## WARNING

This motor is designed to operate with stock factory controllers and after-market controllers that have been programmed with a custom motor specific field map.

Operating this motor with an improperly programmed after-market controller will destroy the motor and void any and all warranties.



## Red Hawk Admiral Motor Break-In Procedure

**Electric Motor Overview** 



Thank you for purchasing an Admiral Electric Motor.

Electric motors built for higher speeds and higher torque can require more current, bigger controllers and larger wires. As the new motors come off of the factory floor, a "break-in period" is needed to *properly seat the brushes against the commutator*. This procedure will help prolong the life of your electric motor.

On a new motor, the surface of the commutator has milling marks from the machining process. These marks can prevent the brushes from making a good connection as the motor turns. The friction causes heat buildup and can prematurely damage the brush material or burn the commutator.



## **How to Break-In an Electric Motor**

The break-in process is simple to perform. Drive 6-10 miles at various speeds, go easy on the acceleration and the motor will last a long time.

Drive the cart on pavement. Accelerate slowly.
 Maintain full speed for 5-10 minutes then stop to check the motor temperature.

2. Check the motor temperature every (10) minutes for the first half an hour by touching the center section (red) followed by the aluminum bell end (silver).

If the aluminum end bell is too hot to touch, stop and let it cool.

If you can hold your hand on the motor for more than (5) seconds, drive a few more miles and recheck the temperature.

**CAUTION**: Be careful not to touch the bare electrical connections with the power applied.



Repeat steps 1 and 2 until the 6-10 mile break-in period is complete and the motor is running cooler.

**NOTE**: The speed and torque will increase as the brushes make better contact with the commutator. The cooler motor will run more efficiently so the cart can be driven at a normal speed.

## **Other Motor Tips**

- Check all wire connections, battery terminals, controller connections and motor terminals. Make sure everything is connected.
- 2. The cart's solenoid must be rated for the correct current. Undersized solenoids can cause controller failure.
- 3. Make sure the solenoid has a diode and a pre-charge resistor.

Your Admiral Electrical Motor break-in is now complete.
Please enjoy safely!