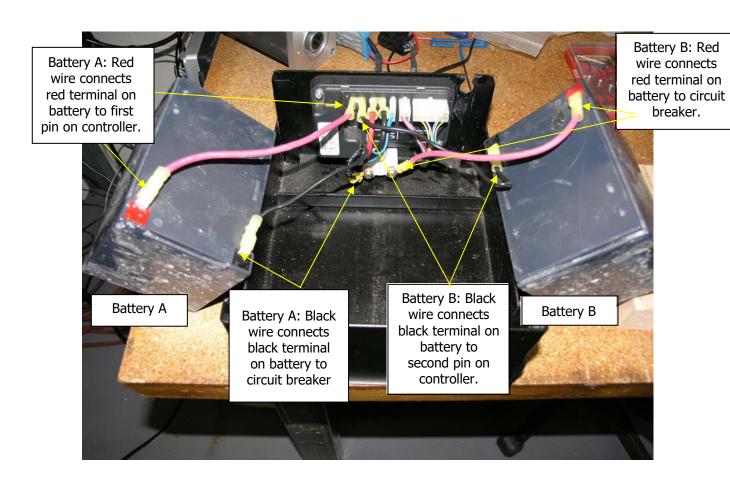
Please Note: These instructions pertain to the Motorized Hopper Cart and the 24V Motorized Transaxle Kit (part number MTK24) only.

## **BATTERY REPLACEMENT INSTRUCTIONS**

**Replacement Battery Specs:** 12 volt, 12 amp/hour lead acid sealed, AGM type. MK Battery model number ES12-12 or equivalent. 2 batteries required.

- A. Turn unit upside down so that battery box is accessible.
- B. Remove the 4 M6 Screws that hold the lid on the battery box.
- C. Carefully remove the two batteries one at a time, and disconnect the spade terminals. Do not discard old batteries please take them to a recycle center.
- D. Re-connect the battery and circuit breaker wires to the new batteries as shown. It is helpful to make the connections with the batteries outside the box first. The batteries are wired in SERIES, not parallel.



Make sure all terminals are tight. If they are loose, use a pair of pliers to carefully squeeze the spade connectors so they fit tightly onto the terminals

1. Place battery A into box first.



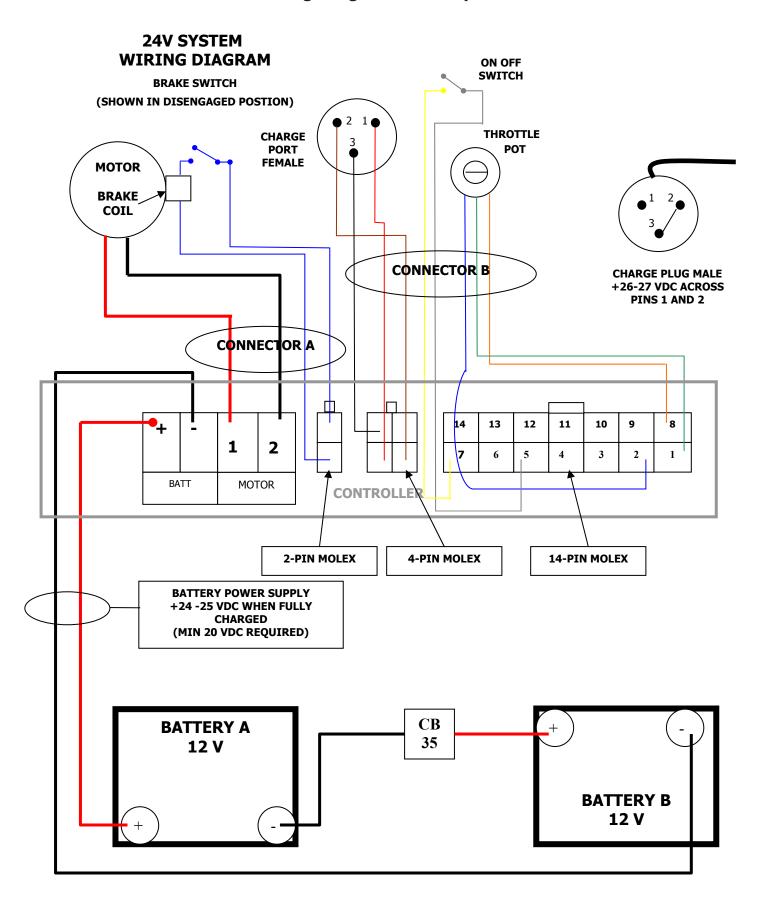
2. Place Battery B into the box making sure the wires are nested between the batteries and that no wires are detached. The fit is designed to be tight.



3. Replace battery box lid, and secure with 4 M6 screws.

## **DONE!**

## Wiring Diagram - 24V System





## **Troubleshooting**

Problem	Possible Causes	Remedy
Motor does not run	Power switch in OFF position	Turn switch to ON position
	Controller in sleep mode	Cycle switch, OFF 2 sec, then ON
	Batteries are drained	Recharge batteries
	Motor brake lever released on drive system	Re-engage motor brake on drive system
	Electrical fault	Unplug, then plug in both motor and throttle connectors
Motor shuts off during use	Circuit breaker has tripped	Push circuit breaker to reset
	Controller trip due to thermal overload (weight and/or climb angle may exceed controller capacity)	Release throttle, allow controller to cool down at least 30 seconds. Unload some weight, cycle power switch, operate machine again.
Insufficient range	Hilly or soft terrain	Push to assist drive system
	Batteries not "broken in"	Charge and discharge 4-10 times before optimum range
	Cold batteries	Keep batteries warm
	Battery not fully charged	ALWAYS keep machine on charge when not in use
	Damaged, old batteries	Replace batteries
	Low tire pressure	Inflate tire(s) to recommended psi
Machine abruptly stops	Broken motor wire or connector	Check motor wires and brake wires to make sure none are broken, and also check connector to make sure wires are secure in connector
Machine slows down aggressively while in manual release mode	"Push too fast" safety feature	Do not push machine so fast while in manual release mode



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