



# 12V ROADSTART® COMPACT JUMP STARTER

MODEL NO: RS1C, RS102C, RS103C

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to instructions



Wear protective gloves



Wear eye protection



Warning



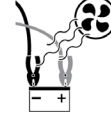
Warning corrosive substance



Electrical shock hazard



Keep away from sources of ignition



Use in well ventilated areas



Keep in dry area, protect from rain

## 1. SAFETY

**IMPORTANT:** 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. Remember to review warning marks on all products and on engines. Modern vehicles contain extensive electronic systems. Check with the vehicle manufacturer for any specific instructions regarding the use of this type of equipment on each vehicle. No liability will be accepted for damage/injury where this product is not used in accordance with all instructions.

### 1.1. SAFETY INSTRUCTIONS

- ✓ Wear safety eye protection and protective clothing. Avoid touching eyes while working with a battery.
- ✓ Wash immediately with soap and water if battery acid contacts skin or clothing. If acid enters eye, flush eye immediately with cool, clean running water for at least 15 minutes and seek immediate medical attention.
- ✓ Remove personal metallic items such as rings, bracelets, necklaces and watches.
- ✓ Keep the unit in good working order and condition. Replace damaged parts immediately.
- ✓ Use only recommended parts. To use unapproved parts may be dangerous and will invalidate your warranty.
- ✓ The Roadstart must only be opened and checked by qualified service personnel. **DO NOT** disassemble the unit for any reason.
- ✓ Keep children and unauthorised persons away from the work area.
- ✓ Keep work area clean and tidy and free from unrelated materials. Ensure that there is adequate lighting.
- ✓ If the Roadstart receives a sharp knock or blow, it must be checked by a qualified service agent before being used.
- ✗ **DO NOT** smoke or allow a spark, or flame in the vicinity of the battery or engine.
- ✗ **DO NOT** drop any metal item onto the battery as it may spark or short circuit the battery, which could cause an explosion.
- ✗ **DO NOT** use Roadstart to recharge dry cell batteries that are commonly used with home appliances.
- ✗ **DO NOT** charge or boost a frozen battery.
- ✗ **DO NOT** use attachments other than those recommended.
- ✗ **DO NOT** pull or carry the unit by its cables and do not pull the negative and positive clamps from the battery terminals.
- ✗ **DO NOT** operate in vicinity of flammable liquids or gases.
- ✗ **DO NOT** recharge the unit with a charger / cables that are damaged. Replace immediately.
- ✗ **DO NOT** use this product to perform a task for which it is not designed.
- ✗ **DO NOT** store the unit in damp or wet locations or where the temperature may exceed 50°C.
- ✗ **DO NOT** submerge the unit in water.
- ✗ **DO NOT** use whilst under the influence of drugs, alcohol or intoxicating medication.
- ✗ **DO NOT** leave the unit in a totally discharged state for an extended period of time as this may result in permanent damage.
- ✗ **DO NOT** cross-connect the power leads from the Roadstart to the battery. Ensure that positive is to positive and negative is to negative.
- ✓ Ensure that the unit is fully charged before storage. Keep the unit fully charged on a regular basis. (At least every three months).

### 1.2. ELECTRICAL SAFETY (with respect to mains chargers)

- WARNING!** It is the user's responsibility to check the following:
  - You must check the mains charger to ensure that it is safe before using.
  - You must ensure the risk of electric shock is minimised by the installation of appropriate safety devices. An RCCB (Residual Current Circuit Breaker) should be incorporated in the main distribution board.
  - We recommend that an RCD (Residual Current Device) is used with all electrical products. It is particularly important to use an RCD with portable products that plug into an electrical supply not protected by an RCCB. If in doubt consult a qualified electrician. You can obtain a Residual Current Device through your Sealey stockist. You must read and understand instructions concerning electrical safety.
  - The Electricity At Work Act 1989 requires all portable electrical appliances, if used on business premises, to be tested by a qualified person, using a Portable Appliance Tester (PAT), at least once a year.
  - The Health & Safety at Work Act 1974 makes owners of electrical appliances responsible for the safe condition of the appliance and the safety of the appliance operator. If in any doubt about electrical safety, contact a qualified electrician.
- ✓ Ensure that the insulation on all cables and the product itself is safe before connecting to the mains power supply.
- ✓ Ensure that cables are always protected against short circuit and overload.

## 2. INTRODUCTION

High output sealed AGM battery with clamp storage and carry handle. Suitable for starting vehicles with four cylinder (RS1C), 6 cylinder (RS102C/RS103C) petrol engines up to 2L/3L/5L or diesel 1.6L/2.5L/3.5L (RS1C/RS102C/RS103C, respectively). Front panel includes an integral LED work light. Reverse polarity and short circuit protection with audible warning. Mains charger with automatic power cut-off prevents damage to battery whilst charging. Inbuilt MOSFET circuit protection. Single 5V 2.4A USB output. Supplied with mains charger. Durable carry case protects unit when stored.

## 3. SPECIFICATION

Model No:.....	RS1C.....	RS102C.....	RS103C.....
Auxiliary Output:.....	USB - 5V/2.4A.....	USB - 5V/2.4A.....	USB - 5V/2.4A.....
Cable & Clamp Length:.....	0.3mtr.....	0.3mtr.....	0.3mtr.....
Cold Cranking Amps:.....	130A.....	280A.....	400A.....
Peak Amps:.....	800A.....	1200A.....	1700A.....
Voltage:.....	12V.....	12V.....	12V.....

## 4. OPERATION

### 4.1. JUMP STARTING

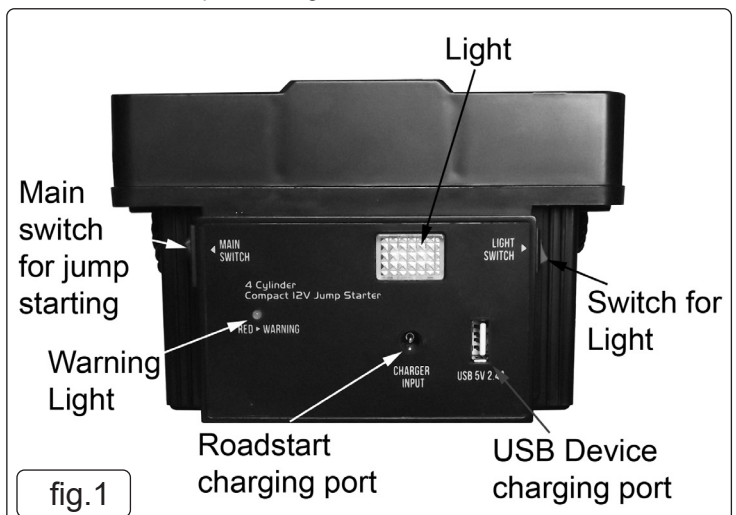
- 4.1.1. Ensure both the ignition of vehicle and the Jump Starter main power switch is switched OFF (fig.1) before any connections are made to the battery.
- 4.1.2. Connect the RED(+) alligator clamp of the Jump Starter to the RED(+) positive battery terminal of the vehicle.
- 4.1.3. Connect the BLACK(-) alligator clamp of the Jump Starter to a non-moving metal part of the engine or chassis (avoid connecting to fuel lines).
- 4.1.4. Switch the Jump Starter main power switch to the ON position, and leave for approximately 5 seconds.
- 4.1.5. Listen for any audible beeping indicating an accidental reversed polarity, the unit is protected from accidental reverse polarity connection or 24V battery connection when the main switch is on. If beeping is heard this unit will not output power, turn the main switch off, disconnect then reconnect clamps in the correct order ensuring the polarity is correct.
- 4.1.6. With the Jump Starter still connected and switched on, turn the vehicle ignition and crank the engine. **DO NOT** crank the engine for any more than 5 seconds at a time.
- 4.1.7. If the engine fails to start, wait for at least 1 minute before trying again to avoid overloading or damaging the Jump Starter or battery.
- 4.1.8. Once the engine is running, switch the Jump Starter main power switch (fig.1) to the OFF position. Disconnect the BLACK(-) Negative clamp first, and return the cable to its storage position on the Jump Start unit.
- 4.1.9. Disconnect the RED(+) Positive clamp last, and return the cable to its storage position on the Jump Starter.
- 4.1.10. As soon as possible, connect the Jump Starter to the supplied 240V AC 3 stage charger and recharge the unit to maintain battery life, see 7.2.

## 5. INBUILT SAFETY SYSTEMS

- 5.1. This Jump Starter is fitted with sophisticated electronic safety systems to protect the unit and the connected battery in the result of accidental user error.
- 5.2. Even with these protection systems in place, extreme care should be taken with the correct identification of the system voltage and the batteries being Jump Started:
- 5.3. **SHORT CIRCUIT PROTECTION:** In the event of accidentally touching the Positive and Negative clamps together while switched on, the Jump Starter will shut off output power thereby preventing a dangerous overload situation. A small spark may still emit from the alligator clamps, care should still be taken to not short circuit unit around lead acid batteries.
- 5.4. **REVERSE POLARITY PROTECTION:** If the Jump Starter is accidentally Connected in the reverse polarity when switched on, the red LED on the front panel will illuminate along with a warning beep. Power will not output during reverse connection, simply toggle off the main switch and correct the polarity of the connection before attempting to use again. The Jump Start will only detect a reverse polarity connection when the main switch is on.
- 5.5. **24V BATTERY CONNECTION PROTECTION:** In the event of accidental connection to a 24V battery system, the Jump Starter unit will automatically enable its overload protection and switch power output off. The Red LED will illuminate on the front panel, along with the warning buzzer. Even though this protection will protect the Jump Starter from catastrophic failure, extreme care should be taken by the user to correctly identify the type of battery to be jump started and the operating voltage of the system.
- 5.5.1. Over load and over temperature protection: When output draw from the clamps is too high or the unit has been used for an extended period, the red LED on the front panel will flash (without beeping) and the jump starter will cut output power. After a cooling down period of approximately 5 to 10 minutes the unit will work again.

## 6. PORTABLE POWER SUPPLY

- 6.1. **USB (FIG.1):**  
This Jump Starter is fitted with a 5V 2.4Amp USB output on the front panel of the unit. To use, simply plug in your USB cable to the socket, connect to your device and switch the Jump Starter main power switch on the left hand side to the on position.  
The USB port is fitted with an overload circuit; if the port is overloaded power will be switched off and will automatically re-set after 2 minutes.
- 6.2. **LED EMERGENCY LIGHT (FIG.1):**  
Toggle the light switch on the right hand side to turn the light ON or OFF.



## 7. CHARGING THE JUMP STARTER

Note: For maximum battery life it is recommended that this Jump Starter be kept fully charged at all times. If the battery is allowed to remain in a discharged state, battery life may be prematurely shortened.

7.1. The following table shows frequency of use between charges and estimated number of charge / recharge cycles.

Number Of Jump Starts Between Recharging	Discharge/Recharge
1	1000+
5	700+
10	500+

We recommend charging as soon as possible after use to maintain battery capacity and battery life. The following table shows ESTIMATED maximum charging times using the supplied 240V 800mA charging adaptor.

### ESTIMATED RECHARGE TIME VS JUMP STARTS

(Using supplied 240V adaptor)

Number of jump starts between recharging	Approximate recharging time (hours)
1	5
2	8
3	12
4	15
5	20
6	24

### 7.2. LOW VOLTAGE ALERT

This Jump Starter is fitted with a red LED light to indicate when recharging is required. Simply switch on the main power toggle, if the red LED is flashing prior to load connection (with audible beeping) please recharge the unit before attempting to use it. The red LED light will also flash when the internal battery reaches approximately 60% of charge.

Recommended charging is from the supplied 240V AC 3 stage smart charger. Simply plug 3 stage wall charger into a 240V AC outlet and the Jump Start connector to the front of the Jump Starter front panel. Switch on at the 240V socket. The 240V AC 3 stage smart charger has an LED indicator to show charging status - RED for CHARGING, GREEN for FULLY CHARGED.

### 7.3. RECOMMENDATIONS TO PROLONG BATTERY LIFE

- 7.3.1. Top up and recharge the Jump Starter every 3 months even if it isn't used.
- 7.3.2. Recharge the Jump Starter as soon as possible if the low voltage LED light activates.
- 7.3.3. Never store the Jump Starter in a discharged state.

### 7.4. FREQUENTLY ASKED QUESTIONS

- 7.4.1. Is the Jump Starter waterproof?  
No. The Jump Starter is to be kept out of wet weather conditions.
- 7.4.2. The Jump Starter is bulging from the sides, what do I do?  
Discontinue using the Jump Starter.



#### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



#### WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.



#### BATTERY REMOVAL

Under the Waste Batteries and Accumulators Regulations 2009, Jack Sealey Ltd are required to inform potential purchasers of products containing batteries (as defined within these regulations), that they are registered with Valpak's registered compliance scheme. Jack Sealey Ltd Batteries Producer Registration Number (BPRN) is BPRN00705.

**Note:** It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

**Important:** No Liability is accepted for incorrect use of this product.

**Warranty:** Guarantee is 12 months from purchase date, proof of which is required for any claim.

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