

NetGain Motors, Inc.

800 South State Street / Suite 4 / Lockport, IL 60441 / 630-243-9100 / 630-685-4054 (FAX)

Special Update

Date: April 13, 2005

To: All **WarP Motors** Dealers

Subject: **WarP Motors** Wiring (except **WarP 13**)

Several sources have recently inquired as to what the proper method was for wiring the terminal lugs on the cases of **WarP Motors**. This **Special Update** clarifies the proper wiring method.

All **WarP Motors** cases have four terminals, A1, A2, S1, S2 stamped on the case at the factory. **WarP Motors** are designed to normally operate in Counter Clock Wise rotation at the Drive End (CCWDE) for forward vehicle operation. When a motor is specified as “advanced timing”, it is assumed to be relative to the normal CCWDE rotation. Motors that do not have advanced CCWDE timing may be wired for Clock Wise rotation at the Drive End (CWDE). These instructions should help clarify the proper wiring method for both rotations.

WarP Motors (except the **WarP 13**) should ALL be jumpered according to these instructions (battery polarity does not matter):

For CCWDE rotation wire as follows:

CCWDE preferred connection method:

Connect A1 to S1

Connect A2 to one input power terminal and S2 to the other input power terminal

CCWDE alternative connection method:

Connect A2 to S2

Connect A1 to one input power terminal and S1 to the other input power terminal

For CWDE rotation wire as follows:

CWDE connection method:

Connect A1 to S2

Connect A2 to one input power terminal and S1 to the other input power terminal

CWDE alternative connection method:

Connect A2 to S1

Connect A1 to one input power terminal and S2 to the other input power terminal

Motors that have “advanced timing” for CCWDE rotation should not be run in CWDE mode. Doing

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so may damage the motor and void the warranty.

*Dealers may request a motor be timed advanced for **CWDE** operation by specifying this on their Purchase Order. This will be considered a "Special Order" and may involve an additional cost.*