

TWO YEAR LIMITED WARRANTY PROGRAM

This limited warranty program is the only one that applies to this product, and it sets forth all the responsibilities of Power On Board regarding this product. There is no other warranty, other than those described herein. Any implied warranty of merchantability or fitness for a particular purpose on this product is limited in duration to the duration of this warranty.

This Power On Board product is warranted, to the original purchaser only, to be free of defects in materials and workmanship for two years from the date of purchase without additional charge. The warranty does not extend to subsequent purchasers or users. Manufacturer will not be responsible for any amount of damage in excess of the retail purchase price of the product under any circumstances. Incidental and consequential damages are specifically excluded from coverage under this warranty.

This product is not intended for commercial use. This warranty does not apply to damage to units from misuse or incorrect installation/connection. Misuse includes wiring or connecting to improper polarity power sources.

RETURN/REPAIR POLICY: Defective products may be returned to manufacturer. Any defective product that is returned to manufacturer within 30 days of the date of purchase will be replaced free of charge. If such a product is returned more than 30 days but less than two years from the purchase date, manufacturer will repair the unit or, at its option, replace it, free of charge.

If the unit is repaired, new or reconditioned replacement parts may be used, at manufacturer's option. A unit may be replaced with a new or reconditioned unit of the same or comparable design. The repaired or replaced unit will then be warranted under the terms of the remainder of the warranty period. The customer is responsible for the shipping charges on all returned items. During the warranty period, manufacturer will be responsible for the return shipping charges to the customer in the United States.

LIMITATIONS: This warranty does not cover accessories, such as charging adapters, bulbs, fuses and batteries, damage or defects resulting from normal wear and tear (including chips, scratches, abrasions, discoloration or fading due to usage or exposure to sunlight), accidents, damage during shipping to our service facility, alterations, unauthorized use or repair, neglect, misuse, abuse, failure to follow instructions for care and maintenance, fire, flood and Acts of God.

If your problem is not covered by this warranty, call our Technical Support Department toll free at (866) 584-5504 for general repair information and charges if applicable. You may also contact us through our website at www.vectormfg.com.

STATE LAW RIGHTS: This warranty gives you specific legal rights. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the exclusions or limitations stated herein may not apply. This warranty gives the purchaser specific legal rights: other rights, which vary from state to state, may apply.

TO REQUEST WARRANTY SERVICE FOR THIS PRODUCT: Contact Technical Support by telephone, fax or mail (see below). We suggest that you keep the original packaging in case you need to ship the unit. When returning a product, include your name, address, phone number, dated sales receipt (or copy) and a description of the reason for return and product serial number. After repairing or replacing the unit, we will make every effort to return it to you within four weeks.

WARRANTY ACTIVATION: Please complete Warranty Activation Card and mail to Power On Board. Enter "VEC012POB" as Model and "Jump-Start System" as Product Type. All Vector products must be registered within 30 days of purchase to activate this warranty. Mail the completed registration form, along with a copy of the original sales receipt, to:

ATTN.: CUSTOMER SERVICE
 4140 SW 30th Ave., Ft. Lauderdale, FL 33312
 • TOLL FREE: (866) 584-5504 • FAX: (954) 584-5556 •

WARRANTY IS NON-TRANSFERABLE.

BD051906

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 MADE IN CHINA



**Jump-Start System
 12 Volt DC Power Supply**



**USER'S MANUAL
 & WARRANTY INFORMATION**

IMPORTANT SAFETY INFORMATION, SAVE THESE INSTRUCTIONS

TO REDUCE THE RISK OF INJURY, USER MUST READ AND UNDERSTAND THIS INSTRUCTIONAL MANUAL. THIS MANUAL CONTAINS IMPORTANT INFORMATION REGARDING THE OPERATION AND WARRANTY OF THIS PRODUCT. PLEASE RETAIN FOR FUTURE REFERENCE.

4140 S.W. 30th Ave., Ft. Lauderdale, FL 33312
 Toll Free: (866) 584-5504

www.vectormfg.com



IMPORTANT SAFETY INSTRUCTIONS

WARNINGS

1. **RISK OF EXPLOSIVE GAS MIXTURES — WORKING IN THE VICINITY OF A LEAD-ACID BATTERY IS DANGEROUS. BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL BATTERY OPERATION. FOR THIS REASON, IT IS OF UTMOST IMPORTANCE THAT EACH TIME BEFORE USING THIS UNIT, YOU READ THIS MANUAL AND FOLLOW THE INSTRUCTIONS EXACTLY.**
2. **To reduce risk of battery explosion, follow these instructions and those published by the battery manufacturer and manufacturer of any equipment you intend to use in vicinity of battery. Review cautionary markings on these products and on engine.**
3. **This equipment employs parts (switches, relays, etc.) that produce arcs or sparks. Therefore, if used in a garage or enclosed area, the unit MUST be placed not less than 18 inches above the floor.**
4. **TO REDUCE THE RISK OF ELECTRIC SHOCK, do not expose this unit to rain. Store indoors.**

Battery Safety

1. When working with lead acid batteries, always make sure immediate assistance is available in case of accident or emergency.
2. Always use protective eyewear when using this product: contact with battery acid may cause blindness and/or severe burns. Be aware of first aid procedures in case of accidental contact with battery acid.
3. There is a risk of releasing explosive gases when lead acid batteries are charged or discharged. Failure to follow instructions may cause property damage and/or personal injury.
4. When connecting the battery clamps to a discharged battery and an alarm sounds — the clamp connections are incorrect and need to be reversed.
5. Jump-start procedures should only be performed in a safe, dry, well-ventilated area.
6. Always store battery clamps on the clamp tabs on the back of the unit when not in use. Never touch battery clamps together. This can cause dangerous sparks, power arcing and/or explosion.
7. When using this unit close to the vehicle's battery and engine, stand the unit on a flat, stable surface, and be sure to keep all clamps, cords, clothing and body parts away from moving vehicle parts.
8. Do not wear vinyl clothing when jump-starting a vehicle, friction can cause dangerous static-electrical sparks. Remove all jewelry or metal objects that could cause short circuits or react with battery acid.
9. Never allow RED and BLACK clamps to touch each other or another common metal conductor — this could cause damage to the unit and/or create a sparking/explosion hazard.
10.
 - a. For negative-grounded systems (most common), connect the POSITIVE (RED) clamp to the POSITIVE ungrounded battery post and the NEGATIVE (BLACK) clamp to the vehicle chassis or engine block away from the battery. Do not connect the clamp to the carburetor, fuel lines or sheet-metal body parts. Connect to a heavy gauge metal part of the frame or engine block.
 - b. For positive-grounded systems, connect the NEGATIVE (BLACK) clamp to the NEGATIVE ungrounded battery post and the POSITIVE (RED) clamp to the vehicle chassis or engine block away from the battery. Do not connect the clamp to the carburetor, fuel lines or sheet-metal body parts. Connect to a heavy gauge metal part of the frame or engine block.
11. Always disconnect the NEGATIVE (BLACK) jumper cable first, followed by the POSITIVE (RED) jumper cable, except for positive grounded systems.
12. Do not expose battery to fire or intense heat since it may explode. Before disposing of the battery, protect exposed terminals with heavy-duty electrical tape to prevent shorting (shorting can result in injury or fire).
13. Do not smoke or use flammable items (matches, cigarette lighters, etc.) while working on a vehicle's battery system.
14. **DO NOT ATTEMPT TO JUMP-START A FROZEN BATTERY.**
15. Place this unit as far away from the battery as DC cables permit.
16. Never allow battery acid to come in contact with this unit.
17. Vehicles that have on-board computerized systems may be damaged if vehicle battery is jump-started. Before jump-starting, read the vehicle's owners manual to confirm that external-starting assistance is suitable.

Inflator Safety

1. Never attempt to disable or block the inflation and deflation ports while pump is operating.
2. Never cover unit at any time.
3. Never leave the pump unattended while in use.
4. Never allow sand, small rocks or other debris to be sucked into the inflation or deflation ports.
5. **RISK OF INJURY:** Never look into or point the inflator port opening toward anyone's eyes. Do not direct air stream at body.
6. Do not use the compressor continuously for longer than 15 minutes. Extended use will cause it to overheat and can damage the product. After 15 minutes of continuous use, turn the unit OFF and wait 15 minutes before resuming operation of the compressor.
7. **DO NOT** overinflate objects or exceed manufacturer's recommendations for pressure on objects to be inflated.

Personal Safety

FIRST AID

SKIN: If battery acid comes in contact with skin, rinse immediately with water, then wash thoroughly with soap and water. If redness, pain or irritation occurs, seek immediate medical attention.

EYES: If battery acid comes in contact with eyes, flush eyes immediately for a minimum of 15 minutes and seek immediate medical attention.

CAUTIONS

- All ON/OFF switches should be in the OFF position when the unit is charging or not in use. Make sure all switches are in the OFF position before connection to a power source or load.
 - Never insert anything other than the supplied power/recharging cords or recommended appliance power/recharging cords into the 12 volt DC charging/power outlet on this unit. Do not use any accessory that is not recommended or provided by the manufacturer.
 - Do not use this unit to operate appliances that need more than 5 amps to operate from the 12 volt DC accessory outlet.
 - This system is designed to be used only on vehicles with a 12 volt DC battery system. Do not connect to a 6 volt or 24 volt battery system.
 - This system is not designed to be used as a replacement for a vehicle battery. Do not attempt to operate a vehicle that does not have a battery installed.
 - Excessive engine cranking can damage a vehicle's starter motor. If the engine fails to start after the recommended number of attempts, discontinue jump-start procedures and look for other problems that may need to be corrected.
 - Although this unit contains a non-spillable battery, it is recommended that unit be kept upright during storage, use and recharging. To avoid possible damage that may shorten the unit's working life, protect it from direct sunlight, direct heat and/or moisture.
 - Check unit periodically for wear and tear. Contact the Customer Service Department at (800) 618-5178 to replace worn or defective parts.
 - Do not drop this unit as it may damage the product. If unit is dropped or damaged, please discontinue using it.
 - Never submerge this unit in water.
 - Store indoors. Do not operate unit in rain or snow, or use when wet.
 - Do not operate this unit in a closed area or restrict ventilation in any way.
- THIS UNIT IS NOT FOR USE BY CHILDREN AND SHOULD ONLY BE OPERATED BY ADULTS.**

Read This User's Manual Before Using This Unit.

SAVE THESE INSTRUCTIONS

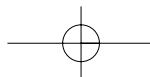




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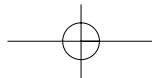
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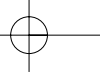
INTRODUCTION

Thank you for choosing the **Power On Board Jump-Start System**. Please read this guide carefully before use to ensure optimum performance and avoid damage to the unit or items that you are using it with.

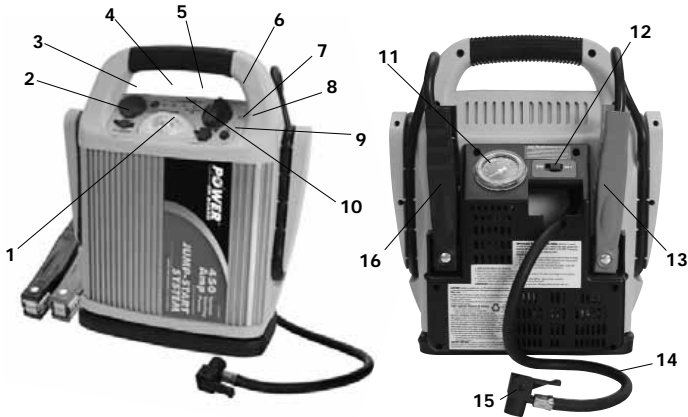
FEATURES

- Keyless ON/OFF Safety Power Switch
- Built-in non-spillable, maintenance-free, heavy duty, AGM, 19 amp/hour, sealed, lead-acid battery
- 450 instantaneous cranking amps
- Heavy duty #4AWG jumper cables and 450 amp copper clamps, with exclusive recessed storage channels
- Audible reverse polarity alarm
- Long-life, ultra bright LED Emergency Area Light
- USB Charging Port charges and recharges personal electronics
- 12 Volt DC Accessory Outlet charges and recharges DC appliances
- Easy-to-read LED battery charge status indicators
- Cordless/rechargeable, includes AC and DC charging adapters
- 120 volt AC charger is Underwriter Laboratories safety tested and listed
- Built-in portable inflator for vehicle tires, trailer tires and recreational inflatables, with lighted analog gauge
- Requires no maintenance (other than recharging) for optimum operation





Control and Function Guide



Front View

Back View

- | | |
|--------------------------------------|------------------------------|
| 1. Built-in LED Emergency Area Light | 9. USB Power Port |
| 2. AC Recharge Port | 10. Area Light Power Switch |
| 3. 12 Volt DC Outlet | 11. Pressure Gauge |
| 4. Battery Charge Level Pushbutton | 12. Inflator Power Switch |
| 5. LED Battery Status Indicators | 13. POSITIVE (+) RED Clamp |
| 6. Jump-Starter Power Switch | 14. Air Hose |
| 7. Reverse Polarity Indicator | 15. Connector (Chuck) |
| 8. USB Power Port Power Switch | 16. NEGATIVE (-) BLACK Clamp |



USING THE JUMP-STARTER

This unit is delivered in a partially charged state – you must fully charge it before using it for the first time. Initial AC charge should be for 48 hours.

This Jump-Starter is equipped with a safety Power Switch that only allows energy to flow when proper connections are made to battery and frame. Once the connections are properly made, turn the switch ON to jump-start the vehicle.

1. Turn OFF vehicle ignition and all accessories (radio, A/C, lights, connected cell phone chargers, etc.). Place vehicle in “park” and set the emergency brake.
2. Make sure the Jump-Starter Power Switch is turned to OFF.
3. Remove jumper clamps from clamp tabs. **Connect the red clamp first, then the black clamp.**
4. Procedure for jump-starting a NEGATIVE GROUNDED SYSTEM (negative battery terminal is connected to chassis) (MOST COMMON)
 - 4a. Connect POSITIVE (+) RED clamp to vehicle battery's POSITIVE terminal.
 - 4b. Connect NEGATIVE (-) BLACK clamp to chassis or a solid, non-moving, metal vehicle component or body part. NEVER CLAMP DIRECTLY TO NEGATIVE BATTERY TERMINAL OR MOVING PART.
5. Procedure for jump-starting POSITIVE GROUND SYSTEMS

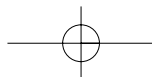
Note: In the rare event that the vehicle to be started has a POSITIVE GROUNDED SYSTEM (positive battery terminal is connected to chassis), replace steps 4a and 4b above with steps 5a and 5b, then proceed to step 6.

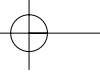
 - 5a. Connect NEGATIVE (-) BLACK clamp to vehicle battery's NEGATIVE terminal.
 - 5b. Connect POSITIVE (+) RED CLAMP to vehicle chassis or a solid, non-moving, metal vehicle component or body part. NEVER CLAMP DIRECTLY TO POSITIVE BATTERY TERMINAL OR MOVING PART.
6. When clamps are connected properly, turn the Jump-Starter Power Switch to ON.
7. Turn ON the ignition and crank the engine in 5-6 second bursts until engine starts.
8. Turn the Jump-Starter Power Switch back to the OFF position.
9. Disconnect the NEGATIVE (-) engine or chassis clamp first, then disconnect the POSITIVE (+) battery clamp.

FOLLOW ALL “IMPORTANT SAFETY INSTRUCTIONS” FOUND AT THE BEGINNING OF THIS USER’S MANUAL.

⚠ WARNINGS

- **Jump-Starter Power Switch should be OFF prior to jump-starting.**
- **This power system is to be used ONLY on vehicles or boats with 12 volt DC battery systems.**
- **Never touch RED and BLACK clamps together — this can cause dangerous sparks, power arcing, and/or explosion.**
- **Vehicles that have on-board computerized systems may be damaged if vehicle battery is jump-started. Before jump-starting this type of vehicle, read the vehicle manual to confirm that external-starting assistance is advised.**
- **Excessive engine cranking can damage the vehicle’s starter motor. If the engine fails to start after the recommended number of attempts, discontinue jump-start procedure and look for other problems that need to be corrected.**
- **After use, turn the Jump-Starter Power Switch OFF.**
- **Replace worn or defective parts immediately — contact the Customer Service Department toll free (866) 584-5504.**





⚠ CAUTIONS

- If the audible Reverse Connection Polarity Alarm sounds after clamps are connected to vehicle battery, reverse clamp connections.
- If vehicle fails to start, turn OFF the ignition, turn OFF the Jump-Starter Power Switch, disconnect the jump-start system's leads and investigate why the engine did not start.
- Recharge this unit fully after each use.

USING THE 12 VOLT DC PORTABLE POWER SUPPLY

This portable power source is also for use with all 12 volt DC accessories equipped with a male accessory outlet plug and are rated up to 5 amps.

1. Lift up the cover of the unit 's 12 volt DC outlet.
2. Insert the 12 volt DC plug from the appliance into the 12 volt DC accessory outlet on the unit. **DO NOT EXCEED A 5 AMP LOAD.**
3. Switch on the appliance and operate as usual.
4. Periodically press the Battery Charge Level Pushbutton to check battery status.

USING THE EMERGENCY AREA LIGHT

The area light is controlled by the Area Light Power Switch on the front panel of the unit (see Control and Function Guide). Make sure the lamp is turned OFF when the unit is being recharged or stored.

USING THE PORTABLE INFLATOR

The built-in 12 volt DC inflator is the ultimate inflator for all vehicle tires, trailer tires and recreational inflatables. Three different sized nozzles are supplied. Each nozzle will clip on the end of the standard tire valve connector located at the free end of the inflator hose. The inflator hose with tire fitting is stored in a retaining channel between the jumper cable channels on the rear of the unit. The ON/OFF Switch is located on the back of the Main Unit. The inflator can operate long enough to fill up to 3 average sized tires before the battery must be recharged.

The inflator may be used by removing the air hose from the storage hatch and if required, fitting an appropriate nozzle to the air hose. An On/Off switch located on the back of the unit controls the power to the inflator and the gauge light. Refer to the Control and Function Guide for location of the inflator hose. Return hose to the storage compartment after use.

⚠ WARNINGS

- **The inflator is capable of inflating up to 260 pounds per square inch (psi) pressure. To avoid over-inflation, carefully follow instructions on articles to be inflated. Never exceed recommended pressures. Bursting articles can cause serious injury.**
- **Always check pressure with the pressure gauge.**
- **Never leave the inflator unattended while in use.**

⚠ CAUTION

Do not operate inflator continuously for extended periods of time

(approximately 15 minutes, depending on ambient temperatures), as it may overheat. In such event, inflator will automatically shut down and restart after a cooling down period of approximately 15 minutes.

Inflating Tires or Products With Valve Stems

1. Place connector (chuck) on valve stem.
2. Ensure connector is pushed on to valve stem as far as possible before closing thumb latch.
3. Make sure latch is secure.
4. Turn ON the Inflator Power Switch.
5. Check pressure with the pressure gauge.
6. When desired pressure is reached, open thumb latch and remove connector from valve stem.
7. Turn OFF Inflator Power Switch.
8. Allow unit to cool before storing away.
9. Store inflator hose and tire fitting in storage compartment.

Inflating Other Inflatables Without Valve Stems

Inflation of other items requires use of one of the adapters (nozzles).

1. Select the appropriate nozzle, located on the inside back cover.
2. Insert appropriate adapter (i.e. needle) into connector (chuck) and close thumb latch.
3. Refer to "Typical Inflation Times" for approximate pressure and time. Small items such as volleyballs, footballs, etc. inflate very rapidly.
4. Insert adapter (i.e., needle) into item to inflate to appropriate pressure.
5. Turn ON the Inflator Power Switch — inflate to desired pressure or fullness.
6. Remove adapter.
7. Switch the Inflator Power Switch OFF.
8. Recharge the unit before storing away.

USING THE USB POWER PORT

Push the USB Power Switch to the ON position and plug the USB-powered device into the jump-starter's USB Power Port and operate normally. The green USB LED Indicator lights up to indicate that it is working.

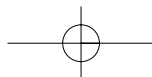
Notes: This USB Power Port does not support data communication. It only provides 5 volts/500mA (maximum) DC power to an external USB-powered device.

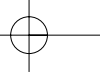
Push the USB Power Switch to the OFF position when not in use. The green USB LED will turn OFF.

CARE AND MAINTENANCE

This product has a sealed lead acid battery that should be kept fully charged. Recharge before first use, immediately after each use, and once a month if not used within that period. Failure to do this may reduce the battery life dramatically.

This unit is delivered in a partially charged state – you must fully charge it before using it for the first time. Initial AC charge should be for 48 hours.





Charging/Recharging

For maximum battery life, we recommend the **Jump-Start System** be kept fully charged at all times. If the battery is allowed to remain in a discharged state, battery life will be shortened.

Note: Recharging battery after each use will prolong battery life; frequent heavy discharges between recharges and/or overcharging will reduce battery life.

120 Volt AC Recharge

1. Plug the AC plug of the AC/DC adapter/charger into any standard 120 volt AC wall outlet.
2. Plug the barrel connector attached to the AC/DC adapter into the small barrel receptacle on the jump-starter.
3. After initial charge, recharge this device as necessary for at least 14-16 hours or until the green FULL indicator lights. **Recharge at least once a month when not in frequent use.**
4. When charging is complete and the FULL indicator lights, remove the AC/DC charger plug and store in a safe place.

Note: The unit cannot be overcharged using the AC method. The Jump-Starter also comes with a DC/DC charging adapter for recharging the unit from a vehicle's 12 volt DC accessory outlet.

12 Volt DC Charging

The DC recharging method will NOT recharge the unit as effectively as recharging from 120 volt AC. The 12 volt DC recharging procedure is recommended only when it is necessary, since frequent use of the 12 volt DC recharging procedure may shorten the battery system's life.

1. Insert the gold-tipped DC/DC charging adapter plug into the vehicle's 12 volt DC accessory outlet.
2. Insert the silver-tipped end plug into the 12 volt DC accessory outlet on the front panel of the unit.
3. To check the charge status of the battery during DC charging, disconnect the DC adapter from the accessory outlet and push the Battery Charge Level pushbutton. Observe the battery charge indicator.
4. When charging is complete, remove the power cord and return it to the storage compartment.

⚠ WARNING

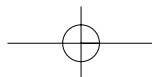
Do not recharge for more than 5 to 6 hours maximum using the 12 volt DC method.

Replacement Parts

For replacement parts (charging adapters, etc.), contact Technical Support, toll free at (866) 584-5504.

⚠ WARNING

Do not operate unit if there is any evidence of damage. The product must be returned to Vector Products, Inc. for testing and repair. Replace any damaged Charging adapters immediately before further use.



Fuse Replacement (DC Charging Adapter)

1. Remove the plug from the accessory outlet. Remove the gold cap by turning counterclockwise and lifting off.
2. Remove the center pin and spring. Remove the fuse.
3. Replace the fuse with a same type and size fuse (8 amp).
4. Replace the center pin and spring inside the plug.
5. Replace the gold cap by turning clockwise onto the plug.

Battery Replacement/Disposal

It is recommended that the unit be returned to manufacturer for battery replacement. Contact Customer Service, toll-free, at (866) 584-5504.

Battery Disposal

Contains a maintenance-free, sealed, non-spillable, lead acid battery, which must be disposed of properly. Recycling is required — contact your local authority for information. Failure to comply with local, state and federal regulations can result in fines or imprisonment. For more information on recycling this battery, call toll-free (877) 288-7722.



⚠ WARNINGS

Do not dispose of the battery in fire, as this may result in an explosion. Before disposing of the battery, protect exposed terminals with heavy-duty electrical tape to prevent shorting (shorting can result in injury or fire).

Do not expose battery to fire or intense heat, as it may explode.

SPECIFICATIONS

Model:	VEC012POB
Boost Ampere:	450 instantaneous cranking amps
Battery Type:	Sealed, high energy density, AGM, lead-acid, rechargeable, maintenance-free, 12 volt DC
Area Light:	Light Emitting Diode (LED)
Booster Cables:	Heavy duty welding cable with 450 amp copper clamps
Accessory Outlet:	Self-resetting breaker 5 amps
DC Charging Adapter:	12 volt DC
AC Charging Adapter:	120 volt AC (700mA, 12 volt DC output)
USB Power Port:	5 volts/500 mA (maximum) DC power