Bäumr-AG

20V Cordless Circular Saw CS2

User Manual

[Revision 1.0 August 2017]

READ THIS MANUAL CAREFULLY BEFORE USE – FAILURE TO DO SO MAY RESULT IN INJURY, PROPERTY DAMAGE AND MAY VOID WARRANTY. • KEEP THIS MANUAL FOR FUTURE REFERENCE. • Products covered by this manual may vary in appearance, assembly, inclusions, specifications, description and packaging.

E&OE

Safety

Read and understand all safety warnings before using the tool.

- Avoid dangerous environments. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite dust or fumes.
- Do not use this product if it is not completely assembled or if any parts appear to be missing or damaged. Use of a product that is not properly and completely assembled could result in serious personal injury.
- Inspect the tool carefully to make sure no breakage or damaged occurred during shipping.
- If any parts are damaged or missing do not operate this tool until the missing parts are replaced. Use of this product with damaged or missing parts could result in serious personal injury.
- Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any alteration or modification is misuse that will void product warranty and could result in a hazardous condition leading to possible serious personal injury.
- To prevent accidental starting that could cause injury, always remove the battery pack from the tool when assembling parts.
- Keep the tool and all components away from children.
- Keep children and bystanders away while operating power tools.
- Keep the work area clean and well lit
- Keep the tool pointed away from yourself and others at all times. Keep hands and body parts away from moving parts and use safety guards.
- Do not allow persons unfamiliar with the tool or its operation to use the tool.
- Use safety equipment. Always wear eye and ear protection. Safety equipment such as dust mask, non-skid safety shoes and hard hat should be used in appropriate conditions.
- Only use parts and accessories recommended by manufacturer.
- Do not modify any part of the tool or its safety mechanisms.
- Do not use in ambient temperatures above 40°C (104°F).
- Do not use the tool outside of its operating parameters. For example, cutting extremely hard materials.
- Blades are sharp and may become hot during use – wear suitable protective gloves when handling blades.
- **Kick-back** – "Kick-back" is a sudden reaction to a pinched, bound or misaligned saw blade. If the rotating blade becomes pinched or digs into in the work-piece, the blade may stall and the motor reaction can drive the tool rapidly back toward the operator – this is highly dangerous. To help avoid kick-back:
  - Always maintain a firm grip with both hands on the tool and position your arms to resist kick-back forces.
  - If blade is binding, or when stopping a cut before completing it for any reason, release the trigger and hold the tool motionless in the blade comes to a complete stop. Never attempt to remove the saw from the work-piece or pull the tool backward while the blade is in motion. If binding occurs, investigate and take corrective actions to eliminate the cause of binding.

  - When restarting the tool with the blade in the work-piece, centre the blade in the cut and check that the teeth are not engaging the material.
  - Support large work-pieces to minimize the risk of blade pinching and kick-back. Large work-pieces tend to sag under its own weight. Supports must be placed under the work-piece on both sides of the cut, near the line of cut and near the edge of the work-piece.
  - Do not use dull or damaged blades. Dull or improperly set blades produce reduced clearance in the cut, causing excessive friction, blade binding and kick-back.
  - Use extra caution when making “plunge cuts”.
  - Ensure that the work-piece does not contains objects, such as nails etc that can cause kick-back.
- Keep hands away from the cutting area and blade – always use both hands to hold the tool when cutting.
- Adjust the cutting depth to suit the thickness of the work-piece. Less than a full tooth of the blade teeth should be visible below the work-piece.
- Never hold the work-piece being cut in your hands or across your legs, body etc. Always secure the work-piece to a stable platform. It is important to support the work-piece properly to minimize body exposure, blade binding, or loss of control.
- Hold the tool by the insulated handles only when cutting to help reduce the possibility of electrical shock should the tool make contact with "live" wires.
- When "ripping", always use a rip fence or straight edge guide. This improves the accuracy of the cut and reduces the chance of blade binding / kick-back.
- Always use blades of the correct size and arbour size. Blades that do not match the mounting hardware will run eccentrically, causing loss of control.
- Never use a damaged or non-original blade collar or locking bolt. Use of substitutes may present a safety hazard.
- Check the lower blade guard for proper closing before each use. Do not operate the tool if the lower guard does not move freely and close instantly. If the guard and the spring are not operating properly, they must be serviced before use. Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- Never clamp or secure the lower guard into the open position. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- Lower guard may be retracted manually only for special cuts such as "plunge" and "compound" cuts. Raise the lower guard by retracting handle and as soon as blade enters the material, release the lower guard. For all other sawing, the lower guard should operate automatically.
- Always observe that the lower guard is covering the blade and the blade has stopped rotating completely before placing the tool down.
- Blade depth and bevel adjusting locking levers must be tight and secure before making cut. If blade adjustment shifts while cutting, it may cause binding and kickback.

Battery and Charging Safety

- Use only with the batteries and battery charger specified by the manufacturer.
- Do not open the battery – danger of short-circuiting.
- Do not attempt to destroy or disassemble battery pack or remove any of its components.

- Do not touch the battery terminals with metal objects and/or body parts as short-circuit and/or personal injury may result.
- Explosion hazard – protect the battery against heat; for example, direct sunlight and fire.
- Explosion hazard – do not short-circuit the battery.
- Poison hazard – battery leakage (liquid ejection) may cause irritation or burns. Under extreme conditions, liquid may be ejected from the battery – avoid contact. If contact occurs, flush with water. If eye contact occurs, flush with clean water for at least 10 minutes and seek medical attention.
- Care when charging. Make sure cord for the battery charger is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress. Do not operate the battery charger if it has a damaged cord or plug.
- Dispose of non-serviceable batteries in an environmentally responsible manner.

Servicing

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that safety of the tool is maintained.

Intended Use

- Cutting suitable materials (wood, plastics etc).

Table of Contents

Parts Identification

No.	Name	No.	Name
1	Tool Body	12	Bevel Guide Lock Nut
2	Main Handle	13	Laser Guide
3	Secondary Handle	14	Laser Guide ON / OFF Switch
4	Base Plate	15	Blade Collar / Lock Bolt
5	Blade	16	Dust Port
6	Lower Blade Guard	17	Rip Fence Lock Nut
7	Trigger	18	Rip Fence
8	Trigger Safety Switch	19	5mm Allen Key
9	Depth Guide	20	Battery Charger
10	Bevel Guide	21	Battery
11	Depth Guide Lock Nut		

Batteries and Battery Charging

Batteries for this tool are supplied in a low-charge condition for shipping reasons. • A battery that is new or has not been used for a long period does not charge to full capacity until after approximately 5 charge/discharge cycles. • Do not recharge batteries after using them if they are not to be used for an extended period of time. • Recharge batteries only as and when required. • If the battery is warm after use, allow it to cool before charging, otherwise it may not fully charge.

The battery packs can be recharged again and again. However, rechargeable batteries eventually need to be replaced. A significantly reduced working period after charging indicates that the battery is no longer serviceable and should be replaced. Discard old batteries in an environmentally responsible manner.

Charging

The battery charger has a charge status LED indicator:

- **Red** - Battery charging.
- **Green** - Battery fully charged.

1. Plug the battery charger power supply into a 240VAC mains electrical outlet and switch the supply ON.
2. Slide the battery fully into the battery charger. The indicator LED on the battery charger will be red to show the battery is charging. The indicator will become green when the battery is fully charged (approximately 1 to 1.5 hours).
3. When the battery is fully charged, unplug the charger from power supply, then press and hold the battery release button and simultaneously slide the battery pack from the charger.

Inserting and Removing the Battery Pack

Insert the battery pack into the tool handle until it "clicks" into place.

To remove the battery pack, press and hold the battery release button (**A**) and simultaneously pull the battery from the tool.

Operation

Setting Cutting Depth

Saw cutting depth can be set anywhere in the range of 0 to 50mm.

1. Remove the battery from the tool.
2. Loosen (rotate left) the depth guide lock nut (**A**).
3. Hold the tool by the handle, then rotate the rear of the base plate (**B**) downward to reduce cutting depth.
4. Use the depth guide (**C**) markings and reference arrow (**D**) to set the required depth.
5. Tighten (rotate right) the depth guide lock nut.
6. Re-install the battery and cut as required.

Setting Bevel Angle

When the cutting angle is changed from perpendicular (0°), the position of the blade in relation to the reference marks on the base plate changes accordingly. The adjacent image shows the reference marks in the base plate for 0° and 45° bevel angles. When bevel cutting, note the actual position of the blade when lining up the cut (using the laser guide is recommended).

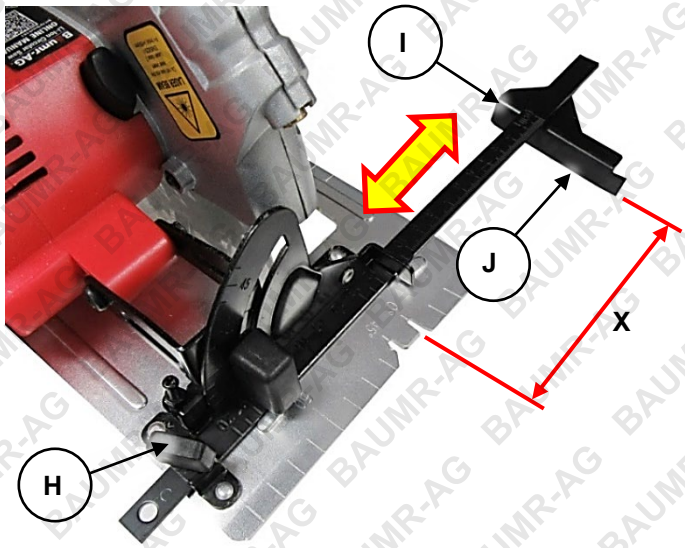
Saw cutting angle can be set anywhere in the range of 0 (perpendicular) to 45°.

1. Remove the battery from the tool.
2. Loosen (rotate left) the bevel guide lock nut (**E**).
3. Hold the tool by the handle, then rotate the base plate (**B**) to alter cutting angle.
4. Use the bevel guide (**F**) markings and reference arrow (**G**) to set the required angle.
5. Tighten (rotate right) the bevel guide lock nut.
6. Re-install the battery and cut as required.

Using the Rip Fence

The "rip fence" is used to keep the cut parallel to the edge of the material being cut for the length of the material (known as "ripping"), or for cutting multiple pieces of the same (approximate) width without marking out each cut. The rip fence can be set anywhere in the range of approximately 10 to 150mm.

1. Remove the battery from the tool.
2. Loosen (rotate left) the rip fence lock nut (**H**).
3. Slide the rip fence (**I**) through the slots in the guide until the required position is reached. Measure the distance (**X**) from the "foot" of the rip fence (**J**) to the blade (using the laser guide is recommended) for best accuracy.
4. Tighten (rotate right) the rip fence lock nut.
5. Re-install the battery and cut as required, using the foot of the rip fence against the edge of the work-piece to guide the cut.

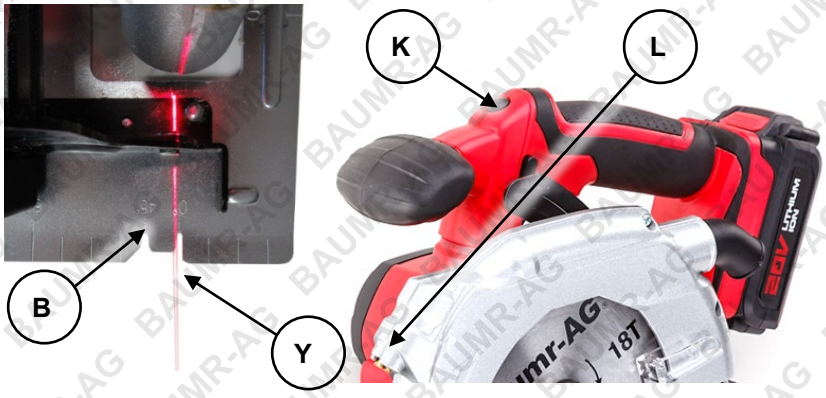


Using the Laser Guide

Do not look directly into the laser or point it towards any person, animal etc. The laser is capable of damaging eyes.

The laser guide helps you to follow marking-out lines on the work-piece and cutting straight by projecting a beam of light forward of the tool, where the blade will cut.

1. Press the laser guide button (**K**) to activate / deactivate the laser guide.
2. The beam (**Y**) is projected from the laser (**L**) onto the base plate (**B**) and beyond.



Using the Dust Port

The tool comes equipped with a dust port (**M**) that can be used to help collect sawdust etc created by the tool. Connect a suitable vaccuum cleaner hose or dust bag to the port when using the tool.

Cutting

Fully understand all operational safety warnings before using the tool.

1. Secure the work-piece and ensure nothing is directly below the cut line.
2. Bring the tool up to the work-piece so the front of the base plate is resting on it, but not so that the blade is touching the work-piece.
3. Ensure that the blade is aligned with the cut line (using the laser guide is recommended).
4. Hold the tool firmly using both handles (**N** and **O**) – always use both hands to hold the tool.
5. Press the trigger safety switch (**P**) using your finger in and hold it in.

6. Pull the trigger (**Q**) to activate the tool, then using a steady pressure move the blade into the work-piece. Maintain sufficient pressure so the blade is cutting freely, however, is not over-loaded (do not force the tool).
7. Continue the cut until complete, then release the trigger and allow the blade to stop completely before withdrawing the blade.

Guidelines for Use

General Cutting

- When cutting across the grain, wood fibres have a tendency to lift and tear, slower cutting may help reduce this effect.
- When cutting laminates and other materials where it is important not to damage the surface finish, place tape over the work-piece along the cut-line to help minimise scratching or splintering of the top surface.

Plunge Cutting

- Set the cut depth as required, then raise the lower guard slightly using the lift lever. With the blade just above the work-piece, start the tool and allow the blade to come to full speed. Gradually lower the blade into the work-piece using the front end of the base plate as a pivot. When the blade starts cutting, release the lower guard. When the base plate is flat on the work-piece, proceed cutting in a forward direction to the end of the cut. Allow the blade to come to a full stop before removing it from the cut.

Cutting Large Work-Pieces

- Large sheet or boards require suitable support on either side of the cut to help prevent bending or sagging of the material. If the work-piece bends where it is being cut, the blade will have a tendency to bind, possibly causing kick-back. Support the work-piece close to the cut and on both sides of the cut line. Be sure to set the cutting depth so the blade just passes through the material thickness.

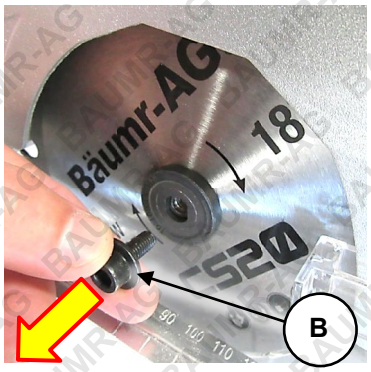
Maintenance and Troubleshooting

Remove the battery from the tool before performing any maintenance. • The tool should be cool enough to touch before performing maintenance activities. • Wear suitable gloves when handling blades. • Some maintenance activities described may be beyond the scope of some users. For procedures that you are not comfortable with or have the tools or experience for, have the unit serviced by a service centre or qualified technician.

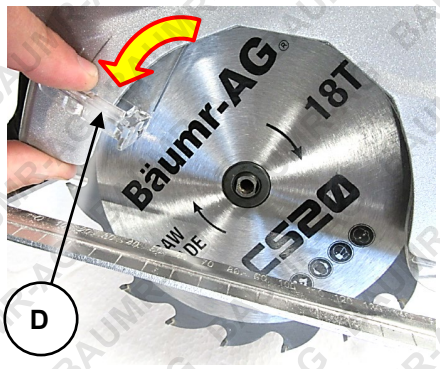
- Clean the tool regularly with a soft cloth – do NOT use water, solvents, abrasives etc. Remove any debris from the guards and tool ventilation slots using a soft brush.

Changing the Blade

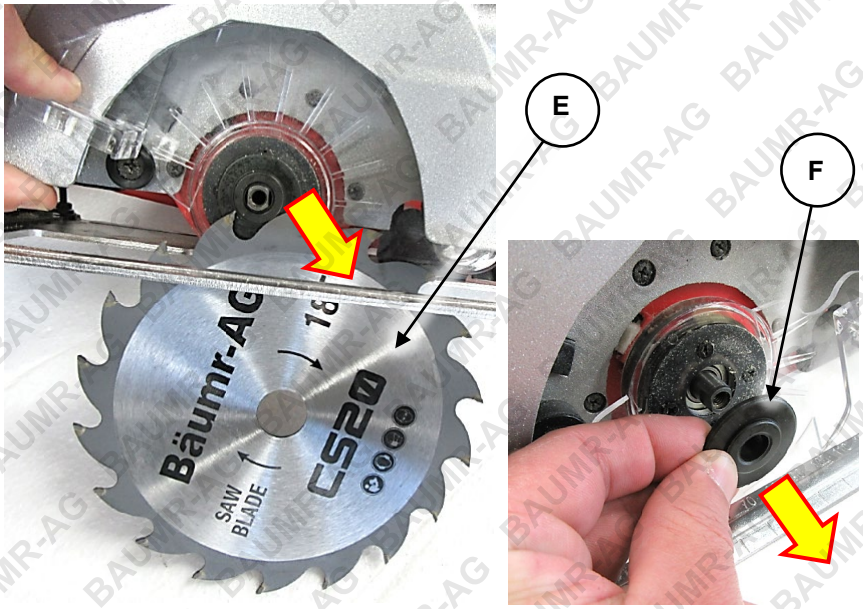
1. Remove the battery from the tool and place the tool on a flat and level surface.
2. Press and hold the blade spindle lock button (**A**).
3. Use the supplied Allen key and rotate the locking bolt (**B**) RIGHT (clockwise) to unscrew and remove it – this bolt is "left-hand thread" meaning that it screws on and off in the opposite direction to "normal"; that is, rotate RIGHT (clockwise) to unscrew, and rotate LEFT (anti-clockwise) to screw on. The blade may rotate slightly until the spindle lock engages and prevents it rotating.



4. Remove the collar (**C**) from the spindle.
5. Rotate the lower guard (**D**) to the open position and hold it there.



6. Remove the blade (**E**) from the tool, then return the lower guard to the closed position.
7. Remove the spigot (**F**) from the spindle.



8. Clean all parts, including the spindle area of the tool of any sawdust or wood particles etc – it is essential that this area is clean, so when the new blade is installed it will run true.
9. Re-install the spigot onto the spindle, then hold the lower guard in the open position.
10. Install the blade onto the spigot and ensure that the rotational arrows are pointing in the direction of rotation, which is clockwise. Ensure that the bore of the blade is sitting correctly on the spigot, then return the lower guard to the closed position.

11. Re-install the collar onto the spindle. If the collar has any markings, have them facing out from the tool.
12. Re-install the locking bolt, rotating LEFT (anti-clockwise). Press and hold the blade spindle lock button, then firmly tighten the bolt using the Allen key.

Troubleshooting

The following information may assist in identifying a problem and rectifying it.

Tool will not operate.

Possible Fault	Action
No voltage	Ensure the battery is charged and is correctly inserted.

Cutting is poor.

Possible Fault	Action
Low voltage	Ensure the battery is charged.
⬇	
Blade dull or damaged	Replace blade.
⬇	
Material too hard	Use correct blade for the material.

Excessive vibration.

Possible Fault	Action
Blade dull, bent or damaged	Replace blade.

Specifications

Battery Charger Electrical Requirements	240VAC / 50Hz
Battery Type	20V Lithium-Ion
Cutting Speed	3800 RPM (no load)
Saw Blade	165mm / 20mm bore
Maximum Cut Depth	52mm @ 0° (perpendicular) / 36mm @ 45°

Some experts believe the incorrect or prolonged use of almost any product could cause serious injury or death. For information that may reduce your risk of serious injury or death, consult the points below and additionally, the information available at www.datastreamserver.com/safety

- Consult all documentation, packaging and product labelling before use. Note that some products feature online documentation which should be printed and kept with the product.
- Check product for loose / broken / damaged / missing parts, wear or leaks (if applicable) before each use. Never use a product with loose / broken / damaged / missing parts, wear or leaks (if applicable).
- Products must be inspected and serviced (if applicable) by a qualified specialist every 6 months assuming average residential use by a person of average weight and strength, above average technical aptitude, on a property matching average metropolitan specification. Intended use outside these guidelines could indicate the product is not suitable for intended use or may require more regular inspection or servicing.
- Ensure all possible users of the product have completed an industry recognized training course before being given access to the product.
- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or your description of the application. Be sure to attain third-party approval for your application from a qualified specialist before use regardless of prior assurances by the retailer or its representatives.
- This product is not intended for use where fail-safe operation is required. As with any product (take an automobile, aircraft, computer or ball point pen for example), there is always a small chance of technical issues that needs to be repaired or may require replacement of the product or a part. If the possibility of such failure and the associated time it takes to rectify could in any situation inconvenience the user, business or employee then the product is not suitable for your requirements. This product is not for use where incorrect operation or a failure of any kind, including but not limited to a condition requiring product return, replacement, service by a technician or replacement of parts could cause a financial loss, loss of employee time or an inconvenience requiring compensation.
- If this item has been purchased in error after considering the points above, simply contact the retailer directly for details of their returns policy, if required.