

Special Update

Date: February 15, 2006

To: All **Warp Motors** Dealers

Subject: WarP Motors Care and Maintenance

This **Special Update** summarizes many responses we have given to dealers and customers alike about motor care and maintenance. As the sphere of users continues to grow for electric motors used in vehicles, knowledge about motors needs to be communicated to all those users across our entire dealership network. As in our other **Special Updates**, this information does not cover every aspect of the subject.

Here are a few simple steps one should take to make the **Warp Motors** give years of great performance.

- 1. Protection from the elements is important. Utilize good design concepts and materials to protect the motor from rain, snow and ice.
- 2. Design the motor mounting area to allow for good air flow. The motor needs a continuous supply of clean fresh air to cool properly.
- 3. Protect the motor from "dirty air" that may be used to cool it. Most airborne grit will act as an abrasive, which will eventually cause harm to the internal parts of your motor.
- 4. Clean the brushes and comm area regularly from the dust/dirt that occurs during normal operation.
- 5. Regularly check connections, voltages, tolerances and alignment to assure they are within normal specifications.
- 6. If you suspect or question the motor's operation, immediately shut it down. Record any visual signs, audio sounds or scents at the time and ask an expert for an opinion prior to operating the motor again.
- 7. Always operate the motor within the normal safety ranges for voltage, amperage and RPM
- 8. Follow all the safety rules available to you.
- 9. Remember your motor will take care of you, if you take care of it.

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