

# POWERBOX®



Model no. 011-2002-8

IMPORTANT SAFETY INSTRUCTIONS. SAVE THESE INSTRUCTIONS.

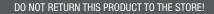
This manual contains important safety and operating instructions.

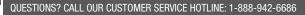
INSTRUCTION MANUAL

## **ELIMINATOR**

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SAFETY INFORMATION

**ELIMINATOR** 

#### Model no. 011-2002-8 Questions? Contact us 1-888-942-6686

This manual contains information that relates to protecting personal safety and preventing equipment problems.

Carefully read and follow the quidelines in this manual and give special attention to the CAUTION and WARNING statements.

ABBREVIATIONS AND ACRONYMS		
Α	Amp (Ampere)	
AC	Alternating current	
Ah	Amp-hour	
DC	Direct current	
LED	Light-emitting diode	
mm	Millimetre	
cm	Centimetre	
٧	Volt	
W	Watt	
mA	Milliampere	

• **DO NOT** use the power pack with life support systems or other medical equipment or devices.

#### SHOCK AND FIRE HAZARD

- Keep children away from the power pack. The power generated by the power pack is as lethal as the AC power from a normal wall outlet.
- **DO NOT** expose the power pack to rain, snow, spray, or bilge water.
- Make sure the power pack wiring is of proper size and rating and in good condition. Operating the power pack with damaged wiring may void warranty.

#### **DO NOT** attempt to service or disassemble the power pack. It does not have user-serviceable parts.

- Always pull by the plug rather than the cord when disconnecting the charger.
- Disconnect DC power source from the power pack before attempting to service or clean. Turning OFF the power pack does not reduce the risk of electric shock.
- **DO NOT** operate the charger with a damaged cord or plug.
- **DO NOT** operate the charger if it has received a sharp blow, been dropped or otherwise damaged in any way. Have a qualified technician perform any service.
- **DO NOT** open the power pack and attempt to replace the internal battery.
- . **DO NOT** insert any foreign objects into the outlets, vents, or fan openings of the power pack.
- Never allow the red and black clamps to touch each other or another common metal conductor. It poses a risk of

- damage to the equipment and spark or explosion hazard. It is recommended to store the clamps in the appropriate holders.
- Keep the power pack away from materials that can be affected by high temperatures such as blankets, pillows and sleeping bags.
- . DO NOT crank the engine for more than 5 seconds, as the jump start feature is designed only for short-term operation. Failure to comply may cause damage to the device.

#### **FIRE HAZARD**

- DO NOT cover or obstruct the ventilated openings of the power pack. Doing so may cause overheating.
- Make sure there is a minimum of 3" (7.5 cm) of unblocked air space around the entire surface of the power pack at all times.
- Keep the power pack away from materials that can be affected by high temperatures such as blankets, pillows and sleeping bags.

#### IMPORTANT!

Read and keep this owner's manual for future reference. This chapter contains important safety instructions.

Charge the power pack immediately after purchase for at least 48 hours and recharge the unit after every use. Recharge the unit once every 90 days, even if the power pack is not in use. Failure to comply will void the warranty.

## **ELIMINATOR**

## EXPLOSION AND FIRE HAZARD

- Never operate the power pack 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.
- Make sure the area around the battery and engine is wellventilated and free from sparks or flame.
- DO NOT operate the power pack in an enclosed area containing automotive type lead-acid batteries. This type of batteries emits explosive hydrogen gas that can be ignited by sparks.
- DO NOT allow the clamps of the boosting cable to touch each other or another common conductor, as it causes sparks and/or damages the equipment.
- · Always connect the clamps to

- the correct terminals. A reverse polarity connection damages the unit and/or creates a spark or explosion.
- po NoT use DC to DC charging cable (not included) to charge power pack if your vehicle's electrical system operates above 15 V. This may lead to accumulations of hydrogen, causing possible fire and explosion hazards. This condition is typically found in marine appliances or portable generators with DC output.

#### **EQUIPMENT DAMAGE**

- Connect and disconnect the DC output clips only after removing the AC plug from the power source.
- DO NOT connect any AC appliance with a neutral conductor connected to ground to the power pack.
- DO NOT expose the power pack to temperatures over 104°F (40°C).

- DO NOT allow the positive and negative clamps of the boosting cable to touch each other or another common metal conductor. Doing so may cause a spark and/or damage the equipment. Always store the clamps in the appropriate holder on each side of the power pack after each use.
- Make sure the positive clamp of the boosting cable is connected to the positive terminal of the battery and the negative clamp is connected to the negative terminal of the battery. A reversed polarity connection (positive to negative) may cause a spark or damage the equipment.
- DO NOT use the boosting feature for more than 5 seconds, as it is designed for short term operations only. Doing so may damage the equipment. Allow the power pack to cool for at least 3 minutes after each boosting operation.

# SAFETY PRECAUTIONS WHEN WORKING WITH BATTERIES

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

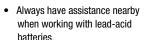
 Remove all metal items such as rings, bracelets, and watches when working with lead-acid batteries. The batteries may produce short circuit current that can weld metals and cause severe burns on skin.

#### SHOCK AND FIRE HAZARD

- DO NOT work near lead-acid batteries. The batteries generate explosive gases during normal operation.
- DO NOT drop a metal tool on the battery. Doing so can create a 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.



SAFETY INFORMATION



- DO NOT use this device to charge nickel cadmium batteries.
- Never smoke while handling the power pack or the batteries.
- DO NOT operate the power pack in a closed-in area or restrict the ventilation in any way.
- Keep a supply of baking soda on hand when working with the batteries. Baking soda neutralizes lead-acid battery electrolytes.
- Always remove the positive battery clip from the battery first.

#### **CHEMICAL HAZARD**

- Have plenty of fresh water and soap nearby in case battery acid contacts your skin, clothing or eyes.
- Wear complete eye and body protection, including safety goggles and protective clothing.
   Avoid touching your eyes while working near the battery.
- Always keep baking soda on hand for emergencies,

as it neutralizes the battery electrolytes.

- If battery acid comes into contact with your skin or clothing, immediately wash the area with soap and water. If acid enters your eye, immediately flood the eye with cold running water for at least 20 minutes and seek medical attention right away.
- If battery acid is accidentally swallowed, drink milk, the whites of eggs, or water. Do not induce vomiting. Seek medical attention immediately.
- DO NOT dispose of the battery and the power pack with regular household waste, as the batteries may contain lead, which is hazardous to the environment.
- Recycling of the battery is recommended to prevent inappropriate disposal of the battery.

#### SAFETY PRECAUTIONS WHEN USING A RECHARGEABLE APPLIANCE

#### **EQUIPMENT DAMAGE**

- DO NOT use this power pack to charge small battery-operated appliances such as flashlights, razors, and night lights that can be plugged directly into an AC outlet.
- DO NOT use this power pack with battery chargers intended to recharge battery packs used in hand power tools (with nickel cadmium batteries). The battery chargers provided for these tools will have a warning label indicating that the battery terminals contain dangerous voltage.
- In case of difficulty in using your rechargeable appliance with the power pack, contact the equipment manufacturer to determine the rechargeable appliance's compatibility with the modified sine wave (nonsinusoidal) AC waveform.

 Make sure the power pack is turned OFF when not in use to prevent unnecessary battery discharge.

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#### BATTERY RECYCLING

The power pack is durable. However, the internal batteries are not user-replaceable.



The internal batteries contain lead, which can be hazardous if exposed to environment. The battery should be recycled or safely disposed at your local recycling depot. Do not dispose of the battery or power pack with regular household waste. Contact your local authorities for recycling services.

**KEY PARTS LIST** 

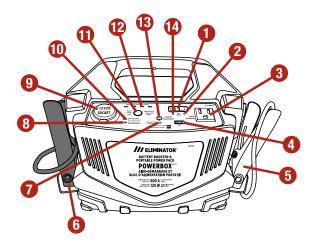
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## **ELIMINATOR**

#### **FRONT PANEL**

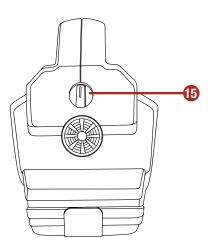
- AC/USB slide switch
- 2 USB power indicator
- 3 AC outlet
- 4 USB power port
- Positive cable clamp
- 6 Negative cable clamp
- Charging status indicator

- 8 Reverse polarity LED indicator
- 9 12 V DC outlet
- Correct connection indicator
- Battery capacity check button
  - Battery capacity % indicators
  - B Charging input port
- AC/USB indicator



#### **SIDE PANEL**

15 Boosting power switch



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The MotoMaster® Portable Booster & Power Pack is easy to use and designed for years of reliable service. The MotoMaster® Eliminator Power Pack can run many AC and 12 V DC appliances and also can be used to jump start engines.

#### **SAFETY FEATURES**

AC OUTPUT OVERLOAD
SHUTDOWN—This feature
automatically turns OFF the inverter
within 15 seconds if the load
attached to the inverter exceeds
the operating limit (greater than
120 W). The unit restarts
automatically, and if the loads are
not removed from the outlets, the
unit turns ON and OFF repeatedly
until the largest load is removed
from the outlet.

**OVER TEMPERATURE SHUTDOWN**—This feature
automatically turns OFF the inverter
within 15 seconds if the internal
components temperature becomes
too high. This may be caused by
the ambient temperature being too
high (over 104°F/40°C) or bad
ventilation.

## POWER PACK COMPONENTS

AC/USB SLIDE SWITCH—The USB port provides power, when the switch is slid to the right. If the switch is slid to the left, the AC/USB indicator lights up and both the AC and USB port are available. If the AC/USB slide switch is in the middle, both the USB port and AC are OFF.

**USB POWER INDICATOR**—The LED indicator 2 lights up if the USB switch is slid to the right and the USB port is powered.

**AC OUTLET**—The outlet 3 is a standard 3-prong outlet supplying 115 V AC power for running an AC appliance.

**USB POWER PORT**—The port 4 provides 5 V/2100 mA of power.

POSITIVE AND NEGATIVE CABLE CLAMPS—The clamps 5, 6 are connected to engine battery of vehicle when the power pack is used to jump start a vehicle. Make sure the positive and negative cable clamps are connected to the positive battery terminal and chassis of the vehicle respectively.

#### CHARGING STATUS INDICATOR—

The LED indicator 7 glows red, when the battery is charging and glows green when the battery is fully charged.

REVERSE POLARITY LED
INDICATOR—The LED indicator 3
glows red when the clamps are
improperly connected to the battery.
The buzzer also sounds an alarm to
indicate an error.

powers 12 V DC auto, RV or marine appliances. It is recommended to use the power pack to power 12 V accessories less than 10 A. It can also be used to charge the battery from a 12 V outlet of a vehicle using DC charging cables (not included).

# CORRECT CONNECTION INDICATOR—The LED indicator ① glows green when the clamps are connected to the battery correctly with the red clamp to the positive terminal and black clamp to the negative terminal.

BATTERY CAPACITY CHECK

**BUTTON**—The button **(1)** checks the remaining battery capacity when pressed.

BATTERY CAPACITY % INDICATORS—The indicator Consists of 4 LEDs to indicate the remaining battery capacity.

**CHARGING INPUT PORT**—Charge the battery in the power pack by inserting the AC to DC adaptor charger into this charging port **13**.

**AC/USB INDICATOR**—The indicator indicates that both AC and USB power are available.

**BOOSTING POWER SWITCH**—The rotary switch **(5)** is used to turn ON and OFF the jump-starting feature of the power pack.

#### NOTE:

It is recommended to use the power pack to charge 12 V accessories less than 10 A.

IMPORTANT INFORMATION

## **ELIMINATOR**

#### TROUBLE LOADS

The electrical appliances mentioned below will be damaged when connected to this power pack.

- Electronics that modulate RF (radio frequency) signals on the AC line will not function and may be damaged.
- Speed controllers found in some fans, power tools, kitchen appliances, and other loads may be damaged.
- The chargers used for small nickel cadmium rechargeable batteries may be damaged.

 Metal halide arc (HMI) lights will be damaged.

#### HIGH SURGE LOADS

Some induction motors used in freezers, pumps, and other motor-operated equipment need high surge current to start. This power pack may not be able to start these motors even though their rated current is within the power pack's limits. The power pack will start single phase induction motors rated at horsepower of 1/2 or less.

#### NOTE:

- In case of difficulty in using your rechargeable appliance with the power pack, contact our customer support for assistance 1-888-942-6686.
- Even though the power pack can supply momentary surge power up to 200 W, some appliances may exceed capabilities of the power pack and trigger the safety overload shutdown circuit. This shutdown is intermittent. The power pack will automatically restart and shutdown until the load does not exceed the surge rating. It is recommended to check the output of your appliance.



#### WARNING! SPARK AND EXPLOSION HAZARD

Do not operate the power pack in compartments containing batteries or flammable materials, or in locations that require ignition-protected equipment.

#### AC APPLIANCE RUN TIME

AC APPLIANCE	WATTS*	* HOURS
Cordless telephone (stand by)	5	20 h**
Clock radio	8	10 h**
Portable stereo	10	8 h**
Fluorescent work light	14	4 h**
Laptop computer	40	2 h**
Table lamp	40	1 h 20 min**
13" colour television	60	1 h**
3/8" drill	190	10 min**

<sup>\*</sup> Actual power consumption as measured on sample products.

## The power pack should be operated only in locations that meet the following requirements:

CONDITION	DESCRIPTION
Dry	Avoid splashing of water or other liquids on the power pack.
Temperature	Maintain ambient air temperature between 32 and 104°F (0 and 40°C).
Ventilation	Leave at least 3" (7.5 cm) of space around the power pack for airflow. Ensure that the ventilation openings are not obstructed.
Safety	Do not install the power pack in a compartment containing batteries or flammable liquids like gasoline.
Flammable battery gases	Do not mount the power pack in a place where it is exposed to gases produced by the batteries. Prolonged exposure to these gases will damage the power pack, as they are very corrosive.

<sup>\*\*</sup> Operating times assume a fully charged 9 Ah battery and may vary based on model/brand used.

**MPORTANT INFORMATION** 

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## **ELIMINATOR**

#### **PACKAGING CONTENTS**

TAORAGING CONTENTS			
NO.	MATERIAL NAME	QUANTITY	ILLUSTRATION
1	Power pack	1	
2	AC charger	1	3
3	Owner's manual	1	

# OPERATION OF AC

 Check the battery capacity by pushing the battery capacity check button to ensure the battery is fully charged. Refer to Important Information

**page** 13.

Slide the AC/USB switch (1) to the left and the indicator (2) will glow (fig.A).



#### NOTE:

If any of these materials are missing or damaged, please contact our customer service hotline: 1-888-942-6686.



#### **CAUTION! EQUIPMENT DAMAGE**

- Read all operating instructions before operating the MotoMaster® Portable Booster & Power Pack.
- Do not use the power pack to operate any AC appliances or 12 V DC appliances while recharging the power pack battery with the AC charger, as the AC charger may fail if the appliances are being used while the AC charger is connected.

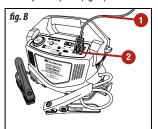
#### NOTE:

- If using many AC appliances, use an AC power bar for additional AC outlets. However, for continuous operation, the combined load must be less than 100 W.
   The power pack will operate for a longer time on a single full charge if lower wattage appliances are used.
- Some appliances may be difficult or impossible to operate using this power pack. They
  may have high surge requirements or may be incompatible with the output waveform
  of this power pack. Refer to the section "Important Information" on page 15.

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 Plug the power cord (1) of the AC appliance into the AC outlet (2) of the power pack (fig. B).



- 4. Turn ON the AC appliance.
- Recharge the power pack immediately after use. Refer to Recharging the Power Pack
   page 25.

# OPERATION OF 12 V DC APPLIANCES

- Check the battery capacity % indicators to ensure the battery is fully charged. Refer to Important Information page 13.
- Plug the DC appliance's power cord (1) into the 12 V DC outlet (2) of the power pack (fig. C).



- 3. Turn ON the DC appliance.
- Recharge the power pack immediately after use. Refer to Recharging the Power Pack
   page 25.



OPERATION

#### CAUTION! EQUIPMENT DAMAGE

- Do not use equipment that is not compatible with non-sinusoidal power, as the output of the power pack is non-sinusoidal.
- Electronic equipments that modulate RF (radio frequency) signals on the AC line will not operate and may be damaged.
- Speed controllers found in fans, power tools, kitchen appliances may be damaged.
- Chargers for small rechargeable batteries can be damaged.
- · Metal halide arc (MHI) lights can be damaged.
- The combined load of the appliances must be less than 100 W for continuous operation. The power pack operates longer on a single full charge when lower wattage appliances are used.
- Equipments with high surge requirements cannot be operated with the power pack. Failure to comply may lead to equipment damage or personal injury.

#### NOTE:

The power pack can only operate 12 V DC appliances that draw 10 A or less from its DC socket. Please disconnect the 12 V DC appliances after use to avoid over-discharge of power pack internal battery.



#### **CAUTION! EQUIPMENT DAMAGE**

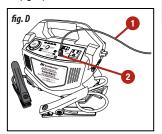
- While the DC appliance is operating, the combined load of the appliances including the power pack's LED light and USB port must not exceed 115 W.
- The DC outlet does not turn OFF automatically even when the internal battery is almost discharged.

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#### **OPERATION OF USB DEVICES**

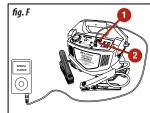
- Check the battery capacity % indicators to ensure the battery is fully charged. Refer to Important Information page 13.
- Plug one end of the USB cable (1) (not provided) of the device into the USB port (2) of the power pack (fig. D).



Plug the other end of the USB cable (1) into the device (2) (fig. E).



4. Slide the AC/USB switch (1) to the right and the USB power indicator (2) will glow (fig. F).



Recharge the power pack immediately after use. Refer to Recharging the Power Pack page 25.

#### **JUMP STARTING AN ENGINE**

- Make sure your vehicle is a negative ground system. If it is positive around system vehicle or you are unsure, please consult the vehicle's owner's of your vehicle.
- Turn off the vehicle and other accessories.
- Engage the park or the emergency brake of the vehicle.

**NOTE:** If boosting a boat engine, purge the engine compartment and vent all fumes before boosting.

#### NOTE:

The 5 V DC USB port of the power pack can only charge compatible devices like MP3 players, digital cameras, camcorders, etc., that have internal batteries.



OPERATION

#### CAUTION! EQUIPMENT DAMAGE

- While the DC appliance is operating, the combined load of the appliances including the power pack's emergency light and USB port must not exceed 115 W.
- Do not connect the USB port directly to a computer USB outlet. Failure to comply could result in damage to both the devices.

NOTE:

damage the internal battery because of over-discharge.

Slide the AC/USB switch (1) to middle to turn off USB after use. Failing to do so may

Allow the power pack to cool down for at least 3 minutes after each boost.

#### WARNING! SHOCK AND FIRE HAZARD

- Never allow the red and black clamps to touch each other or another common metal conductor, as it may damage the equipment and create a spark or explosion hazard.
- Always store the clamps in their holders after each use.
- Do not crank the engine for more than 5 seconds, as the jump start feature is designed only for short term operation. Failure to comply may cause damage to the device.
- Do not connect the boosting clamps in reverse polarity. Failure to comply may cause damage to the equipment and a fire hazard.

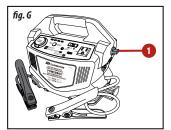
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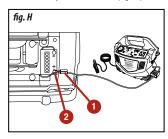
- Engage the transmission in park mode for an automatic transmission vehicle or engage the transmission in neutral for a manual transmission vehicle.
- Place the power pack on a flat, stable surface close to the battery of the vehicle.

**NOTE:** Ensure that the power pack is placed away from the moving parts of the engine and jump start power switch is in OFF position.

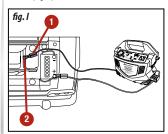
6. Turn OFF the boosting power switch (1) before attempting to make any connections (fig. G).



 Connect the positive (red) clamp (1) from the power pack to the positive (+) terminal (2) of the battery in the vehicle (fig. H).



 Connect the negative (black) clamp (1) from the power pack to the chassis (2) of the vehicle (fig. I).



#### NOTE:

Follow these instructions carefully for boosting your vehicle, as the instructions may be different from those mentioned for other boosting products or cables.



**DPERATION** 

#### **CAUTION! EQUIPMENT DAMAGE**

- Always turn 0FF the AC/USB slide switch before the operation, as the device can be damaged when connected to wrong terminals.
- Use only the supplied boost cables to boost a vehicle or boat engine (4 cylinder) that has a 12 V starting battery.

#### NOTE:

- The positive (+) terminal of the battery is usually larger in diameter than the negative terminal (-). The positive terminal (+) of the battery is usually connected with a red wire.
- If the cable clamps are connected in reverse, the reverse polarity LED indicator glows red and the audible alarm sounds.
- If the glow of the correct connection indicator is green and no alarm sounds, the connections are proper.



#### **CAUTION! EQUIPMENT DAMAGE**

Make sure the cable clamps are connected correctly to the battery terminals. A reversed polarity connection (positive to negative) may cause a spark or damage the equipment.

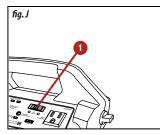
OPERATION

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### **ELIMINATOR**

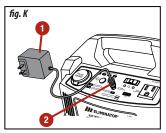
- Disconnect the clamps from the battery of the vehicle if the connections are reversed and repeat the steps 6 and 7, or proceed to step 9.
- 10. Turn ON the boosting power switch of the power pack.
- 11. Crank the engine for 4-5 seconds or until it starts, whichever is first.
- Turn OFF the boosting power switch after using the power pack.
- Disconnect the positive (red) (+) clamp and then the negative (black) (-) clamp from the battery of the vehicle.

- Store the clamps in the appropriate holder on each side of the power pack.
- Recharge the power pack immediately after use. Refer to Recharging the Power Pack page 25.



# RECHARGING THE POWER PACK WITH AC CHARGER

 Turn OFF the AC/USB slide switch (1) of the power pack (fig. J). Plug the 115 V AC charger (1) into charging input port (2) of the power pack (fig. K).



#### NOTE:

- Ensure that the power pack and the cables are away from the belts, fans or any other moving part of the engine.
- It is recommended to not to use the power pack to crank the engine for more than 5 seconds, as the jump start feature is a just a short-term operation.
- Allow the power pack to cool down for at least 3 minutes after each boost.



#### CAUTION! EQUIPMENT DAMAGE

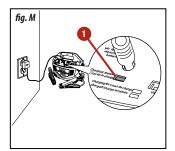
- The power pack battery gradually discharges when left idle.
   Lead-acid batteries must be charged at least once every 90 days even if the battery is not in use, especially in a warm environment. Leaving a battery in a discharged state or not recharging every 90 days may result in permanent damage to the battery and poor boosting performance.
- Do not operate AC or DC appliances while the power pack is being charged.
- Do not attempt to recharge the power pack battery if it is frozen.
- Use only the supplied AC charger or approved battery chargers to recharge the power pack battery to ensure safe recharging and maximum battery life.
- Recharge the power pack battery periodically to maintain maximum battery capacity.

**OPERATION** 

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3. The charging status indicator (1) glows red (fig. M).



#### NOTE:

- The charging status indicator glows green when the charging is complete. Charging
  the battery could take up to 30 hours if the battery is fully discharged. The charging
  time could be lower than 30 hours depending on the capacity left in the battery.
- Do not unplug the power cord until the battery is fully charged.
- The 30-hour charging time for the unit assumes that there is 115 V in the AC wall
  outlet. If the voltage is less than 115 V AC, it may take more than 30 hours to fully
  recharge. Once fully charged, the charging current automatically reduces to a
  floating charge mode. If the power is interrupted, the charging process automatically
  restarts when power returns.

#### **TROUBLESHOOTING**

PROBLEM	POSSIBLE CAUSE	SOLUTION
The power pack cannot jump start vehicle.	The battery in the power pack is not fully charged.	Recharge the battery.
	<ul> <li>The engine start capacity exceeds the power pack jump- start capacity.</li> </ul>	<ul> <li>Use a higher capacity power pack. Make secure cable connections.</li> </ul>
	The battery of the power pack is dead.	Replace the power pack.
	Battery of the vehicle is damaged.	Replace the vehicle battery.
The charging status LED indicator glows red but the battery has not been charged to full after 50 hours of charging.	The AC charger is faulty.	Replace the 115 V AC charger (Model Number: 011-1599-4).
	<ul> <li>The internal battery is permanently damaged.</li> </ul>	Check the battery at a cal maintenance workshop.
	False LED reading.	Disconnect AC charger for 15 minutes. Check battery status. Reconnect AC charger to a different AC outlet.
	Switches are in the "ON" position or a DC or AC load is connected.	<ul> <li>Place all switches in "OFF" position and disconnect all DC or AC loads.</li> </ul>

**TROUBLESHOOTING** 

Model no. 011-2002-8 Questions? Contact us 1-888-942-6686



PROBLEM	POSSIBLE CAUSE	SOLUTION
The charging status LED indicator	No AC power at the AC wall outlet.	Ensure power is available at the AC wall outlet.
oes not glow.	The AC charger is faulty.	Replace the 115 V AC charger (Model Number: 011-1599-4).
The AC appliance does not operate.	The safety overload has tripped, as the AC appliance is rated more than 120 W.	Use AC appliance with a power rating of less than 120 W.
	The high starting surge has tripped the safety overload even though the AC appliance is rated less than 100 W.	Use an AC appliance with a starting surge within the power pack surge rating, as the AC appliance may exceed the power pack's surge capability.
	The battery has discharged to less than 11 V.	Recharge the battery.
	The inverter has overheated due to poor ventilation or excessive- ly warm environmental conditions.	Allow the power pack to cool for 15 minutes or more. Clear blocked fan opening or remove objects covering the unit, then restart the power pack. Move to a cooler environment.
he run time for appliance is less han expected.	The internal battery is not fully charged.	Recharge the power pack using the AC charger until the charging status LED indicator glows green.

The power consumption

of the AC appliance is

higher than expected.

· Check the power or wattage

rating of the AC appliance

appliances).

(or current draw for 12 V DC

#### **BUZZING IN AUDIO SYSTEMS AND RADIOS**

PROBLEM	POSSIBLE CAUSE	SOLUTION
The audio systems and radios produce a buzzing sound when powered by the inverter.	The power supply filtering is inadequate.	Use products with high-quality filters.

#### **TELEVISION INTERFERENCE**

PROBLEM	POSSIBLE CAUSE	SOLUTION
Improper signal reception on TV screen.	The inverter operation affects the TV signal reception.	Increase the distance between the inverter and the TV, antenna and cables.
		Adjust the orientation of inverter, TV, antenna and cables.
		<ul> <li>Maximize the TV signal strength by using a better antenna and use a shielded antenna cable.</li> </ul>
		Use a different TV, as the susceptibility to interference differs between various models.

#### NOTE:

For further assistance with the MotoMaster® Portable Booster & Power Pack contact customer service at 1-888-942-6686.



#### **WARNING!**

Do not remove the cover of the power pack or disassemble the power pack as the power pack does not contain any internal user-serviceable parts and attempting to service the unit could result in electric shock or burn.



#### **ELECTRICAL SPECIFICATIONS**

Continuous output power	100 W
Five minute AC output power	120 W
AC output surge capacity (peak)	200 W
Output voltage	104 – 125 V
Output frequency	59 – 61 Hz
Output waveform	Modified sine wave
No load current draw	< 0.5 A
Input voltage range	11 – 15 V DC
Low battery shutdown	$10.0 \pm 0.3  \text{V DC}$
Over temperature shutdown	Yes
Overload shutdown	Yes
Operating temperature range	32 – 104 °F (0 – 40 °C)

#### PHYSICAL SPECIFICATIONS

Dimension (L x W x H)	12 13/16 x 6 15/16 x 9 5/16"
	(32.6 x 17.6 x 23.7 cm)
Weight	9 lb 4 oz (4.20 kg)

#### **AC CHARGER SPECIFICATIONS**

Input voltage	115 V AC
Output voltage	15 V DC
Input current	400 mA

#### **IMPORTANT:**

All specifications are subject to change without notice.

This MotoMaster® Eliminator product carries a one (1) 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. Made in China