

# Instruction Manual

PN 2805-11 Ronin Lift





#### WIND ENERGY







ARBORIST



WINDOW CLEANING



**EXTERIOR ACCESS** 



OIL 🔏

GAS



CONSTRUCTION

REV. Q: DATE MARCH 3, 2021

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#### **User Disclaimer**

#### Warning

Training is not required but recommended for any new users. This manual is not a substitute for user training.

To avoid injury, you should never remove the front cover of your Ronin Lift or modify it in anyway. Any changes or modifications are considered out of compliance, which voids the warranty and the Lift's certification for commercial or personal use.

Never use the equipment until you have read and understand this instruction manual. Ronin Revolution Corporation and any of its distributing subsidiaries are not responsible for any damages, injuries or deaths that result due to usage outside the instruction of this instruction manual.

Always visit <a href="https://www.roninpowerascender.com">www.roninpowerascender.com</a> for the most current version of this manual.

Tel: +1-657-444-2557 Email: <u>info@ronin.inc</u>



Never open the front cover of your Ronin Lift.



You must read and understand this manual before using your Ronin Lift.

## **Product Safety**

#### **Lithium-Ion Battery Information**

- The battery should always be removed from the Ronin before storage or extended periods of non-use. Failure to comply could result in degradation of the battery cells or loss of all battery life.
- The battery must be removed from the Ronin Lift, before charging.
- Each Ronin battery has an overcurrent safety cutoff to prevent lifts over max safe working load.
- For shipping, the 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 Ronin for the Battery Safety Data Sheet. info@ronin.inc
- Stop use if battery becomes too hot to touch, or battery becomes swollen / bloated.
- The battery should never be connected to the Ronin Lift in areas with poor ventilation or where gas may be present.
- Battery needs to be stored in a cool dry place when not in use.



Type	Lithium-lon		
Voltage	28.8 VDC Nominal		
Amperage	90 amps (1 min burst)		
Battery	4.5 Ah		
Capacity			
Operating	-4º F — 100º F (-20º C —		
Temperature	38º C)		
Mass	Approximately 6.5 lbs.		
IVIASS	(3Kg)		
Battery Life	Approximately 300		
Dattery Life	Charges		
Charge Time	Approximately 2 hours		
Charging	109 º F (43 º C) Maximum		
Temp			
	-4º F – 113º F (-20º C –		
Storage	45º C) Less than 1		
Temperature	month		
remperature	-4º F – 95º F (-20º C – 35º		
	C) Less than 6 months		
Storage	≤ 80% Less than 1 month		
Humidity	≤ 70% Less than 6 months		
	50% charge approx. is		
Storage	recommended for		
Voltage	extended periods of		
	battery storage		

#### **Power Supply Information**

- The battery charger is adaptable from 100v – 240v outlets. The charger cables shipped with the unit fit type A, B or C.
- Do not leave any battery charging unattended for longer than 3–4-hours.
- 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 for extended periods of time.
- Regularly inspect AC power cord for damage.
- After use, wait 30 minutes before charging the battery.
- After fully charging the battery wait 30 minutes before use.

#### Power Supply Charging

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



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

## **Product Safety**

#### Ronin Lift Information

- Do not use the Ronin Lift without the required proper personal protective equipment (PPE).
   Not doing so may cause serious injury or death.
- Inspect all equipment prior to each use.
- Only use approved static ropes with the Ronin Lift.
- Each Ronin battery has an overcurrent safety cutoff to prevent lifts over max safe working load.
- Ronin Lift is IP54 rated for light rain and use of wet rope. Do not spray with direct water stream or use in heavy rain conditions.
- Do not stick any foreign metal objects into the Rope inlet or Rope exit holes for any reason.
- 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
- Do not cover motor ventilation holes
- This product is recommended for adults 18 years of age and higher. Children under the age of 18 must be supervised by a trained adult.



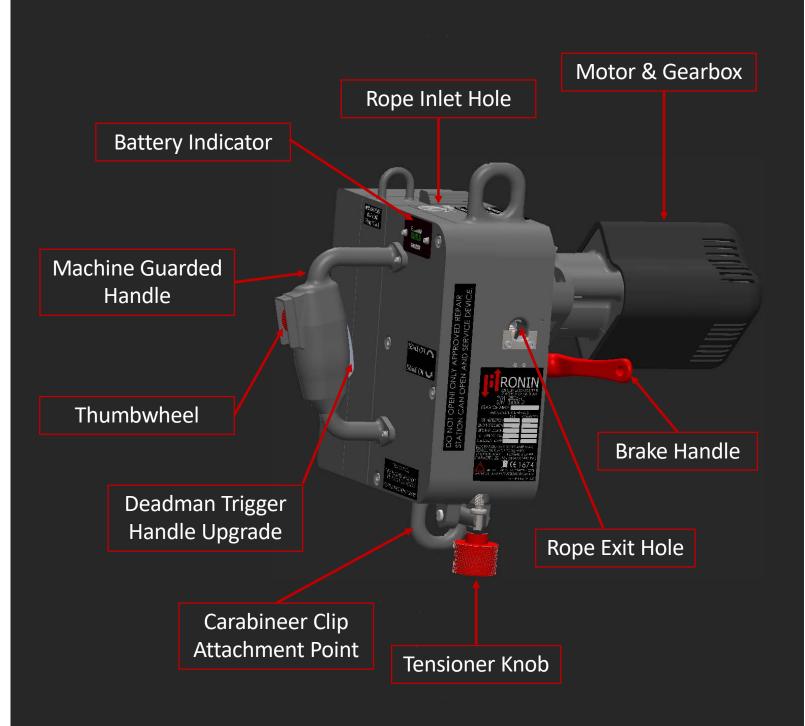




## **Ronin Lift Technical Specifications**

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

## **System Overview**



#### **Device Labels**

Warning Label instructions: User must read the entire instruction manual and have a thorough understanding of the device, prior to use. A secondary rope grab must always be used. WARNING! READ
INSTRUCTIONS.
ALWAYS USE A
SECONDARY ROPE
GRAB SYSTEM



The Ronin Lift ID Plate 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 service life of the Ronin Lift.

Service Bulletin ID Plate helps Ronin service locations to keep track of active service bulletins that have been applied.



#### **Device Labels**

DO NOT OPEN! ONLY APPROVED REPAIR STATION CAN OPEN AND SERVICE DEVICE.

The Ronin Lift can only be serviced or repaired by Ronin or an approved certified repair center. The maintenance or repair can be scheduled by visiting www.roninpowerascender.com 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.

BRAKE OFF

BRAKE ON

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

#### **Device Labels**

TENSION KNOB

TURN KNOB LEFT LOAD ROPE
TURN KNOB RIGHT ASCEND

"READ INSTRUCTIONS FOR USE"

#### 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.

#### 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.

TENSION KNOB

TURN KNOB RIGHT LOAD ROPE
TURN KNOB LEFT ASCEND

"READ INSTRUCTIONS FOR USE"





#### Ronin Lift Serial Numbers 3000-R and up

- 1: Ronin HP Rope by Marlow 11.5 mm dia.
- 2: Marlow ProTech 500 11.0 mm dia.
- 3: Sterling Tech  $125 \frac{1}{2}$ " dia.
- 4: Yale Cordage R.I.N.G. 11.5 mm dia.
- 5: Yale Cordage Scandere 11.7 mm dia.
- 6: Sterling HTP Red 13 mm dia.
- 7: Sterling WorkPro 1/2" dia.
- 8: Teufelberger X-Static 11.7 mm dia.
- 9: Teufelberger KM III Max 11 mm dia.
- 10: Pelican Rope White Rope 11 mm dia.
- 11: Pelican Rope 1WPP-160L54-001 1/2" dia.
- 12: PMI RR125BL030M 12.5 mm dia.
- 13: Sterling Element ½" dia.
- 14: Yale Cordage Calamine 11.7 mm dia.
- 15. Sterling Scion 11.5 mm dia.
- 16. PMI E-Z Bend 11 mm dia.
- 17: Yale Cordage XTC-16 13 mm dia.
- 18. Teufelberger Platinum Protect PES/PA 11 mm dia.

#### Ronin Lift Serial Numbers 2999-R and below

- 1: Ronin HP Rope by Marlow 11.5 mm dia.
- 2: Marlow ProTech 500 11.0 mm dia.
- 3: Teufelberger X-Static 11.7 mm Dia.
- 4: Teufelberger KM III Max 11 mm Dia.

## Rope Requirements

# Ronin Lift Serial Numbers 3000-R and up only

- Rope Type: Static Rope
- Rope Diameter: 10 mm 13 mm
- Rope Diameter Shrinkage: Cannot shrink below 10 mm under loaded conditions
- Sheath Construction: Tech-Nora/Aramid Preferred (Kernmantle is acceptable)
- Rope Elongation: Less than or equal to 2% at 300 lbs. for 10 mm - 11.5 mm. Less than or equal to 3.3% at 300 lbs. for 11.6 mm - 13.0 mm
- Plait Count: Preferred 32 or 48 Plait (16 and 24 are acceptable)

If additional help is needed with your rope selection, then please contact us today



We do not force usage of a single rope for our ascender. However, not all ropes are created equal. With that in mind page 12 has a list of ropes we've approved for use with our system. Rope will have a big impact on how your ascender performs. We recommend choosing from the approved ropes list only.

## **Rope Preparation**

Remove any tape or markers from the ends of the rope, before inserting into the Ronin Lift. Make sure your ends are burnt so NO inner core is visible. A hot knife cut, or factory burn is not acceptable.

#### 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 outer sheath back over the inner core. The inner core should be recessed into the outer jacket now.
- Burn the ends of the rope with a torch and use a rag to cone the end after burning.
- Make sure your rope tip is coned and no inner core is visible.



Always check your ropes condition, prior to use with the Ronin Lift. Ensure it and your secondary backup are in acceptable climbing condition.



Remove any tape or markers from your rope before loading into the Ronin Lift.

### **Box Contents**

- 1: Ronin Lift Kit (Includes Bollard Friction Saver & Reverse Functionality.)
- 2: Lithium-Ion Rechargeable Battery
- 3: AC Power Supply
- 4: Type A, B or C, AC Power Cord
- 5: Rope Brush Watch our instruction video on YouTube "Ronin Lift Rope Brush Introduction."



# Battery Installation & Start up procedure

- Make sure you are using a secondary rope grab system.
- Check that your primary and secondary climbing lines are in acceptable climbing condition.
- All PPE is on and secured (Helmet, Gloves, eye protection.)
- Battery indicator is showing sufficient charge for the job.
- Be sure to clean out any rope fibers from the brake teeth, visible from the rope exit hole.
- Attach the battery to the Ronin Lift and confirm you hear a series of 5 beeps.
   (Be sure to slide down the battery with some force, when connecting to the Ronin.)
- Slowly roll down the thumbwheel. The motor should activate and speed up as you roll down further. When you release the thumbwheel, the motor should turn off. (If you have a Deadman handle upgrade then perform this while squeezing the Deadman trigger)



Do not use if feeling tired, fatigued or on any medication that prevents use of heavy machinery.



You must read and understand this manual before using your Ronin Lift.

#### Rope Loading

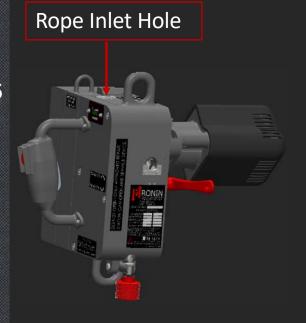
Be sure you've read and understand the Rope Preparation section on page 14, before continuing.

Rope loading for Ronin Lifts with serial numbers 3201 & up.

Step 1: 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.

Step 2: Insert an approved Static Line Rope (10 mm to 13 mm diameter) through the rope inlet hole. Push until it stops. TAP the thumbwheel once, while pushing the rope. The system should have pulled in about 2 in (5 cm) of rope



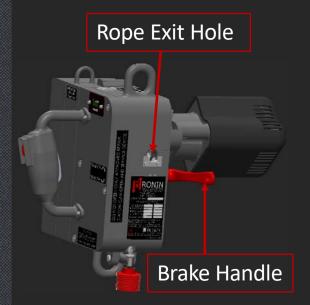


# Rope loading for Ronin Lifts with serial numbers 3201 & up.

Step 3: Now pull down on 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.

Step 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.

Step 5: Roll down the thumbwheel slowly and run out the slack in your climbing line until your Ronin is at waste level. 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.





Turn Fully to the Right until you start to feel resistance and then go hand tight.

Ascending & Descending for Ronin Lifts with serial numbers 3201 & up.

Step 1: Connect the Ronin Lift to your harness with a load rated carabineer clip, using the lower housing attachment point

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 without a secondary rope grab system, helmet, gloves and eye protection.

Step 2: 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. When you release the thumbwheel, the Ronin will automatically brake in that spot.)





Thumbwheel

Ascending & Descending for Ronin Lifts with serial numbers 3201 & up.

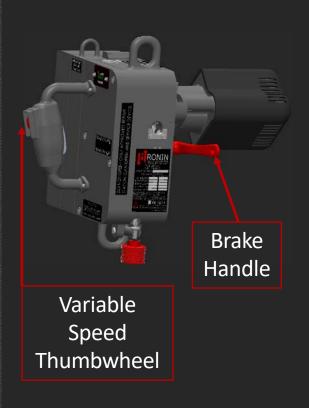
Step 3: Once your reach your desired height, then simply release the thumbwheel. The brake will automatically hold you in place.

Step 4: When ready to descend 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 knot being set too tight for the weight you are lifting turn the red tensioner knot counterclockwise (Left) 1-2 turns to remove tension and repeat step.)

Caution: Do not pull open the brake and roll the thumbwheel down to descend. Reverse function is not used to descend the line.



Release the thumbwheel to stop the ascent



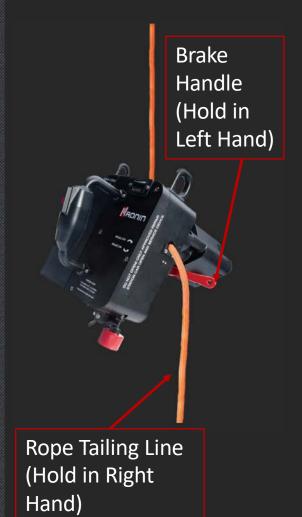
Ascending & Descending for Ronin Lifts with serial numbers 3201 & up.

Step 5: 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) with your left hand. Keeping the brake held fully open (down) with your left hand, If you pull slightly on the rope with your right hand, 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 stops)

Caution: the Ronin's brake is an On / Off switch and cannot be feathered. Follow steps above for best performance.

Step 6: Once you are safely back on the ground and sufficient slack has been taken out of the system, then release the brake and you may now unclip from Ronin Lift. (Note: You can hold the brake handle fully open and roll the thumbwheel down to create more stack in the system. This reverses the rope out of the system.)

Continue to page 28 of this user manual



# Battery Installation & Start up procedure

- Make sure you are using a secondary rope grab system.
- Check that your primary and secondary climbing lines are in acceptable climbing condition.
- All PPE is on and secured (Helmet, Gloves, eye protection.)
- Battery indicator is showing sufficient charge for the job.
- Be sure to clean out any rope fibers from the brake teeth, visible from the rope exit hole.
- Attach the battery to the Ronin Lift and confirm you hear a series of 5 beeps.
   (Be sure to push down the battery with some force, when connecting to the Ronin.)
- Slowly roll down the thumbwheel. The motor should activate and speed up as you roll down further. When you release the thumbwheel, the motor should turn off. (If you have a Deadman handle upgrade then perform this while squeezing the Deadman trigger)



Do not use if feeling tired, fatigued or on any medication that prevents use of heavy machinery.



You must read and understand this manual before using your Ronin Lift.

Be sure you've read and understand the Rope Preparation section on page 14, before continuing.

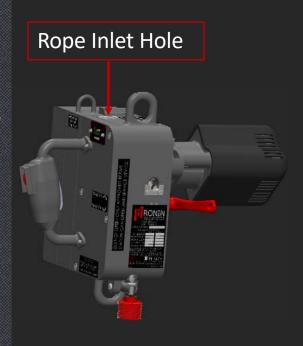
Rope loading for Ronin Lifts with serial numbers 3200-R & below.

Step 1: 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.



Step 2: Insert an approved Static Line Rope (10 mm to 13 mm diameter) into the rope inlet hole. Push until it stops. TAP the thumbwheel once, while pushing the rope. Continue pushing the rope and tapping the thumbwheel, until 8-10 inches (20-25 cm) of rope has fed into the system.

Caution: Serial numbers 2999-R and below can only accept rope diameters of 10 mm to 12 mm. See page 12 for approved ropes.

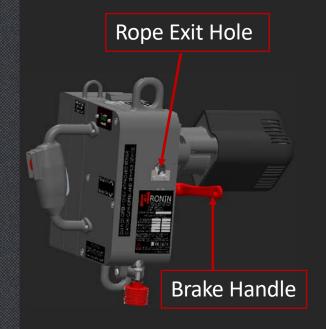


#### Rope loading for Ronin Lifts with serial numbers 3200-R & below.

Step 3: Now turn the red tensioner knob counterclockwise (Left) to the neutral position. (The knob should be very loose and free floating.) Pull down on the red brake handle slightly and slowly roll down the thumbwheel, until the rope comes out the rope exit hole. For units with reverse function do not pull the red brake handle fully open or this will activate reverse function.

Step 4: Before Ascending turn the red tensioner knob to the counterclockwise (Left) 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 counterclockwise (Left) 1-2 additional turns, until slipping stops.

Step 5: Roll down the thumbwheel slowly and run out the slack in your climbing line until your Ronin is at waste level. 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.





Turn Fully to the Left until you start to feel resistance and then go hand tight.

Ascending & Descending for serial numbers 3200-R & below

Step 1: Connect the Ronin Lift to your harness with a load rated carabineer clip, using the lower housing attachment point

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 without a secondary rope grab system, helmet, gloves and eye protection.

Step 2: 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. When you release the thumbwheel, the Ronin will automatically brake in that spot.)



Lower Carabineer Attachment Point



Ascending & Descending for serial numbers 3200-R & below

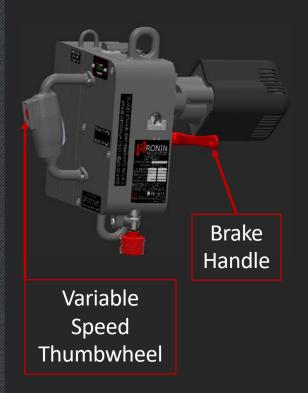
Step 3: Once your reach your desired height, then simply release the thumbwheel. The brake will automatically hold you in place.

Step 4: When ready to descend 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 know being set too light for the weight you are lifting turn the red tensioner know clockwise (Right) 1-2 turns to remove tension and repeat steps)

Caution: Do not pull open the brake and roll the thumbwheel down to descend. Reverse function is not used to descend the line.



Release the thumbwheel to stop the ascent

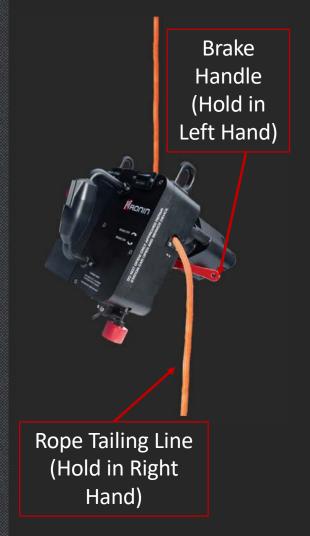


#### Ascending & Descending for serial numbers 3200-R & below

Step 5: 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) with your left hand. Keeping the brake held fully open (down) with your left hand, If you pull slightly on the rope with your right hand, 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)

Caution: the Ronin's brake is an On / Off switch and cannot be feathered. Follow steps above for best performance.

Step 6: Once you are safely back on the ground and sufficient slack has been taken out of the system, then release the brake and you may now unclip from Ronin Lift. (Note: You can hold the brake handle fully open and roll the thumbwheel down to create more slack in the system. This reverses the rope out of the system.)

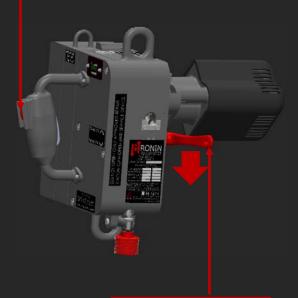


#### Removing Rope From The System

 For Ronin Lifts with a serial number of 3201-R or higher, pull the brake fully open (Down) and rotate the thumbwheel down. Keeping the brake open 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 if this happens.

• For Ronin Lifts with a serial number of 3200-R & below, 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.) 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. Rotate thumbwheel down slowly with brake open



Hold brake fully open by pulling down

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) until it cannot be turned any further. 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.

# Ronin Lift Winching & Hauling

#### **Mechanical Advantage Lifting**

The Ronin Lift can support mechanical advantage lifting using a wide range of pulley setups.

 The top attachment point on the Ronin Lift can be used for using a 2:1 mechanical advantage. This means you can lift up to 800 lbs. (363 Kg).

Note: Each Ronin Lift battery has an overcurrent safety cutoff. If your rigging is incorrect and you are over the safe working load, then the unit will shutoff. Remove battery for 10 seconds to reset the system.

 For a 3:1 or 4:1 pulley setup you have the advantage to lift up to 1200 lbs. (544 kg) or 1600 lbs. (726 kg).

It's recommended to have a wireless remote control upgrade with your Ronin Lift for any mechanical advantage lifting setups of 3:1 or higher.





Stand clear of loads when winching or hauling. Use the wireless remote from a safe distance.

#### Wireless Remote



#### **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 antiinterference.
- 32bit ID code
- Built-in lithium-Ion battery good for approx. 10 hours when fully charged., using the micro-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.



Each remote will only work with the Ronin Lift it's paired too. The serial number of the corresponding lift will be on the back of each remote.

#### **Remote 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 <a href="mailto:info@ronin.inc">info@ronin.inc</a> 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.





When winching or hauling with the remote, always use a stop knot at the end of the rope.













#### **Remote Operation**

Step 1: Install the battery onto the Ronin Lift.

Step 2: Hold the remotes 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.

Step 3: Roll down on the remote's thumbwheel for full variable speed control. Release the thumbwheel to stop the Ronin Lift's movement.

Step 4: When finished using the remote you will hold down the power button for 6 seconds until all 3 LED lights are off.

Step 5: Remove battery from the Ronin Lift, when finished



## Inspection & 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

Part Number	Description	Inspection Interval	Inspection	Maintenance Interval	Maintenance	Replacement Interval
2805- 82610	Drive Shaft Assembly	None	Will be performed at authorized repair facility	None	None	Every year
508822	Battery	Daily Prior to Use	Verify battery is not damaged, leaking, or swollen	None	None	Approx. 300 Charges

## Returning For Service

When returning your Ronin Lift to have the required annual service completed or any repairs, please follow the steps below:

- Complete an RMA (Return Material Authorization) by visiting <u>www.roninpowerascender.com</u> and click on the Service tab at the top of the page. 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 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**

See annual service exceptions 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 2000 ft (610 m) or less of rope in a 12-month period, does not have to be returned for the annual service. Use the table below to track your usage.

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

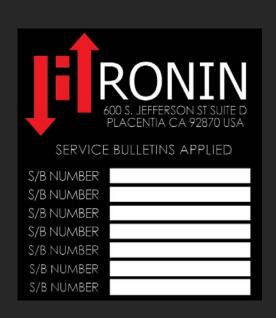
You Ronin's service life is complete 12 months after your 4th Annual Service



# ID Plate Servicing Information

- 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.
- 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





## Ronin Lift duty Cycle

For users operating where CE certification is required...CE 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. The duty cycle may be performed one additional time per day.

### **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 4<sup>th</sup> 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.





Ronin Revolution Corporation 600 S. Jefferson St. Unit D Placentia, CA 92870 USA

Tel: +1-657-444-2557 Email: info@ronin.inc