model no. 011-1846-6



# 3,000 WATT MODIFIED SINE WAVE DIGITAL INVERTER



## **IMPORTANT:**

This manual contains important safety and operating instructions. Read all instructions and follow them with use of this product.

## INSTRUCTION MANUAL

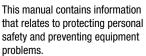
DO NOT RETURN THIS PRODUCT TO THE STORE!

QUESTIONS? CALL CUSTOMER SERVICE, HOTLINE: 1-877-619-6321



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Carefully read and follow the guidelines in this manual and give special attention to the caution and Warning statements.

## ABBREVIATIONS AND ACRONYMS

Α	Amp (Ampere)
AC	Alternating current
cm	Centimeter
DC	Direct current
kW	Kilowatt
mm	Millimeter
٧	Volts
W	Watts

## **SHOCK HAZARD**

SAFETY INFORMATION

- Keep children away from the Digital Power Inverter. Do not allow children to handle the Digital Power Inverter.
- **DO NOT** expose the Digital Power Inverter to rain, snow, spray, or bilge water.
- Make sure the inverter wiring is of proper size and rating and in

- good condition. Operating the inverter with damaged wiring may void warranty.
- **DO NOT** use the inverter if it is dropped, hit, worn, broken, or damaged.
  - **DO NOT** attempt to service or disassemble the inverter, as it does not have user-serviceable parts and the internal capacitors remain charged even if the power source is disconnected.
- Disconnect DC power source from the inverter, before attempting to service, clean, or operate on any circuits connected to inverter. Simply turning OFF the ON/OFF switch of the inverter will not disconnect the power, thereby causing electric shock.
- **NEVER** connect the inverter to any power distribution systems or branch circuits.
- While servicing, never work on the AC wiring without physically disconnecting the DC connection.

- Use care when operating 110 V circuit. Incorrect operation of the inverter may cause personal injury.
- Digital Power Inverter is not designed to be waterproof. It functions in ambient temperatures of -10°C to 40°C.

## **EXPLOSION AND FIRE HAZARD**

- **NEVER** operate the inverter near flammable items or explosives, such as in cabin of a gasoline powerboat, or near propane/fuel tanks, in compartments containing batteries of flammable materials, locations that require ignition-protected equipment, joints, fittings or any connections between fuel system components. This inverter contains components which tend to produce arcs or sparks.
- **NEVER** smoke while handling the inverter.

## **FIRE HAZARD**

- **DO NOT** cover or obstruct the ventilated openings of the inverter, as doing so may cause overheating.
- Make sure there is minimum of 3" (7.5 cm) of unblocked air space around the entire surface of the inverter at all times. The inverter may become warm reaching a temperature of  $140^{\circ}$ F (60°C) under high power operation.
- **DO NOT** place any materials near the inverter, that could be easily damaged by heat.

## **EQUIPMENT DAMAGE**

- Do not connect inverter to live AC power circuits or any AC device with neutral conductor connected to ground, to avoid damage to the inverter even if it is switched OFF.
- Never install the inverter in a zero-clearance environment, as doing so may cause overheating of the inverter.

# SAFETY INFORMATION

## SAFETY PRECAUTIONS WHEN WORKING WITH BATTERIES

Follow all instructions mentioned by the manufacturer to avoid explosion of the battery.

## **EXPLOSION HAZARD**

- DO NOT work near lead-acid batteries, as the batteries generate explosive gases during normal operation.
- DO NOT drop a metal tool on the battery, as doing so can create spark or short circuit in the battery or other electrical parts, resulting in battery explosion.
- While removing the battery, make sure to remove grounded terminal from the battery and disconnect other electrical connections.
- Make sure the area around the battery and engine is well ventilated and free from spark or flame.
- Do not operate the inverter in an enclosed area containing automotive type lead-acid

- batteries. These types of batteries emit explosive hydrogen gas that can be ignited by sparks.
- Have someone within the range of your voice or nearby for help when working with the leadacid batteries.

## CHEMICAL HAZARD

- Remove all metal items such as rings, bracelets, and watches when working with the leadacid batteries. The batteries may produce short circuit current that can weld metals, thereby causing severe burns on skin.
- Make sure there is plenty of fresh water, soap and baking soda near the work area. If a person's skin or clothing accidentally contacts with battery acid, wash immediately with baking soda, soap and water. If the acid enters eye, wash immediately with running cold water for minimum twenty minutes and get medical attention immediately.

 Always wear complete eye and clothing protection. Avoid touching your eyes while working with the batteries.

## **EQUIPMENT DAMAGE**

- Connect the inverter to batteries with a normal output of 12 V DC only. The inverter will not operate if connected to a 6 V battery (voltage is too low) and 24 V battery (voltage is too high) will damage the unit.
- D0 N0T insert any foreign objects into the outlets, vents, or fan openings of the inverter.
- DO NOT cover or obstruct the ventilation openings of the inverter.

## SAFETY PRECAUTIONS WHEN USING RECHARGEABLE APPLIANCE

 Please connect 4 cables with all 4 DC terminals according to the installation instructions in this manual. Failure to do so may damage the inverter.

- DO NOT use this inverter to recharge battery operated appliances such as flashlights, razors, and night lights that can be plugged directly into an AC outlet.
- DO NOT use this inverter to recharge battery operated power tools that have a charger with a warning label indicating that dangerous voltages are present at the battery terminals.

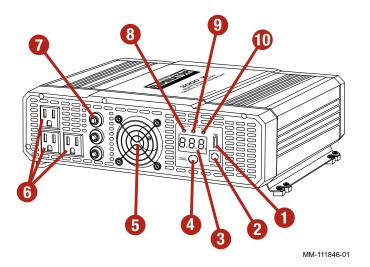
**KEY PARTS LIST** 

## model no. 011-1846-6 | contact us 1-877-619-6321



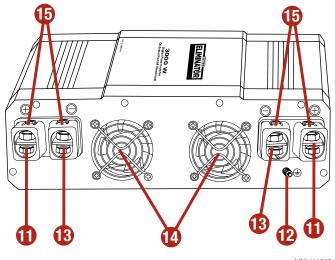
## **AC PANEL**

- 1 USB port
- 2 Remote switch port
- 3 Digital display
- 4 Power switch button
- Cooling fan and ventilation opening
- 6 AC Outlets
- AC Outlet overload reset circuit
- 8 Input indicator (V)
- Output power indicator (kW)
- Output power indicator (W)



## **DC PANEL**

- 1 Positive DC terminals
- 12 Ground terminal
- Negative DC terminals
- 14 Cooling fan and ventilation openings
- 15 Terminal covers



MM-111846-02



## **GENERAL USE**

The MotoMaster® 3,000 Watt Modified Sine Wave Digital Inverter efficiently and reliably supplies 115 V/60 Hz AC power with 3000 W continuous output power for large single loads, intermittent loads, or multiple smaller loads. The inverter is designed to meet UL standard and cETL certification. The highquality and mid-range inverter is suitable for charging or powering electrical devices such as jacklight, TV set, audio/video system, and tools with power consumption less than 3000 W. It is ideal for operating household appliances, cars, trucks, RVs and boats.

## CHARACTERISTICS OF INVERTER

- The inverter is not waterproof.
- The inverter has high surge capability and functions in ambient temperatures of -10°C to 40°C.
- The inverter's low standby power ensures less battery discharge, even if it is kept ON for few days. (Stand by time is varied based on the capacity of battery connected.) It is not

- recommended to keep inverter always on, even when it is not in use.
- The inverter has convenient USB port. It powers most modern electronic products.

## **SAFETY FEATURES**

## AC OUTPUT OVERLOAD OR SHORT CIRCUIT SHUTDOWN -

This feature automatically turns OFF the inverter if a short circuit occurs or if the load attached to the inverter exceeds the operating limit. The digital display will show "OLP" or "OPP" and the audible alarm is also activated.

## **HIGH BATTERY VOLTAGE**

**SHUTDOWN** - This feature automatically shuts down the inverter if the input voltage exceeds 15.5 +/- 0.5 V. The digital display will show "OUP" and the audible alarm is also activated. The inverter recovers automatically when the battery voltage drops to a safe range.

## **LOW BATTERY VOLTAGE ALARM**

- The alarm produces an audible sound if the battery discharges to 11.0 +/- 0.3 V. The digital display will show "LUP".

## **LOW BATTERY VOLTAGE**

**SHUTDOWN** - This feature automatically shuts down the inverter if the battery voltage drops to 10.5 +/- 0.3 V. The digital display will show "LUP" to prevent the battery from being completely discharged. The inverter recovers automatically when the battery voltage is 12 +/- 0.3 V DC.

### **OVER TEMPERATURE**

SHUTDOWN - This feature automatically turns OFF the inverter if the internal components temperature becomes too high. The audible alarm produces a beep when this happens. The digital display will show "OCP". This may be caused by the ambient temperature being too high (over 40°C) or bad ventilation.

## MAIN FEATURES OF AC PANEL

**USB PORT** - The port **1** powers and charges USB-enabled devices.

**REMOTE SWITCH PORT** - The port 2 through which the remote control is connected using a communication cable.

## **DIGITAL DISPLAY** - This

display 3 shows input voltage in volts, output power in kilowatts or watts under normal operating conditions. It displays error code under error or alarm conditions. The allowed power tolerence is 15% for loads of over 300 W. The allowed voltage tolerance is

 $\pm$  0.3 V under no load conditions.

**POWER SWITCH BUTTON -** This button 4 turns ON/OFF the inverter.

## 

feature 5 protects the inverter from overheating. The ventilation openings should be kept clear.

AC OUTLET - The inverter is provided with three AC outlets 6 into which 115 V AC electrical appliance having a power consumption of 1500 W or less can be plugged in.

**INPUT INDICATOR (V)** - This indicator 3 indicates that the inverter is turned ON. The digital display shows DC input voltage.

## **OUTPUT POWER INDICATOR (W)**

- This indicator 10 indicates that the load consumption is less than 1000 W. The digital display shows output power in watts.

## **MAIN FEATURES OF DC PANEL**

## **POSITIVE DC TERMINALS -**

These terminals 11 accept ring connectors of the positive cables connected to the battery.

**GROUND TERMINAL** - This terminal (2) accepts a ground wire which is connected to a ground.

## **NEGATIVE DC TERMINALS -**

These terminals (13) accept ring connectors of the negative cables connected to the battery.

### **COOLING FAN AND**

**VENTILATION OPENING** - This feature 14 protects the inverter from overheating. The ventilation openings should be kept clear.

**TERMINAL COVERS** - These covers (15) are plastic covers to prevent positive and negative DC terminals from short circuit if the bolt and nut are loosened.

## **INVERTER LOADS**

The inverter will operate AC loads within its power rating of 3,000 W. However, some appliances and equipment may be difficult to operate, and some appliances may be damaged while operating them with this inverter.

## **HIGH SURGE LOADS**

Some induction motors used in freezers, pumps, and other motor operated equipment need high surge current to start. This Inverter may not be able to start these motors even though their rated current is within the inverter's limits. Observe the voltage reading in digital display during motor start up.

. If the reading drops below 11 V while the inverter is starting the motor, make sure all connections are securely fastened, battery is fully charged and proper sized cables are used.

· Use a high capacity battery, if the voltage still drops below 11 V even after rectifying the problem.

## **INDICATORS AND DIGITAL DISPLAY CODES**

CONDITION	DIGITAL DISPLAY	DESCRIPTION
Left indicator on	13.5	Power supply: 13.5 Volts
Middle indicator on	1	Load consumption: 1 kW (1000 W)
Right indicator on	500	Load consumption: 0.5 kW (500 W)
	LUP	Low voltage alarm
	LUP	Under voltage shutdown
	OUP	Over voltage shutdown
	OLP	Over load shutdown
	OCP	Over temperature shutdown
	OPP	Short circuit

## **OPERATING LIMITS**

The inverter delivers power to the load based on input voltage and ambient temperature. The inverter will deliver more than 100 % of its continuous power rating for approximately 5 minutes. Allow the inverter to cool for 15 minutes before resuming operation above continuous power rating.

## **INPUT VOLTAGE**

The table below depicts the input voltage limits under various operating conditions.

OPERATING CONDITION	VOLTAGE RANGE	DESCRIPTION
Normal	11 V - 14 V	
Peak performance	13 V -14 V	
Low voltage alarm	11.0 ± 0.3 V	The audible low battery voltage alarm sounds. The display will show "LUP".
Low voltage shutdown	$10.5\pm0.3\textrm{V}$	The inverter shuts down to protect the battery from being over-discharged. The display will show "LUP".
High voltage shutdown	$15.5 \pm 0.5 \mathrm{V}$	The inverter shuts down to protect itself from excessive input voltage. The display will show "OUP" <b>NOTE:</b> Even though the inverter has over-voltage protection feature, it can be damaged if input voltage exceeds 16 V.
Inverter restarts after low voltage shutdown	$12.0 \pm 0.3 \mathrm{V}$	The inverter will not restart unless the battery voltage is suitable for operating the load.

## LOAD PERFORMANCE CHART FOR THE 3,000 WATT MODIFIED SINE WAVE DIGITAL POWER INVERTER 011-1846-6

This power inverter is modified sine wave inverter, it will perform good for most of the appliances. Please refer to below table for applications performance rating comparison of modified sine wave inverter and pure sine wave inverter.

APPLICATIONS	PERFORMANCE RATING		
	MODIFIED SINE WAVE INVERTER	PURE SINE WAVE INVERTER	
LCD/Plasma TV		* * *	
Standard TV	* *	* * *	
Audio equipment	*	* * *	
Laptop	* * *	* * *	
Desktop computer	* *	* * *	
Microwave	* *	* * *	
Table saw/ Air compressor	* *	* * *	
Hand power tool	* *	* * *	
Coffee maker, toaster, hair dryer	* * *	* * *	
Blender, mixer, coffee grinder	* *	* * *	
Laser printer		* * *	

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APPLICATIONS	PERFORM <i>A</i>	NCE RATING
	MODIFIED SINE WAVE INVERTER	PURE SINE WAVE INVERTER
Photo copier	_	* * *
Bubble jet printer	* *	* * *
Fax machine	* *	* * *
Air conditioner	*	* * *
Light (incandescent)	* * *	* * *
Light (others)	* *	* * *
Medical equipment	_	* * *

_	Not recommended	* *	Good performance
*	Adequate performance	* * *	Ideal performance

## **LOAD RUN TIME SPECIFICATION**

	LOAD RUN TIME PER BATTERY TYPE					
APPLIANCE	WATT	22 NF (100 AH)	8 D (200)	DUAL 8Ds (400 AH)	6 V GOLF CART (440 AH)	FOUR 8DS (800 AH)
19" Color TV	100	8 h	19 h	44 h	49 h	100 h
Computer	200	3 h 30 min	8 h	19 h	21 h	44 h
Power drill	500	1 h 10 min	2 h 40 min	6 h	7 h	14 h 30 min
Coffee maker	1000	30 min	1 h 10 min	2 h 30 min	3 h	6 h
Microwave oven	1500	_	40 min	1 h 30 min	1 h 45 min	4 h
Coffee maker and Microwave oven	2500	г	п	1 h	1 h	2 h

Not recommended



## PACKAGING CONTENTS

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NO.	MATERIAL NAME	QUANTITY	ILLUSTRATION	
1	Digital Power Inverter	1		
2	6 m wired remote control	1		
3	Owner's manual	1		

## **BEFORE INSTALLATION**

Follow all instructions including safety guidelines mentioned in this manual.

## **DETERMINING BATTERY CAPACITY**

- Determine the battery capacity based on the type and requirement of load.
   Please use with 12 V battery only.
- Battery type and size strongly affect the performance of the inverter.

## **DETERMINING CHARGING SYSTEM**

- Choose an appropriate charging system. A well-designed charging system allows the battery to remain in optimal condition, thereby supplying power when needed.
- Inadequate charging and wrong charger type will affect the system performance and reduce battery life.



### **WARNING!**

Please consult a qualified professional for installing electrical equipment. Only qualified professionals have knowledge of applicable installation codes and the hazards involved in performing electrical work.



## **CAUTION! EQUIPMENT DAMAGE**

The inverter will not operate if connected to a 6 V battery and will be damaged if connected to a 24 V battery.

## NOTE:

If any of these materials are missing or damaged, please contact our TOLL-FREE HELPLINE: 1-877-619-6321.

ASSEMBLY INSTRUCTION

## **CHOOSING A LOCATION**

The inverter contains components that tend to produce arcs or sparks. It is not recommended to use this device for marine applications.

The inverter should be operated only in locations that meet the following requirements:

CONDITION	DESCRIPTION
CONDITION	DESCRIPTION
Dry	Avoid splashing of water or other liquids on the inverter.
Cool	Maintain the ambient air temperature between 14°F and 104°F (-10°C and 40°C).
Ventilated	Leave at least 3" (7.5 cm) of space around the inverter for airflow. Ensure that the ventilation openings are not obstructed.
Safe	Do not install the inverter in a compartment containing batteries or flammable liquids like gasoline.
Close to battery	Do not use an excessively longer DC cable, as it increases wire resistance and reduces input power.
Protection from battery gases	Do not mount the inverter in a place where it is exposed to gases produced by the batteries. Prolonged exposure to these gases will damage the inverter, as they are very corrosive.
Clean	Do not operate the inverter in an area that is prone to dirt, dust or debris.

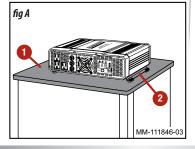
## $\triangle$

## **WARNING!**

- To prevent fire or explosion, do not install the inverter in compartments containing batteries, flammable materials, or ignition-protected equipment.
- Do not cover or obstruct the ventilation openings of the inverter.
- Never install the inverter in a zero-clearance environment, as doing so may cause overheating of the inverter.

## MOUNTING THE INVERTER

- Place the inverter in a suitable location and orientation. The inverter can be positioned on a vertical or horizontal surface. Make sure the inverter DC connections must point left/right while installing on vertical surface.
- Hold the inverter against the mounting surface (1) and mark the positions on the surface with respect to mounting bracket (2) (fig A).



- 3. Drill four mounting holes on the marked position of the surface.
- 4. Align the holes on the mounting surface with corresponding holes of the mounting bracket. Fasten the inverter on the mounting surface using corrosion-resistant fasteners. It is recommended to use M6 fasteners for mounting purpose.



## **CAUTION! EQUIPMENT DAMAGE**

- Do not install the inverter in a wet environment or in any environment where the moisture can enter through the ventilation openings.
- If the inverter is mounted vertically, the DC connections should not point up or down to avoid foreign material from falling or settling into the unit.

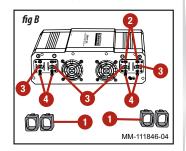
ASSEMBLY INSTRUCTION

- Make sure the inverter is turned OFF.
- Prepare the 2 sets of positive and negative cables to connect to battery (2 positive cables and 2 negative cables. Total 4 cables).
   Copper cable with 2 ring terminals are recommended (ring terminals at inverter side should be with 10 mm diameter hole, and other other side should be the same size as the battery terminal connection).

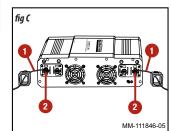
It is highly recommended to use red cables for positive terminal and black cables for the negative terminal. Refer to this chart for the copper cables gauge depending on distance.

CABLE LENGTH	CABLE GAUGE
<=3'	4 AWG (4 cables)
<=6'	2 AWG (4 cables)
<=10'	1 AWG (4 cables)

 Remove the terminal covers (1), nuts (2), washers (3) and bolts (4) from the positive and negative DC terminals (fig B).



I. With the positive (red) battery cable (1) passing through the terminal cover, connect the ring connector on one end of the positive battery cable to the positive (red) DC terminal (2) of the inverter. Make sure both positive DC terminals are connected with the cables (fig C).



## **NOTE**

The Digital Power Inverter uses low-voltage and high-current input, hence low-resistance wiring between the battery and the inverter is essential to deliver the maximum amount of usable energy to the load.



## **WARNING!**

- It is strongly recommended to contact a qualified professional.
- Do not perform the cable connection if the environment has any flammable fumes. Always ventilate the battery compartment before making this connection. If not explosion or fire may occur.
- Always make sure the cable connection is tight. Loose connections may cause excessive voltage drop, thereby leading to overheating and melting of cable insulation.
- Please connect 4 cables with all 4 DC terminals according to the assembly instructions in this manual. Failure to do so may damage the inverter.

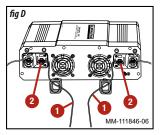


## **CAUTION! EQUIPMENT DAMAGE**

Do not change the negative and positive polarities of battery cable, while connecting into the DC terminals. A reversed polarity connection will damage the inverter, thereby voiding the warranty.

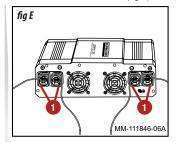
ASSEMBLY INSTRUCTION

5. With the negative (black) battery cable (1) passing through the terminal cover, connect the ring connector on one end of the negative battery cable to the negative (black) DC terminal (2) of the inverter. Make sure both negative DC terminals are connected with the cables (fig D).



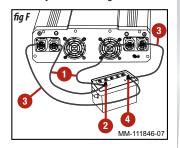
Insert the nuts on all 4 DC terminals and tighten them with washers. Do not overtighten.

7. Insert both terminal covers (1) back onto the inverter (fig E).

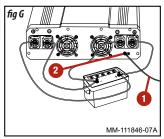


Connect the ring connectors on the other ends of both negative (black) battery cables (1) to the negative (black) terminal (2) of the battery (fig F). Tighten the nut with washer firmly. Do not overtighten.

9. Connect the ring connectors on the other ends of both positive (red) battery cables (3) to the positive (red) terminal (4) of the battery (fig F). Tighten the nut with washer firmly. Do not overtighten.



10. Prepare a 14 AWG copper wire (1) with enough length to connect the inverter to a ground. Strip the insulation at both sides. Connect one end of the copper wire to the ground terminal (2) of the inverter, and the other end of the wire to the ground (fig G).



## NOTE:

If connecting the inverter in a vehicle, connect the copper wire to the chassis of the vehicle. If connecting the inverter in a boat, connect the copper wire to the boat grounding system. If connecting the inverter in a fixed location, connect the copper wire to a ground rod (a metal rod pounded into the earth) or other proper service entrance ground.



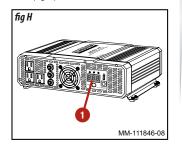
## **CAUTION! EQUIPMENT DAMAGE**

Do not change the negative and positive polarities of battery cable, while connecting into the DC terminals. A reversed polarity connection will damage the inverter, thereby voiding the warranty.

### NOTE:

Spark may occur during the cable connection. This is normal condition.

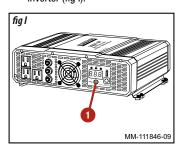
- 11. Turn ON the inverter using power switch button. Refer operating instructions page 27, step 1.
- Check the front panel of the inverter. The digital display (1) will indicate 12-13 V, depending on the battery voltage. If there is no indication, check the battery and its connection to the inverter (fig H).





1. Press the power switch button (1) for half a second to turn ON the inverter (fig I).

**TURNING ON/OFF THE INVERTER** 



Press the power switch button for one second to turn OFF the inverter.

**AFTER AC OUTPUT SHUTDOWN** 1. Press the power switch button for

**RESTARTING THE INVERTER** 

- one second to turn OFF the inverter. Remove all AC loads from the inverter. Allow the inverter to
- cool down for 15 minutes. Then, press the power switch button for half a second to turn ON the inverter.

## NOTE:

- The inverter does not draw current from the battery, when the power switch button is in OFF position.
- When the power switch button is in ON position and there is no power supply to the load, the inverter draws less than 1 A from the battery. It would take a week to discharge a 100 Ah battery with this low current. Therefore, there will not be excessive discharge of the battery even if the inverter remains in ON condition for several days.
- · Keep the inverter in OFF condition, if the battery has to be recharged within a week.



## **WARNING!**

Before working on any circuits connected to the inverter, always disconnect DC and AC power source from the inverter even if the ON/OFF switch is in OFF position.

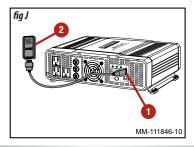
**OPERATION** 

## **OPERATING SEVERAL LOADS**

- Press the power switch button for half a second to turn ON the inverter.
- While operating multiple loads, turn ON the loads from high capacity to low capacity. This will avoid the inverter from delivering the starting current for all the loads simultaneously.

## **CHARGING USB LOADS**

 Use the USB port (1) for charging and powering USB-powered devices (2) such as portable music (MP3) player, mobile phone, and video game player (fig J).



 Make sure the USB device accepts 5 V and can be charged using a USB power source. Refer technical specifications page 32.

## **MAINTENANCE**

The inverter will operate efficiently when maintained properly.

- Clean the exterior surface of the inverter with a damp cloth to prevent accumulation of dust and dirt.
- Ensure that the DC cables are secured and fasteners are tightened.
- Recharge the battery before it is discharged to 50%. This will extend the durability and efficiency of the battery.



## **CAUTION! EQUIPMENT DAMAGE**

Do not charge portable GPS receivers and certain cameras using this inverter, as these devices may not be compatible and damage the inverter when plugged in.

**TROUBLESHOOTING** 

## **TROUBLESHOOTING**

PROBLEM	POSSIBLE CAUSE	SOLUTION
The digital display shows "LUP".  • Low battery voltage shutdown feature turns OFF the inverter.		Recharge the battery. Check if cables and connections are secure.
	DC wiring is incorrect.	Use proper cable length and gauge. Refer assembly instructions page 22.  Make secure cable connections.
	<ul> <li>Battery condition is poor.</li> </ul>	Charge or replace the battery if needed.
The digital display shows "OUP".	High battery voltage shutdown feature turns OFF the inverter.	Make sure the inverter is connected to a 12 V battery.
The digital display shows "OLP".	AC output overload shutdown feature turns OFF the inverter.	Make sure the load attached to the inverter is within the operating limit.  Refer technical specifications  page 32.
The digital display shows "OCP".	Over temperature shutdown feature turns OFF the inverter.	Make sure the inverter is placed in a well-ventilated area and ventilation openings are not obstructed. Reduce the ambient temperature if possible. Refer technical specifications page 32.
The digital display shows "OPP".	Occurrence of short circuit.	Check the AC wiring.

PROBLEM	POSSIBLE CAUSE	SOLUTION
No output voltage and voltage indication.	The inverter is in OFF position.	Turn ON the inverter.
	There is no power supply to the inverter.	Check the wiring to the inverter.
	The DC polarity is reversed.	Reverse DC polarity will damage the inverter and voiding the war- ranty. Have a qualified service technician to repair.

## NOTE:

For further assistance with the MotoMaster® Eliminator, contact customer service at 1-877-619-6321.



## **WARNING!**

Do not disassemble the inverter, as it does not contain userserviceable parts.

Have the inverter serviced by a qualified technician. Attempting to service the inverter by yourself could result in electric shock or burn. **TECHNICAL SPECIFICATION** 

## **ELECTRICAL SPECIFICATION**

Continuous AC output power	3000 W
Maximum AC output surge power	6000 W
AC output voltage range	104 V - 127 V AC
Output frequency (nominal)	60 ± 1 HZ
Output waveform	Modified sine wave
DC output	5 V DC, 2100 mA
DC input voltage range	11 V - 14 V DC
Low battery alarm	Audible, 11 $\pm$ 0.3 V DC
Low battery shutdown	$10.5\pm0.3\mathrm{VDC}$
Low battery shutdown resume	$12.0 \pm 0.3 \mathrm{V}$
High battery shutdown	$15.5 \pm 0.5 \mathrm{V}$
Fuse (replaceable)	25 A fuse x 16

## **PHYSICAL SPECIFICATION**

Ambient operating temperature range	14°F - 104°F (-10°C - 40°C)
Dimension (L x W x H)	11 7/8 x 12 15/16 x 4 3/16"
	(30.2 x 32.9 x 10.6 cm)
Weight	10 lb 8 oz (4.8 kg)

## **IMPORTANT:**

All specifications are subject to change without notice.

This MotoMaster® Eliminator product carries a two (2) year limited warranty against defects in workmanship and materials. At its discretion, MotoMaster Canada agrees to have any defective part(s) repaired or replaced free of charge, within the stated warranty period, when returned by the original purchaser with proof of purchase. This product is not guaranteed against wear or breakage due to misuse and/ or abuse.

Imported by MotoMaster® Canada, Toronto, Canada M4S 2B8.