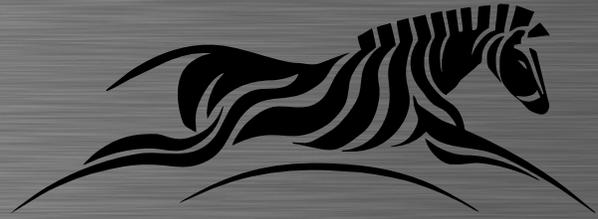


# Zebra Instruments



Motor Monitoring, Protection, and Control

## Product Catalog



1-888-HI Zebra

[ZebraInstruments.com](http://ZebraInstruments.com)

512-869-7000

# The Universal Zebra UZ-1

## The Best Weapon in Your Arsenal Against ECM System Problems



UZ1

**Best Seller**

The *Universal Zebra* or *UZ-1*, is able to test run a motor in one or more (up to six) speeds. It has seven LEDs and three 3-way switches. Housed in a rugged case that latches, it is shipped with our most popular adapter, which fits the very common GE/Regal-Beloit series 2.0 and 2.3 motors.

Additional adapters (see page 2) make the *UZ-1* a truly universal tool.

The *UZ-1* comes with a *one year limited warranty*.

Diagnostic Tools

- **Easy to Use:**

Three 3-position switches exercise ECM motors in as many as six different speeds. The number of available test speeds range from 1 to 6, dependent on the motor model.

- **Versatile:**

Plug-in Adapters mate the tool to virtually any ECM motor used in HVAC/R. (Popular Adapter "A" is included.) A magnetic overlay quick-reference card with each adapter explains what each switch position and LED means with that motor series.

- **Built to Last:**

The Universal Zebra is housed in a latched, rugged plastic case that protects it and its leads. We are committed to making affordable adapters for virtually every ECM motor used in HVAC/R industry.



UZ1



Award Winning Product

1

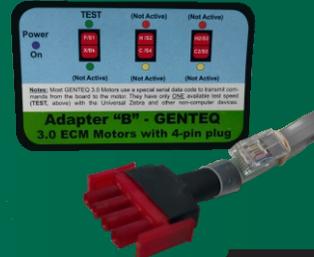
# UZ-1 Accessories

## UZ-1 Adapters

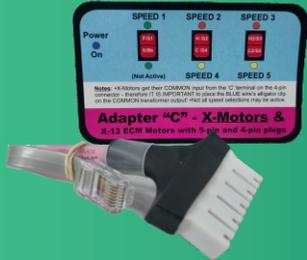
Adapters couple the UZ-1 to different motors. Six different adapters are currently available.



**UZHMA**  
Fits GE, Regal-Beloit, GENTEQ 2.0 & 2.3 ECM motors  
16-pin plug



**UZHMB** *Best Seller*  
Fits GENTEQ 3.0 ECM motors  
4-pin plug



*Best Seller* **UZHMC**  
Fits GE, Regal-Beloit, GENTEQ X-motors, X13, Evergreen AH (not IM) ECM motors  
5-pin + 4-pin plugs



**UZHME**  
Fits GE, Regal-Beloit, GENTEQ ECM 142 multi-speed condenser motors  
Internal 4-pin plug



**UZHMF**  
Fits Evergreen IM series ECM motors  
5-pin + 4-pin plugs



**UZHMG**  
Fits Azure ECM motors  
3-pin plugs

## UZ-1 Power Harness

Motor power plugs with harnesses are necessary when you want to test a motor out of its air handler/furnace environment. Most ECM motors have special power input plugs, so bench testing can be challenging without access to these plugs. A wide variety is currently available.



**UZPH1**  
Fits GE, Regal-Beloit, GENTEQ 2.0, 2.3, 2.5 & 3.0 ECM motors & many others



**UZPH2**  
Fits GE, Regal-Beloit, GENTEQ X-motors, X13, Evergreen AH (not IM) ECM motors



**UZPH3**  
Fits GE, Regal-Beloit, GENTEQ ECM 142 multi-speed condensers



**UZPH4**  
Fits Evergreen IM series ECM motors



**UZEXT**  
36" extension or replacement harness for the UZ-1



**UZACC**  
Rugged case to house your UZ-1 and all your accessories

Diagnostic Tools

# The UZ-ALL

All in one!



## UZALL

The *UZ-All* comes with a *UZ-1* and all of the current accessories. It's the same great Zebra quality, all in one convenient package.

The package includes:

Part #	Description
UZ-1	Universal Zebra-Basic ECM Troubleshooter
UZHMA	Fits GE, Regal-Beloit, GENTEQ 2.0 & 2.3 ECM motors
UZHMB	Fits GENTEQ 3.0 ECM motors
UZHMC	Fits GE, Regal-Beloit, GENTEQ X-motors, X13, Evergreen AH (not IM)
UZHME	Fits GE, Regal-Beloit, GENTEQ ECM 142 multi-speed condenser ECM
UZHMF	Fits Evergreen IM series ECM motors
UZPH1	Fits GE, Regal-Beloit, GENTEQ 2.0, 2.3, 2.5 & 3.0 ECM motors
UZPH2	Fits GE, Regal-Beloit, GENTEQ X-motors, X13, Evergreen AH (not IM)
UZPH3	Fits GE, Regal-Beloit, GENTEQ ECM 142 multi-speed condenser
UZPH4	Fits Evergreen IM series ECM motors
UZEXT	36" extension or replacement harness for the UZ-1
UZACC	Rugged case to house your UZ-1 and all your accessories all together

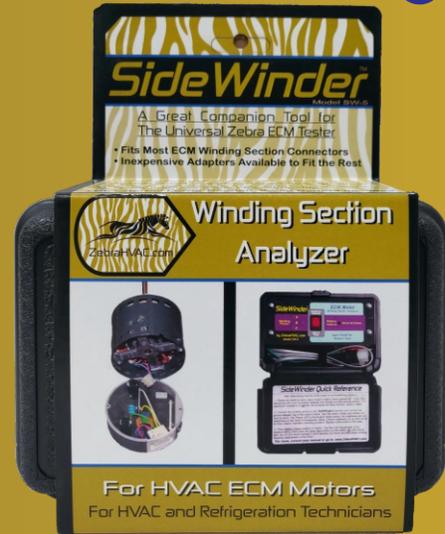
# SideWinder SW-5

New Product

The *SideWinder (SW-5)* is a winding section analyzer tool. It's a great companion tool for the *Universal Zebra* (see page 1).

## Features:

- Fits most ECM winding section connectors with 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 unlit indicator LED shows faults (shorts or opens) in each phase of the winding section.
- A second test indicates any shorts between the motor frame and any winding phase.
- No external power source needed; 9-volt battery included.
- *One Year Limited Warranty.*



SW5

Many unit manufacturers are starting to deny warranty claims for misdiagnosed ECM motor problems. After years of giving technicians grace from sending back complete motors, manufacturers now realize that tools exist which can determine which part of a motor requires replacement.

Approximately 30 seconds is needed to administer the *SideWinder's* two main tests, which may save you money, hours of work, and possibly an ECM motor claim denial.



SW5

## SW-5 Adapters

Coming Soon!

ZSWAA

Designed to connect the Sidewinder to Azure ECM Motors



ZSWAE

Designed to connect the Sidewinder to Emerson ECM Motors.

Diagnostic Tools

# Variable Speed Zebra VZ-7

The *Variable Speed Zebra* is an in-line diagnostic tool: connected between the unit's control board and the ECM motor, it provides real-time information about:

- Commands being sent by the control board to the motor.
- Motor feedback, including RPM and CFM being pushed.
- Control voltage levels.
- Multi-color tap display LEDs.
- The **VZ-7** also allows manual motor control by sending commands directly to the motor.



**VZ7**

The **VZ-7** uses a simple-to-operate microprocessor controlled tests to:

- Accurately diagnose exactly which component has failed in a variable speed system that isn't working correctly.
- Assist in system setup by reporting motor RPM and CFM airflow as room vents and controls are adjusted.
- Allows easy adjustments of all available settings and options on ECM (Variable Speed) blower motors to obtain maximum comfort for your customer.
- **One Year Limited Warranty.**



**VZ7**

## VZ-7 Adapters



Award Winning Product



**VZH03**

Provides two-way communication between the VZ-7 and X-13 (and other X-Motor types) as well as some Evergreen motors



**VZH06**

Engineered to provide two-way communication for the VZ-7 when used with condensing units that have the ECM 142 series motors

Diagnostic Tools

# Zebra-Stat ZS-2

ZebraStat (ZS-2) is a fully electronic and easy-to-use diagnostic tool for every HVAC and refrigeration system technician.

- Inside its durable protective case you will find a tool that quickly diagnoses low-voltage control problems in system wiring, control boards, thermostats, and associated components.
- Bright LEDs positively indicate OK/Not-OK status.
- Easily trouble shoot single and multi-stage, residential, and commercial systems using any or all of ZebraStat's five operating modes.



ZS2

## Features:

- Over/Under-Voltage indicators quickly spot trouble areas. Its auto-resetting circuit protection makes finding problems on “computer board” equipment less risky when shorts are present. Also, the entire ZebraStat is protected with the same auto-resetting circuit protection.
- A quick instruction card is printed on the inside cover and a full manual in English and Spanish.
- Magnetic strip on the back and a slide up hook for ease of use.
- One Year Limited warranty



ZS2

# Short Finder Tool

- Used to quickly locate shorts in 24VAC circuits while protecting controls from damage.
- No more walking around with a fist full of fuses or risk of burning up your equipment using the wrong fuse. With the short finder's push-to-reset 3 amp breaker and bottom mounted LED indicator, this tool saves you time and money.
- The short finder tool is designed to plug directly into a fuse holder or attach with the supplied alligator clips.



ZSPRT

Diagnostic Tools

# Zebra 'Dapters

## Zebra 'Dapters

A Significantly Safer way to obtain 120V power from or in:

- Condensing Units • Attics & HVAC Closets • New Construction Sites •
- Helps save vacuum pumps, charging scales, drop lights, and valuable equipment from destruction due to accidental connection to overvoltage/overcurrent.



### ZD001

Includes a 72" fused "cheater" cord set with *male* plug and three alligator clips.

- Other cords of this type are often called "widow makers" because they lack any safety devices. The **ZD001** version has an in-line fuse (3 provided) that reduces the risk of arcing when connecting or accidentally shorting a lead.
- Glow-lit plug provides definite proof of power.
- Insulated heavy duty clips on a safety yellow cord.



ZD001

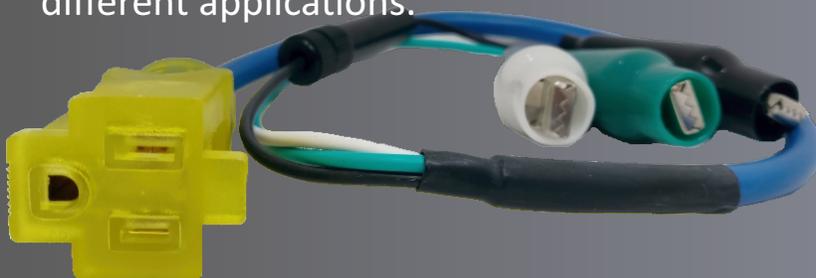
### ZD002 **Best Seller**

Includes a 24" fused cord set with *female* plug and three alligator clips.

- The **ZD002's** socket glows gently when connected to 120V and brightly if it's ever accidentally connected to 240V.
- The in-line fuse also acts as a last line of defense for vacuum pumps and other valuable tools.
- Three different fuses are included for different applications.



ZD002



# Zebra-Gators

*Zebra-Gators* are alligator jumper wires designed for the HVAC/R technician. Unlike competitive products, *Zebra-Gators* don't pull or fall off because our wires are soldered, not just crimped. They carry the current they are designed for, because they are made from wiring that is the full gauge size listed. Each set comes with a velcro wrap that keeps your *Zebra-Gators* organized; either in the tool box or hanging in your vehicle.



*"...soldered, not just crimped."*



**ZG002** **Best Seller**  
**Small**  
 22-Gauge  
 10 Wires  
 5 Colors  
 36"



**ZG003** **Best Seller**  
**Medium**  
 18-Gauge  
 8 Wires  
 Assorted Colors  
 24"



**ZG004**  
**Large**  
 14-Gauge  
 4 Wires  
 4 Colors  
 24"

Alligator Lead Sets



# Motor & Control Board Protection

## Plug-In Transient, Surge, Lightning, and Spike Protection Motor Protection for ECM 2.0 and newer, X-13, & Evergreen

### • Saves Equipment -

ECM protectors plug into existing motor connectors and plugs. They help to protect these valuable motors from voltage spikes, surges, and transients that often damage them.

### • FAST Installation -

The *VZPRO*, *X13PR* and the **NEW** *AZPRO* simply plug in between the motor connector and the existing wiring harness. A ground strap with a ring terminal is provided for additional protection.

### • Protect Your Investment -

The most common cause of Variable Speed (ECM) motor failure is damage to the electronics module as a result of poorly conditioned incoming power.



**VZPRO**



**X13PR**



**AZPRO**



**VZPRO**

**Best Seller**



**X13PR**

**Best Seller**



**AZPRO**



**ZAP-PRO**

**Best Seller**

## Surge & Spike Protection Device Circuit Board • Condensing Unit • Heat Pump

The *ZAP-PRO* provides plug-in protection from voltage surges and spikes that can devastate modern circuit boards and controls in HVAC condensing units and furnaces/air handlers. Simply plug the *ZAP-PRO* onto the incoming 1/4" power terminals of the unit you want to protect:

- The line side of the contactor in a condensing unit, or
- The neutral and line terminals on a circuit board in a furnace or air handler.

## Plug-In Transient, Surge, Lightning, and Spike Protection for 24V Control Systems

The *PRO24* provides 24V control systems plug-in protection from voltage spikes that can cause costly damage to control boards.

The *PRO24* simply plugs in with male and female spade connectors, between the 24V system transformer's output leads and the control board you want to protect.



# Fuses, Breakers, Repair Kits

## Fuses

- High Quality
- Fast Acting
- Popular Sizes



**Best Seller**

### ZFP03

25 Pack of 3A Plastic Fuses



### ZFPAS

25 Pack Assorted Plastic Fuses

Includes:  
5 X 3A  
4 X 5A  
4 X 10A  
4 X 15A  
4 X 20A  
4 X 30A

Part #	Fuse Description
ZFP03	25 Pack 3A, Plastic
ZFP05	25 Pack 5A, Plastic
ZFPAS	25 Pack Assorted Plastic
ZFG03	25 Pack 3A, Glass
ZFG05	25 pack 5A, Glass

## Fuse Holders

Use fuse holders in circuits where protection is needed. Fuse holder kits utilize standard size glass or plastic fuses. Each package includes 4 fuse holders, popular size fuses, and crimp on connectors.



**Best Seller**

### ZFH01

4 Pack of 15A Medium Duty Plastic Fuse Holders



### ZFH02

4 Pack of 15-A Medium Duty Glass Fuse Holders

## Z-Breakers

Push-to-reset circuit breakers for voltages from 24 to 125 VAC. White button clearly pops out indicating trip. Includes 24" wire harness, snap-in bushing, breaker, and consumer sticker.



**Best Seller**

### ZK003

3 Amp Circuit Breaker



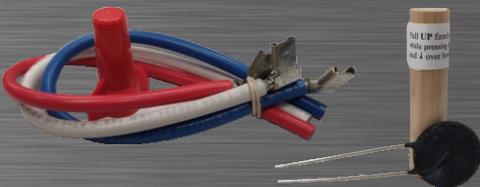
**Best Seller**

### ZK005

5 Amp Circuit Breaker

## Repair Kits

Comprehensive kits designed with the HVAC Tech in mind.



### VZREP

Motor Module Repair Kit, Comes with full instructions



### ZCTRK

Compressor Terminal Kit Soldered and Crimped 10 Gauge Wire

Fuses, Breakers, Repair Kits

# Zebra Instruments

- ▲ *Diagnostic Tools and Accessories*
- ▲ *ECM Devices and Surge Protection*
- ▲ *Alligator Lead Sets*
- ▲ *Safety Power Adapters*
- ▲ *Fuses and Circuit Protection*

**Zebra Instruments** products are sold exclusively to wholesalers.  
Visit your local distributor to inquire about our products.

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Fax: 512-864-1725 Attn: Sales

Email: [Sales@ZebraInstruments.com](mailto:Sales@ZebraInstruments.com)

Address: PO Box 1305, Salado, TX 76571



[ZebraInstruments.com](http://ZebraInstruments.com)

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Our team takes great pride in producing high quality HVAC/R  
tools and accessories with the technician in mind.

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