

21-18AG

Original Instructions



GENERAL WARNINGS & DISPOSAL



To reduce the risk of injury, the user must read the instruction manual.



This symbol is used throughout this manual to warn the user about potential risks. Please read & understand these sections before using the device.



Personal Protective Equipment (P.P.E.), such as ear defenders, eye protection, safety gloves and a dust mask, must be worn during the operation of the device.



The device must not be exposed to rain or immersed in water.



Do not allow any part of the device to come into contact with flames, or to catch fire.



Do not expose battery pack or tool to fire or excessive temperatures.



Do not dispose of batteries in household waste. Return exhausted batteries to a local collection or recycling point.



This product has been marked with a symbol relating to removing electric and electronic waste. The product should not be discarded with household waste but must be returned to a collection system which conforms to the EU Directive 2012/19/EU or the UK Waste Electrical and Electronic Equipment Regulations 2013. It will then be recycled or dismantled in order to reduce the impact on the environment. Electric and electronic equipment can be hazardous for the environment and for human health since they contain hazardous substances.

The month and year of manufacture can be found within the product serial number e.g. MMYYPXXX. Where production month (MM) and production year (YY) are included.

21-18AG Designation of the tool: 18 - 18Vdc, AG - Angle Grinder

Contents

GENERAL POWER TOOL SAFETY WARNINGS	4
1. Work area safety	4
2. Electrical safety	4
3. Personal safety	4
4. Power tool use and care	5
5. Battery tool use and care	5
6. Service	6
TOOL SPECIFIC SAFETY WARNINGS	7
Safety Warnings Common for Grinding, Sanding, Wire Brushing or Abrasive Cutting-Off Operations	7
Kickback And Related Warnings	9
CHARGER SAFETY	11
COMPONENT LIST	12
POWER TOOL TECHNICAL DATA	13
LITHIUM ION BATTERY TECHNICAL DATA	13
CHARGER TECHNICAL DATA	13
NOISE INFORMATION	13
VIBRATION INFORMATION	14
OPERATING INSTRUCTIONS	15
Intended Use	15
Battery	15
Auxiliary Handle	16
Guard	16
Changing Grinding Discs	16
ON/OFF Trigger	17
Surface Grinding	17
Edge Grinding (Cutting)	17
Surface Finishing with Sanding Flap Discs	18
Maintenance	18
Transport and Storage	18
WARRANTY STATEMENT	20
Terms and Conditions	20
EU/UK DECLARATION OF CONFORMITY	22



GENERAL POWER TOOL SAFETY WARNINGS

WARNING!

Read all safety warnings, instructions and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. **Save all warnings and instructions for future reference.**

The term “power tool” in the warnings refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

1. Work area safety

- **Keep work area clean and well lit.**
Cluttered or dark areas invite accidents.
- **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 the dust or fumes.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2. Electrical safety

- **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

- **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep the cord away from heat, oil, sharp edges or moving parts.**

Damaged or entangled cords increase the risk of electric shock.

- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

- **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

3. Personal safety

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- **Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.

- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
 - **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
 - **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
 - **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
 - **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.
- 4. Power tool use and care**
- **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
 - **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
 - **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
 - **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
 - **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
 - **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
 - **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.
- 5. Battery tool use and care**
- **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
 - **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.



- › **When the battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects that can make a connection from one terminal to another.**

Shorting the battery terminals together may cause burns or a fire.

- › **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.**

Liquid ejected from the battery may cause irritation or burns.

- › **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, an explosion or risk of injury.

- › **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130 °C may cause explosion.

- › **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

6. Service

- › **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.
- › **Never service damaged battery packs.**

Service of battery packs should only be performed by the manufacturer or authorized service providers.

TOOL SPECIFIC SAFETY WARNINGS

- > **Wear ear protectors.** Exposure to noise can cause hearing loss.
- > **Wear eye protection.** Wear goggles to prevent eyes from exposure to flying particles.
- > **Wear a dust mask.** Take protective measures against inhalation of dust. Some materials can contain toxic materials. Also work with dust/ chip extraction when connectable.
- > **Wear gloves when operating the power tool or changing accessories.** Accessible metal parts on the tools and bits may get extremely hot during operation. Small bits of broken material may damage bare hands.
- > **Do not use accessories which are not specifically designed and recommended by the tool manufacturer.** Just because the accessory can be attached to your power tool, it does not assure safe operation.
- > **Use only wheel types that are recommended for your power tool and the specific guard designed for the selected wheel.** Wheels for which the power tool was not designed cannot be adequately guarded and are unsafe.
- > **The grinding surface of centre depressed wheels must be mounted below the plane of the guard lip.** An improperly mounted wheel that projects through the plane of the guard lip cannot be adequately protected.
- > **The guard must be securely attached to the power tool for maximum safety, so the least amount of wheel is exposed towards the operator.** The guard helps to protect the operator from broken wheel fragments, accidental contact with the wheel and sparks that could ignite clothing.
- > **Wheels must be used only for recommended applications. For example: do not grind with the side of a cut-off wheel.** Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.

Safety Warnings Common for Grinding, Sanding, Wire Brushing or Abrasive Cutting-Off Operations

- > **This power tool is intended as a grinder, sander, wire-brush or cut-off tool. Read all safety warnings, instructions, illustrations and specifications provided with this power tool.** Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.
- > **Polishing is not recommended to be performed with this power tool. Cutting-Off operations are not recommended unless a fully enclosed blade guard is fitted.** Operations for which the power tool was not designed may create a hazard and cause personal injury.



- › **Always use undamaged wheel flanges that are of correct size and shape for your selected wheel.** Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage. Flanges for cut-off wheels may be different from grinding wheel flanges.
- › **Do not use worn down wheels from larger power tools.** Wheels intended for larger tools are not suitable for the higher speed of a smaller tool and may burst.
- › **The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool.** Accessories running faster than their rated speed can break and fly apart.
- › **The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool.** Incorrectly sized accessories cannot be adequately guarded or controlled.
- › **Threaded mounting of accessories must match the grinder spindle thread. For accessories mounted by flanges, the arbour hole of the accessory must fit the locating diameter of the flange.** Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
- › **Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, backing pad for cracks, tear or excess wear, wire brush for loose or cracked wires. If the power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute.**
Damaged accessories will normally break apart during this test time.
- › **Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and workshop apron capable of stopping small abrasive or workpiece fragments.** The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- › **Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment.** Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.



- > **Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting tool may contact hidden wiring.** Contact with a “live” wire will also make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- > **Never lay the power tool down until the accessory has come to a complete stop.** The spinning accessory may grab the surface and pull the power tool out of your control.
- > **Do not run the power tool while carrying it at your side.** Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
- > **Regularly clean the power tool’s air vents.** The motor’s fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- > **Do not operate the power tool near flammable materials.** Sparks could ignite these materials.
- > **Do not use accessories that require liquid coolants.** Using water or other liquid coolants may result in electrocution or shock.

Kickback And Related Warnings

- > Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory’s rotation at the point of the binding.
- > For example, if an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the wheel’s movement at the point of pinching. Abrasive wheels may also break under these conditions.

Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- > **Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up.** The operator can control torque reactions or kickback forces, if proper precautions are taken.
- > **Never place your hand near the rotating accessory.** Accessory may kickback over your hand.



- > **Do not position your body in the area where power tool will move if kickback occurs.** Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
- > **Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory.** Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
- > **Do not attach a saw chain woodcarving blade or toothed saw blade.** Such blades create frequent kickback and loss of control.

CHARGER SAFETY

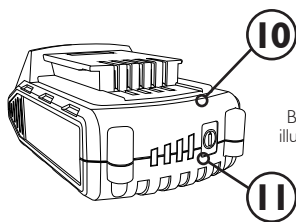
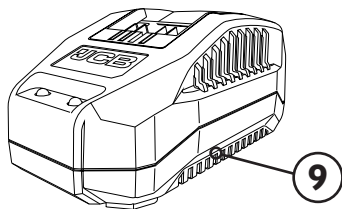
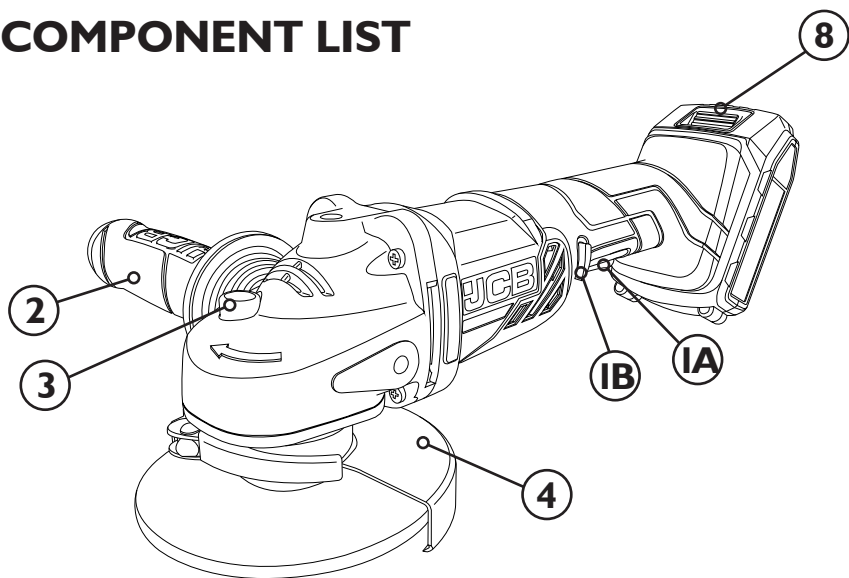
WARNING!

Read all safety warnings, instructions and specifications provided with the charger. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. **Save all warnings and instructions for future reference.**

- **To reduce risk of injury, only charge JCB rechargeable batteries.** The charger and battery packs are specifically designed to work together. Other types of batteries may burst causing fire and personal injury.
- **Do not allow any liquid to get inside the charger.** Electric shock may result.
- **Do not expose the charger to rain or snow.**
- **Under certain conditions with the charger plugged into the power supply, the exposed charging contacts inside the charger can be shorted by foreign materials.** Foreign materials of a conductive nature such as, but not limited to, steel, wool, aluminium foil or any buildup of metallic particles should be kept away from charger cavities.
- **Always unplug the charger from the power supply when there is no battery in the cavity.**
- **Unplug the charger from the power supply before attempting to clean.**
- **Do not operate the charger with a damaged cord or plug.** Have them replaced immediately.
- **JCB battery chargers are designed to operate on 230-240V AC input voltage (Note: the dual charger can additionally operate on 100-240 AC input voltage). Do not attempt to use them on any other supply voltage.**
- **This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.** Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- **If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.**

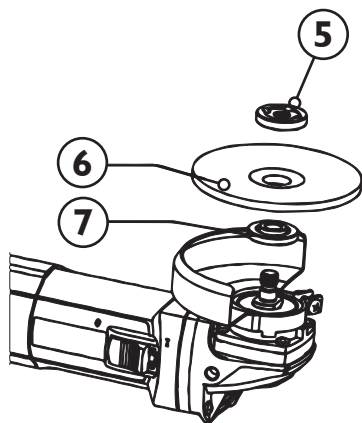


COMPONENT LIST



Battery size shown for illustrative purposes only

- 1A. ON/OFF TRIGGER
- 1B. SAFETY INTERLOCK
- 2. 3 POSITION AUXILIARY HANDLE
- 3. SPINDLE LOCK
- 4. ADJUSTABLE GUARD
- 5. TOOL FREE LOCKING NUT
- 6. GRINDING DISC
- 7. LOWER PLATE
- 8. BATTERY RELEASE BUTTON
- 9. CHARGER*
- 10. BATTERY PACK* - PLEASE REFER TO TABLE ON PAGE 13 FOR BATTERY INFORMATION
- 11. BATTERY TEST BUTTON AND CHARGE INDICATOR*



*If applicable

POWER TOOL TECHNICAL DATA

Rated Voltage	18V d.c.
No Load Speed	n_o : 8000/min
Sanding Disc Diameter	115mm
Product Weight (Body only, w/o battery)	1.5kg

LITHIUM ION BATTERY TECHNICAL DATA

Battery Code	Battery Size	Voltage	Battery Capacity	Charge Time (Fast Charger)	Charge Time (Super Fast Charger)	Charge Time (Dual Charger)
21-20LI	Small	18V	2.0Ah	45 mins	30 mins	35 mins
21-30LI	Large	18V	3.0Ah	65 mins	40 mins	45 mins
21-40LI	Large	18V	4.0Ah	90 mins	55 mins	60 mins
21-50LI	Large	18V	5.0Ah	110 mins	65 mins	75 mins

Times given as a guide only. Battery charge and discharge times dependant on age, usage and condition.

CHARGER TECHNICAL DATA

Charger Code	Input Power	Output
21-18VFC	220-240V AC, 50-60Hz, 70W	14.4 - 18V d.c. 2.4A
21-18VSFC	220-240V AC, 50-60Hz, 105W	14.4 - 18V d.c. 4.0A
21-18VDC	100-240V AC, 50-60Hz, 200W	20.5V d.c. 2 x 3.5A

NOISE INFORMATION

Noise emission values determined according to EN 60745-1 and EN 60745-2-3.

A-Weighted Sound Pressure (L_{pA})	76.1 dB(A)
A-Weighted Sound Power (L_{wA})	87.1 dB(A)
K_{pA} & K_{wA}	3 dB(A)
Wear ear protection when sound pressure is over 80 dB(A)	



⚠ WARNING!

Wear hearing protection. The effects of noise can cause a loss of hearing. The above-mentioned noise emission values were measured in accordance with a standardised test procedure and can be used to compare one power tool with another. The above-mentioned noise emission values can also be used for the preliminary assessment of exposure.

The noise emissions during the actual use of the power tool may differ from the above-mentioned values depending on the power tool being used, in particular on the type of workpiece being processed. Try to keep emissions as low as possible, for example by limiting your working time. In this regard, all the operational cycle phases must be taken into consideration (such as the times when the tool is switched off or running idle).

VIBRATION INFORMATION

Vibration total values (triax vector sum) determined according to EN 60745-1 and EN 60745-2-3

Vibration Emission Value (a_{hAG})	Main Handle	2.9 m/s ²
	Auxiliary Handle	2.4 m/s ²
Uncertainty (K)		1.5 m/s ²

⚠ WARNING!

The vibration emission value of the power tool is tested under EN 60745-1 and EN 60745-2-3, and can vary during operation depending on the following usage conditions:

- How the tool is used and the materials being cut or drilled.
- The tool being in good condition and well maintained.
- Using the correct accessory for the tool and ensuring it is sharp and in good condition.
- The tightness of the grip on the handles and if any anti-vibration accessories are used.
- The tool being used as intended by its design and these instructions.
- The declared vibration total value may also be used in a preliminary assessment of exposure.

THIS TOOL MAY CAUSE HAND-ARM VIBRATION SYNDROME (HAVS) IF USAGE IS NOT ADEQUATELY MANAGED.

⚠ WARNING!

To be accurate, an estimation of exposure level in the actual conditions of use should also take account of all parts of the operating cycle. These include times when the tool is switched off and when it is running idle but not actually doing work. This may significantly reduce the total exposure level over the working period, helping to minimize your vibration exposure risk.

- ALWAYS use sharp chisels, drills and blades.
- Maintain this tool in accordance with these instructions and keep well lubricated (where appropriate).
- If the tool is to be used regularly then invest in anti-vibration accessories.
- Avoid using tools in temperatures of 10°C or less.
- Plan your work schedule to spread any high vibration tool use across a number of days.



OPERATING INSTRUCTIONS

Intended Use

This angle grinder is intended for grinding, edge grinding (cutting) and surface finishing of metal, stone and ceramic objects and surfaces.

This power tool must not be modified or used for any other purposes than the ones described in these instructions.

Battery

NOTE

Make sure the ON/OFF Trigger (1A) is not operated when inserting or removing the battery. Use only JCB batteries: 21-20LI, 21-30LI, 21-40LI, 21-50LI.

- > **Do not use excessive force when inserting the JCB battery in the power tool.** An incorrectly connected battery can damage the battery terminals or the battery socket on the tool.
- > Use the button (12) on the battery to check the charging status; 4 red LEDs indicates fully charged, where 1 indicates low battery status.

Charging The Battery

WARNING!

After charging for the first time, ensure the battery is completely discharged before placing on charge again. Repeat this charging and discharging cycle 4 to 5 times to ensure battery is correctly conditioned.

- > Place the battery charger on a level and stable surface. Plug the charger into a suitable power point.

- > Connect the battery to the charger so that it clicks into place.
- > Refer to the Battery Charge Level table below for battery charger status as indicated by LED lights.
- > Unplug the charger from the power point and remove the battery from the charger.

Battery Charge Level

Red LED	Green LED	Battery Charge Status
		Charger is connected to mains power
		Connected battery is charging
		Connected battery is fully charged
		Connected battery has a charging fault
		Charger is outside correct operating temperature range (<0°C / >40°C)

If the LEDs on the charger do not illuminate when charging:

- > Check that the charger's mains plug is properly plugged into the power point.
- > Check that the battery is correctly inserted in the charger.

Connecting the battery

- > Connect the battery to the battery socket on the power tool so that it clicks into place.

Removing the battery

- > Press the battery release button (9) and remove the battery from the tool.

Auxiliary Handle

WARNING!

During all work undertaken with the tool, the auxiliary handle must be mounted.

- Choose the position that provides the most comfortable and safest handling. Screw the auxiliary handle onto the top, left or right of the machine head as required.

Guard

- Fit the guard as shown in the illustration. Adjust the clamping force of the locking arm by tightening the hex screw out or in when the locking arm is unloaded.

Changing Grinding Discs

WARNING!

Switch off the tool and disconnect the power (remove battery/unplug as appropriate) before changing grinding discs.

Grinding and cutting discs become very hot while working; do not touch until they have cooled & always use gloves.

Pay attention to the dimensions of the grinding disc. The mounting hole diameter must fit the lower plate without play. Do not use reducers or adapters.

To remove an attached disc:

- Press down the spindle lock button (3).
- Lift up the release tab on the tool free locking nut (5). Turn anti-clockwise to release.
- Slowly rotate the grinding disc manually while holding in the spindle lock button.

NOTE

Actuate the spindle lock button only when the grinder output shaft is at a standstill.

- Make sure the spindle lock button engages into the shaft during slow rotation of the grinding disc.”
- Unscrew the tool free locking nut (5) from the output shaft, loosening the grinding wheel (6).
- Remove the grinding wheel from the lower plate (7).
- If storing the angle grinder without a disc, reinstall the tool free locking nut (5).

To attach a new disc:

- Align the flats on the lower plate (7) with the flats on the output shaft.
- Place the grinding wheel (6) on the lower plate, carefully checking the boss of the lower plate fits securely in the mounting hole of the grinding disc.
- Screw the tool free locking nut (5) onto the output shaft, on top of the grinding wheel, carefully checking the boss of the locking nut fits securely in the mounting hole of the grinding disc.
- Press down the spindle lock button (3) while slowly manually turning the new grinding disc until the spindle lock fully engages in the output shaft.
- Use the tab on the tool free locking nut (5) to fully tighten.
- Release the spindle lock button once the locking nut is fully tightened.

NOTE

Check the direction of rotation of the accessory matches the direction of rotation marked on the power tool!

ON/OFF Trigger

NOTE

The ON/OFF Trigger (1A) has a safety-interlock (1B) to prevent accidental operation.

- To start the power tool, operate the ON/OFF Trigger. Initially move the safety-interlock switch left or right and squeeze the ON/OFF Trigger to operate.
- To stop the power tool, release the ON/OFF Trigger. Note that the safety-interlock automatically re-engages as soon as the trigger is released.

NOTE

Using the pressure release function of the ON/OFF Trigger gives you added safety. Letting go will make the power tool stop itself.

Surface Grinding

- Allow the power tool to reach full speed before touching the wheel to the work surface.



WARNING!

Do not use edge grinding/ cutting wheels for surface grinding applications. These wheels are not designed for side pressures encountered with surface grinding - wheel breakage and serious personal injury may result.

A fully enclosed guard is required to be fitted for cutting-off operations. Failure to fit a fully enclosed guard for cutting-off operations may result in serious personal injury.



- Apply minimum pressure to the work surface, allowing the power tool to operate at high speed. Grinding rate is greatest when the power tool is at high speed.
- Maintain a 20-30 degree angle between the power tool and work surface.
- Continuously move the power tool in a forward and back motion to avoid creating gouges in the work surface.
- Remove the power tool from the work surface before turning it off. Allow the wheel to stop rotating before laying the power tool down.

- Remove the power tool from the work surface before turning it off. Allow the wheel to stop rotating before laying the power tool down.

Surface Finishing with Sanding Flap Discs

- Allow the power tool to reach full speed before touching the disc on the work surface.
- Apply minimum pressure to the work surface, allowing the tool to operate at high speed. Sanding rate is greatest when the tool is at high speed.
- Maintain a 5-10 degree angle between the disc and work surface.
- Continuously move the disc in a forward and back motion to avoid creating gouges in the work surface.
- Remove the power tool from the work surface before turning it off. Allow the disc to stop rotating before laying the power tool down.

Edge Grinding (Cutting)

WARNING!

Wheels used for cutting and edge grinding may break if they bend or twist while the power tool is being used to do cut-off work or deep grinding.

- Position yourself so that the open-underside of the wheel is facing away from you.
- Allow the power tool to reach full speed before touching the wheel to the work surface.
- Apply minimum pressure to the work surface, allowing the power tool to operate at high speed. Grinding rate is greatest when the power tool is at high speed.
- Once a cut has begun and a notch is established in the workpiece, do not change the angle of the cut. Changing the angle of the cut will cause the wheel to bend and may cause wheel breakage. Edge grinding wheels are not designed to withstand side pressures caused by bending.

WARNING!

If the guard has been removed to facilitate sanding or wire brushing, it must be reinstated after completion of the above operation.

Maintenance

WARNING!

Switch off the power tool and disconnect the power (remove battery/unplug) before cleaning and maintenance. This helps avoid the risk of electric shocks and accidental starting.

- Wipe the tool with a dry or damp cloth.
Do not use a wet cloth. Do not use detergent that contains solvent or

corrosive, abrasive additives. This risks damaging the surfaces of the tool.

- Clear the tool vents and the accessory mount of dust and dirt after each use. **Do not clean ventilation holes by inserting sharp objects in them, such as screwdrivers and other similar objects.**
- Stubborn contamination in areas hard to access can be removed with compressed air (max 3. bar).
- Regularly check all fasteners, screws and bolts to make sure that they are tight. Tighten any loose screws immediately or serious injury could occur.

- Ensure that the power tool is not at risk of tipping over or exposed to excessive vibration and shocks during transport, especially if the power tool will be transported by car or other vehicle.

NOTE

Operating temperature: 0-40 °C
Storage temperature: 20-60 °C

WARNING!

Never open the power tool. The power tool has no internal parts that the user can service or repair. Never try to repair the power tool yourself. Take to an authorised service centre.

Transport and Storage

- If the power tool will remain unused for any length of time, it should be stored in the original packaging.
- Store the power tool and battery in a dry, frost-free, well ventilated place.
- Keep all tools out of the reach of children.
- Always switch off the power tool and disconnect it from the power supply (remove the battery/unplug the power cord) before transport.
- Always carry the power tool using the purpose-designed handle.



WARRANTY STATEMENT

JCB Power Tools are guaranteed against manufacturing defects for up to 3 years from date of purchase by simply registering your product online within 30 days. Proof of purchase required. This does not affect your statutory rights.

To register your JCB Power Tool, please visit: jcb-tools.com

Online registration is required within 30 days to receive a warranty certificate to activate your standard 3 year warranty. Registration is only available online via www.jcb-tools.com. You will need your original sales receipt, the model number and the serial number (if applicable) of your product. Kits comprising of two or more tools are excluded from single registration and must be registered individually for full warranty cover.

Upon successful registration, a warranty certificate will be available to download, print or save as a PDF document. The relevant warranty certificate together with the original sales receipt will be required in the event of any claim within the warranty period.

Should you choose not to register your product within 30 days of purchase, your statutory consumer rights will not be affected. You will need the original sales receipt as proof of purchase in the event of a warranty claim.

Warranty cover commences from the date of purchase on the retail sales receipt and is valid only for JCB Tools products purchased within the UK bearing the CE and UKCA mark and a visible serial number.

In the unlikely event your JCB Power Tool is subject to a manufacturing fault within the warranty period, JCB Tools may repair the product by replacing defective parts free of charge at our discretion. In the event parts are irreplaceable JCB Tools may replace your product free of charge. The original product will remain the property of JCB Tools in this situation.

The above repair or replacement of products will be undertaken providing that:

- The product has been subject to fair wear and tear only.
- The product has not been subject to accidental or cosmetic damage.

- The product has not been misused and has been used only in accordance with the instruction manual provided.
- The product has not been subject to overload or insufficient servicing and maintenance.
- The product has not been subject to any abnormal environmental conditions or inappropriate operating conditions.
- Repairs have not been attempted by an unauthorised person and no modifications have been made to the product.
- Repairs have not been undertaken using non-genuine spare parts.

JCB Power Tools used for Hire Fleets or as part of B2B and Service Contracts are not covered by these terms and conditions.

JCB Tools 3 Year Warranty excludes the following (where applicable):

- Components normally subject to wear such as carbon brushes.
- Batteries, Chucks and Chargers.
- Accessories and consumable items.
- Cases and tool storage products.

If your product develops a fault within 30 days of purchase, return it to the retailer where it was purchased together with your sales receipt. If a product develops a fault after 30 days a warranty claim must be submitted.

If you have a warranty claim please take your product, original sales receipt and if applicable, a copy of your extended warranty certificate to your place of purchase or nearest JCB Tools retailer.

If you wish to send your product to us directly, please send to JCB Tools, Unit 55, Romsey Industrial Estate, Greatbridge Road, Romsey, Hampshire, SO51 0HR, along with your original receipt and, if applicable, a copy of your extended warranty certificate. Delivery and repair charges may apply at our discretion should the warranty claim be invalid for any of the reasons illustrated above. In the event charges are not accepted the product will be retained by JCB Tools and remain the property of JCB Tools.

The information on both your sales receipt and your extended warranty certificate must match.

JCB TOOLS WILL NOT BE LIABLE FOR ANY INJURIES OR CONSEQUENTIAL DAMAGES RESULTING FROM USE OF THIS PRODUCT.

EU DECLARATION OF CONFORMITY				UK DECLARATION OF CONFORMITY
1.	PRODUCT(S) COVERED BY THIS DECLARATION:	Product: UK Product Code No. EU Product Code No. Factory Reference No.	JCB 18V Cordless Angle Grinder JCB-18AG-B, 21-18AG-B JCB-18AG-B-E PLAL-762	Batch Number: P.O.
2.	IDENTIFICATION DETAILS OF MANUFACTURER:	Name: Address: Country:	Yellow and Black Tools Ltd. (T/A: JCB Tools) Unit 55 Romsey Industrial Estate, Greatbridge Road Romsey, Hampshire SO51 0HR UK	
	AUTHORISED REPRESENTATIVE:	Name: Address: Country:	Authorised Representative Service 77 Camden Street Lower Dublin D02 XE80 Ireland	
THIS DECLARATION OF CONFORMITY IS ISSUED UNDER THE SOLE RESPONSIBILITY OF THE MANUFACTURER				
4.	OBJECT OF THE DECLARATION:	Product: Function:	18V Cordless Angle Grinder + 18V 2.4A Li-Ion Battery Charger + 18V Lithium-Ion 'E-TECH' Battery Pack, Cell Type 18650, Capacities: 2.0Ah, 3.0Ah, 4.0Ah, 5.0Ah. Grinding and Surface Finishing	
5i.	THE OBJECT OF THE DECLARATION DESCRIBED IN POINT 4 IS IN CONFORMITY WITH THE RELEVANT UNION HARMONISATION LEGISLATION:	2006/42/EC 2014/30/EU 2006/66/EC (plus amendment 2013/56/EU) 2011/65/EU	The Machinery Directive The Electromagnetic Compatibility Directive The Battery Directive The Restriction of Hazardous Substances Directive	
5ii.	THE OBJECT OF THE DECLARATION DESCRIBED IN POINT 4 IS IN CONFORMITY WITH THE RELEVANT UK STATUTORY INSTRUMENTS:	2008 No. 1597 2016 No. 1091 2012 No. 3032 2009 No. 890 2016 No. 1101	The Supply of Machinery (Safety) Regulations 2008 The Electromagnetic Compatibility Regulations 2016 The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 The Waste Batteries and Accumulators Regulations 2009 The Electrical Equipment (Safety) Regulations 2016	
6.	REFERENCES TO THE RELEVANT HARMONISED SAFETY STANDARDS USED OR REFERENCES TO THE OTHER TECHNICAL SPECIFICATIONS IN RELATION TO WHICH CONFORMITY IS DECLARED:	EN 60745-1:2009+A11 EN 60745-2-3:2011+A13:2015 EN 55014-1:2017 EN 55014-2:2015 IEC 62133-2:2017+A12:2021 EN 60335-1:2012+A15:2021 EN 62233:2008 EN 60335-2-29:2004+A11:2018 [UN 38.3] Issue: ST/SG/AC.10/11/Rev.6	Hand-held motor-operated electric tools. Safety. General requirements Hand-held motor-operated electric tools. Safety. Particular requirements for grinders, polishers and disk-type sanders Electromagnetic compatibility. Requirements for household appliances, electric tools and similar apparatus. Emission Electromagnetic compatibility. Requirements for household appliances, electric tools and similar apparatus. Immunity. Secondary cells and batteries containing alkaline or other non-acid electrolytes. Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications. Lithium systems Household and similar electrical appliances. Safety - General requirements Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure Household and similar electrical appliances. Safety - Particular requirements for battery chargers Transport of Dangerous Goods, Manual of Tests and Criteria	
7.	ADDITIONAL INFORMATION. THE TECHNICAL DOCUMENTATION FOR THE MACHINERY IS AVAILABLE FROM:	Name: Address: Country:	Authorised Representative Service 77 Camden Street Lower Dublin D02 XE80 Ireland	
SIGNED FOR AND ON BEHALF OF:		YELLOW AND BLACK TOOLS LTD.		
PLACE OF ISSUE:		ROMSEY, UK.		
DATE OF ISSUE (DD/MM/YYYY):		25/11/2022		
NAME:		JAMES BINGHAM		
FUNCTION:		OPERATIONS DIRECTOR		
SIGNATURE:				