



BC350 SAW

GB BENCH SAW
OPERATORS MANUAL



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03/05



Belle Group Head Office
Sheen, Nr. Buxton, Derbyshire.
SK17 0EU, GB

+44(0)1298 84606

+44(0)1298 84621

sales@belle-group.co.uk

<http://www.bellegroup.com>

This manual has been written to help you operate and service the 'BC 350' Bench Saw safely. This manual is intended for dealers and operators of the 'BC 350' Bench Saw

Foreword

The '**Machine Description**' section helps you to familiarise yourself with the machine's layout and controls.

The '**Environment**' section gives instructions on how to handle the recycling of discarded apparatus in an environmentally friendly way.

The '**General Safety**' and '**Health and Safety**' sections explain how to use the machine to ensure your safety and the safety of the general public.

The '**Operating Instructions**' section helps you with the setting up and use of the machine.

The '**Trouble Shooting**' guide helps you if you have a problem with your machine.

The '**Service & Maintenance**' section is to help you with the general maintenance and servicing of your machine.

The '**Replacement Parts**' section provides instructions on how to order and specify replacement parts, if the need arises.

Directives with regard to the notations.

Text in this manual to which special attention must be paid are shown in the following way:



CAUTION

The product can be at risk. The machine or yourself can be damaged or injured if procedures are not carried out in the correct way.



WARNING

The life of the operator can be at risk.



Before you operate or carry out any maintenance on this machine **YOU MUST READ** and **STUDY** this manual.

KNOW how to safely use the unit's controls and what you must do for safe maintenance.

(NB Be sure that you know how to switch the machine off before you switch on, in case you get into difficulty.)

ALWAYS wear or use the proper safety items required for your personal protection.

If you have **ANY QUESTIONS** about the safe use or maintenance of this unit, **ASK YOUR SUPERVISOR OR CONTACT THE BELLE GROUP.**

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Belle Group reserves the right to change machine specification without prior notice or obligation.



Technical Data

Model	Single Phase	Three Phase
Height (mm)	500	500
Length (mm)	1100	1100
Width (mm)	530	530
Motor Power (kW / Hp)	2.2 / 3	3 / 4
Motor Voltage (V)	230 or 110	230-380
Pump Voltage (V)	230 or 110	230
Blade Diameter (mm)	300	300-350
Maximum Cut Length (mm)	65	65
Maximum Cut Height (mm)	75	75-100
R.P.M	3000	3000
Net Weight (Kg)	78	78
Water Volume (Ltr)	70	70
Sound Power Level (dB(A))	99.7	99.7

* The Sound Power Level was recorded on a machine using a 300mm Blade on 8mm thick stoneware

EC DECLARATION OF CONFORMITY / DECLARATION CE DE CONFORMITE / DECLARACION DE CONFORMIDAD CE / DECLARAÇÃO CE DE CONFORMIDADE / EG-VERKLARING VAN OVEREENSTEMMING



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PRODUCT TYPE TYPE DE PRODUIT TIPO DE PRODUCTO TIPO DE PRODUCTO PRODUCTTYPE.....

MODEL MODELE MODELO MODELO MODEL

SERIAL No. N° DE SERIE N° DE SERIE NO. DE SÉRIE SERIENUMMER

DATE OF MANUFACTURE..... DATE DE FABRICATION..... FECHA DE FABRICACIÓN..... DATA DE FABRIC..... FABRICAGEDATUM

SOUND POWER LEVEL..... NIVEAU DE NIVEL DE NIVEL DE GEMETEN
 MEASURED (GUARANTEED)..... PUISSANCE SONORE MESURÉE (GARANTIE) POTENCIA ACÚSTICA MEDIDA (GARANTIZADO) GELUIDSTERKTE NIVEAU (GEGARANDÉERD)

Signed by:
 Signature:
 Medido por:
 Assinado por:
 Getekend door:

Ray Neilton

Managing Director - On behalf of BELLE GROUP (SHEEN) UK.
 Le Directeur Général - Pour le compte de la SOCIÉTÉ BELLE GROUP (SHEEN) UK.
 Director Gerente - En nombre de BELLE GROUP (SHEEN) UK.
 Director-Geral - Em nome de BELLE GROUP (SHEEN) UK.
 Algemeen Directeur - Namens BELLE GROUP (SHEEN) UK.



852/10004/2

Your new Belle Group BC350 Bench Saw is warranted to the original purchaser for a period of one-year (12 months) from the original date of purchase.

The Belle Group warranty is against defects in design, materials and workmanship.

The following are not covered under the Belle Group warranty:

1. Damage caused by abuse, misuse, dropping or other similar damage caused by or as a result of failure to follow assembly, operation or user maintenance instructions.
2. Alterations, additions or repairs carried out by persons other than Belle Group or their recognized agents.
3. Transportation or shipment costs to and from Belle Group or their recognized agents, for repair or assessment against a warranty claim, on any machine.
4. Materials and/or labour costs to renew, repair or replace components due to fair wear and tear.

The following components are not covered by warranty.

- Drivebelt/s
- Engine air filter
- Engine spark plug

Belle Group and/or their recognized agents, directors, employees or insurers will not be held liable for consequential or other damages, losses or expenses in connection with or by reason of or the inability to use the machine for any purpose.

Warranty Claims

All warranty claims should firstly be directed to Belle Group either by telephone, by Fax, by Email, or in writing.

Tel: +44(0) 1538 380000 Fax: +44(0) 1538 380038

Email : Warranty@belle-group.co.uk

Write to:

Belle Group Warranty Department,
Unit 5 Bode Business Park,
Ball Haye Green,
Leek,
Staffordshire, ST13 8BW,
England.

For your own personal protection and for the safety of those around you, please read and ensure you fully understand the following safety information.

It is the responsibility of the operator to ensure that he/she fully understands how to operate this equipment safely. If you are unsure about the safe and correct use of the Ambassador Saw, consult your supervisor or Belle Group.



CAUTION

Improper maintenance can be hazardous. Read and Understand this section before you perform any maintenance, service or repairs.

- This equipment is heavy and must not be lifted single-handedly, either **GET HELP** or use suitable lifting equipment.
- Cordon off the work area and keep members of the public and unauthorized personnel at a safe distance.
- Personal Protective Equipment (PPE) must be worn by the operator when ever this equipment is being used (see Health & Safety).
- Make sure you know how to safely switch this machine **OFF** before you switch it **ON** in case you get into difficulty.
- Always switch **OFF** the motor before transporting, moving it around the site or servicing it.
- During use the motor becomes very hot, allow the motor to cool before touching it. Never leave the motor running and unattended.
- Never remove or tamper with any guards fitted, they are there for your protection. Always check guards for condition and security, if any are damaged or missing, **DO NOT USE THE BC 350 SAW** until the guard has been replaced or repaired.
- **DO NOT OPERATE THE BC 350 SAW** when you are ill, feeling tired, or when under the influence of alcohol or drugs.
- The BC350 Saw should not be used in the rain, or any other harsh weather conditions.

Pre-start Checks

Pre start-up inspection

The following Pre-start-up inspection must be performed before the start of each work session or after every four hours of use, whichever is first. Please refer to the service section for detailed guidance. If any fault is discovered, the floor saw must not be used until the fault is rectified.

1. Thoroughly inspect the BC 350 saw for signs of damage.
Check components are present and secure. Pay special attention to the blade safety guard.
2. Check fluid lines, hoses filler openings, drain plugs and any other areas for signs of leakage. Fix any leaks before operating.
3. Check the machine is connected to electrical earthing.
4. Check all cables are protected from damage and are not likely to be tripped over.

Vibration

Some vibration from the BC350 Saw operation is transmitted through the handle to the operator's hands. Refer to specifications & technical data for vibration levels and usage times (recommended maximum daily exposure time). **DO NOT** exceed the maximum usage times.

PPE (Personal Protective Equipment)

Suitable **PPE** must be worn when using this equipment i.e. Safety Goggles, Gloves, Ear Defenders, Dust Mask and Steel Toe capped footwear.

Wear clothing suitable for the work you are doing. Tie back long hair and remove any jewellery which may catch in the equipment's moving parts.

Dust

The sawing process will occasionally produce dust, which may be hazardous to your health. Always wear a mask that is suited to the type of dust being produced.

Fuel

- Before refuelling, switch off the engine and allow it to cool.
- Spilt fuel must be made safe immediately, using sand. If fuel is spilt on your clothes, change them.
- Store fuel in an approved, purpose made container away from heat and ignition sources.
- Do not ingest fuel or inhale fuel vapours and avoid contact with your skin. Wash fuel splashes immediately.
- If you get fuel in your eyes, irrigate with copious amounts of water and seek medical attention as soon as possible.

**WARNING**

Fuel is flammable. It may cause injury and property damage. Shut down the engine, extinguish all open flames and do not smoke while filling the fuel tank. Always wipe up any spilled fuel.

Exhaust Fumes

- Do not operate the floor saw indoors or in a confined space, make sure the work area is adequately ventilated.

**WARNING**

The exhaust fumes produced by this equipment are highly toxic and can kill!

After the working day, it is recommended that the pump function is placed into a clean water recipient. Thus you eliminate and residue from the the inner circuit.

In any case, after the daily work, in order to avoid damages, take the water pump out of the pan. If not, the mud produced by the dusty sediment may deposit on the pump turbine arms, hindering their rotation.

**WARNING**

WITH REGARD TO ANY CLEANING, REPAIRING OR MAINTENANCE OPERATION, MAKE SURE THAT THE ELECTRICAL NET FEEDING PLUG IS DISCONNECTED. YOU MUSN'T USE WATER UNDER PRESSURE TO CLEAN ANY CIRCUITS.

The BC 350 Saw has been designed and made for straight and mitre cuts on any kind of material, such as, tile, stoneare, bricks and marble. Any modification of the saw, aswell as misuse is considered inappropriate and dangerous. In case of material or physical damages due to the nonobservance of the above recommendations, Belle Group is free from responsibility.

The machine only needs simple maintenance.

Clean the machine as often as needed to that dust and other residues from cut materials do not hinder the function of the water pump.

Any maintenance work is to be carried out by trained individuals.

Problem	Cause	Remedy
The motor has no power.	Low Voltage	Increase the cable section or in its case, find a solution to the slow voltage which might be due to the electricity main supply.
	Bad Connection	Check that the motor is connected to the same voltage as the mains supply.
The machine doesn't cut straight at 90° angle.	Looseness in wheels	Change the wheels or adjust them.
	Incorrect Blade	Change the blade. Use the appropriate blade to the material being cut.
	The machine isn't lined up.	Line up according to instructions
	The rulers are not perpendicular to the blade.	Loosen the screws and place the rulers at right-angle to the blade.
The blade has lost its cutting power.	Blunting of the diamond coating.	Cut an abrasive material (Stoneware, concrete, Emery)
The water pump	The propellar is blocked doesn't work.	Unscrew the lid and remove the items (mud and grit) blocking the propellar
	The pump is burnt.	Change the pump.
	The pump is badly connected.	Connect properly (See operating instructions)
The mitre is defective	The headstock is not horizontal (this can be due to a short) when you are moving the machine for mitering.	Try to place the headstock in a horizontal position using the screw in Fig.4
The power point (in its case) doesn't remain enclaved.	The coil is burnt.	Change the coil.

With you machine you will find the following items:

- 4 Legs.
- 4 Wing Nuts to tighten the legs.
- 1 Rubber plug for the water pan.
- 2 Keys (1) axle of the blade, (1) Hexagonal.

Apart from this, you must take off the metal strip sealing the saddle. Then, place the saddle onto the water pan lodging its grooved wheels into the guides.



IT IS A LIGHT MACHINE WHICH CAN BE MOVED WITHOUT ANY EFFORT AND DANGER, WHEN CARRIED OUT BY 2 PEOPLE.

Blade Assembly

- **Disconnect the plug from the electric network.**
- **Throw away any worn out, bent or cracked blades.**
- **Remove the blade guard, ad loosen the fasteners which attach it to the headstock.**
- **Fix the axle of the disc by introducing the key into the hole of the axle, and loosen the nut of the blade using the hexagonal key.**
- **Remove the outer plate and then change the blade. Centre the blade before tightening. The blade is set in place by tightening the nut and fixing the keys.**
- **Re-attache the blade guard, and tighten the fasteners.**

Fasten the blade ny tightening the nut. Use the set of tools that you receive with the machine.



WARNING

This machine must be used with a 6KVA transformer

The headstock of the machine can cut in to different positions:

A) 90° STRAIGHT CUT “VERTICAL BLADE POSITION”

Move the saddle towards the blade, pushing it gently in order to create the cut.

B) 45° MITRE CUT “INCLINED DISC POSITION”

The head of the BC 350 model inclines up to 45°. To get this position, loosen the fastener and rotate the motor head completely, fixing it in the position indicated.

To Mitre, put the piece on the saddle with the front side down. Then, put the guide ruler on the left-hand side of the saddle. That way you can adjust the mitre to the measure of the piece. Once the ruler blockade has been fixed, make all the cuts on pieces of an equal measure.

Begin by moving the saddle carefully, so that the glazed material does not suffer any damage. Do not move the saddle quickly. Otherwise you will force the blades flexibility. As a result, the mitre will be defective and the blade may break.

The water pan contains water in order to cool the cut. Its capacity is approximately 60 litres. It is important to frequently check the water level. (It must always cover the pump when functioning)

The flow of water is adjusted using a spherical valve placed over the disc protection. The jet of water must be projected directly towards the inner line of the diamond blade bar. You can adjust it using a screwdriver. Partially introduce the screwdriver into the water pipes and correct them. They are easily corrected as they are made from malleable copper.

NOTE: The water pump starts up with the machine as you switch it on.

NECESSARY ITEMS:

- A round steel stick of 4 or 5mm and 250mm in length. Sharpen one of the ends.
- Ceramic tile.

THE OPERATOR SHOULD BE POSITIONED ON THE SADDLE IN FRONT OF THE AXLE OF THE BLADE

1. Unplug the machine, remove the blade guard, loosen the fasteners which attach it to the headstock.
2. Remove the blade following the operating instructions.
3. Loosen the 4 screws which fix the motor to the platform. (Don't remove completely)
4. Put the ceramic tile on the saddle as indicated in Fig.1 with the glazed side facing down. Put some chalk on the visible side along the central line.
5. Place the stick between the fixing pans, after having tightened the thread of the axle of the motor. When placing the stick, take into account that the sharpened end must be in contact with the tile.
6. Then, turn the axle with the stick in the opposite direction, and move the saddle in the opposite direction to create a new line on the tile. This must coincide with the previous line. If it doesn't, you have to move the motor until the lines coincide. Once obtained, fix the screws to the platform.

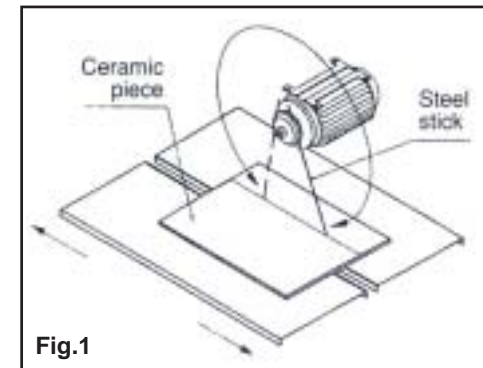


Fig.1