

# JUNO BATTERY CARE

## Introduction

Juno utilizes "Smart" Lithium-Ion (Li-ion) batteries and specialized power management systems to monitor and charge the cells. Safety is a crucial design objective with lithium technology. A lot of intelligence is placed within the battery pack to communicate with the charger to determine the best charge rate and when to end charging. Redundant temperature sensing is built-in.

## Charging

Unplugging the external power adapter is unnecessary because the charging stops when the Li-ion battery is full. A topping charge is only applied when the battery voltage drops to a preset level. A slow drain of the battery between training sessions is expected, and why keeping the simulator plugged-in is advised. Although it is safe to leave the external power plugged in all the time, unplugging the simulator during the actual training session can help protect the cable from being damaged if moving the "patient" is part of the training objective. Please remember to plug power back in after the session.

## Battery Life

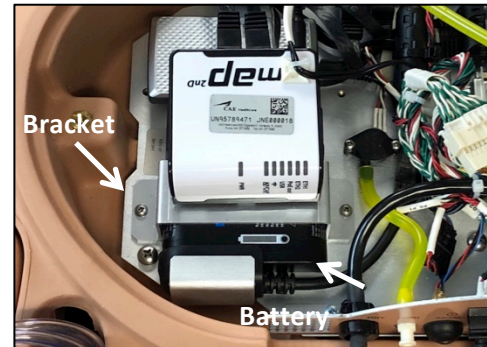
Keeping the simulator and battery in a cool location will extend the cell's life and capacity both in storage and during use. Maintaining the battery charge level above 80% between simulator usage is ideal. One of the worst things that can occur is discharging the battery and leaving the battery drained for an extended time. Storing it discharged for months will likely damage the battery. Since Juno consumes a small amount of power even when turned off, it is best to leave her plugged into a power source. If that is not an option, then charge the battery to 100% before storing the simulator for up to two months. Longer than that, it would be wise to disconnect the battery to assure the best performance.

## Long Term Storage

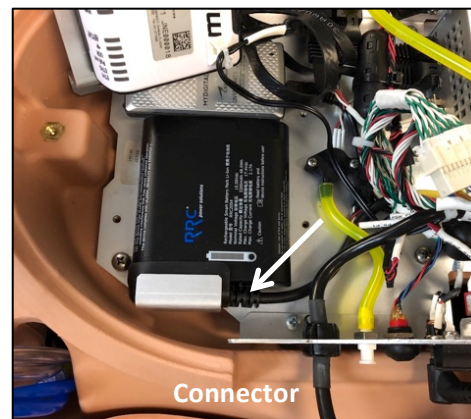
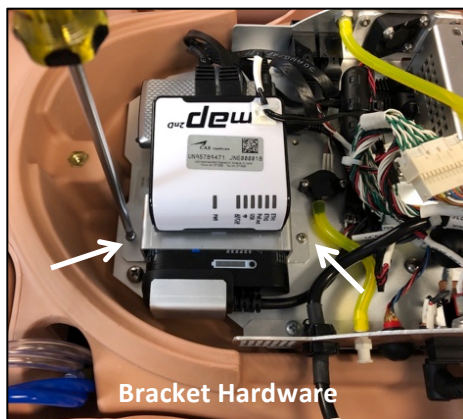
When storing Juno for an extended period, follow instructions in the User Guide to drain fluids. If Juno cannot be left plugged into power, charge her to 100% to help retain the battery's health during storage and then follow the steps below to disconnect the charged Li-ion battery within Juno.

1. Turn off the simulator and unplug the power adapter from the right Side Panel.
2. Roll the torso over so the rear access panel and screws are exposed.

- Using a #2 sized Phillips Screwdriver, remove the two Phillips screws from the rear panel and temporarily place the panel and screws in a safe place, so they are not lost.



- Locate the battery located under the router. The battery is held against the tray using a metal bracket.
- Confirm the battery is fully charged by pressing the circle at the end of the LED indicator. All LEDs will light, indicating a full battery.
  - If not charged, temporarily plug the Power adapter back in and let it charge.
  - Remove Power Adapter when the battery indicates a full charge.
- The bracket holding the battery is secured to the tray using two screws. Using a #1 sized Phillips Screwdriver, carefully remove the two Phillips screws from the bracket.

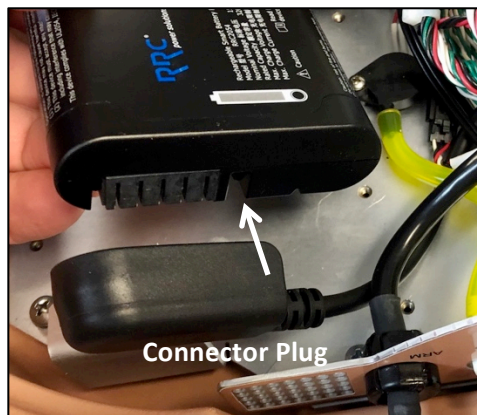


- Place these screws in a safe location until needed again in a later step.
- Lift this bracket holding the router up and to the side to gain easy access to the battery.
  - Carefully pull the battery cable connector off the battery. Note how the connector contacts engage the battery.
  - Move this loose electrical cable connector off to the side.
  - Reinstall the battery and bracket using the screws removed in an earlier step to keep the battery and hardware in a secure location during storage duration.

11. Replace the rear access cover and install the two Phillips screws. Make screws snug, but do not overtighten.
12. Roll Juno back on her back and cover with a cloth for protection.

**When ready to use the simulator again, use the following steps to reconnect the cable to the battery:**

13. Repeat steps 1 – 4 to gain access to the tray.
14. Repeat steps 6 – 7 to gain access to the battery.
15. Hold the battery with one hand and align the power connector with contacts, then plug onto the end of the battery with the other.
16. Place the battery back into the tray with the battery check LEDs facing up and the connector cap firmly pressed against the bent plate. See photo detail.



- **Note:** It is essential to have the connector cap snug against the plate as this keeps the battery firmly plugged in.

17. Reinstall the bracket over the battery using the two Phillips screws.
18. Replace the rear access cover and install the two Phillips screws. Make screws snug, but do not overtighten.
19. Roll Juno back on her back and plug in the power adapter.

**For any questions or comments, please contact CAE Customer Service.**

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