### **GE TECMate Pro™ Service Tool**

The Tecmate Pro™ Service Tool, MARS stock #08500 is the latest advance in ECM technology developed by and for Genteq Motors. The Tecmate allows the service technician to analyze a Genteq ECM motor independently of the HVAC system in which it is installed. The Tecmate can test all the basic settings of a Genteq ECM motor, and can detect and isolate motor failures from HVAC system failures.

Genteq is the leader in ECM motor technology. ECM motor applications are a fast growing segment of the residential and light commercial HVAC market. Genteq's advanced designs in ECM motors are at the forefront of high efficiency equipment design.



### Easy To Use

See Additional ECM Accessories on page 48

MARS NO.	DESCRIPTION
08500	TECMate Pro ECM Motor Tester

# **Broad Ocean ECM Motor Tester** (Digimotor Test Tool)

Save time and money with the Broad Ocean ECM Motor Tester

· Isolates any issues to either the motor or the control board and the control wiring

NOTE: This tool is for Broad Ocean OEM Digi-Motors only. This tool is not compatible with Azure®

### Kit Contents:

**Broad Ocean ECM Tool** Type A test Connector (Furnaces, AH & Packaged) Type B Test Connector (Packaged Units)

Type C Test Connector (Air

Type D Test Connector (Outdoor Condenser Fan Motors)



MARS NO.	DESCRIPTION	MARS PACK
08503	Broad Ocean ECM Motor Tester	1

# genteq

### **ECM Protectors**

### **Saves Equipment**

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

### **Fast Installation**

These protectors 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 ECM motor failure is damage to the electronics module as a result of poorly conditioned incoming power.

MARS NO.	USED ON	MARS PACK
08552	GE X-13 ECM	1
08553	OEM ECM Applications	1







# **ECM Repair Kit**

Repairs many ECM motor modules that have been damaged by voltage problems and power surges

- · Full instructions included in kit
- · Kit includes OCPD device and helpful circuit board releaser tool
- · Using the kit requires a soldering gun or iron and rosin core solder

ECM's have \*Over Current Protection Devices that are designed to keep excessive power from damaging other system components. Frequently, only this part needs replacement to restore an expensive ECM to an operation condition.

Not every ECM module can be repaired. Because of this, the repair kit is not guaranteed to fix every motor-but because of the motor's high cost vs. the repair kit's low cost- it's often worth the effort.

MARS NO.	DESCRIPTION	MARS PACK
08551	ECM Repair Kit	1









# ACCESSORIES

# Variable Speed Zebra

Complete diagnostics for systems where an ECM motor is not working properly

Uses simple-to-operate microprocessor controlled tests to:

- accurately diagnose exactly which component has failed in a variable speed system that is not working correctly
- assist in system setup by reporting CFM airflow and motor RPM as room vents and other controls are adjusted
- allows easy adjustment of all available settings and options on ECM blower motors to obtain maximum customer comfort



MARS NO.	DESCRIPTION	MARS PACK
08550	ECM Diagnostic System	1
08562	2 Pc Adapter Set for New GE X-13 & Evergreen Motors (Variable Speed)	1

### **Universal Zebra**

### A tool designed to troubleshoot every ECM motor in HVAC/R systems!

- Three 3-position switches test up to 6 speeds
- LED's indicate power and signals being sent
- Rugged case protects your tools & leads

### Adapters for Universal Zebra

- Adapters quickly plug into motor and Universal Zebra
- Magnetic reference cards show what each switch does & what each LED means for that motor

MARS NO.	DESCRIPTION	MARS PACK
08554	Universal ECM Diagnostic System	1

### MARS#

**08555** Adapter "A" – for GE 2.0 & 2.3 ECM's

**08556 Adapter "B"** – for Genteq 3.0 ECM's

**08557** Adapter "C" – for X-13 & X-mtr ECM's

**08558** Adapter "E" – for ECM 142 & Signal Select ECM's

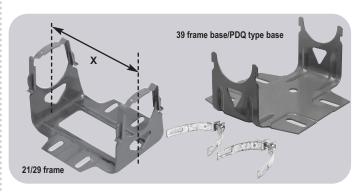






# **Motor Mounting Bases**

Designed for use with GE motors. Bases include clips.



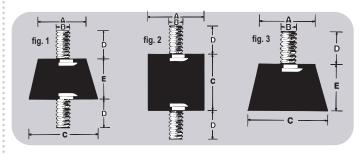
### **Mounting Bases**

MARS NO.	FOR USE ON	GE NO.	SHAFT HEIGHT	X DIMENSION
08060	39 frame motors	920AB10	3-1/2	5.98/6.14

### **Mounting Accessories**

MARS NO.	USED ON	DESCRIPTION	PAK QUAN
08096	39 frame	clips for 39 frame motor bases	2 pieces

### **Vibration Insulators**



MARS	MFR.			NSIONS				AX. LOAD IN POU		FIG.
NO.	NO.	Α	В	С	D	E	THD.	COMPRESSION	SHEAR	NO.
07801	K30	1-3/16	5/16	1-5/8	5/8	1-1/2	18	60	-	1
07802	K33	1-3/8	5/16	1-5/8	5/8	1.0	18	100	-	1
07804	K44	1.0	5/16	1.0	5/8	-	18	40	10	2
07805	K47	1.0	1/4	3/4	1/2	-	20	50	10	2
07807	K133	1-3/8	5/16	1-5/8	5/8	1.0	18	100	-	3

### **Plastic Rain Shields**

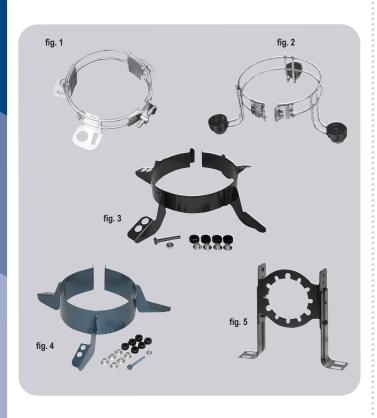


MARS NO.	DESCRIPTION	MARS PACK
93581	6-3/4 in. diameter for motors with 1/2 in. diameter shaft	1 piece
93582	6-3/4 in. diameter for motors with 5/8 in. diameter shaft	1 piece





### **Mounting Brackets**



MARS NO.	USED ON	DESCRIPTION	FIG. NO.
08020	39 frame and 5-1/2 in. diam. motors	adj. lug mounting bracket fits triangular bolt patterns of 6-1/8 in. to 6-9/16 in. bolt to bolt (1/4 in. x 7/8 in. and 3/4 in. x 1-3/8 in. knockouts)	1
08021	5-1/2 in. fixed motor mtg. bracket with grommets	for mounting blower motor with large wheel opening fits any 5-1/2 in. diameter motor	2
08024	5 in. fixed motor mtg. bracket with grommets	for mounting blower motor with large wheel opening fits any 5 in. diameter motor	2
08049	29 and 39 frame motors, 5 in. motors	3 Wing Torsion-Flex mounting adapter kit for 9 in. and 10 in. blowers	4
08050	48 frame, 5-5/8 in. and 5-1/2 in. diam. motors	3 Wing Torsion-Flex mounting adapter kit for 9 in. and 10 in. blowers	4
08047	48 frame, 5-5/8 in. and 5-1/2 in. diam. motors	4 Wing Torsion-Flex mounting adapter kit for 9 in. and 10 in. blowers	3
08004	51 frame motors	shaft height adjustable 4-1/8 in. to 5-3/8 in.	5

# **Premium Belly Bands**

### Applications:

Residential HVAC,

**Direct Drive Blowers** 

- Welded 3-ring bracket
- · Anodized steel rod construction
- Includes 3 sets of rubber grommets, 3 sheet metal screws, 3 galvanized steel sleeves, 1 bolt, 1 nut



MARS NO.	DESCRIPTION
08025	10" Bolt Pattern
08026	11" Bolt Pattern

### Applications:

Residential HVAC, **Direct Drive Blowers** 

- · Welded 4-ring bracket
- · Anodized steel rod construction
- · Includes 4 sets of rubber grommets, 4 sheet metal screws, 4 galvanized steel sleeves, 1 bolt, 1 nut



MARS NO.	DESCRIPTION
08027	13" Bolt Pattern

### **Rheem Adapter Belly Bands**

### Applications:

Rheem Blower Assemblies This kit allows the use of standard 5.5" blower motors

(without Rheem mounting holes) in Rheem original equipment blower applications.

- Welded 4-ring bracket
- · Anodized steel rod construction
- · Includes bracket, blower housing tabs, hardware & grommets



MARS NO.	DESCRIPTION
08028	Rheem Adapter



