

## WE ARE HERE TO HELP

If you have any questions concerning safety precautions or for any assistance in installing or using the battery in your system, contact Allied through our website:  
[alliedlithium.com/pages/contact-us-1](http://alliedlithium.com/pages/contact-us-1)

## TECHNICAL INFORMATION

Information provided by Allied Battery including technical documents, diagrams, videos, and information provided by representatives are for reference only. Actual details of each application may vary, please consult a professional for each specific application, service or installation.

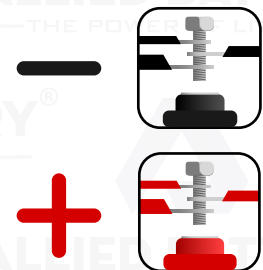
# BEGIN SAFE TO END SAFE

- Always wear proper personal protective equipment (PPE).
- Never wear jewelry or other metal objects when working on or around batteries.
- Always use insulated tools when working on batteries.
- Never place objects on top of batteries.
- Always check connections for proper torque.
- Proper connections should be checked regularly to ensure a tight connection.
- Never charge a battery when the temperature is below 32°F or above 131°F.
- Always keep sparks and flames away from batteries.  
(including sources of static electricity)
- Never store batteries below 30% State of Charge.
- Always use Allied lithium charger.
- Always make sure chargers are off or disconnected while working on batteries.
- Never attempt to open the battery case.
- Always install in a parallel set up.
- Do not submerge batteries in water.
- Never physically damage the batteries.  
- (this includes, without limitation): Puncturing, dropping, crushing, burning, penetrating, shaking, hammering, and misconnecting terminals.
- Never over-charge or over-discharge the batteries.
- Never attempt to connect batteries in series.
- Do not connect the battery terminals with reverse polarity.

## INSTALLING ALLIED BATTERIES

Use hand tools only and ensure the cable rings have solid flush contact with the battery terminal; largest diameter (high current) cables attach to battery terminals first for lowest resistance.

- Take a photo of the battery wiring in the cart before removal.
- Take note of the wires attached to system positive and system negative.
- Take note if you have any accessory wires directly connected to a battery.
- Lead-Acid batteries are wired in Series, Allied batteries are wired in Parallel.
- Common cart voltages include 36V (38.4V) / 48V (51.2V) / 72V (76.8V)
- Please confirm all Allied batteries are the same voltage and match your motor/controller system voltage.
- Remove Lead-Acid Batteries and install Allied batteries.
- Parallel Batteries make common connections only.
  - Positive (red) only connects to positive, Negative (black) only connects to negative.
- Do not connect parallel batteries in series to protect from high voltages which will destroy electronics, and can cause personal injury.
- Parallel connections increase Amp-hour capacity (3x 30Ah = 90Ah; 5x 36Ah = 180Ah).



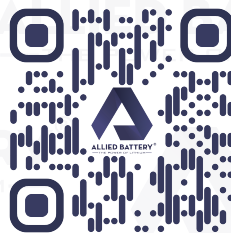
# STEPS

1. Turn off the golf car.
2. Flip switch to tow mode.
3. Remove main negative and main positive from battery terminal.
  - These cables will only be connected to 1 battery terminal each.
4. Remove Accessory cables (if there are any). These cables are typically smaller.
5. Remove series cables from lead-acid batteries.
6. Remove lead-acid batteries. (Can be made easier using the battery removal strap.)
7. Clean battery tray and clear any debris. Also, clean any corrosion from cables/rings.
8. Place the Allied drop-in-ready lithiums in the battery tray.
9. Wire your drop-in-ready lithiums in parallel - positive to positive, negative to negative.
10. Connect the controller and any other positive cables onto the middle battery's positive terminal bolt
  - Starting with the smallest. This way the largest rings will be closest to the terminal.
11. Connect the negative from the controller to one of the large terminal bolts on the solenoid.
  - (If you have a 12V converter, also connect that negative to the solenoid on the same terminal)
12. Connect a cable from the opposite large Solenoid bolt to the middle battery's negative terminal.
  - Also, connect A1 (small) solenoid terminal to this same large solenoid terminal.
  - This is the same middle battery you already connected the controller positive to.
13. Power on the big bank lithium and switch the golf car from tow to run mode.
14. Briefly test that everything is functioning normally, including lights or other accessories.
15. Then fully charge the battery before use. Allied batteries ship with around 50% charge.
16. If you have a smart phone, we recommend downloading the free Allied Battery app.
  - This will provide the most detailed information on your battery.
  - To connect, open the app and select your battery from the list of nearby bluetooth devices.
  - Must be near the battery to connect.
  - Battery should display in the list as: AB-..... or D.....

## RESOURCES - QR CODES



Apple App



Android App



Videos/Diagrams



Warranty Registration