



Instruction Manual
For
Ronin Lift
PN 2805-11
"Original Instructions"



WARNING

To avoid electrical shock, do not open the Ronin Lift's front cover. Refer servicing to qualified personnel only.

Caution

Modification of controls or adjustment of performance, other than specified by procedures herein, may results in injury or death.

You are cautioned that any changes or modifications, not expressly approved by the party responsible for compliance, could void the user's authority to operate the equipment.

If you have questions about this product please visit www.ronin.inc or contact Ronin Customer Service at +1-657-444-2557 or info@ronin.inc. You can also write to,

Ronin Revolution Corporation
Customer Service/Technical Support
600 S. Jefferson St Suite D
Placentia CA 92870 USA

Declaration of Conformity

Trade Name:	Ronin Lift
Model No.:	2805-11
Responsible Party:	Ronin
Address:	600 S. Jefferson St Suite D Placentia CA 92870 USA
Telephone:	+1-657-444-2557

This device complies with Part 15 of FCC Rules and Industry. Canada license-exempt RSS standard(s). 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.

Lithium Ion battery Information & Warnings

The lithium ion battery used to power this product contains Perchlorate. The following statement is required by the state of California, USA:

Perchlorate Material – special handling may apply. See <http://www.dtsc.ca.gov/hazardouswaste/perchlorate>

- The Battery should always be removed from the Ronin before storage or extended periods of non-use. Failure to comply could result degradation of the battery cells or loss of all battery life. See Page 9 for extended battery storage voltage.
- The battery must be removed from the Ronin Lift, before charging.
- For shipping, the Ronin Lift (PN 2805-11) battery falls under UN3481 PI 966 Section II, Batteries shipped with equipment. Due to the weight and size of the battery you can only ship one battery per package. Contact info@ronin.inc for the Battery Safety Data Sheet.
- The battery charger is adaptable from 100v – 240v outlets. You will need an outlet adapter for any country that is different than U.S.A.
- The battery should never be connected to the Ronin Lift in areas with poor ventilation or where gas may be present. The Ronin Lift does have a spark arrester in the controller but connection of the battery to the Ronin Lift can cause a spark, not visible or audible.

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Precautions

Before using this product, carefully read this manual and retain it for future reference. This product is recommended for adults 18 years of age and higher. Children under the age of 18 must be supervised by an adult.

Safety

This product has been designed with the highest concern for safety. However, any electro-mechanical device, if used improperly, has the potential for causing fire, electrical shock, or personal injury. To help ensure accident-free operation, follow these guidelines:

- Observe all warnings, precautions, and instructions
- Regularly inspect AC power cord for damage
- Do not leave any charging battery unattended for longer than 1-2-hour charge times.
- Unplug charging battery immediately, once charge is complete
- Stop use and unplug AC power cord from electrical outlet immediately, if the device functions in an abnormal manner, produces unusual sounds / smells, becomes too hot to touch, or battery becomes swollen / bloated.
- Do not handle damaged or leaking lithium-ion batteries.
- Do not allow the battery to come into contact with fire or subject to extreme temperatures such as direct sunlight, in a vehicle exposed to sun or near a heat source

Prior to using the Ronin Lift please ensure you thoroughly inspect all gear and accessories.

Use & Handling

- Do not use Ronin Lift without the proper safety equipment (PPE). Not doing so may cause serious injury or death.
- Only use approved static ropes with Ronin Lift personal ascender.
- Do not overheat the DC motor. If motor becomes extremely hot discontinue use until motor has cooled down.
- Inspect all equipment prior to each use, including the Ronin Lift, safety harness, carabineer clips, static rope, and helmet.
- Only use safety rated carabineer clips when attaching to the Ronin Lift.
- Do not wet or submerge the Ronin Lift. Ronin Lift is IP54 rated and not waterproof.
- Be careful when carrying the Ronin Lift, if you do not have a good grip, the device may drop causing potential damage or injury
- Do not stand on or put objects on the device, and do not stack the device with other devices
- Do not stick any foreign objects into the Rope inlet or Rope exit holes
- Stop using the device immediately if you begin to feel tired or if you experience discomfort or pain in your hands, arms or legs while operating the device

- If you experience any of the following health problems, discontinue use of the device immediately. If symptoms persist, consult your doctor.
 - Dizziness, nausea, fatigue, or symptoms similar to motion sickness
 - Discomfort or pain in a part of the body, such as hands, arms, or legs
- Do not place device on the floor or in a place where it may cause someone to trip, stumble or fall
- Do not expose the device to high temperatures or high humidity
- Do not use device in an electrical storm
- Do not touch connectors on device
- Do not rest the device on any surfaces that are unstable, tilted, or subject to vibration
- Do not allow liquid, small particles or other foreign debris to enter the device

Vents

Do not block any motor vents. To maintain good ventilation, follow the guidelines below:

- Do not cover motor ventilation holes
- Do not allow dust to build up on the motor vents
- Do not allow foreign debris to cover the motor vents

AC Power Cord Use

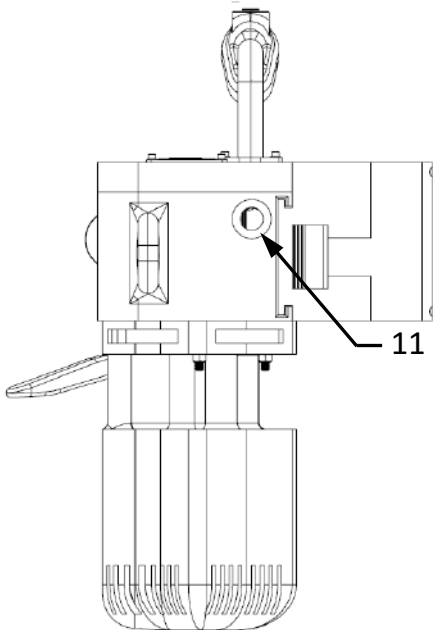
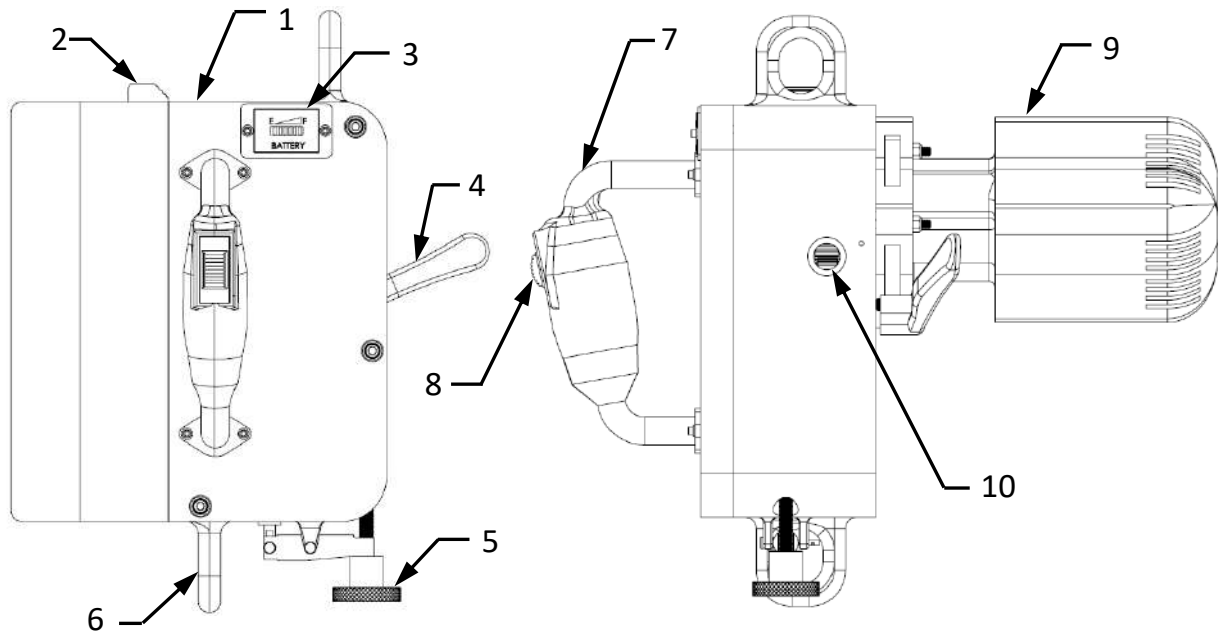
- Do not plug in AC power cord without verifying electrical outlet compatibility. The Ronin charger is compatible with power sources from 100v to 240v.
- To help ensure safe operation, regularly inspect the AC power cord. If damaged, stop use immediately and contact customer support.
- Do not modify the cord
- Do not use a power cord other than the supplied AC power cord
- Do not touch the AC power cord with wet hands
- Protect the AC power cord from being walked on or pinched particularly at plugs, expansion receptacles and the point where the cords exits the power supply
- Do not place heavy items on the AC power cord
- Do not place the AC power cord near heating equipment and do not expose the cord to heat
- Unplug the AC power cord from the electrical outlet when you do not intend to use the charger. When disconnecting, grasp the AC power cord by the plug and pull straight out of the electrical outlet. Never pull by the cord and do not pull out at an angle.
- Do not connect AC power cord to a voltage transformer or inverter.

Moisture & Condensation

If the device is brought directly from a cold location to a warm one, moisture may condense either on the electronics or motor. Should this occur, the device may not operate properly. In this case, remove the battery until moisture evaporates from the

device (this may take several hours). If the device still does not operate properly contact customer service.

Product Overview



Ronin Lift

- 1 – Ronin Lift Personal Ascender
- 2 – Lithium Ion Rechargeable Battery
- 3 – Battery Indicator
- 4 – Brake/Descend Handle
- 5 – Tensioner Knob
- 6 – Carabineer Clip Attachment Point
- 7 – Handle
- 8 – Thumbwheel
- 9 – Motor/Gearbox
- 10 – Rope Exit Hole
- 11 – Rope Inlet Hole

Ronin Lift Specifications

Motor	28 VDC nominal 100 amps (1 min burst) 275° F (135° C) max operating Temp 4500 rpm 5 N-m continuous torque
Gearbox	32:1 reduction
Speed Controller	Pulse Width Modulation (PWM) 120 amps max 33 VDC Max
Thumbwheel	.381k ohm 60° rotation
Brake	Manual Operations Via Brake Handle
Rope Diameters	Static Rope 10 mm to 12 mm (SN's 2999 and below) Static Rope 10 mm to 13 mm (SN's 3000 and up)
Max Rated Power	2,800 watts
Mass	Approximately 24 lbs.
Speed	Variable at Approximately 0.50 – 1.5 ft/sec (0.15 - 0.46m/sec)
Operating Temp	-4° F – 100° F (-20° C – 38° C)
Sound Level	83.1 dBa
Vibration Level	6.9 m/s ²
Max Capacity	400 lbs. (181 kg) (1.78 kN) Max load or 1 Person Max
Operational Humidity	0 – 85 %
Operating Barometric Pressure	29.9 in. Hg – 7.04 in. Hg (101 kPa – 23.8 kPa)
Storage Temperature	-4° F – 113° F (-20° C – 45° C) Less than 1 month -4° F – 95° F (-20° C – 35° C) Less than 6 months
Storage Humidity	≤ 80% Less than 1 month ≤ 70% Less than 6 months

Power Supply

Type	Lithium-Ion Battery Charger
Input Charging Voltage	100 VAC – 240 VAC
Input Charging Amperage	5 amps max
Operating Temperature	32° F – 95° F (0° C – 35° C)
Operating Humidity	5% - 90%
Charge Time	Approximately 2 hours
Charging Temp	95° F (35 ° C) Maximum
Storage Temperature	-4° F – 185° F (-20° C – 85° C)
Storage Humidity	5% - 90%

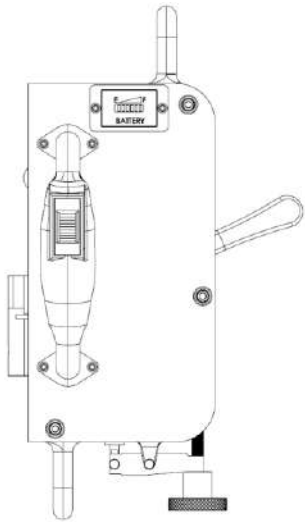
Battery

Type	Lithium-Ion
Voltage	28.8 VDC Nominal
Amperage	90 amps (1 min burst)
Battery Capacity	6 Ah
Operating Temperature	-4° F – 100° F (-20° C – 38° C)
Mass	Approximately 6.5 lbs. (3Kg)
Battery Life	Approximately 300 Charges
Charge Time	Approximately 2 hours
Charging Temp	109 ° F (43 ° C) Maximum
Storage Temperature	-4° F – 113° F (-20° C – 45° C) Less than 1 month -4° F – 95° F (-20° C – 35° C) Less than 6 months
Storage Humidity	≤ 80% Less than 1 month ≤ 70% Less than 6 months
Storage Voltage	50% charge + or - 10% charge is recommended for extended periods of battery storage

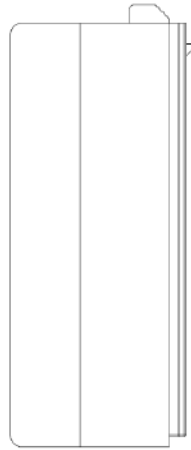
Rope

Specification	EN 1891 and EN 564 approved rope
Rope Size	10.0 mm – 11.5 mm with less than 2.0% elongation 11.6 mm – 12.0 mm with less than 3.3% elongation 12.0 mm – 13.0 mm with less than 4.5% elongation
Rope Type	Static Line with Aramid or Kernmantle Sheath
Rope Sheath	32 Strand or Greater
Sheath Slippage	Very Low
Rope Stiffness	Stiff

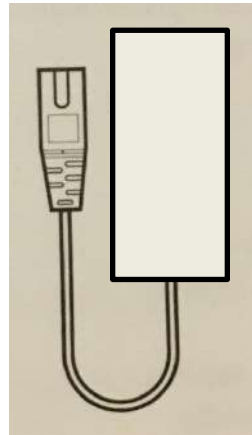
Box Contents



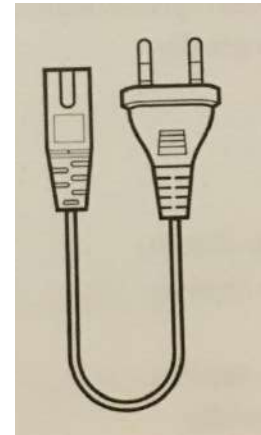
1



2



3



4

1: Ronin Lift Kit (Includes Bollard Friction Saver & Reverse Functionality starting May 2020.)

2: Lithium-Ion Rechargeable Battery

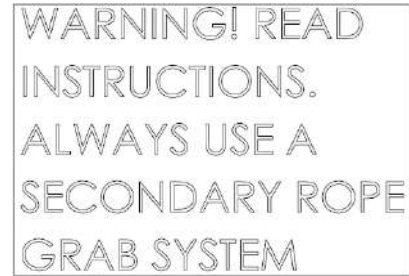
3: AC Power Supply

4: AC Power Cord

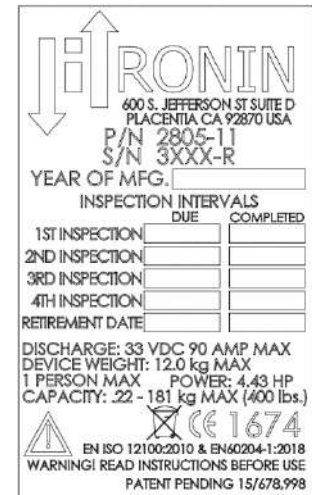
5: Rope Brush

Ronin Lift Device Labels

- 1) Warning Label instructions: User must read the entire instruction manual and have a thorough understanding of the device, prior to use. Please contact customer service if you are unsure of anything prior to use.



- 2) The Ronin Lift label provides device information, part number, serial number, year of manufacture, device limits and capabilities, certifications acquired, and yearly maintenance intervals performed for the 5-year life of the Ronin Lift.



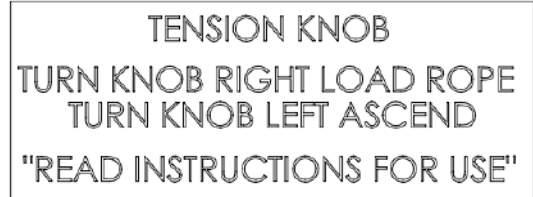
- 3) Ronin Lift can only be serviced or repaired by an approved certified repair center or by sending the device back to the manufacturer. The maintenance or repair can be scheduled by calling and obtaining a Return Material Authorization (RMA). Do not open the Ronin Lift or warranty will be voided. The “Do Not Open” label is a tear away one-use label for anti-tampering.



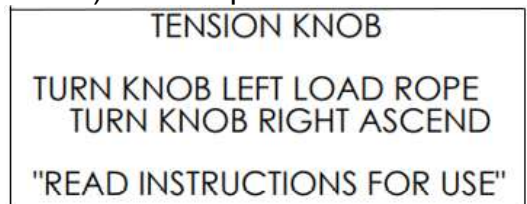
- 4) Max load label is the maximum permitted load on the battery carabineer attachment point. The carabineer Attachment point on the battery is not load bearing, maximum permitted load is 53.4 N (12 lbs. or 5.4 Kg).



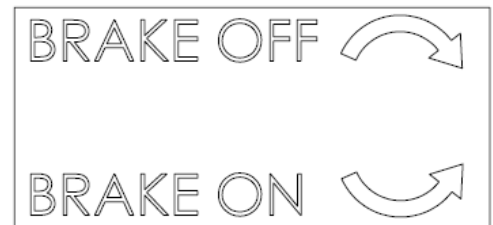
- 5) **Serial Numbers 3200-R and Below** the tension label describes which direction to turn the red tensioner knob to apply more (Left Turn) or less tension (Right Turn) to the rope. More tension (Left Turn) increases the grip on the rope to reduce rope slippage with heavier loads. Turning it to the Left (Counterclockwise) direction increases grip on the rope. Turning it fully to the Right (Clockwise) direction allows rope to be loaded in the device.




- 6) **Serial Numbers 3201-R and Up** will have the below tensioner label. The tension label describes which direction to turn the red tensioner knob to apply less tension (Left Turn) or more tension (Right Turn) to the rope. Less tension (Left Turn) decreases the grip on the rope for lighter loads or to increase descent speed. Turning the tension fully to the left is to load rope only. Turning it to the Right (clockwise) direction increases grip on the rope for ascending / lifting loads.



- 7) The brake label provides instructions on which direction to operate the brake handle for releasing the brake. The brake is always in the “On” position. To release the brake, you must physically pull down on the handle and hold it open to descend. Once you release the brake, then it will automatically spring back to the on position. The brake is an On / Off switch and cannot be feathered. To control descent speed and ultimately come to a stop, it is recommended to tend the tailing line of the rope in your right hand, while holding the brake open with your left hand. Simply squeezing the rope with your right hand will slow you down or bring you to a stop, then release the brake handle. This will help to preserve your ropes life.



- 8) ID Plate for Ronin service locations to keep track of active service bulletins that have been applied. See page 30 for additional details.



600 S. JEFFERSON ST SUITE D
PLACENTIA CA 92870 USA

SERVICE BULLETINS APPLIED

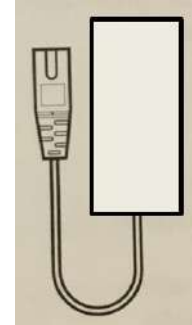
S/B NUMBER	
S/B NUMBER	
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S/B NUMBER	
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S/B NUMBER	

Battery Charger Indicators

The battery takes approx. 2 hours to charge.

The battery charger LED codes are the following:

- Standby (Solid Green with no battery plugged in)
- Charging (Solid Red when battery is charging)
- Fully Charged (Solid Green with battery plugged in)



Battery Charging Warnings

- To charge the battery, you must only use the included charger.
- Do not charge the battery, while connected to the Ronin.
- Only use included AC power cord.
- Do not over-discharge the Lithium-Ion battery.
- Remove the battery from the device when storing the unit.
- Disconnect a depleted battery, do not leave a dead battery on the device
- If at any time the Lithium-Ion battery begins to balloon or swell, discontinue charging or discharging immediately.
- Always terminate all processes if the battery/charger malfunctions.
- Remove battery from charger after the charge is complete.
- Store the Lithium-Ion battery at room temperature in a dry area for best results.
- Allow the Lithium-Ion Battery to cool to ambient/room temperature before recharging.
- Never charge the Lithium-Ion battery unattended at any time.
- Never Charge the battery in an environment above 109 ° F (43 ° C).

Rope Requirements

Only use static line rope with Tech-Nora, aramid, or kernmantle sheath in your Ronin Lift. No semi static ropes. The approved rope sizes for use with the Ronin Lift is Static Rope, range of 10 mm diameter to 12 mm diameter sizes for Serial numbers 2999 & below. Serial numbers 3000 & up can accept 10 mm to 13 mm ropes.

- Static rope sizes between 10 mm and 11.5 mm need to have a Tech-Nora, aramid, or kernmantle sheath with low elongation (recommended under 2% elongation). Outer sheath should consist of 32 strands or higher for best rope wear.
- Rope diameter 11.5 mm to 12 mm can be used with larger elongation factors (recommended under 3.3% elongation). Outer sheath must consist of 32 strands or higher for best rope wear.
- Rope Diameter 12 mm to 13mm (3000 & up Serial Numbers Only) need to have a Tech-Nora, aramid, or kernmantle sheath with low elongation (recommended under 4.5% elongation). Outer sheath should consist of 32 strands or higher for best rope wear.
- The diameter of the rope should not shrink below 10 mm when weight is applied to the device. This can cause the rope to slowly slip when brake is applied.

Both ends of the rope need to have good clean burnt end where the inner core is no longer exposed or visible. All tape or shrink wrap should be removed from the rope. (see rope burning video <https://www.youtube.com/watch?v=ug6JuV8I4H4&t=4s>)

Rope Warnings

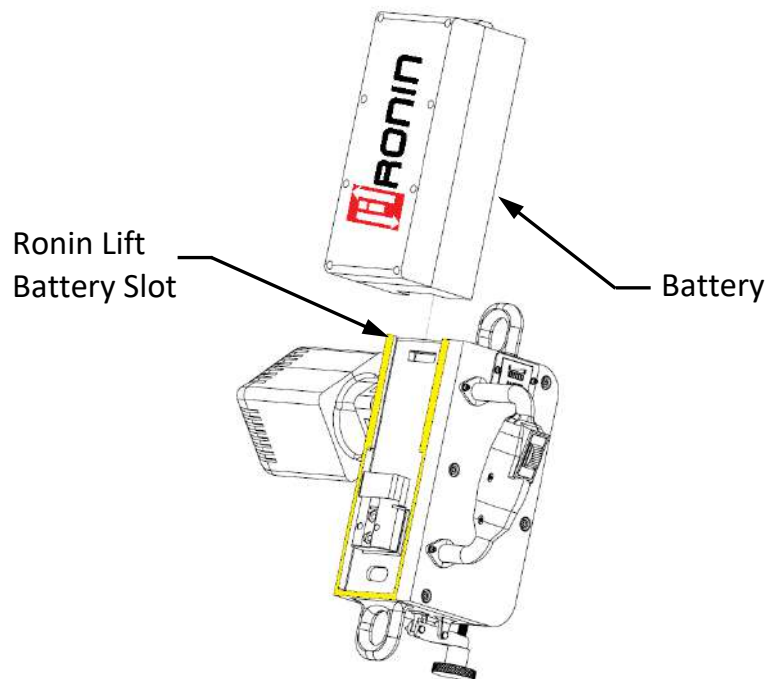
- Only use static line ropes with Tech-Nora, aramid, or kernmantle sheath with Ronin Lift.
- Use only ropes that are 32 strand or higher.
- Remove any tape or markers from the ends of the rope, before inserting into the Ronin Lift.
- Do not use Dynamic rope.
- Inspect rope prior to use, during use and after use for rope integrity
- Never use damaged or worn rope
- Only use EN 1891 and EN 564 approved rope

Contact Ronin directly at info@ronin.inc for the complete list of approved ropes

Battery Installation and Motor Initiation

Warning: If battery is to be switched out mid-line, then a lanyard shall be attached to the battery carabineer attachment point and another point either on person or device. This ensures if the battery were to fall, then it will be retained by the lanyard. This is a safety precaution to ensure a battery does not accidentally fall and/or injure person(s) below.

1. Slide the battery down the side of the Ronin Lift, matching the slots in the Ronin Lift housing with the tangs on the battery.



2. Drive the battery down with enough force to mate the connectors.

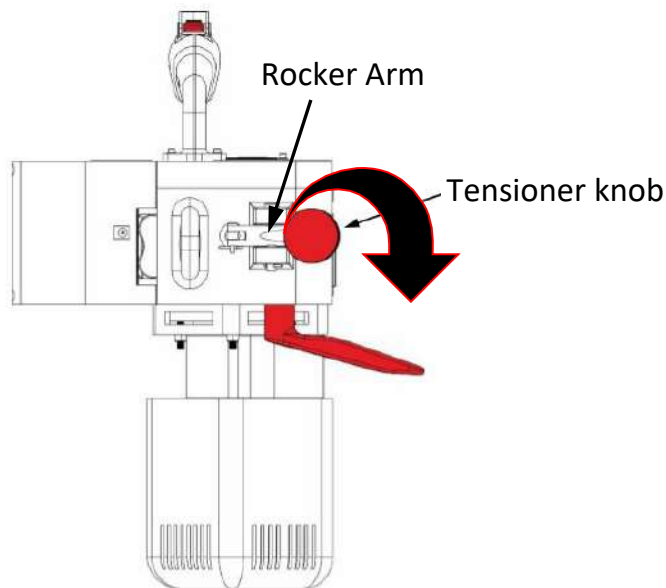
Note: The connectors are impact resistant, due to tolerance stack some batteries may take more force to connect than others.

3. The battery connection will start up the motor arming sequence. You will hear the controller beep 5 times, now the Ronin Lift is ready for use.
4. The battery indicator will also go through a lighting sequence. It will circulate from empty (**red** color tick mark left most side) to full (**green** color tick mark right most side), then display the batteries current charge state.

Loading Rope

This section is for any Ronin Lifts with a serial number of 1000 to 3200-R. If your Ronin's serial number is 3201-R or higher, then continue to Rope Loading on page 20.

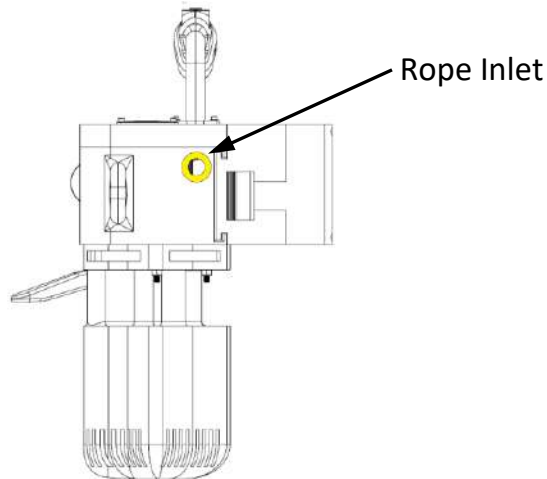
1. For Ronin Lifts with a serial number of 1000 to 3200-R, fully rotate the red tensioner knob in the clockwise (Right) direction, until the rocker arm bottoms out on the ascenders housing. This will pull down the tensioner and create space to allow the rope to feed into the system. **Make sure the red knob is turned fully clockwise (Right), until it cannot be turned any more.**



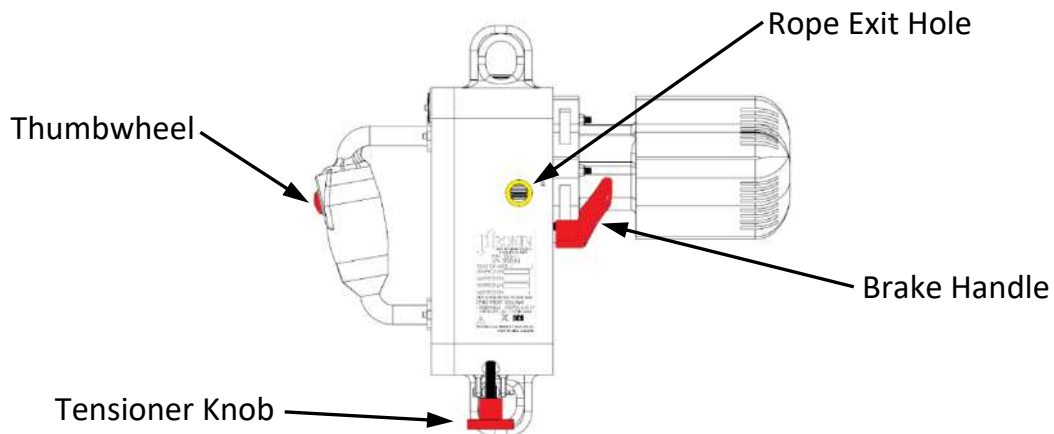
Burning Rope Ends

Note: Remove any tape or markers from the ends of the rope, before inserting into the Ronin Lift. Make sure your ends are burnt and No inner core is exposed. For users with the Ronin Perfect Burn Tip, please see the instructional video at <https://www.youtube.com/watch?v=ug6JuV8I4H4&t=4s>. For user's burning their rope tips without the Ronin Perfect Burn Tip, please follow the instructions below.

- Remove any tape or markers from the ends of the rope.
- Eject the inner core out from the outer jacket about 0.5 in (1.3 cm).
- Cut the inner core with rope cutters and milk the sheath back over the inner core.
- Burn the end of the rope with a torch and use a rage to cone the end after burning.
- Make sure your rope tip is coned and no inner core can be seen.



2. Insert Static Line Rope (10 mm to 12 mm diameter) through the rope inlet hole, until it stops. Start pushing rope into the inlet hole and TAP the thumbwheel, while pushing. Continue to push and TAP the thumbwheel, until approx. 8 inches (20 cm) of rope has fed into the system. **Note: You only need to TAP the thumbwheel for this operation. Do not hold the thumbwheel down or this can cause damage to the rope or system.**
3. Now turn the red tensioner knob back to the left (Counterclockwise) to the neutral position (The neutral position is where the knob feels very loose in tension and the rocker arm is floating in between the two flanges on the red tensioner knob). Now pull the brake open slightly and TAP the thumbwheel, until the rope comes out of the rope exit hole (**Note: For units with reverse function do not pull brake fully open or unit will switch into reverse**). If the rope does not move or moves very slowly, then you can turn the red tensioner knob 1-2 additional turns in the left (Counterclockwise) direction and repeat the step.



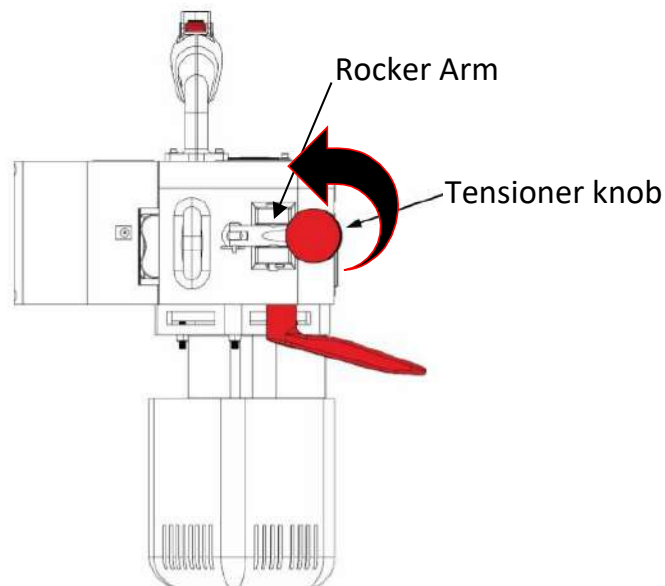
- Before Ascending turn the red tensioner knob to the left (counterclockwise), until it starts getting physically tight. The more weight you lift, then the tighter you need to turn the knob, in the left (counterclockwise) direction. **(Note: The Ronin is a non-slip system, so if the Ronin is slipping, while ascending, then STOP. Apply more tension by turning the Red Tensioner knob counterclockwise, until Ronin is no longer slipping under power).** For best rope wear, the tensioner should be set for the weight you are lifting. Do not just turn the tensioner as tight as you can, or this will result in increased rope wear.

Continue to page 22 for users with a serial number of 1000 to 3200-R to learn to operate the Ronin Lift.

Loading Rope

This section is for any Ronin Lifts with a serial number of 3201-R or higher. All other serial numbers continue to the Loading Rope section on page 18.

- For Ronin Lifts with a serial number of 3201-R or higher, fully rotate the red tensioner knob in the counterclockwise (Left) direction, until the rocker arm bottoms out on the ascenders housing. This will pull down the tensioner and create space to allow the rope to feed into the system. **Make sure the red knob is turned fully counterclockwise (Left), until it cannot be turned any more.**

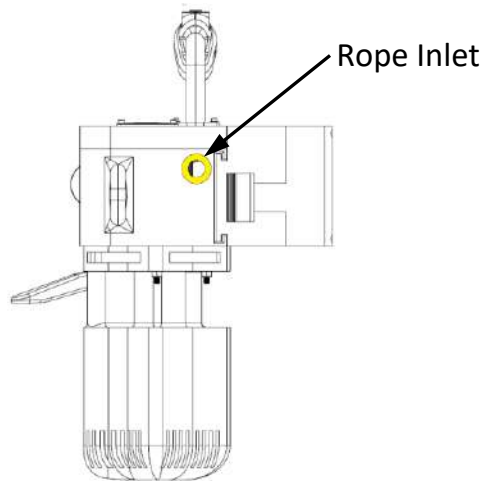


Burning Rope Ends

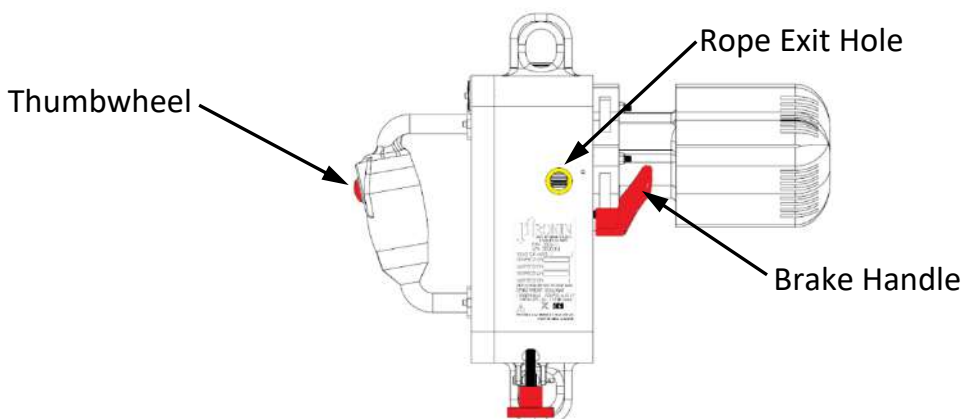
Note: Remove any tape or markers from the ends of the rope, before inserting into the Ronin Lift. Make sure your ends are burnt and No inner core is exposed. For users with the Ronin Perfect Burn Tip, please see the instructional video at

<https://www.youtube.com/watch?v=ug6JuV8I4H4&t=4s>. For user's burning their rope tips without the Ronin Perfect Burn Tip, please follow the instructions below.

- Remove any tape or markers from the ends of the rope.
- Eject the inner core out from the outer jacket about 0.5 in (1.3 cm).
- Cut the inner core with rope cutters and milk the sheath back over the inner core.
- Burn the end of the rope with a torch and use a rage to cone the end after burning.
- Make sure your rope tip is coned and no inner core can be seen.



2. Insert Static Line Rope (10 mm to 13 mm diameter) through the rope inlet hole, until it stops. Start pushing rope into the inlet hole and TAP the thumbwheel once, while pushing. The system should have pulled in about 2 in (5 cm) of rope.
3. Now pull open the red brake handle slightly and slowly roll down the thumbwheel, until the rope comes out the rope exit hole. **Do not pull the red brake handle fully open or this will activate reverse function.**



4. Before Ascending turn the red tensioner knob to the clockwise (Right) direction, until hand tight. If you feel the Ronin slipping on the rope during ascending or winching, then stop and turn the red tensioner knob clockwise (Right) 1-2 additional turns, until slipping stops.

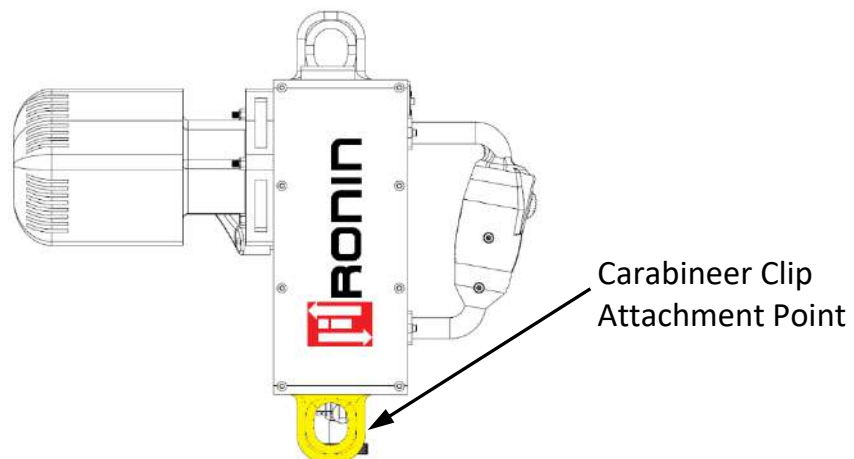
Operating Ronin Lift

Caution: Ensure you have all safety equipment on and properly secured, prior to using Ronin Lift. Misuse or improperly secured equipment could result in serious injury or death. Never use the Ronin Lift Personal without a secondary rope grab system.

1. Below is an example of a rope grab system, this is one example. There are many different secondary safety line systems that can be used.



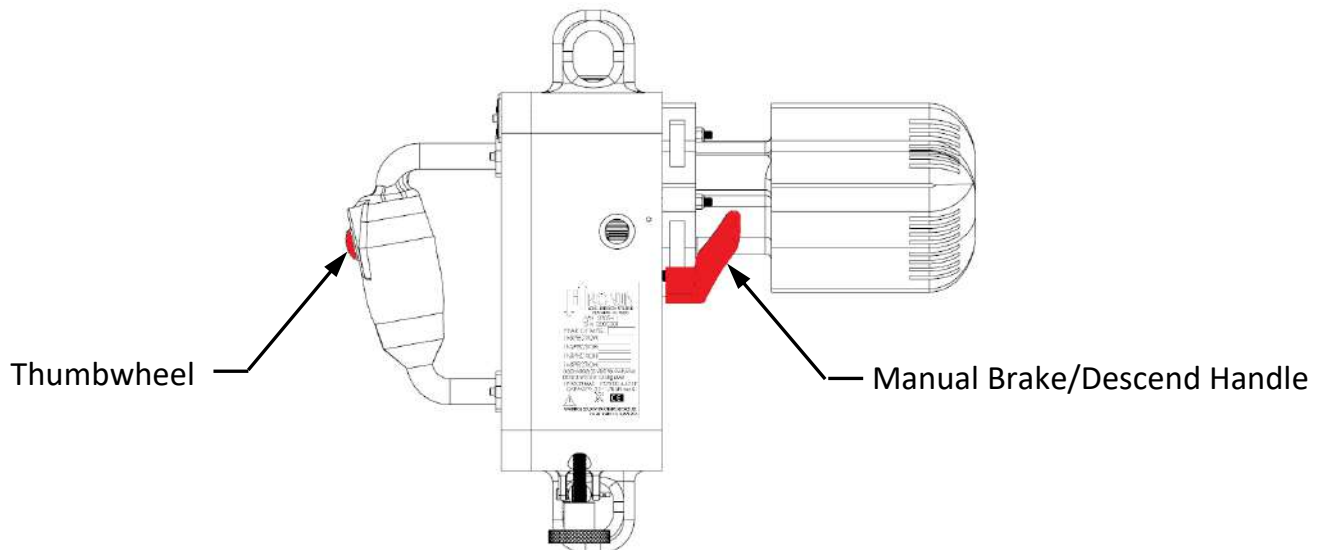
2. Be sure to use a load rated carabineer clip that complies with ANSI / CE standards. Connect the Ronin Lift to your harness with a carabineer, using the lower Ronin housing attachment point.



3. Grip the handle in your hand and gently roll the thumbwheel down slowly, to actuate the motor & remove any slack in the line. **Note: If your Ronin is equipped with a Deadman handle upgrade, then you will need to pull the Deadman trigger first before the thumbwheel can activate the motor.**

4. Once the slack has been removed you can rotate the thumbwheel down slowly to start ascending. The thumbwheel switch is a variable speed thumbwheel capable of providing ascent speeds of 0.5 – 1.5 ft/sec (0.15 - 0.46 m/sec). The further you roll down the thumbwheel the faster the ascent will be. **(Note: The brake is always engaged automatically, while ascending. Once you stop your ascent the Ronin will automatically brake in that spot).**

Warning: Prior to ascent double check all equipment for integrity, rope, Ronin Lift, Harness, Secondary line w/ backup connected and functioning, Helmet secured, etc. Check to make sure there is no risk of objects falling on the lift, operator, or surrounding person(s) below.



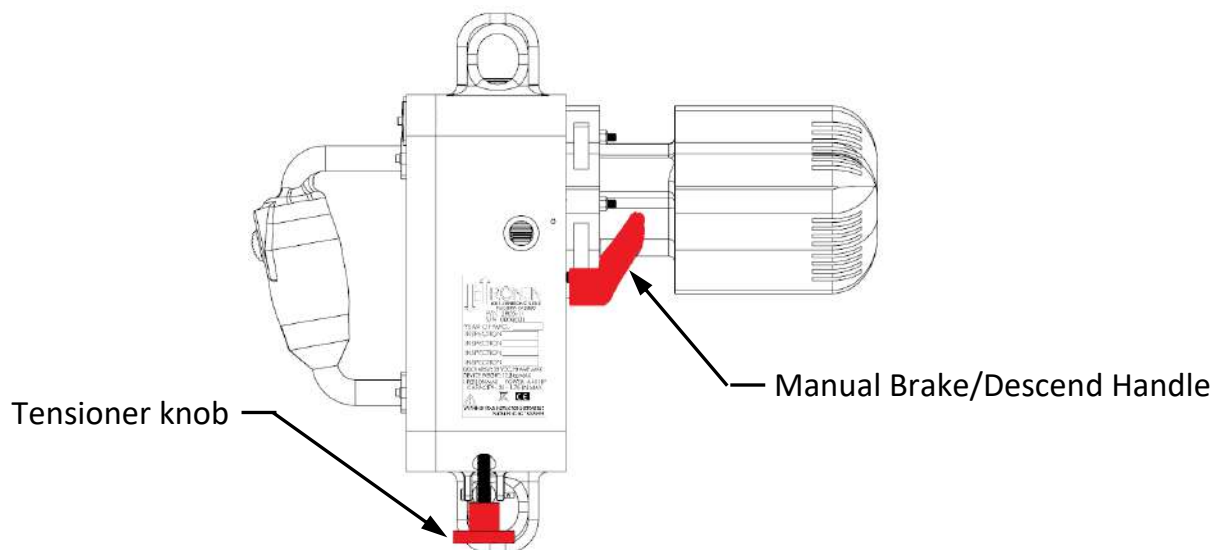
5. When ready to stop ascending release the thumbwheel switch. **(Note: The brake is always engaged, while ascending. Once you stop your ascent the Ronin will automatically brake in that spot).**
6. When descending its best practice to TAP the thumbwheel and then simultaneously pull the brake handle down. This will help to preserve your rope. If you run out of battery at any time and do not have power, then you can always just pull the brake handle open to descend. **(Note: If you pull the brake handle open and do not descend or descend very slowly, then this is due to the tensioner knob being set too tight for the weight you are lifting. Serial #'s 1000 to 3200-R will turn the red tensioner knob clockwise (Right) 1-2 turns to remove tension. Serial #'s 3201-R & higher will turn the red tensioner knob counterclockwise (Left) 1-2 turns to remove tension.)**

Caution: For Ronin Lifts with reverse function, do not pull down on the thumbwheel, with the brake fully open. This will activate reverse function, which is not recommended for descending.

7. When descending you can control your speed and braking best by tending the rope tailing line with your right hand. While holding the brake handle fully open (down), if you pull slightly on the rope, while descending, then you can control speed. If you pull tightly, then the unit will stop, and you can release the brake to stay in place. This is the best practice for preserving rope. (Note: You can always just release the brake at any time to stop.)

Note: The Ronin's brake is an On / Off Switch and cannot be feathered. It acts similarly to any backup device for stopping. Follow the steps above to control descent speed and increase rope longevity.

Note: A 2:1 or 3:1 pulley system can be used with the Ronin Lift. This reduces the speed of the device but allows for max loads of 800 lbs. (363 kg) or 1200 lbs. (544 kg).



8. Once you are safely on the ground and sufficient slack has been taken out of the rope, then release the brake and you may now unclip from Ronin Lift.

Wireless Remote Control:

If your Ronin Lift Ascender is equipped with a Wireless Remote control, then please make yourself aware of the proper usage and precautions below. For information on how to upgrade your Ronin Lift with a wireless remote, please contact your local distributor or Ronin at info@ronin.inc. It is recommended that your Ronin Lift Ascender has reverse functionality for full range of control with your wireless remote.

Features:

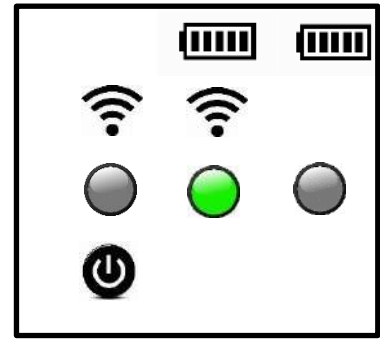
- Each wireless remote & matching receiver are a pair and cannot control other Ronin Lift's.
- 2.4GHz two-way communication with 80 channels & automatic FM anti-interference.
- 32bit ID code
- Built-in lithium Ion battery good for approx. 10 hours when fully charged. Charge battery using the USB port.
- Center LED light will flash Red when battery is low.
- Remote will automatically turn off 5 minutes after signal loss.
- Remote control and receiver match automatically when remote and Ronin are powered on.
- Range for the remote is 300 ft (91 m) direct Line of site. Any buildings, trees or other obstructions will interfere with the max range.
- The Ronin Lift's thumbwheel has priority and can override the remote, when used.
- The remote has a variable speed thumbwheel, just like the Ronin Lift's thumbwheel. This allows for smooth controlled operation during usage.

Precautions:

- For use in reverse direction the Ronin Lift's brake handle must be tethered fully open (down) by using the Ronin brake latch, a lanyard, or paracord. If your Ronin Lift is not equipped with reverse functionality, then contact Ronin at info@ronin.inc for upgrade information.
- It is always recommended to have a stop knot at the top of the rope, when using the remote.
- Do not use the remote if severely damaged in anyway.
- Discontinue use if the thumbwheel does not rotate freely or spring back to the neutral position, when released.

Remote Charging:

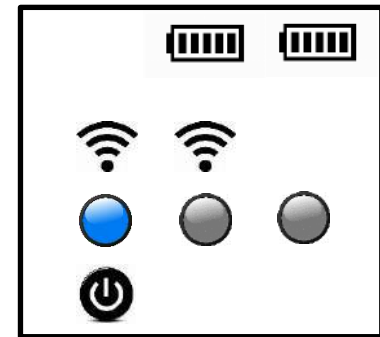
The wireless remote takes approx. 2 hours to fully charge. The charging port on the remote is a standard micro USB. Center LED light will be **Green** when charging and turn off when fully charged.



Remote Operation:

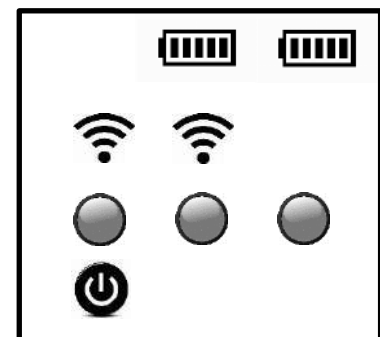
1. Install the battery onto the Ronin Lift.
2. Hold the remote's power button down for 3 seconds to power on. The 3 LED's will flash, and the left LED will be solid Blue, when paired. Make sure you are within range of the Ronin Lift to pair with the Ronin Lift's receiver.

Note: If the Blue LED is flashing then it is still attempting to connect with the Ronin Lift.



3. Roll down on the remote's thumbwheel for full variable speed control. Release the thumbwheel to stop the Ronin Lift's motor.
4. When finished using the remote you will hold down the power button for 6 seconds until all 3 LED lights are off.

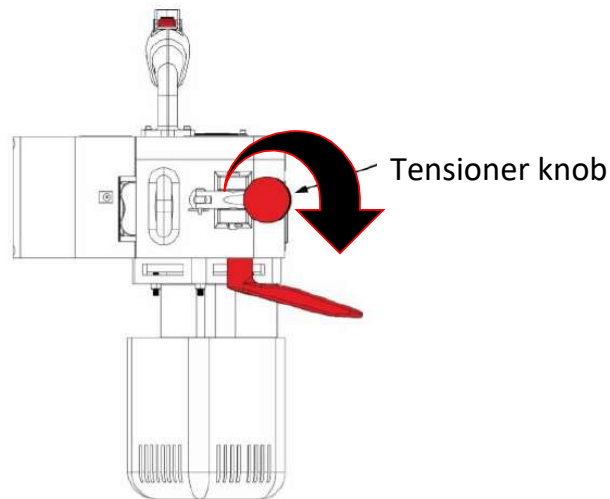
5. Remove battery from the Ronin Lift, when finished.



Removing Rope from The System

- For Ronin Lifts with a serial number of 1000-R to 3200-R, rotate the red tensioner knob in the clockwise (Right) direction to the neutral position. (The neutral position is where the knob feels very loose in tension and the rocker arm is floating in between the two flanges on the red tensioner knob). Pull the brake fully open (Down) and rotate the thumbwheel down, while holding the brake fully open (down). This will activate reverse function and back the rope out of the system.

Note: If your Ronin is not equipped with reverse functionality (There is no “R” after your serial number), then rotate the red tensioner knob fully clockwise (Right). Then open the brake by pulling down and walk the rope back out of the system. You will be back driving the gearbox, so some pulling force will be needed.



- For Ronin Lifts with a serial number of 3201-R or higher, pull the brake fully open (Down) and rotate the thumbwheel down, while holding the brake fully open (down). This will activate reverse function and back the rope out of the system.

Note: When you reach the end of the rope, the rope may not fully eject from the system. Release the thumbwheel and pull the rope out by hand when this happens.

Ronin Lift Duty Cycle

For users operating where CE certification is required...Ronin Lift requires a duty cycle to ensure the device housing does not exceed temperatures defined by CE certification requirements as unsafe. The max CE permitted temperature is 129 °F (54 °C) in which skin can touch metal and not be burned. To meet this requirement please do not exceed the duty cycle described below:

- The Ronin Lift can ascend 200 ft. of rope continuously in 100 °F (38 °C) temperature with max load of 400 lbs. (181Kg).
- Followed by a 30 min. rest and an additional 50 ft. (15m) can be ascended.
- The 30 min. rest and additional 50 ft. (15m) of ascent can be performed 3 additional times after the initial 200 ft. (61m) of ascent.

Then unit needs to cool down back to 100 °F (38 °C) temperature. Then the duty cycle may be performed one additional time per day.

Battery Overcurrent Protection

Overload occurs when loads more than 400 lbs. (181 kg) are attempting to be lifting or extreme shock loading occurs.

- If overload condition occurs power will cut out from the battery.
- To reset system in an overload event, disconnect the battery, wait 10 seconds, and reconnect battery
- Additional weight may need to be removed to prevent further overload events

In the event overload condition occurs and battery removal is not achievable, release the brake to descend to ground. Then follow the above reset procedure.

Inspection and Maintenance

During the Ronin Lifts life cycle, periodic inspections and maintenance is required. Some parts will experience wear and will need to be replaced. See table below for periodic inspection, maintenance check and parts replacement intervals.

Part Number	Description	Inspection Interval	Inspection	Maintenance Interval	Maintenance	Replacement Interval
2805-101504	Thumbwheel & optional Deadman Trigger	Daily Prior to Use	With battery connected rotate thumbwheel downward slowly and verify motor increases in speed. Then rotate thumbwheel slowly back to neutral position and verify thumbwheel decreases motor speed to off. If your device has the Deadman Trigger option, then verify the trigger springs back to the start position, when released. Make sure the thumbwheel does not activate the motor without the Trigger being Squeezed.	None	None	Annually Inspected
2805-151023	Motor	Daily Prior to Use	With battery connected rotate thumbwheel downward slowly and verify motor increases in speed. Then rotate thumbwheel slowly back to the off position and verify thumbwheel decrease motor speed to off in the neutral position. Ensure there is no debris blocking the air vents in the motor cover and the motor is free from debris inside. If debris is found blow out using air.	None	None	Annually Inspected
2805-770518	Tensioner Knob	Daily Prior to Use	Visually inspect tensioner knob threads are in good working condition and lubricated with Teflon grease	None	Apply Teflon based grease	Annually Inspected
2805-52035	Tensioner Assembly	None	Verify tensioner assembly moves up and down smoothly with operation of the tension knob	None	None	Every year
2805-112483	Battery Indicator	Daily Prior to Use	Visually verify when battery is connected indicator flashes through the indicator lights and then displays current battery charge	None	None	Annually Inspected
2805-80027	Cam Cinch Assembly	Daily Prior to Use	Look into the Ronin Lift rope Exit hole and visually inspect that Cam Cinch teeth are not clogged with any debris and are not worn	Before Every Use	Use an AWL, Pick or small file to clean cinch teeth	Every year

2805-82610	Drive Shaft Assembly	None	Will be performed at authorized repair facility	None	None	Every 2 years
508822	Battery	Daily Prior to Use	Verify battery is not damaged, leaking, or swollen	None	None	Approx. 300 Charges

Returning for Service / Maintenance

When returning your Ronin Lift to have the yearly required inspection and part replacement performed, please return to Ronin Revolution Corp or your local certified Ronin Repair Center. If you are returning your Ronin Lift to Ronin Revolution Corp., then follow the steps below...

1. Complete an RMA (Return Material Authorization) by visiting www.ronin.inc and clicking on the Service tab. Complete the RMA form and click submit.
2. Safely package products along with a copy of the RMA form.
3. Make sure to package your return securely if you are not shipping back in the original packaging or the Ronin hard case.

Note: Please do not hand deliver your product to the Ronin facility, even if you are local. This facility is not set up to receive visitors.

Annual Service Exceptions

For users that have not used their Ronin's or have had very little use, see annual service guidelines below.

- If you have a Ronin that is a backup unit and has not been used for the 12-month period, then there is no need to send it in for annual Service.
- Any Ronin that has ascended 2000ft (610m) or less of rope in a 12-month period, does not have to be returned for annual service. Use the table below to track your usage.

Tracking Your Ascending						
Part Number: 2805-11				Product: Ronin Lift		
Serial Number:				First Date of Use:		
	Date	Number of Times Ascending		Height of Lift (ft/m)		Total Length of rope ascended
1			X		=	
2			X		=	
3			X		=	
4			X		=	
5			X		=	
6			X		=	
7			X		=	
8			X		=	
9			X		=	
10			X		=	

You Ronin's service life is complete 12 months after your 4th Annual Service

ID Plate Inspection Referencing

When you purchase your Ronin Lift new the ID Plate will show the year of manufacture. Your first annual inspection will be 12 months after the first date of use. Date of Manufacture will show the Month followed by the year (ie: 05/2020).

Your first inspection due date will be listed in the first column showing month followed by the year (ie: 06/20). The second column will be the date the inspection was completed showing the month followed by the year (ie: 06/20). The next inspection due will be filled in by the service center after each annual service is completed.

IRONIN
 600 S. JEFFERSON ST SUITE D
 PLACENTIA CA 92870 USA
 P/N 2805-11
 S/N 3XXX-R
 YEAR OF MFG.

	INSPECTION INTERVALS	
	DUE	COMPLETED
1ST INSPECTION	<input type="text"/>	<input type="text"/>
2ND INSPECTION	<input type="text"/>	<input type="text"/>
3RD INSPECTION	<input type="text"/>	<input type="text"/>
4TH INSPECTION	<input type="text"/>	<input type="text"/>
RETIREMENT DATE	<input type="text"/>	<input type="text"/>

DISCHARGE: 33 VDC 90 AMP MAX
 DEVICE WEIGHT: 12.0 kg MAX
 1 PERSON MAX POWER: 4.43 HP
 CAPACITY: .22 - 181 kg MAX (400 lbs.)

EN ISO 12100:2010 & EN60204-1:2018
 WARNING! READ INSTRUCTIONS BEFORE USE
 PATENT PENDING 15/678,998

Service Bulletin ID Plate

Your Ronin Lift will have an ID Plate for Ronin service locations to keep track of active service bulletins. This plate will be located just above the battery connector on the inside of the Ronin Lift's main housing. If you Ronin does not have this plate, then do not worry. The next time you send your Ronin in for service, then the plate will be added and updated accordingly. With our worldwide network of certified repair locations, this assures you can send your Ronin to any location and the most current service updates will be completed.

IRONIN
 600 S. JEFFERSON ST SUITE D
 PLACENTIA CA 92870 USA

SERVICE BULLETINS APPLIED

S/B NUMBER	<input type="text"/>
S/B NUMBER	<input type="text"/>
S/B NUMBER	<input type="text"/>
S/B NUMBER	<input type="text"/>
S/B NUMBER	<input type="text"/>
S/B NUMBER	<input type="text"/>
S/B NUMBER	<input type="text"/>

End of life

After 5 years of service, the Ronin's service life is complete. Service life is based on time, which is defined by how many annual services the lift has received. A Ronin's service life is complete 12 months after the 4th annual service. Your annual services will be marked on the Ronin's id Plate, by the certified repair center that performed the service. If the Ronin does not need to be returned, because it falls under one of the Annual Service Exceptions, then the life of a Ronin can be extended up to 10 years. The service life of a Ronin cannot exceed 10 years under any circumstances.

The Ronin Lift is made of many materials that may be recycled. The battery contains lithium ion materials, and the lift contains aluminum. The speed controller contains solder and electrical components. Ronin products can be recycled for free in the United States and Canada by dropping the product off at any number nationwide recycling locations.

Ronin Warranty

Ronin products and accessories are guaranteed against manufacturing defects for 90 days from the original date of purchase or the minimum legally mandatory country requirement, from the original date of purchase. In the event of such defects, Ronin will repair or replace the defective part(s) or product(s) with comparable parts or products at Ronin's sole discretion. Damage resulting from use, water intrusion, physical damage, or normal wear and tear is not covered by this or any warranty. Ronin assumes no liability for any accident, injury, death, loss, or other claim related to or resulting from the use or misuse of any products. In no event shall Ronin be liable for incidental or consequential damages relating to or resulting from the use of this product or any of its parts. This product is not warrantied against user repairs and user repairs will void the warranty. Breaking the seal on the Ronin cover also results in immediate loss of warranty. Returns or replacements of parts and/or products may be subject to shipping, handling, replacement, and/or restocking fees.

If you have purchased your product(s) from an authorized Ronin distributor, then please contact the distributor for warranty claims.