



500 AMP JUMP-STARTER

WITH INFLATOR

INSTRUCTION MANUAL



Catalog Number JUS500IB

# SAFETY GUIDELINES / DEFINITIONS

⚠ **DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

**CAUTION:** Used without the safety alert symbol indicates potentially hazardous situation which, if not avoided, may result in property damage.

**RISK OF UNSAFE OPERATION.** When using tools or equipment, basic safety precautions should always be followed to reduce the risk of personal injury. Improper operation, maintenance or modification of tools or equipment could result in serious injury and property damage. There are certain applications for which tools and equipment are designed. Black & Decker strongly recommends that this product NOT be modified and/or used for any application other than for which it was designed. Read and understand all warnings and operating instructions before using any tool or equipment.

## IMPORTANT SAFETY INSTRUCTIONS

⚠ **GENERAL SAFETY WARNINGS AND INSTRUCTIONS FOR ALL APPLIANCES READ ALL INSTRUCTIONS READ ALL INSTRUCTIONS**

⚠ **WARNING:** Read all instructions before operating product. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

- **AVOID DANGEROUS ENVIRONMENTS:** Don't use appliances in damp or wet locations. Don't use appliances in the rain.
- **KEEP CHILDREN AWAY.** All visitors should be kept at a distance from work area.
- **STORE IDLE APPLIANCES INDOORS.** When not in use, appliances should be stored indoors in dry, and high or locked-up place – out of reach of children.
- **DON'T FORCE APPLIANCE.** It will do the job better and with less likelihood of a risk of injury at the rate for which it was designed.
- **USE RIGHT APPLIANCE.** Do not use the appliance for any job except that for which it is intended.
- **DRESS PROPERLY.** Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and substantial, non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
- **USE SAFETY GLASSES AND OTHER SAFETY EQUIPMENT.** Use safety goggles or safety glasses with side shields, complying with applicable safety standards and, when needed, a face shield. Also use face or dust mask if operation is dusty. This applies to all persons in the work area. Also use a hard hat, hearing protection, gloves, safety shoes and dust collection systems when specified or required. Safety glasses or the like are available at extra cost at your local dealer or Black & Decker Service Center.
- **DON'T ABUSE CORD.** Never carry appliance by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- **DON'T OVERREACH.** Keep proper footing and balance at all times.
- **DISCONNECT APPLIANCES.** Disconnect the appliance from the power supply when not in use, before servicing, and when changing accessories such as blades and the like.
- **AVOID UNINTENTIONAL STARTING.** Don't carry plugged-in appliance with finger on switch. Be sure switch is off when plugging in.
- **GROUND FAULT CIRCUIT INTERRUPTER (GFCI)** protection should be provided on the circuits or outlets to be used. Receptacles are available having built in GFCI protection and may be used for this measure of safety.
- **USE OF ACCESSORIES AND ATTACHMENTS.** The use of any accessory or attachment not recommended for use with this appliance could be hazardous. Note: Refer to the accessory section of this manual for further details.
- **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
- **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.
- **DO NOT OPERATE** portable electric tools near flammable liquids or in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks might ignite fumes.
- **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.

- **EXTENSION CORDS.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Minimum Gauge for Cord Sets				
Volts	Total Length of Cord in Feet			
120V	0-25	26-50	51-100	101-150
	(0-7.6m)	(7.6-15.2m)	(15.2-30.4m)	(30.4-45.7m)
240V	0-50	51-100	101-200	201-300
	(0-15.2m)	(15.2-30.4m)	(30.4-60.9m)	(60.9-91.4m)
Ampere Rating				
More Than	Not more Than	American Wire Gauge		
0 -	6	18	16	14
6 -	10	18	16	14
10 -	12	16	14	12
12 -	16	14	12	Not Recommended

⚠ **WARNING:** This product or its power cord contains lead, a chemical known to the State of California to cause cancer and birth defect or other reproductive harm. Wash hands after handling.

⚠ **WARNING: BURST HAZARD:** Do not use the unit for charging dry-cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and damage property. Use the unit for charging/boosting a LEAD-ACID battery only. It is not intended to supply power to a low-voltage electrical system other than in a starter-motor application.

⚠ **WARNING: SHOCK HAZARD:**

- If an extension cord is used, make sure that:
  - a) the pins of extension cord are the same number, size and shape as those in the charger,
  - b) the extension cord is properly wired and in good electrical condition,
  - c) the wire size is large enough for the AC rating of the charger as indicated in the table on page 3999.
- Do not operate unit with damaged cord or plug; or if the unit has received a sharp blow, been dropped, or otherwise damaged in any way. Do not disassemble the unit; take it to a qualified service technician when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire, and will void warranty.
- Use of an attachment not supplied, recommended or sold by manufacturer specifically for use with this unit may result in a risk of electrical shock and injury to persons.
- NEVER submerge this unit in water; do not expose it to rain, snow or use when wet.
- To reduce risk of electric shock, disconnect the unit from any power source before attempting maintenance or cleaning. Turning off controls without disconnecting will not reduce this risk.
- Do not insert foreign objects into the USB outlet.

⚠ **WARNING: RISK OF EXPLOSIVE GASES**

- 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 the utmost importance that each time before using the jump-starter you read this manual and follow instructions exactly.
- To reduce the risk of battery explosion, follow these instructions and those published by the battery manufacturer and manufacturer of any equipment you intend to use in the vicinity of the battery. Review cautionary markings on these products and on the engine.
- 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.
- THIS UNIT IS NOT FOR USE BY CHILDREN AND SHOULD ONLY BE OPERATED BY ADULTS.

⚠ **CAUTION: TO REDUCE THE RISK OF INJURY OR PROPERTY DAMAGE:**

- Pull cord by plug rather than cord when disconnecting the 120V AC Charging Adapter from the unit.
- NEVER ATTEMPT TO JUMP-START OR CHARGE A FROZEN BATTERY.
- To recharge this unit, use only the supplied AC Charging Adapter.
- Vehicles that have on-board computerized systems may be damaged if vehicle battery is jump-started. Before jump-starting, read the vehicle's owner's manual to confirm that external-starting assistance is suitable.
- When working with lead acid batteries, always make sure immediate assistance is available in case of accident or emergency.
- Always have 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.
- Have plenty of fresh water and soap nearby in case battery acid contacts skin.

- If battery acid contacts skin or clothing, wash immediately with soap and water for at least 10 minutes and get medical attention immediately.
- Never smoke or allow a spark or flame in vicinity of vehicle battery, engine or power station
- Remove personal metal items such as rings, bracelets, necklaces and watches when working with a lead acid battery. A lead acid battery can produce a short circuit current high enough to weld a ring, or similar metal object, to skin, causing a severe burn.
- Do not wear vinyl clothing when jump-starting a vehicle when jump-starting a vehicle, friction can cause dangerous static-electrical sparks.
- Jump-start procedures should only be performed in a safe, dry, well-ventilated area.
- Always store battery clamps when not in use. Never touch battery clamps together. This can cause dangerous sparks, power arcing and/or explosion.
- 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.
- 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.
  - a) For negative-grounded systems, 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. Refer to the automobile owner's manual.
  - 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. Refer to the automobile owner's manual.
- If the connections to the battery's POSITIVE and NEGATIVE terminals are incorrect, the Reverse Polarity Indicator will light (red) and the unit will sound a beep. Disconnect clamps and reconnect to battery with correct polarity.
- Always disconnect the NEGATIVE (BLACK) jumper cable first, followed by the POSITIVE (RED) jumper cable, except for positive grounded systems.
- 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).
- Place this unit as far away from the battery as cables permit.
- Never allow battery acid to come in contact with this unit.
- Do not operate this unit in a closed area or restrict ventilation in any way.
- **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.
- **IMPORTANT:** This unit is delivered in a partially charged state. Fully charge unit with a household extension cord (not supplied) for a full 48 hours before using for the first time. You cannot overcharge the unit using the AC charging method.
- 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.
- 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 vehicular 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.
- Do not use this jump-starter on a watercraft. It is not qualified for marine applications.
- 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.
- Read And Understand This Instruction Manual Before Using This Unit.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### **⚠ WARNING: TO REDUCE THE RISK OF INJURY:**

Follow these instructions and those published by the battery manufacturer and manufacturer of any equipment you intend to use with this unit. Review cautionary markings on these products and on engine.

## **INTRODUCTION**

Thank you for choosing the **500 Amp Jump-Starter**. This compact jump-starter is unique in the amount of energy it can supply for its size. The internal battery is a high density sealed, lead-acid battery that stores and delivers energy comparable to full sized ordinary jump-starters. 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.

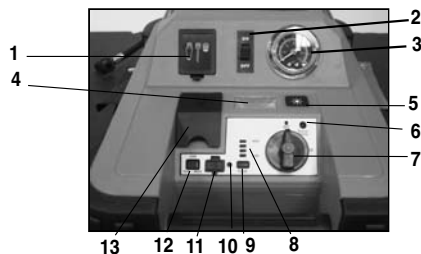
The **500 Amp Jump-Starter** is a compact, durable, portable jump-start system for vehicles that have a standard 12 volt battery system. This self-contained, rechargeable system will start most vehicles without the need for a host vehicle or 12 volt DC power supply.

## **FEATURES**

- Keyless ON/OFF Power Switch
- Cordless/rechargeable
- Built-in non-spillable, maintenance-free, heavy duty, sealed, lead-acid battery
- Requires no maintenance (other than recharging) for optimum operation
- Heavy duty cables and clamps
- 5 Volt DC USB Charging Port
- Built-in LED Area Light
- Built-in portable inflator for vehicle tires and recreational inflatables
- Reverse polarity connection warning indicator
- Exclusive cable storage channels keep jumper cables out of the way until needed
- Built-in 120 Volt AC Charger (uses a standard extension cord, not included)
- Easy-to-read LED battery charge status indicators

# SAVE THESE INSTRUCTIONS

## Controls and Indicators



### TOP OF UNIT

1. INFLATOR NOZZLE TIPS AND STORAGE HATCH
2. INFLATOR ON/OFF SWITCH
3. PRESSURE GAUGE
4. BUILT-IN LED AREA LIGHT
5. AREA LIGHT POWER SWITCH
6. REVERSE POLARITY INDICATOR
7. JUMP-STARTER POWER SWITCH
8. LED BATTERY STATUS INDICATORS
9. BATTERY CHARGE LEVEL PUSHBUTTON
10. USB POWER ON LED INDICATOR

### 11. USB CHARGING PORT

### 12. USB ON/OFF SWITCH

13. BUILT-IN 120 VOLT AC CHARGER (UNDER PROTECTIVE COVER)

### SIDES OF UNIT

14. POSITIVE (+) RED CLAMP
15. NEGATIVE (-) BLACK CLAMP

### BOTTOM OF UNIT

16. INFLATOR HOSE AND CONNECTOR (CHUCK)

## CHARGING/RECHARGING

This product has a sealed lead acid battery. For maximum battery life, we recommend the Jump-Starter be kept fully charged at all times. Recharge before first use, immediately after each use, and once a month if not used. Failure to do this may reduce the battery life dramatically. To check the battery charge status at any time, press the Battery Charge Level Pushbutton.

When the battery is overly discharged and if the green LED is lit when the charger is plugged in, this indicates the battery is at a high impedance stage.

In this event, recharge the unit and leave the unit on charge for a period of 24-48hrs before using the unit.

**Note:** 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 24 hours.

## Charging/Recharging Using the 120 Volt AC Charger and a Standard Household Extension Cord (not included)

1. Lift the AC adapter cover located on the front of the unit and connect an extension cord to the unit. Plug the other end of the cord into a standard 120 volt AC wall outlet.
2. Charge until one red, two yellow and one green LED Battery Status Indicators light or flash.
3. Once fully charged, disconnect the extension cord.

**Note:** The unit cannot be overcharged using the AC method.

## JUMP-STARTER

This Jump-Starter is equipped with an ON/OFF Power Switch. 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. Refer to the automobile owner's manual.
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. Refer to the automobile owner's manual.
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 SAFETY INSTRUCTIONS FOUND IN THIS MANUAL.

### ⚠ CAUTIONS: RISK OF PROPERTY DAMAGE

- If the connections to the battery's positive and negative terminals are incorrect, the Reverse Polarity Indicator will light (red) and the unit will sound a beep. Disconnect clamps and reconnect to battery with correct polarity.
- If vehicle fails to start, turn OFF the ignition, turn OFF the Jump-Starter Power Switch, disconnect the jump-start system's leads and contact a qualified technician to investigate why the engine did not start.
- Recharge this unit fully after each use.

### ⚠ WARNINGS

- Jump-Starter Power Switch should be off prior to jump-starting.
- This power system is to be used ONLY on vehicles 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.

## USB POWER PORT

1. Push the USB Power Port On Pushbutton to turn the USB Port ON.
2. Plug the USB-powered device into the inverter's USB Charging Port and operate normally.

**Notes:** This unit's USB Power Port does not support data communication. It only provides 5 volts/500mA DC power to an external USB-powered device.  
Make sure the USB Charging Port ON/OFF Pushbutton is in the OFF position when the unit is being recharged or stored.  
Some household USB-powered electronics will not operate with this unit.

LED AREA LIGHT

The area light is controlled by the Area Light Power Switch on the front panel of the unit. Make sure the lamp is turned OFF when the unit is being recharged or stored.

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 nozzles are stored inside the storage hatch on the top of the unit. The inflator hose with tire fitting is stored in a retaining channel on the bottom of the unit. The ON/OFF Switch is located on the front of the 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 front of the unit controls the power to the inflator and the gauge light. Refer to the "Controls and Indicators" section on page 5 for locations of inflator hose and nozzle storage hatch. Return hose to the storage compartment after use.

⚠ WARNING: BURST HAZARD

- The inflator is capable of inflating up to 120 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: RISK OF PROPERTY DAMAGE

Do not operate inflator continuously for extended periods of time (approximately 10 minutes, depending on ambient temperatures), as it may overheat. In such event, inflator will automatically shut down. Immediately turn OFF the Inflator Power Switch. Restart after a cooling down period of approximately 10 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.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.

CARE AND MAINTENANCE

Before disposing of the battery, protect exposed terminals with heavy-duty electrical tape to prevent shorting (shorting can result in injury or fire).

TROUBLESHOOTING

Problem	Solution
Unit Fails to Jump-Start	<ul style="list-style-type: none"><li>• Make sure unit's power switch is in the ON position.</li><li>• Check that Jump-Starter has a full charge. Recharge unit if necessary.</li><li>• Make sure a proper polarity cable connection has been established.</li><li>• Leave charger plugged in and keep unit on charge for 24-48 hours.</li></ul>
USB Power Port will not power appliance	<ul style="list-style-type: none"><li>• Make sure the USB Charging Port ON/OFF Pushbutton is in the ON position.</li><li>• Check that Jump-Starter has a full charge. Recharge unit if necessary.</li></ul>
LED Area Light does not come on	<ul style="list-style-type: none"><li>• Make sure the LED Area Light ON/OFF button is in the ON position</li><li>• Check that Jump-Starter has a full charge. Recharge unit if necessary.</li></ul>
Portable Inflator will not inflate	<ul style="list-style-type: none"><li>• Make sure the Inflator Power Switch is in the ON position.</li><li>• Check that Jump-Starter has a full charge. Recharge unit if necessary.</li><li>• Make sure connector is pushed to valve stem and thumb latch is closed when attempting to inflate tires; or nozzle (adapter) is securely inserted into connector (chuck) on all other inflatables.</li></ul>