## Kite Buggy Electric Conversion



### Contact info:

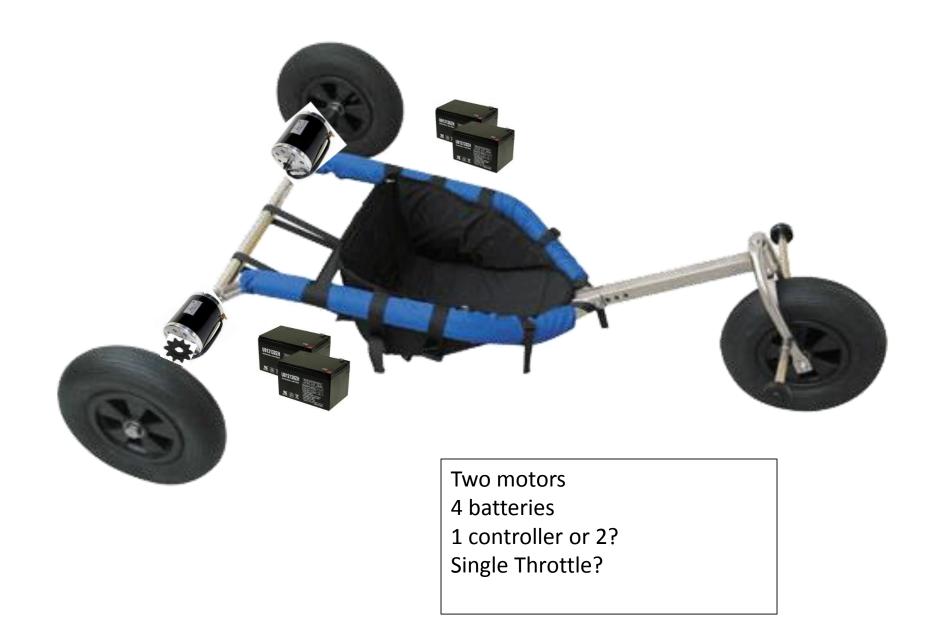
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### Goal: Maximum power for use on soft sandy beach – reasonable speed steep hills



### Kit Elements?



24 Volt 500 Watt Electric Scooter or Go Kart Power Kit with Batteries and Charger

This kit includes:

- 1- MOT-24500X2500 24V 500W motor.
- 1- SPD-24500B 24 Volt 500 Watt controller.
- 1- THR-105K twist throttle with key switch.
- HNS-100 battery wiring harness.
- BAT-12V12AHX2 battery pack.
- 1- CNX-515 battery charger port.
- CHR-24V1.6A3P battery charger.



This is a complete power kit including everything needed to power an electric scooter or go kart including the battery pack and battery charger. The throttle in this kit has an LED battery level meter and a key switch with removable keys to turn the power on and off and to lock the power in the off position.





We install matching connectors on every part in this kit so all you have to do is plug them together. Our electric scooter power kits take the guesswork out of buying parts to re-power older electric scooters and go karts or to build new ones from scratch. These parts are perfectly matched and 100% plug and play with each other for easy and trouble free installation.



The motor in this kit has an 11 tooth sprocket for #25 chain. We will cut a #25 heavy-duty chain to any length that you need up to 150 links and include it with this kit free of charge upon request.

Item # KIT-106

## **Gear Ratio Options**

#### **Motor Types**

There are two types of electric motors available; standard motors and gear motors. Standard motors have shafts directly attached to the motor windings with shaft output speeds between 1800-3000RPM. Gear motors have gear reduction transmissions built into them with shaft output speeds between 400-500RPM.

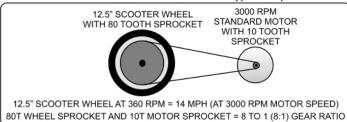
#### Standard Motors (Electric Scooter Motors)

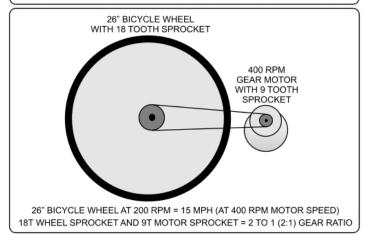
Standard motors are designed for electric scooters, go karts, and other similar vehicles with 6"-12" wheels. Standard motors should not be used for electric bicycle projects unless a gear reduction transmission such as a jack-shaft is used with them to lower the gear ration so they can operate near their top RPM while the vehicle is in motion, otherwise they will run at too low of an RPM which will cause them to overheat and possibly burn out along with not allowing them to produce the full amount of power that they have the potential to.

#### Gear Motors (Electric Bicycle Motors)

Gear motors are designed for electric bicycles with 16"-26" wheels. Gear motors can also be used on vehicles with smaller wheels if a slow top speed and a high amount of torque for uphill climbing or driving through sand or mud is required.

#### Motor to Wheel Gear Ratio and Motor Type Examples





## Power / Ride Time

This chart is calculated for riding on flat ground 100% of the time at full throttle. Riding at slower speeds will increase the mileage range or ride time. Riding up hills or inclines will decrease the mileage range or ride time. For electric bikes pedaling along with the electric motor will significantly increase the ride time.

	24 Volt 250 Watts	36 Volt 250 Watts	48 Volt 250 Watts	60 Volt 250 Watts
5Ah	4 Miles / 20 Minutes	6 Miles / 30 Minutes	8 Miles / 40 Minutes	10 Miles / 50 Minutes
8Ah	6 Miles / 30 Minutes	9 Miles / 45 Minutes	12 Miles / 60 Minutes	15 Miles / 75 Minutes
10Ah	8 Miles / 40 Minutes	12 Miles / 60 Minutes	16 Miles / 80 Minutes	20 Miles / 100 Minutes
12Ah	10 Miles / 50 Minutes	15 Miles / 75 Minutes	20 Miles / 100 Minutes	25 Miles / 125 Minutes
15Ah	12 Miles / 60 Minutes	18 Miles / 90 Minutes	24 Miles / 120 Minutes	30 Miles / 120 Minutes
18Ah	14 Miles / 70 Minutes	21 Miles / 100 Minutes	28 Miles / 140 Minutes	35 Miles / 170 Minutes
22Ah	16 Miles / 80 Minutes	24 Miles / 120 Minutes	32 Miles / 160 Minutes	40 Miles / 200 Minutes

The chart above is calculated for electric scooters and bikes with 250 Watt motors. For 500 Watt motors divide the mileage range or ride time by 2, for 750 Watt motors divide by 3, and for 1000 Watt motors divide by 4.

# Buggy Rear Tires 21 / 12-8"



## Parts Checklist:

### **Kite Buggy Electric Modification**

Item:	Weight	Dimensions	Specs	Comments
Motors				Orient right or left?
Batteries				
Controller				
Wiring Harness				
Throttle Types - Single for both motors				
Charging Port				
Sprockets				
Wheel Sprocket Size?				
Chains?				
Belts?				
Braking				
Water resistance?				
Reversible Motor Direction / Mounting				
Engine to Sprocket distance				