

## Winding Section Analyzer



A Great
Companion
Tool For The
Universal Zebra
ECM Tester



- Fits most ECM Winding Section connectors; inexpensive Adapters available to fit the rest
- Uses the Motor's Back-EMF Generation to display each of the Motor's 3-Phase conditions
- An <u>unlit</u> indicator LED shows Faults (Shorts or Opens) in each Phase of Winding Section
- A second test indicates any Shorts between the Motor Frame and any Phase Winding
- · No external power source needed; 9-Volt battery included



## Why might the *SideWinder* help make your ECM problem diagnosis more accurate?

"So, you have traced the problem down to the ECM motor - but which section of the motor is the cause of the problem? If you send back the whole motor (the module **and** the winding section), you may be subject to chargebacks under warranty, or you may unnecessarily spend hundreds of the customer's dollars for out-of-warranty parts."

Many unit manufacturers are starting to deny warranty claims for mis-diagnosed ECM motor problems. After years of giving Technicians grace after sending back the complete motor, the unit makers realize that the tools now exist for a Tech to properly determine when only a module - instead of the complete motor - required replacement.

About 30 seconds is all that is needed to administer the **SideWinder's** two main tests - and it may save you money, hours of work, and possibly the embarrassment when an ECM motor claim is later denied.

## Diagnosing which section of an ECM motor has a problem has never been easier:

- First, perform your normal system diagnosis routines.
- If a failure in the ECM motor is indicated, disconnect power and remove the two module screws.
- Unplug the 3-pin connector between the module and winding sections.
- Plug the *SideWinder's* 3-pin plug into the above connector.
- Spin the shaft of the motor, and watch the Phase LED's on the tool.
- Press the "Short Test" switch on the tool, while watching the LED's.

That's it! The LED's have told you whether the winding section has any faults. You can confidently use that information to replace only those parts that really require replacement.



*by Zebra HVAC* www.ZebraHVAC.com