

A SELECTION FROM THE VAST RANGE OF

Clarke[®]

QUALITY PRODUCTS

AIR COMPRESSORS

From DIY to industrial. Plus air tools, spray guns and accessories.

GENERATORS

Prime duty or emergency standby for business, home and leisure.

POWER WASHERS

Hot and cold, electric and engine driven - we have what you need.

WELDERS

Mig, Arc, Tig and Spot. From DIY to auto/industrial.

METALWORKING

Drills, grinders and saws for DIY and professional use.

WOODWORKING

Saws, sanders, lathes, markers and dust extraction.

HYDRAULICS

Cranes, body repair kits, transmission jacks for all types of workshop use.

WATER PUMPS

Submersible, electric and engine driven for DIY, agriculture and industry.

POWER TOOLS

Angle grinders, cordless drill sets, saws and sanders.

STARTER/CHARGERS

All sizes for car & commercial use.



Clarke INTERNATIONAL

For spare parts and servicing, please contact your nearest dealer, or Clarke International on

020 - 8988 - 7400

e-mail: Parts@clarkeinternational.com e-mail: Service@clarkeinternational.com

Clarke[®]

Start·N·charge

Powerful Battery Boosters/Chargers



OPERATING INSTRUCTIONS

FOR MODEL BC100B

Clarke[®] Start-charge

OPERATING INSTRUCTIONS

MODEL BC100B PART NO. 6210100

**SUITABLE FOR NORMAL CHARGING AND BOOSTING
OF 12 VOLT LEAD ACID TYPE BATTERIES.**

GUARANTEE

This **Clarke** product is guaranteed against faults in manufacture for 12 months from purchase date.

Keep your receipt as proof of purchase.

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

Where possible return faulty goods to the place of purchase.
No products can be returned to us without our prior permission.
The reason for return must be clearly stated.

This guarantee does not effect your statutory rights.

CONTENTS:

Safety precautions	2
Electrical connections	3
BC 100B: Charging procedure	4
BC 100B: Starting procedure	5
Technical data	6
Spares and servicing	6

IMPORTANT: SAFETY PRECAUTIONS PLEASE READ BEFORE USING THIS UNIT.

- WARNING:** Because highly inflammable hydrogen gas is released in the process of battery charging, please remember to switch OFF first and so avoid sparking which will occur when connecting or disconnecting LIVE LEADS.
Furthermore, serious damage can occur to the charger if direct positive-negative contact is made.

Clarke[®] Start-charge

Clarke BATTERY BOOSTER/CHARGERS

Other Battery Booster/Chargers in the comprehensive **Clarke** range include units with boost facilities from 140-600 amps. See table below, for full details.

MODEL	BC 140B	BC 160	BC 180	BC 200	BC 250B	BC 300B	BC 400B	BC 600B
MAX CHARGE AMPS	15	20	20	30	30	35	50	80
MAX BOOST AMPS	140	160	180	200	250	300	400	600
BOOST CHARGE VOLTS	12	12	12/24	12/24	12/24	12/24	12/24	12/24
THERMAL OVERLOAD PROTECTION	YES	YES	YES	YES	YES	YES	YES	YES
DIMENSIONS (LxWxH) mm.	260x260x250	260x260x250	260x300x770	260x300x770	320x490x730	320x490x730	320x490x730	580x340x800
WEIGHT Kg.	10.0	12.5	16.0	21.0	28.0	31.0	37.0	69.0
PART NO.	6210150	6210000	6210180	6220000	6225050	6230050	6240050	6260000

ECONOMY MODELS BC.210 AND BC.410 NOW AVAILABLE. DETAILS ON REQUEST.



Clarke INTERNATIONAL
Lower Clapton Road London E5 0RN

- f) If the car has not started after this first attempt, wait 20 seconds then repeat "e" above.
- g) Should starting continue to prove difficult, this may be because your battery is completely flat. We recommend that you reconnect for a CHARGE procedure as explained above, but at the MAX (Maximum charge) setting for 10-15 minutes only, prior to reconnecting for BOOST/STARTING again. In any event such charging will improve the chances of a "first time start" particularly with very big engines or where the battery is completely flat.

Note:

If the BC100B Start and Charge unit is overloaded at any time, a thermal cut out will automatically come into operation and render it inoperative. Allow approximately 5-10 minutes then press the thermal reset button to use the unit again.

4. Technical Data

MODEL	BC 100B
MAX CHARGE AMPS	15
MAX BOOST AMPS	100
BOOST/CHARGE VOLTS	12
THERMAL OVERLOAD PROTECTION	YES
DIMENSIONS (LxWxH) mm.	175x130x239
WEIGHT Kg.	4
PART NO.	6210100

5. Spares and Servicing

FOR SPARES AND/OR SERVICING PLEASE CONTACT YOUR LOCAL DEALER OR TELEPHONE **Clarke** INTERNATIONAL ON ONE OF THE NUMBERS BELOW:

SPARES: 01-254 3860
 SERVICE: 01-254 6421

2. Black negative (-) lead must always be clipped to the negative (-) on the battery. Red positive (+) lead must always be clipped to the positive (+) on the battery.
3. To prevent battery overheating and consequent damage, use the BOOST facility sparingly and do not exceed our recommendations.
4. Battery acid is highly corrosive. If spillage occurs, wipe off immediately and wash copiously with water. Particularly avoid contact with the eyes.
5. When charging is completed, ensure that the vehicle battery leads are secured to the proper terminals which should be clean and lightly smeared with petroleum jelly to prevent corrosion. Finally, re-check the electrolyte level.
6. Do not expose this unit to rain.
7. Never touch together the negative and positive leads on this unit whilst the unit is switched on.
8. Never attempt any electrical or mechanical repair. If you have a problem with your machine contact your local stockist for service information.
9. **WARNING:** Certain types of sealed or maintenance-free batteries need extra care when charging. Please consult battery manufacturers instructions before using this unit.

1. Electrical Connections (refer to diagram 1)

Connect the mains lead (5) to a standard 240 volt (50 Hz) electrical supply through a fused good quality (rubber preferred) plug, or a suitable fused isolator switch.

WARNING: This appliance must be earthed.

IMPORTANT: The wires in this mains lead (5) are coloured in accordance with the following code:

- GREEN AND YELLOW - EARTH
- BLUE - NEUTRAL
- BROWN - LIVE

As the colours of the flexible cord of this appliance may not correspond with the coloured marking identifying terminals in your plug, proceed as follows:
 Connect GREEN AND YELLOW coloured cord to plug terminal marked letter "E" or Earth Symbol \perp or coloured Green or Green and Yellow.
 Connect BROWN coloured cord to plug terminal marked letter "L" or coloured Red.
 Connect BLUE coloured cord to plug terminal marked letter "N" or coloured Black.

2. BC100B

Procedure for normal charging (refer to diagram 1).

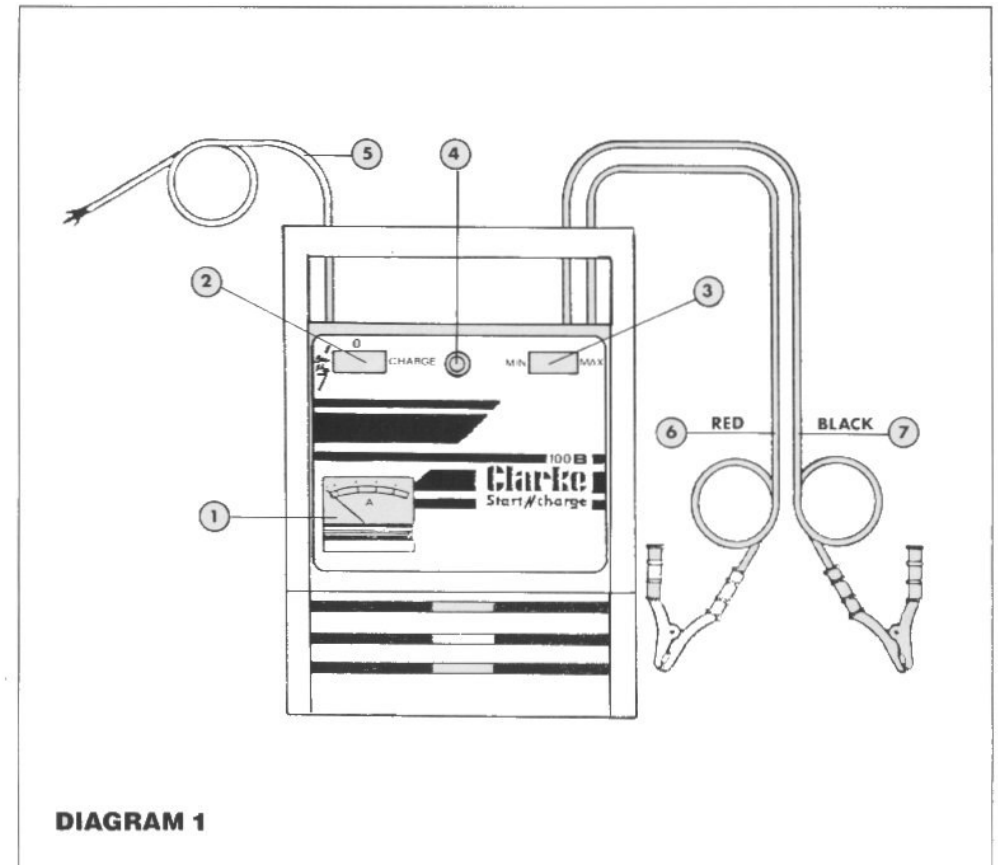
- a) Before charging or boosting ensure the battery terminals are clean and that the cells are filled with electrolyte to the correct level by adding distilled water where necessary.
- b) Where appropriate we recommend that the positive (+) lead (on the vehicle) to the battery is disconnected prior to charging.
- c) Check that the CHARGE/BOOST START switch (2) is in the OFF (0) position.
- d) Connect the fixed positive (+) red lead (6) to the positive (+) terminal on the battery.
- e) Connect the fixed negative (-) black lead (7) to the negative (-) terminal on the battery.
- f) Remove the battery filler caps during charging in order to prevent the build up of dangerous gases within the battery.
- g) Set the MIN (minimum charge) MAX (maximum charge) switch (3) to the MIN position. This is suitable for charging most normal car batteries (having an ampere hour rating of approximately 40 A.H.).
- h) Switch on the mains supply.
- i) Switch the CHARGE/BOOST START switch (2) to the charge position.
- j) Keep the battery on charge until the Ammeter gauge (1) reads zero (or 0-2 amps) or has stopped moving down. Then switch off at the machine, disconnect from mains supply, and remove leads from battery.

Notes on charging procedure.

* A complete charge is best done slowly in order to protect your battery, so we recommend the MIN setting as described above.

A complete charge may take up to 10 hours.

** If a low amperage reading (2 amps or less) is seen on the gauge at either the MIN or MAX setting, this may indicate that the battery is either (a) already fully charged or (b) at the end of its useful life and in need of replacement.



3. BC100B

Procedure for engine starting.

- a) Check that the CHARGE/BOOST START switch (2) is in the OFF (0) position.
- b) Connect the fixed red positive (+) lead (6) to the positive (+) terminal on the battery.
- c) Connect the fixed black negative (-) lead (7) to the negative (-) terminal on the battery.
- d) Switch on the mains supply.
- e) With the keys ready in the car's ignition, get an assistant to switch the CHARGE/BOOST START switch (2) to the BOOST START position and **IMMEDIATELY** turn the key to start the car.
IMPORTANT: you must switch the CHARGE/BOOST START switch (2) back to the OFF (0) position after a MAXIMUM OF 5 SECONDS ON BOOST START. WAIT 20 SECONDS BEFORE REPEATING. FAILURE TO DO THIS MAY DAMAGE YOUR BATTERY AND THE START AND CHARGE UNIT AND MAY INVALIDATE YOUR GUARANTEE.
With the Start and Charge unit connected to your car, NEVER LEAVE THE UNIT SWITCHED TO BOOST START FOR MORE THAN 5 SECONDS.