Bäumr-AG

20V Cordless Angle Grinder AG2

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, polishing.
- Cutting discs may become hot during use – wear suitable protective gloves when handling discs.
- Always use the correct type of grinding / cutting disc for the material and the rotational speed (7000RPM) of the tool –discs designed for slower operating speeds may become over-stressed and fracture or break apart if used at higher than rated speeds.
- Do not grind using cut-off discs, or cut using grinding discs. Always use the correct type and size (that is, outside diameter and bore diameter) of disc for the type of work to be performed. Do not use toothed saw blades etc or discs that are not designed for a tool of this type.
- Do not start the tool with the disc inside a cut or against any object. Always allow the disc to be running at full speed before contacting it to the work-piece.
- Position yourself to not be in the path of sparks or debris created by the tool. Always be aware of the direction in which sparks / debris may be ejected from the tool.

- **Kick-back** – "Kick-back" is a sudden reaction to a pinched, bound or misaligned cutting disc. If the rotating disc becomes pinched or digs into in the work-piece, the disc 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 the disc 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 cutting disc from the work-piece or pull the tool backward while the disc is in motion. If binding occurs, investigate and take corrective actions to eliminate the cause of binding.
  - When restarting the tool with the disc in the work-piece, centre the disc in the cut and check that it is not engaging the material.
  - Support large work-pieces to minimize the risk of pinching and kick-back. 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 excessively worn or damaged cutting / grinding discs.
  - Use extra caution when making “plunge cuts”.
- Keep hands away from the cutting area and disc – always use both hands to hold the tool when cutting.
- 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, disc 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.
- Always use cutting discs of the correct size and arbour size. Discs that do not match the mounting hardware will run eccentrically, causing loss of control.
- Never use a damaged or non-original disc collar. Use of substitutes may present a safety hazard.
- Check that the disc guard is secure before each use. Do not operate the tool if the disc guard is loose or not installed.
- Do not use on magnesium.
- Use extra caution when using the tool on sharp corners or edges and avoid bouncing the disc, chatter, vibration and kick-back.
- Always observe that the cutting disc has stopped rotating completely before placing the tool down.

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 / grinding suitable materials (metal etc).

Table of Contents

Parts Identification

Note that some cutting discs / accessories may come supplied with the tool.

No.	Name
1	Tool Body / Main Handle
2	Disc Guard
3	Secondary Handle (shown installed)
4	Spindle Lock
5	Trigger
6	Trigger Safety Switch

No.	Name
7	Disc Collar
8	Typical Disc
9	Battery
10	Pin Spanner
11	Battery Charger

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.

Assembly

1. Install the handle (**A**) to the tool – it can be positioned to the left or right – install it in the position most comfortable for you. Screw the handle on (rotate right / clockwise) firmly.
2. Ensure that the disc guard (**B**) is positioned in a way to protect you from sparks, debris etc and against the disc itself if it was to shatter during use. Lock the guard in position using the locking lever (**C**). If the locking lever is not holding the guard securely enough, increase tension on the locking screw by rotating the nut (**D**) inward (right / clockwise) as required using the supplied spanner.

3. To attach a disc, see Changing the Disc.

Operation

Cutting and Grinding

Fully understand all operational safety warnings before using the tool.

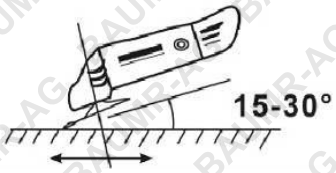
1. Secure the work-piece and, when cutting, ensure nothing is directly below the cut line.
2. Hold the tool firmly using both handles (**A** and **B**) – always use both hands to hold the tool.
3. Press the trigger safety switch (**C**) using your finger in and hold it in.
4. Pull the trigger (**D**) to activate the tool, then using a steady pressure move the disc into the work-piece. Maintain sufficient pressure so the disc is cutting/ grinding freely, however, is not over-loaded (do not force the tool).

5. Continue the cutting or grinding task until complete, then release the trigger and allow the disc to stop completely before withdrawing the disc.

Guidelines for Use

General Cutting / Grinding

- When cutting, hold the tool at approximately 30 to 45° to the work-piece and take extra care to keep the disc as straight as possible during the cut to reduce disc binding in the cut (slot). Cut slowly, allowing the material to be fully cut through as you move the tool. Allow the disc to come to a full stop before removing it from the cut.
- 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.
- When grinding, hold the tool at approximately 15 to 30° to the work-piece.



- When discs become ineffective or reduced in size, replace them.
- Cut or grind / abrade according to the roughness of the disc – do not use excessive pressure or force the tool. Rougher grade discs produce rougher finishes. For fine or smooth finishes, use a suitable disc.

Cutting Large Work-Pieces

- Large work-pieces 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 disc 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.

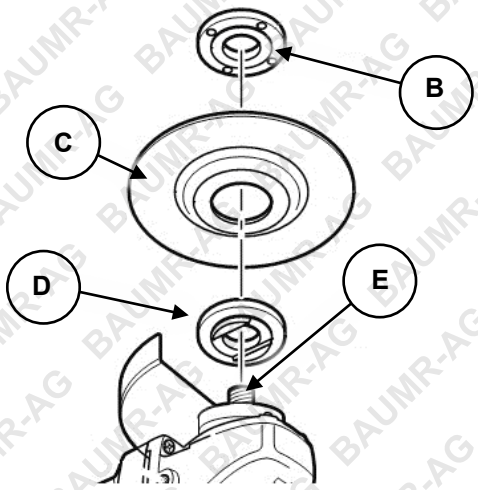
Maintenance and Troubleshooting

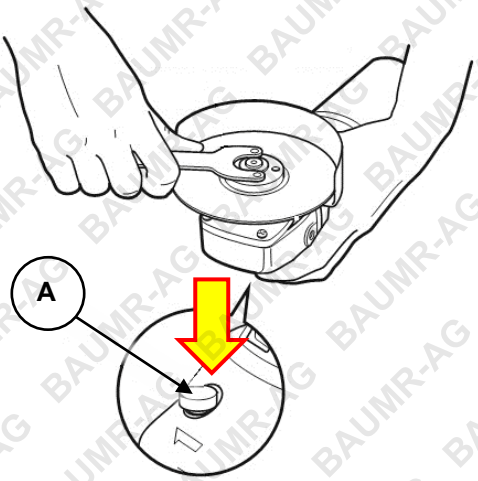
Remove the battery from the tool before performing any maintenance. • The tool should be cool enough to touch before performing maintenance activities. • Wear suitable gloves when handling discs. • Some maintenance activities described may be beyond the scope of some users. For procedures that you are 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.

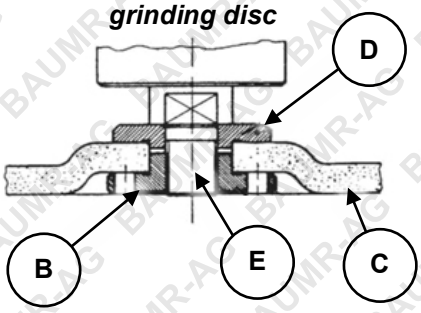
Changing the Disc

1. Remove the battery from the tool and place the tool on a flat and level surface.
2. Press and hold the spindle lock button (**A**).
3. Using the supplied pin spanner, rotate the locking collar (**B**) left (anti-clockwise) to unscrew and remove it. The disc may rotate slightly until the spindle lock engages and prevents it rotating.
4. Remove the collar (**B**), disc (**C**) (if installed) and spigot (**D**) from the spindle (**E**).
5. Clean all parts, including the spindle area of the tool of any dust or particles etc – it is essential that this area is clean, so when the new disc is installed it will run true.
6. Re-install the spigot onto the spindle, with the stepped section that has the driven flats engaging the drive flats on the spindle.
7. Install the disc onto the spigot and ensure that the rotational arrows are pointing in the direction of rotation, which is clockwise when looking at the tool from above. Ensure that the bore of the disc is sitting correctly on the spigot.
8. Re-install the collar (rotate right / clockwise) onto the spindle – use the images for various disc types for the correct orientation of the collar.
9. Press and hold the spindle lock button, then firmly tighten the collar using the pin spanner.

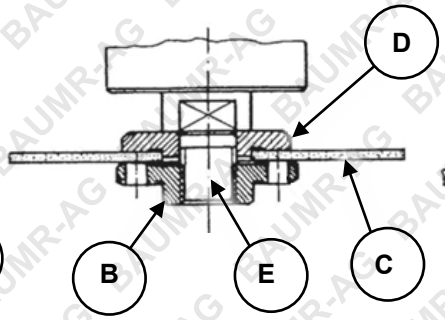




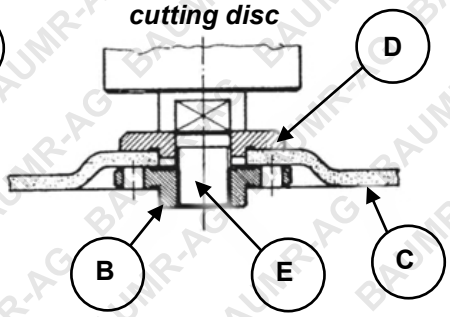
Collar assembly for depressed-centre grinding disc



Collar assembly for straight cutting disc



Collar assembly for depressed-centre cutting disc



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.
⬇	
Disc dull or damaged	Replace disc.
⬇	
Material too hard	Use correct disc for the material.

Excessive vibration.

Possible Fault	Action
Disc dull or damaged	Replace disc.

Specifications

Battery Charger Electrical Requirements	240VAC / 50Hz
Battery Type	20V Lithium-Ion
Cutting Speed	7000 RPM (no load)
Disc	115mm / 22mm bore

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.