



MODEL

**SJ1328**

**Jump Starter and DC Power Source**

**OWNER'S MANUAL**



**PLEASE SAVE THIS OWNER'S MANUAL AND READ BEFORE EACH USE.**

This manual will explain how to use the jump starter safely and effectively. Please read and follow these instructions and precautions carefully.



**CONTAINS SEALED NON-SPILLABLE LEAD-ACID BATTERY. MUST BE DISPOSED OF PROPERLY.**

**WARNING:** Possible explosion hazard. Contact with battery acid may cause severe burns and blindness. Keep out of reach of children.

## 1. IMPORTANT SAFETY INSTRUCTIONS

### SAVE THESE INSTRUCTIONS. WARNING – RISK OF EXPLOSIVE GASES

WORKING IN THE VICINITY OF A LEAD-ACID BATTERY IS DANGEROUS. BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL OPERATION. IT IS IMPORTANT THAT YOU FOLLOW THESE INSTRUCTIONS EACH TIME YOU USE THE UNIT.

To reduce the risk of battery explosion, follow these instructions and those published by the battery manufacturer and the manufacturer of any equipment you intend to use in the vicinity of a battery. Review cautionary markings on these products and on the engine.

#### **WARNING! RISK OF ELECTRIC SHOCK OR FIRE.**

- 1.1 Read the entire manual before using this product. Failure to do so could result in serious injury or death.
- 1.2 Keep out of reach of children.
- 1.3 Do not put fingers or hands into any of the jump starter's outlets.
- 1.4 Do not expose the jump starter to rain or snow.
- 1.5 Use only recommended attachments. Use of an attachment not recommended or sold by the jump starter manufacturer may result in a risk of fire, electric shock or injury to persons or damage to property.
- 1.6 To reduce the risk of damage to the electric plug or cord, pull by the plug rather than the cord when disconnecting the jump starter.
- 1.7 To reduce the risk of electric shock, unplug the jump starter charger from the outlet before attempting any maintenance or cleaning. Simply turning off the controls will not reduce this risk.

- 1.8 Do not operate the jump starter with damaged cables or clips; replace the damaged cable or clip immediately.
- 1.9 Do not operate the jump starter if it has received a sharp blow, been dropped or otherwise damaged in any way; take it to a qualified service person.
- 1.10 Do not disassemble the jump starter; take it to a qualified service person when service or repair is required. Incorrect reassembly may result in a risk of fire or electric shock.

#### **WARNING! RISK OF EXPLOSIVE GASES.**

- 1.11 To reduce the risk of a battery explosion, follow these instructions and those published by the battery manufacturer and the manufacturer of any equipment you intend to use in the vicinity of the battery. Review the cautionary markings on these products and on the engine.
- 1.12 This jump starter employs parts, such as switches and circuit breakers, that tend to produce arcs and sparks. If used in a garage, locate this jump starter 18 inches (46 cm) or more above floor level.

## 2. PERSONAL PRECAUTIONS

#### **WARNING! RISK OF EXPLOSIVE GASES. A SPARK NEAR THE BATTERY MAY CAUSE A BATTERY EXPLOSION. TO REDUCE THE RISK OF A SPARK NEAR THE BATTERY:**

- 2.1 NEVER smoke or allow a spark or flame in the vicinity of a battery or engine.
- 2.2 Do not permit the internal battery of the jump starter to freeze. Never charge a frozen battery.
- 2.3 To prevent sparking, NEVER allow clips to touch together or contact the same piece of metal.
- 2.4 When charging the internal battery, work in a well ventilated area and do not restrict the ventilation in any way.
- 2.5 Be sure the area around the battery is well ventilated while the jump starter is being used.
- 2.6 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 the like to metal, causing a severe burn.
- 2.7 Be extra cautious, to reduce the risk of dropping a metal tool onto the battery. It might spark or short-circuit the battery or other electrical part that may cause an explosion.
- 2.8 Consider having someone nearby to come to your aid when you work near a lead-acid battery.
- 2.9 Have plenty of fresh water and soap nearby in case battery acid contacts your skin, clothing or eyes.
- 2.10 Wear complete eye and body protection, including safety goggles, face shield and

protective clothing. Avoid touching your eyes while working near the battery.

- 2.11 If battery acid contacts 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 10 minutes and get medical attention right away.
- 2.12 If battery acid is accidentally swallowed, drink milk, the whites of eggs or water. DO NOT induce vomiting. Seek medical attention immediately.  
**WARNING! RISK OF CONTACT WITH BATTERY ACID. BATTERY ACID IS A HIGHLY CORROSIVE SULFURIC ACID.**
- 2.13 Clean the battery terminals before using the jump starter. During cleaning, keep airborne corrosion from coming into contact with your eyes, nose and mouth. Use baking soda and water to neutralize the battery acid and help eliminate airborne corrosion. Do not touch your eyes, nose or mouth.

### 3. CONNECTING THE JUMP STARTER

**WARNING! A SPARK NEAR THE BATTERY MAY CAUSE A BATTERY EXPLOSION. TO REDUCE THE RISK OF A SPARK NEAR THE BATTERY:**

- 3.1 Attach the output cables to the battery and chassis as indicated below. Never allow the output clips to touch each other.
  - 3.2 Position the DC cables to reduce the risk of damage by the hood, door and moving or hot engine parts. **NOTE:** If it is necessary to close the hood during the jump starting process, ensure that the hood does not touch the metal part of the battery clips or cut the insulation of the cables.
  - 3.3 Stay clear of fan blades, belts, pulleys and other parts that can cause injury.
  - 3.4 Check the polarity of the battery posts. The POSITIVE (POS, P, +) battery post usually has a larger diameter than the NEGATIVE (NEG, N, -) post.
  - 3.5 Determine which post of the battery is grounded (connected) to the chassis. If the negative post is grounded to the chassis (as in most vehicles), see step 3.6. If the positive post is grounded to the chassis, see step 3.7.
- 2.14 Add distilled water to each cell until the battery acid reaches the level specified by the battery manufacturer. Do not overfill. For a battery without removable cell caps, such as valve regulated lead acid batteries (VRLA), carefully follow the manufacturer's instructions.
  - 2.15 Read, understand and follow all instructions for the jump starter, battery, vehicle and any equipment used near the battery and jump starter.
  - 2.16 Determine the voltage of the battery by referring to the vehicle owner's manual and make sure that the output voltage of the jump starter is correct.
  - 2.17 Make sure that the jump starter cable clips make tight connections.
  - 2.18 **WARNING:** This product contains one or more chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
- 3.6 For a negative-grounded vehicle, connect the POSITIVE (RED) clip from the jump starter to the POSITIVE (POS, P, +) ungrounded post of the battery. Connect the NEGATIVE (BLACK) clip to the vehicle chassis or engine block away from the battery. Do not connect the clip to the carburetor, fuel lines or sheet-metal body parts. Connect to a heavy gauge metal part of the frame or engine block.
  - 3.7 For a positive-grounded vehicle, connect the NEGATIVE (BLACK) clip from the jump starter to the NEGATIVE (NEG, N, -) ungrounded post of the battery. Connect the POSITIVE (RED) clip to the vehicle chassis or engine block away from the battery. Do not connect the clip to the carburetor, fuel lines or sheet-metal body parts. Connect to a heavy gauge metal part of the frame or engine block.
  - 3.8 When disconnecting the jump starter, turn all switches to off (if applicable), remove the clip from the vehicle chassis, then remove the clip from the battery terminal.

## 4. FEATURES



1. Heavy-duty battery clamps
2. 12 Volt DC power outlet
3. Charging status LEDs
4. Internal battery status LEDs
5. Internal battery status button




## 5. CHARGING THE INTERNAL BATTERY OF THE JUMP STARTER

**IMPORTANT: CHARGE IMMEDIATELY AFTER PURCHASE, AFTER EACH USE AND EVERY 30 DAYS TO KEEP THE JUMP STARTER'S INTERNAL BATTERY FULLY CHARGED.**



- 5.1 Use of an improper extension cord to charge the jump starter could result in a risk of fire and electric shock. Make sure:
  - That the pins on the plug of the extension cord are the same number, size and shape as those of the plug on the jump starter.
  - That the extension cord is properly wired and in good electrical condition.
  - That the extension cord has a wire size of 18 gauge (AWG) [0.82 mm<sup>2</sup>] or larger and is 50 feet (15.24 meters) long or less.
- 5.2 To reduce the risk of electric shock unplug the jump starter before attempting any maintenance or cleaning.
- 5.3 When charging the internal battery, work in a well-ventilated area and do not restrict the ventilation in any way.
- 5.4 **LED INDICATORS:**

To check the internal battery's charge status, press the **Battery Status** button on the front of the jump starter.

### Internal Battery Status LEDs

-  **RED** – 50% or less charge; immediately charge the unit.
-  **YELLOW/ORANGE** – 50-75% charge. The jump starter may be used, but should be recharged as soon as possible.
-  **GREEN** – The internal battery is fully charged.




### CHARGING STATUS LEDS

-  **(red) lit** – The jump starter is charging (connected to an AC power source.)
-  **(green) lit** – The internal battery has completed charging and is in Maintain Mode.

### 5.5 CHARGING THE INTERNAL BATTERY, USING THE BUILT-IN CHARGER

Charge the internal battery for the jump starter using an extension cord (not included).

**NOTE:** Use of an improper extension cord may result in a risk of fire and electric shock.

1. To charge, plug an 18 gauge (AWG) or larger extension cord into the charger plug on the back of the jump starter.
2. Plug the extension cord into a 120VAC electrical wall outlet.
3. While the jump starter is charging, the red  LED will be on.
4. Complete charging may take up to 72 hours. When the red  LED turns off, the jump starter is ready to use.
5. When the internal battery is fully charged, the green  LED will light. The charger will automatically go into maintain mode and maintain the battery at full charge without damaging it.
6. Charge the jump starter as soon as possible after use.



## 5.6 CHARGING THE INTERNAL BATTERY WHILE DRIVING

You may also charge the internal battery while driving, using a male-to-male charger cable (part number 94500109 – not included).

**IMPORTANT:** DO NOT CHARGE INTERNAL BATTERY FOR MORE THAN 30 MINUTES OR LEAVE THE BATTERY UNATTENDED. IT COULD EXPLODE, CAUSING PROPERTY DAMAGE OR PERSONAL INJURY.

1. Make sure the car is running.
2. Insert one end of the accessory cable into the 12V DC power outlet.

3. Insert the other end of the accessory cable into the vehicle's accessory outlet (lighter socket).

**NOTE:** The red  and green  LEDs do not operate during this method of charging. Using this method to charge the battery overrides the maintain mode and the battery can be overcharged.

4. Monitor the progress of the charge by pressing the **Battery Status** button on the front of the unit. When the battery is fully charged, disconnect the accessory cable from the jump starter, then from the lighter socket of the vehicle.

**NOTE:** Completely disconnect the charger cable when the engine is not running.

## 6. OPERATING INSTRUCTIONS

### 6.1 JUMP STARTING A VEHICLE ENGINE

**WARNING! A SPARK NEAR THE BATTERY MAY CAUSE A BATTERY EXPLOSION. TO REDUCE THE RISK OF A SPARK NEAR THE BATTERY:**

**IMPORTANT:** Using the Engine Start feature without a battery installed in the vehicle will damage the vehicle's electrical system.

**IMPORTANT:** Do not use the jump starter while charging the internal battery.

1. Turn the vehicle's ignition OFF before making cable connections.
2. Position the DC cables to reduce the risk of damage by the hood, door and moving or hot engine parts.  
**NOTE:** If it is necessary to close the hood during the jump starting process, ensure that the hood does not touch the battery clips or cut the insulation of the cables.
3. Stay clear of fan blades, belts, pulleys and other parts that can cause injury.
4. Check the polarity of the battery posts. The POSITIVE (POS, P, +) battery post usually has a larger diameter than the NEGATIVE (NEG, N, -) post.
5. Determine which post of the battery is grounded (connected) to the chassis. If the negative post is grounded to the chassis (as in most vehicles), see step 6. If the positive post is grounded to the chassis, see step 7.

6. For a negative-grounded vehicle, connect the POSITIVE (RED) clip from the jump starter to the POSITIVE (POS, P, +) ungrounded post of the battery. Connect the NEGATIVE (BLACK) clip to the vehicle chassis or engine block away from the battery. Do not connect the clip to the carburetor, fuel lines or

sheet-metal body parts. Connect to a heavy gauge metal part of the frame or engine block.

7. For a positive-grounded vehicle, connect the NEGATIVE (BLACK) clip from the jump starter to the NEGATIVE (NEG, N, -) ungrounded post of the battery. Connect the POSITIVE (RED) clip to the vehicle chassis or engine block away from the battery. Do not connect the clip to the carburetor, fuel lines or sheet-metal body parts. Connect to a heavy gauge metal part of the frame or engine block.
8. Crank the engine. If the engine does not start within 5-8 seconds, stop cranking and wait at least 1 minute before attempting to start the vehicle again. (This permits the battery to cool down.)
9. After the engine starts, disconnect the black clamp (-) and then the red clamp, (+) in that order.
10. Recharge the jump starter as soon as possible after use.

### 6.2 POWERING A 12V DC DEVICE

The jump starter is a power source for all 12V DC accessories that are equipped with a 12V accessory plug. Use it for power outages and on fishing or camping trips. Estimated usage times are listed in the following chart.

**NOTE:** Do not power a 12V device with the jump starter while charging the internal battery.

1. Make sure the device to be powered is OFF before inserting the 12V DC accessory plug into the 12V DC accessory outlet.
2. Ensure the battery clamps are secured on the storage holders.

3. Open the protective cover of the DC power outlet on the jump starter.
4. Plug the 12V DC device into the DC power outlet and turn on the 12V DC device (if required).
5. If the 12V DC device draws more than 15A or has a short circuit, the internal circuit breaker of the jump starter will trip and disconnect the power to the device. Disconnect the 12V DC device. The breaker will automatically reset after an overload occurs.
6. When finished, turn off the DC device (if required) and unplug from the DC power outlet.

**CAUTION:** Do not use the jump starter to run appliances that draw more than 15A DC.

**NOTE:** Extended operation of a 12V DC device may result in excessive battery drain. Recharge the jump starter immediately after unplugging the 12V DC device.

#### 12V DC ESTIMATED RUN-TIMES

| APPLIANCE TYPE             | EST WATTAGE | ESTIMATED RUN TIME |
|----------------------------|-------------|--------------------|
| Cell phone                 | 4 watts     | 54 hrs             |
| Fluorescent light          | 4 watts     | 54 hrs             |
| Radio, fan                 | 9 watts     | 24 hrs             |
| Depth finder               | 9 watts     | 24 hrs             |
| Camcorder                  | 15 watts    | 14.4 hrs           |
| Electrical tool            | 24 watts    | 9 hrs              |
| Electric cooler            | 48 watts    | 4.5 hrs            |
| Car vacuum, air compressor | 80 watts    | 2.7 hrs            |

**NOTE:** Actual time may vary. Times are based on the internal battery being fully charged.

## 7. MAINTENANCE INSTRUCTIONS

- 7.1 After use and before performing maintenance, unplug and disconnect the jump starter.
- 7.2 Use a dry cloth to wipe all battery corrosion and other dirt or oil from the battery clips, cords and the jump starter case.
- 7.3 Ensure that all of the jump starter components are in place and in good working condition.
- 7.4 All servicing should be performed by qualified service personnel.

## 8. MOVING AND STORAGE INSTRUCTIONS

- 8.1 Store inside, in a cool, dry place.
- 8.2 Do not store the clips on the handle, clipped together, on or around metal, or clipped to cables. The clips on the jump starter are live when the switch is in the ON position and will produce arcing or sparking if they come in contact with each other. To prevent accidental arcing, always place the switch in the OFF position and keep the clips on the storage holders when not using it to jump start a vehicle.
- 8.3 If the jump starter is moved around the shop or transported to another location, take care to avoid/prevent damage to the cords, clips and jump starter. Failure to do so could result in personal injury or property damage.  
**IMPORTANT:** Do not use and/or store the jump starter in or on any area or surface

where damage could occur if the internal battery should unexpectedly leak acid.

### 8.4 IMPORTANT:

- **CHARGE IMMEDIATELY AFTER PURCHASE**
- **KEEP FULLY CHARGED**

Charge the jump starter's internal battery immediately after purchase, after every use and every 30 days.

All batteries are affected by temperature. The ideal storage temperature is at 70° F. The internal battery will gradually self-discharge (lose power) over time, especially in warm environments. Leaving the battery in a discharged state may result in permanent battery damage. To ensure satisfactory performance and avoid permanent damage, charge the internal battery every month.

## 9. TROUBLESHOOTING

| PROBLEM                                   | POSSIBLE CAUSE  | SOLUTION   |
|---|---|--|
| The jump starter won't jump start my car. | Clamps are not making a good connection to the battery. | Check for poor connection to battery and frame. Make sure connection points are clean.                 |
|   | Connections are reversed.                               | Disconnect the jump starter and reverse the clamps.  |
|   | The jump starter's battery is not charged.              | Press the Battery Status button on the front of the unit. The LEDs will indicate the status of charge. |
|   | The vehicle's battery is defective.                     | Have the battery checked.  |

| <b>PROBLEM</b>                                       | <b>POSSIBLE CAUSE</b>                                      | <b>SOLUTION</b>   |
|--|--|---|
| The jump starter won't power my 12V device.          | The 12V device is not turned on.                           | Turn on the 12V device.   |
|  | The jump starter's battery is not charged.                 | Check the battery charge status by pressing the Battery Status button.  |
|  | The 12V device draws more than 15A or has a short circuit. | Disconnect the 12V device. The internal breaker will automatically reset after a minute or two. Try the 12V device again. |
| The battery in the jump starter won't hold a charge. | The battery is bad (will not accept a charge).             | Replace the battery.  |

## 10. SPECIFICATIONS

|                             |  |
|-----------------------------|--|
| Internal battery type ..... | Sealed, maintenance-free AGM lead-acid           |
| Nominal voltage .....       | 12V DC   |
| 12V DC power output.....    | 15A  |
| Capacity .....              | 18Ah   |
| Peak Amps.....              | 1100   |
| Cranking Amps.....          | 370  |
| Battery Hookup Cables.....  | 6 AWG, 30" (76.2 cm)                             |
| Dimensions (H x W x D)..... | 11" x 12" x 3.5" (27.94 cm x 30.48 cm x 8.89 cm) |
| Weight.....                 | 15.3. lbs (6.94 kg)                              |

## 11. ACCESSORIES

|                                    |          |
|------------------------------------|----------|
| Male-to-male accessory cable ..... | 94500109 |
|------------------------------------|----------|