

# Champion®



## JUMPSTART

Models JS1000, JS1010 & JS1224

Part No's 6240040, 6240035 & 6240045

## OPERATING & MAINTENANCE INSTRUCTIONS



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## INTRODUCTION

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Thank you for purchasing this CLARKE Jumpstart.

Before attempting to operate the device, it is essential that you read this manual thoroughly and carefully follow all instructions given. In doing so you will ensure the safety of yourself and that of others around you, and you can also look forward to the jumpstart giving you long and satisfactory service.

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## GUARANTEE

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This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

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## ENVIRONMENTAL PROTECTION

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Do not dispose of this product with general household waste. All tools, accessories and packaging should be sorted, taken to a re-cycling centre and disposed of according to the laws governing Waste Electrical and Electronic Equipment.

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## PARTS & SERVICE

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For parts & Servicing, please contact your nearest dealer, or CLARKE International, on one of the following numbers.

**PARTS & SERVICE TEL: 020 8988 7400**

**PARTS & SERVICE FAX: 020 8558 3622**

**or e-mail as follows:**

**PARTS: [Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com)**

**SERVICE: [Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)**

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## SAFETY PRECAUTIONS

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1. ALWAYS ensure when jumpstarting that there is air circulating around the machine.
2. NEVER allow the negative and positive leads on this unit, to touch each other or to touch the same metal object.
3. Although the jumpstart is water resistant and may be used outdoors, DO NOT leave it exposed to the elements. Avoid direct sunlight, direct heat, rain/moisture etc.
4. The Jumpstart JS1000 and JS1010 are designed for use with 12V systems while the JS1224 can be used with either 12 or 24V systems.
5. Do not operate the jumpstart if any of the cables are damaged. Consult your Clarke dealer for repair or replacement of the parts.
6. Do not operate the jumpstart if the case is damaged. Consult your Clarke dealer or a qualified person for inspection and repair.
7. Ensure the vehicle battery posts and battery clamps are perfectly clean before use.
8. When connecting the jumpstart leads to a battery, ensure the ON/OFF switch is OFF, and ALWAYS connect the RED, (positive '+') output conductor to the UNEARTHED (+) battery terminal FIRST, then connect the BLACK, (negative) conductor to a suitable earthing point on the chassis, well away from any fuel lines.
9. To prevent battery overheating and consequent damage, do not exceed our recommendations for duration of jump starting.
10. ALWAYS wear suitable protective clothing and eye protection when working with lead acid batteries.
11. The jumpstart is NOT designed to be used as a replacement for a vehicle battery.
12. DO NOT attempt to BOOST CHARGE the jumpstart's sealed battery.
13. NEVER allow the battery to become completely discharged.
14. NEVER jump start the engine whilst the jumpstart is being charged.
15. NEVER allow the cables to become wrapped around the operator or any other person.
16. NEVER attempt any repairs yourself. If you have a problem with the machine contact your local CLARKE dealer.
17. Always keep body and clothing dry. Never work in damp area without adequate insulation against electric shock.
18. Always store the jumpstarter out of reach of children.
19. Always wear safety glasses when working with lead acid batteries.

20. If splashed by battery acid, immediately flush the area of the splash with clean water. If a burning sensation is felt or any blistering occurs, seek medical help.
21. If acid comes into contact with the eyes, flush the eyes with clean water continuously and seek medical help.



**WARNING: ALL LEAD ACID BATTERIES GENERATE HYDROGEN GAS DURING NORMAL OPERATION. THIS PROCESS INCREASES DURING A PERIOD OF RAPID DISCHARGE, SUCH AS WHEN USING FOR JUMP - STARTING.**

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**WARNING: HYDROGEN GAS AND BATTERY ACID (SULPHURIC ACID) CAN BE: EXPLOSIVE, CORROSIVE TO SKIN, EYES AND HAIR, DAMAGING TO CLOTHING AND METALS, FLAMMABLE, POISONOUS TO BREATHE.**

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## **ELECTRICAL CONNECTIONS**

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This product is provided with a 13 amp, 230 volt (50Hz), charging adaptor for connection to a standard, domestic electrical supply.



This product is of double insulated design. No earth conductor is provided.

If in any doubt, consult a qualified electrician. DO NOT attempt any electrical repairs yourself.

## ELECTRICAL SYMBOLS DISPLAYED

The meanings of the safety markings and symbols displayed on this product are shown below.



Class II appliance without an earth connection



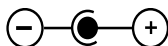
Always read instructions before use



Electrical hazard due to exposed live terminals



Chemical Hazard from battery acid



Live centre pin



Suitable for indoor use only



Fitted with built-in safety isolator



Fitted with thermal cutout



Subject to Waste Electrical & Electronic Directive

## COMPONENT IDENTIFICATION

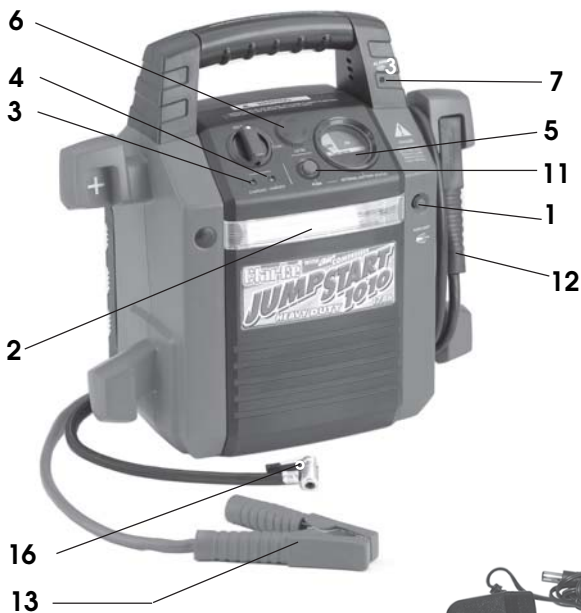
The JS1000, JS1010 and JS1224 are a range of rechargeable power supplies which can be used to start a car in the event of a flat battery. The units can also be used to power electrical appliances via a cigar lighter type socket using the adaptor supplied.

- The JS1010 model also incorporates a compressor, which can be used for inflating car tyres/dinghies/lilos etc by connecting the air hose/adaptor contained within the side compartment.
- The JS1224 model can be switched to either 12 V or 24 V, depending on the battery being boosted.

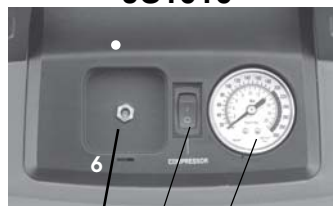
Unpack and lay out the components, checking against the following list. Any damage or deficiency should be reported to your CLARKE dealer immediately.

1. Jumpstart
2. 230V/AC charging unit
3. Operators manual (this document)
4. 3 x Air connectors (JS1010 only- stored inside compartment door)
5. 12V DC adaptor cable/connector





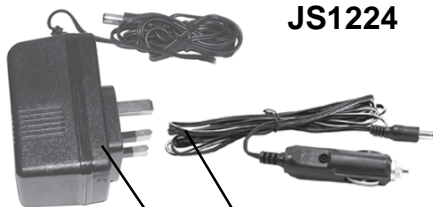
### JS1010



10 9 8



### JS1224



14 15

1. Work Light ON/OFF switch
2. Lamp/work light
3. Red LED (charging)
4. Green LED (charged)
5. Battery condition gauge
6. 12V DC socket connection
7. Alert LED (incorrect polarity alarm)
8. Compressed Air pressure gauge (JS1010 models only) or 12/24V Selector (JS1224 models only)
9. Air Compressor ON/OFF switch (JS1010 only)
10. 12V charging jack socket
11. Test pushbutton
12. Positive (+) battery connection lead
13. Negative (-) battery connection lead
14. 230V mains adaptor
15. 12V DC adaptor lead with jack plug
16. Compressed air hose with connector (JS1010 models only)



## INITIAL BATTERY CHARGING

1. Charge your jumpstart battery before using for the first time.
  2. Recharge the jumpstart battery after every occasion of use if possible, and thereafter, at least every 3 months.
  3. Always avoid leaving your jumpstart in a state of discharge.
- FOLLOW THE ABOVE POINTS TO ENSURE MAXIMUM LIFE FROM THE BATTERY.

Two means of charging the battery are provided:

1. Via a mains electricity supply, using the mains adaptor, shown in Fig 1.
2. Via a 12V vehicle supply using the cigarette lighter adapter with cable and plug provided, shown in Fig 1.

**NOTE: Using a 12V vehicle supply, the battery will not charge to maximum, but only to approx. 50% of its capacity.**

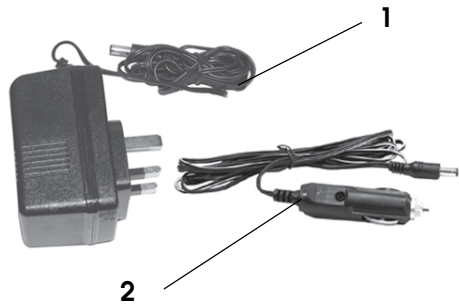


FIG 1

### CHARGING USING THE MAINS ADAPTOR

1. Plug the cable into the socket to the rear of the unit, then plug the adaptor into the mains supply and switch ON.
  - The red CHARGING light will come on to indicate charging is in progress.
2. It is best to charge the jumpstart until the green CHARGED light comes on.
  - To ensure maximum battery life, it is desirable to charge the unit after each occasion of use and recommended to recharge after every 30 days.



FIG 2

Note: Pressing the 'TEST' button with the charger disconnected will cause the needle on the battery condition gauge shown in Fig 2, to register the state of charge of the battery.

Turn the unit ON and a beep will be heard, indicating that there is power to the booster clamps.

## CHARGING USING THE 12 VOLT ADAPTOR

1. Plug the jack plug into the charging socket at the rear of the unit, then into the cigarette lighter socket on the vehicle and start the engine. The green LED will illuminate on the adaptor, and the red LED on the charger to indicate that charging is in progress.
2. Continue to charge until the battery condition gauge registers 'Battery Charged' when the 'TEST' button is pressed, **WITH THE CHARGING CURRENT DISCONNECTED**. i.e. disconnect the cigarette lighter adapter from the socket on the vehicle before pressing the TEST button.

NOTE:

*We recommend that you use this system only when necessary, as prolonged use will reduce the life expectancy of the battery, due to the fact that this method can only charge the battery to approx. 50% of its capacity.*

**For maximum battery life, we strongly recommend that you maintain the battery in a fully charged state at all times.**

*If charging does not take place, check the green LED on the adapter. Ensure all connections are clean and free of grease etc.*

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## OPERATION

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**WARNING: FAILURE TO FOLLOW THE INSTRUCTIONS BELOW AND THE SAFETY INSTRUCTIONS ON PAGE 4, MAY RESULT IN PERSONAL INJURY, DAMAGE TO THE VEHICLE, OR THE POSSIBILITY OF AN EXPLOSION.**

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**ALWAYS carry out the following preliminary checks before connecting the Jumpstart to the battery:**

- Ensure the vehicle ignition and ALL ancillary equipment - lighting, radio etc, is switched OFF.
- Ensure the vehicle battery is rated at 12V and is not damaged in any way. If the battery is rated at 24V, the JS1224 jumpstart will be suitable when the selector switch is set to 24V.
- Ensure the battery terminals are clean and the clamps are firm and secure.
- Remove any vehicle battery filler plugs and check electrolyte level. If necessary, top up with distilled water.

When completely satisfied, proceed as follows:

1. Turn the vehicle ignition off before connecting the booster cables.
2. Take great care not to touch the red positive (+) clamp against the black negative (-) clamp.
3. Ensure the area is well ventilated.
4. Ensure the ON/OFF switch is in the OFF position.
5. Connect the red positive (+) clamp to the positive (+) battery terminal first. Take care the clamp does not contact any moving parts or fuel lines.
6. Connect the black negative (-) clamp to a suitable earthing point on the vehicle chassis.
7. Switch the unit on. An intermittent beep should be heard, indicating there is power to the cables. If the audible signal becomes louder and steadier, a polarity error is indicated. Disconnect the booster clamps immediately. Reverse the connections to the battery terminals and the audible signal should return to a beep.
8. Select either 12 or 24 V as required if using the JS1224 jumpstart.
9. Turn the ON/OFF switch to the ON position.
10. Turn the ignition key on for a maximum of 6 seconds and the vehicle should start. If the vehicle does not start after a few seconds, switch off and wait for at least 3 minutes to prevent damage to the jumpstarter due to overheating before trying again. After this cooling off period, it is safe to resume trying to start the vehicle.
11. Once the vehicle has started, turn the jumpstart ON/OFF switch OFF.
12. Disconnect the black negative (-) clamp first, then disconnect the red positive(+) clamp.
13. After use, always wrap the cables around the post on the side of the jumpstart body and clip the clamps into their positions on the clamp posts.
14. In the case of the JS1224 Jumpstart, always return the 12V/24V selector to the OFF position after use.
15. After use, always recharge the jumpstart as described on page 12.
16. Regularly check the charge level of the battery by pressing the TEST Push-button on the front panel.



**WARNING! IT IS POSSIBLE THAT SOME ELECTRONIC EQUIPMENT COULD BE DAMAGED BY JUMP STARTING. ALWAYS CHECK WITH THE CAR MANUFACTURERS HANDBOOK TO DETERMINE WHAT PRECAUTIONS IF ANY SHOULD BE TAKEN.**

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## RECHARGING

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Recharge the unit following each period of use. The unit must be charged at least every 3 months but it is recommended that a 'top-up' charge is desirable after every 30 days.

**Note: Failure to do so will result in possible damage to the internal battery and result in poor performance from partial failure to operate due to the poor condition of the battery.**

1. Insert the charger lead into the charging jack socket at the rear of the unit
2. Connect the mains adaptor to the mains outlet.
3. In the case of the JS1224, the 12V/OFF/24V selector switch must always be set to the 12V position while charging in this way, otherwise the charge will not be received by both batteries.
4. Check that the red CHARGING light illuminates and remains ON during the charging process.
  - When the internal battery is fully charged, the green FULLY CHARGED light will come on automatically.
5. The unit can now be unplugged for further use or storage, or it can be left plugged in indefinitely so as to use its internal control to maintain the optimum battery charge level.
6. Alternatively, charge the unit from the 12-volt outlet in the vehicle by plugging one end of the DC charging cable into the jump start charging socket and the other end into the running vehicle's cigarette lighter.

### CHARGE STATUS

When pressing the battery test button, the battery level can be shown at a High Charge status. This does not necessarily indicate that the battery is fully charged.

To be at the fully charged level, the green FULL CHARGE light on the front panel will turn on during the charging process, indicating Full Charge status.

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## USING THE AIR COMPRESSOR (JS1010 ONLY)

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**WARNING! THE AIR COMPRESSOR GAUGE ON THIS PRODUCT IS FOR GUIDANCE ONLY. IT IS IMPORTANT YOU CHECK YOUR TYRE PRESSURE ON AN APPROVED GAUGE.**

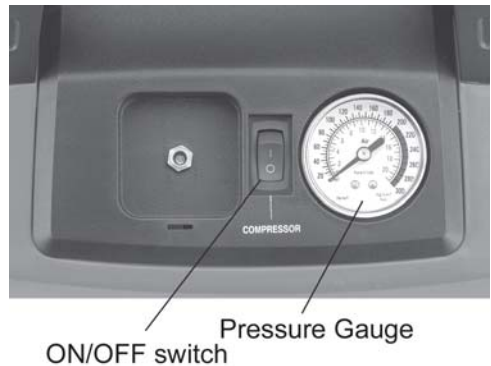
The outlet hose from the compressor is housed inside the storage compartment at the rear of the machine.

1. Extend the hose fully before use. Inside the access door are a selection of 3 adaptors for different uses.



2. Switch the air compressor ON with the rocker switch on the top of the jumpstart. The air pressure will be indicated by the gauge adjacent to the switch. Pump up the tire to the required pressure.

3. Switch OFF the compressor before disconnecting the air hose and coiling it back in the storage compartment.



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## MAINTENANCE

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Always inspect the jumpstart before use to ensure the cables are in perfect condition and the clamps are clean and free from corrosion.

Keep the unit clean by wiping with a dry cloth. DO NOT use solvents as a cleaning agent.

Keep the unit at HIGH or FULL CHARGE status at all times. Refer to the "RECHARGING" section on page 12.

Always turn the jumpstart OFF during storage and store the unit in an upright position, away from direct sunlight, moisture or sources of extreme heat or cold.

NEVER attempt any repair unless you are a qualified technician. If you have a problem with the machine contact your local Clarke dealer.

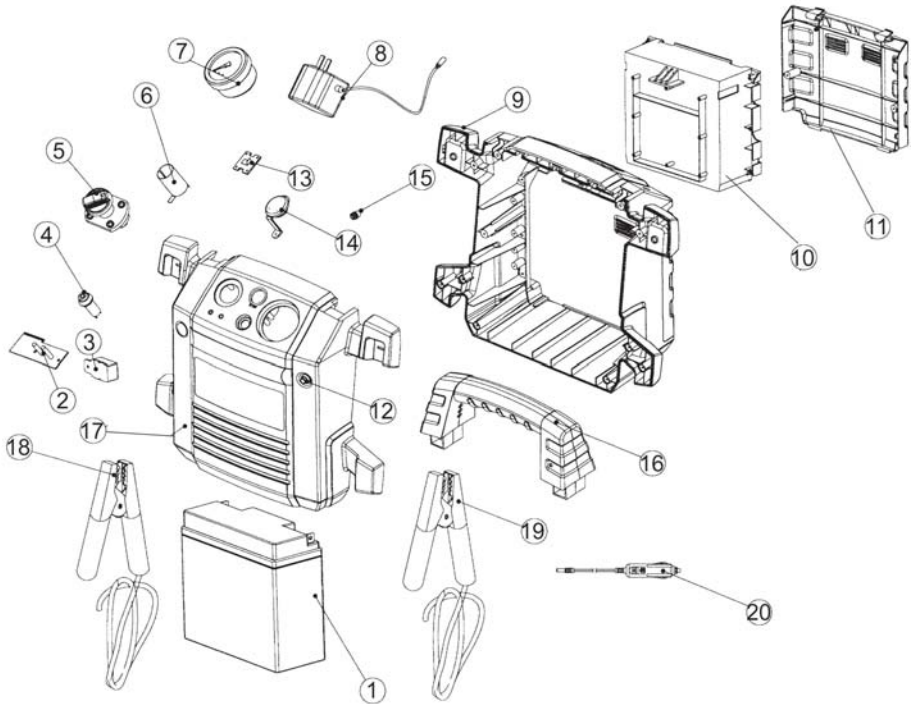
Your Clarke jumpstart has been designed to give long and trouble free service. If, however, having followed the instructions in this booklet carefully, you encounter problems, take the unit to your local Clarke dealer.

## TECHNICAL SPECIFICATION

Item	Specification		
Model	JS1000	JS1010	JS1224
Part No	6240040	6240035	6240045
Weight	9 kg	9 kg	16 kg
Dimensions (dxwxh) mm	210 x 390 x 375	210 x 380 x 370	210 x 390 x 375
Insulation Class	Class II		
Input Power supply	12V DC / 1A / 12W		12V DC/3A/12W
Max output current	Starting 400A Peak 900A	Starting 400A Peak 900A	Starting 1000A@12v Peak 2000A@12v  Starting 500A@ 24v Peak 1000A@24v
Output power	180W		
Battery Type	sealed lead-acid 12V DC /17 AH	sealed lead-acid 12V DC / 17 AH	2 x sealed lead-acid 12V DC /22 AH
Lighter Socket Output	12V DC / 15A		
Operating Temperature	-20-40°C		
Estimated engine starting capacity	Up to 3.0 Litres (diesel) Up to 3.0 Litres (petrol)		Up to 3.0 Litres (diesel)  Up to 6.0 Litres (petrol)
Working Lamp	LED, 3V / 0.3W (non-replacable)		
Max Compressor Pressure		300 psi	

Please note that the details and specifications contained herein, are correct at the time of going to print. However, CLARKE International reserve the right to change specifications at any time without prior notice. Always consult the machine data plate.

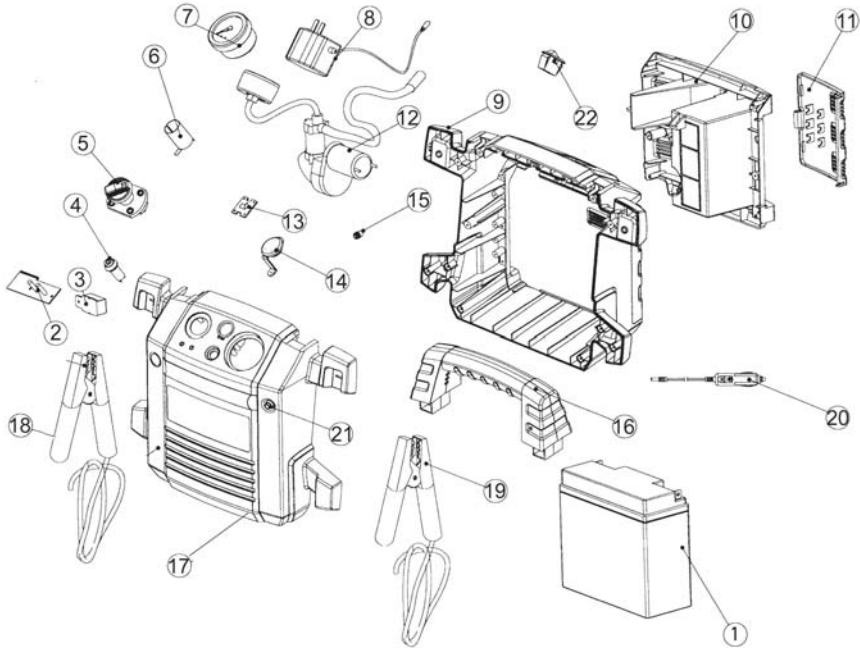
# PARTS LIST - JS1000



No	Description	Part No
1	Battery 12V-17AH	GWJS100001
2	PCBoard	GWJS100002
3	Circuit Breaker	GWJS100003
4	Voltage Test Switch	GWJS100004
5	ON/OFF Switch	GWJS100005
6	Adaptor Neg Electrode	GWJS100006
7	Voltage Meter	GWJS100007
8	Mains Charging Adaptor	GWJS101008
9	Rear Housing	GWJS100009
10	Storage Compartment	GWJS100010

No	Description	Part No
11	Rear Middle Housing	GWJS100011
12	Worklight Switch	GWJS100012
13	Adaptor Pos Electrode	GWJS100013
14	DC Adaptor Cover	GWJS100014
15	Charging Socket	GWJS100015
16	Handle	GWJS100016
17	Front Housing	GWJS100017
18	Positive Battery Lead Clamp (red)	GWJS100018
19	Negative Battery Lead Clamp (black)	GWJS100019
20	DC Adaptor Cable	GWJS100020

# PARTS DIAGRAM - JS1010

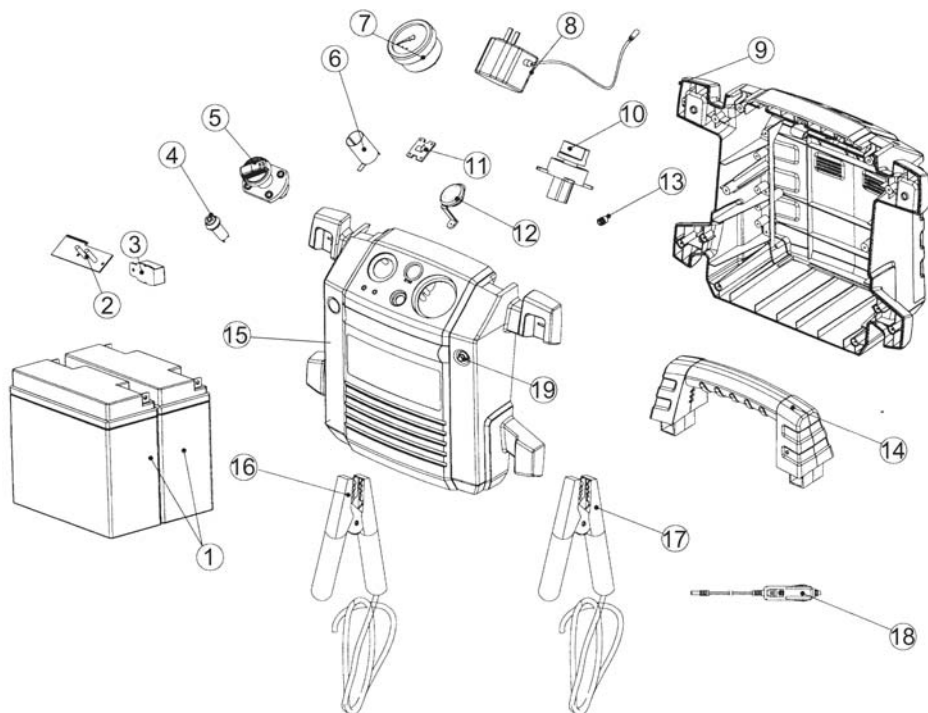


No	Description	Part No
1	Battery 12V-17AH	GWJS101001
2	PCB	GWJS101002
3	Circuit Breaker	GWJS101003
4	Voltage Test Switch	GWJS101004
5	ON/OFF Switch	GWJS101005
6	Adaptor Neg Electrode	GWJS101006
7	Battery Condition Meter	GWJS101007
8	230V Charging Adaptor	GWJS101008
9	Rear Housing	GWJS101009
10	Air Hose Housing	GWJS101010
11	Housing Side Door	GWJS101011

No	Description	Part No
12	Comp Air Pump	GWJS101012
13	Adaptor Pos Electrode	GWJS101013
14	12V DC Adaptor Cover	GWJS101014
15	Charging Socket	GWJS101015
16	Handle	GWJS101016
17	Front Housing	GWJS101017
18	Pos Battery Lead Clamp	GWJS101018
19	Neg Battery Lead Clamp	GWJS101019
20	DC Adaptor Cable	GWJS101020
21	Worklight Switch	GWJS101021
22	Pump Rocker Switch	GWJS101022



# PARTS LIST - JS1224



No	Description	Part No
1	Battery 12V / 22AH	GWJS122401
2	PCB	GWJS122402
3	Circuit Breaker	GWJS122403
4	Voltage Test Switch	GWJS122404
5	ON/OFF Switch	GWJS122405 NEW
6	Negative Electrode of Cigarette Lighter	GWJS122406
7	Voltage Meter	GWJS122407
8	230v / 3 Amp Charging Adaptor	GWJS122408 NEW
9	Rear Housing	GWJS122409
10	12V/24V Switch	GWJS122410

No	Description	Part No
11	Positive Electrode of Cigarette Lighter	GWJS122411
12	Cigarette Lighter Shield	GWJS122412
13	Charging Socket	GWJS122413
14	Handle	GWJS122414
15	Front Housing	GWJS122415
16	Positive Battery Lead Clamp (red)	GWJS122416
17	Negative Battery Lead Clamp (black)	GWJS122417
18	DC Adaptor Cable	GWJS122418
19	Worklight Switch	GWJS122419

# DECLARATION OF CONFORMITY



**Clarke**<sup>®</sup>  
**INTERNATIONAL**

Hemnall Street, Epping, Essex CM16 4LG

## DECLARATION OF CONFORMITY

This is an important document and should be retained.

**-We hereby declare that this product(s) complies with the following directive(s):**

2004/108/EC *Electromagnetic Compatibility directive.*

98/37/EC *Machinery Directive.*

73/23/EEC *Low Voltage Equipment directive ( amended by 93/68/EEC).*

2002/95/EC *Restriction of Hazardous substances*

**The following standards have been applied to the product(s):**

EN 55014-1:2006, EN 55014-2:1997+A1:2001,

EN 61000-3-3:1995+A1:2001/+A2:2005, EN 61000-3-2:2006

BS EN 61558-2-6:1997, EN 61558-1:1997+A1:1998+A11

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2005

**Product Description:** AC/DC Adaptor

**Model number(s):** GWJS101008

**Serial / batch Number:** N/A

**Date of Issue:** 12/01/09

**Signed:**

  
.....  
**J.A. Clarke**  
**Managing Director**



# A SELECTION FROM THE VAST RANGE OF

# Clarke®

## QUALITY PRODUCTS

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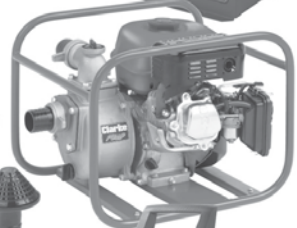
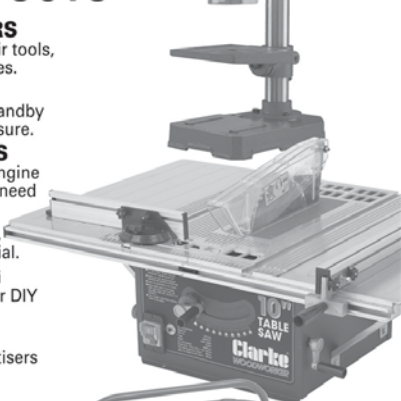
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