours before using the product for the first time and up to 12 hours after each subsequent use.
	Battery is old and will not accept full charge.	Even with proper care, a rechargeable battery does not last forever. Average battery life is 1 to 2 years depending on product use and conditions. Replace only with a Razor replacement battery.
Product runs sluggishly.	Riding conditions are too stressful.	Use only on solid, flat, clean and dry surfaces such as pavement or level ground.
	Product is overloaded.	Make sure you do not overload the product by allowing more than one rider at one time, exceeding the maximum weight limit, going up too steep a hill or towing objects behind the product. If the product is overheated, the fuse may have burned.
Sometimes the product doesn't run, but other times it does.	Loose wires or connectors.	Check all wires connectors to make sure they are tight.
	Motor or electrical switch damage.	Contact your local Razor authorized service center for diagnosis and repair. Contact Razor customer service or visit <a href="http://www.razor.com">www.razor.com</a>
Product makes loud noises or grinding sounds.	Chain is too dry.	Apply a lubricant such as 3 in 1™ or Tri-Flow™ to the chain.

For more troubleshooting tips, visit our website at [www.razor.com](http://www.razor.com).

**Need Help?** Visit our web site for replacement parts, product support and a list of authorized service centers at [www.razor.com](http://www.razor.com) or call toll-free at 866-467-2967 Monday - Friday 8:00 AM - 5:00 PM Pacific Time.

**SB 1918 (CALIFORNIA) DECLARATION**

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.

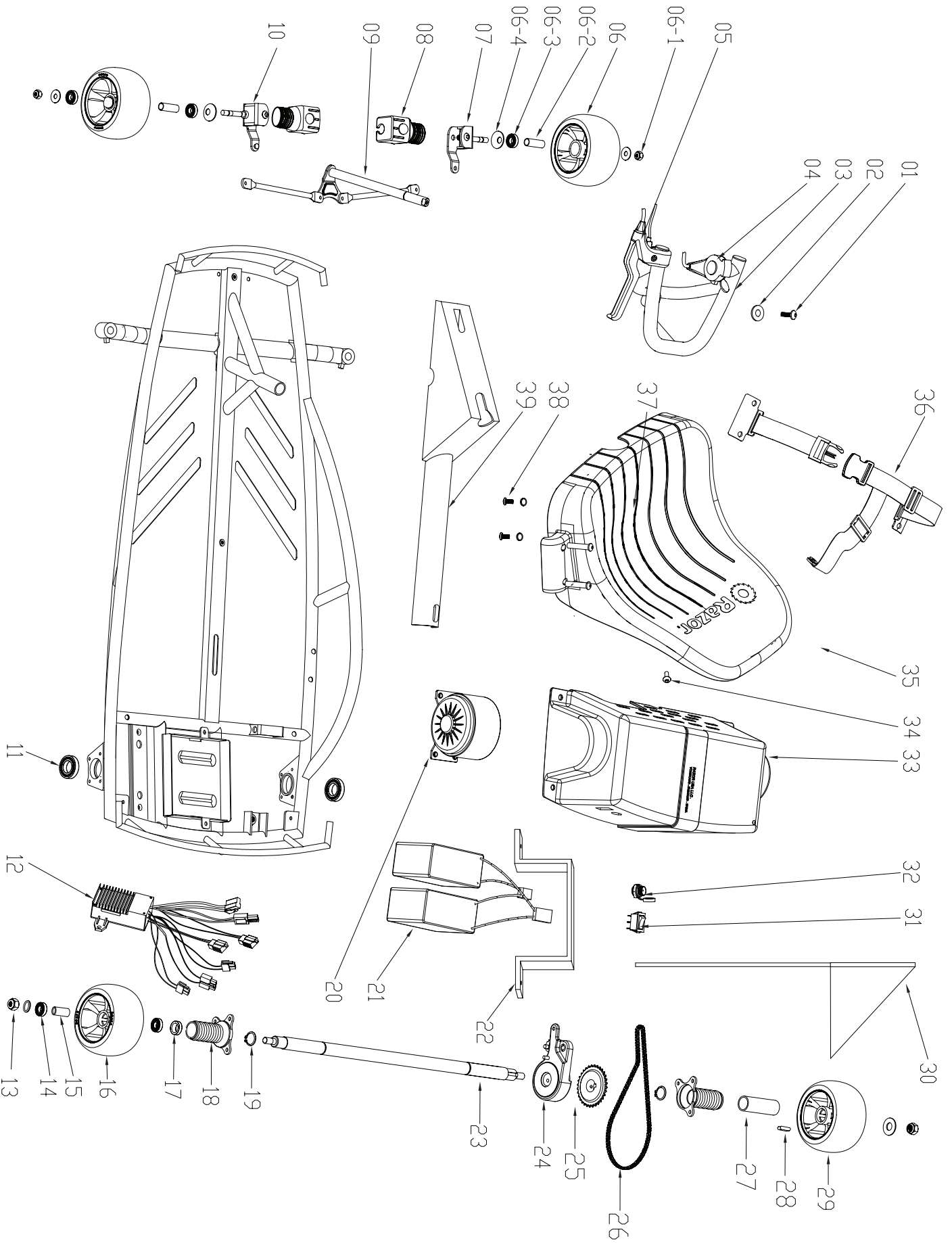
## GROUND FORCE PARTS

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

01	Screw, M6*12mm for steering wheel	19	C clip for rear axle (x2)
02	Washer for steering wheel	20	Motor special GF 200W+
03	Steering wheel	21	Battery 12v 7AH (x2)
04	Speed control / throttle	22	Battery bracket
05	Brake lever with cable	23	Axle (rear)
06	Front wheel (x2)	24	Drum brake
06-1	Nut, M8 nylock self locking & washer (x2)	25	Axle sprocket
06-2	Front wheel spacer (x2)	26	Chain
06-3	Bearing 608z (x4)	27	Rear wheel spacer (right)
06-4	Spring washer (x2)	28	Key
07	Spindle (right)	29	Back wheel (right)
08	Front protector (x2)	30	Flag
09	Steering assembly	31	On/off switch
10	Spindle (left)	32	Charger port
11	Bearing 6904Z (x2)	33	Motor cover
12	Control module	34	Screw, M6*15mm for Lap belt
13	Nut, M10 nylock self locking & washer (x2)	35	Seat
14	Bearing 6900Z (x2)	36	Lap belt
15	Rear wheel spacer (left)	37	Lock screw (x4)
16	Rear wheel (left)	38	Lock nut & washer (x4)
17	Spacer tube (left)	39	Steering cover
18	Axle cover (x2)		

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# GROUND FORCE PARTS



## SAFETY REMINDERS

### PRE-RIDE CHECKLIST



#### Loose Parts

Check and secure all fasteners before every ride. There should not be any unusual rattles or sounds from loose parts or broken components. If you are not sure, ask an experienced mechanic to check.



#### Brake

Check the brake for proper function. When you squeeze the lever, the brake should provide positive braking action. When you apply the brake with the speed control on, the brake cut-off switch will stop the motor.



#### Frame, Fork and Steering Wheel

Check for cracks or broken connections. Although broken frames are rare, it is possible for an aggressive rider to run into a curb or wall and wreck and bend or break a frame. Get in the habit of inspecting yours regularly.



#### Safety Gear

Always wear proper protective equipment such as an approved safety helmet. Elbow pads and kneepads are recommended. Always wear shoes (lace-up shoes with rubber soles), never drive barefooted or in sandals, and keep shoelaces tied and out of the way of the wheels, motor and drive system.



## DO NOT RETURN TO STORE

**Do not use this product for the first time until you have charged the battery for at least 12 hours.**

**Failure to follow these instructions may damage your product and void your warranty.**

## 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, wheels or cables, or any damage, failure or loss caused by improper assembly, maintenance, storage or use of the Razor Ground Force.

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

- used in a manner other than for recreation;
- 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 store at which it was purchased.

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

Item Number:  
**300001-SL**

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