



4 1/2in Angle Grinder

Instruction Manual

We've tried to make this manual useful, simple, and understandable.

Please read it carefully, and keep it safe for future reference



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THE ABC'S OF ANGLE GRINDER SAFETY

Read all safety warnings and instructions *before* using your angle grinder. They're pretty reasonable, and neglecting them may bring a touch of explosion, fire, and/or serious injury to your grinding and polishing sessions. There are other (and much better) ways to get your adrenaline going.

Save this manual for future reference, review in between uses, and make sure that anyone who's going to test your new angle grinder has read and fully understood all the information in here as well.

In case this manual happens to disappear in the black hole all manuals seem to go into, you can get a digital version of it at www.nocry.com/instructions, or by letting us know at wecare@nocry.com.

So, let's get to it, shall we?

- ✓ **Only use your angle grinder and its accessories for grinding metal, cutting tile, stucco and pavers, routing or mortaring, sanding, polishing or sharpening.** Would you use a hammer to screw in a screw? Exactly.
- ✓ **Only pair your angle grinder with the accessories that are made for angle grinders, and do not require liquid coolants.** You can find a list of accessories that come included in the package on page 14.
- ✓ **Before using this angle grinder with accessories you already own,** make sure they're designed to withstand rotation speeds of 10,000rpm or more, *and* are not too small or too big for the tool. Speaking of...
- ✓ **Only use accessories that are in perfect working condition.** If the accessory has dropped or been hit, mount it onto your angle grinder, and let it run at the highest speed for 1 minute. In most cases, a damaged accessory will fail this test. Keep everyone - including yourself - at a safe distance away from the spinning parts.

- ✓ **Grinding discs, flanges, support discs and other accessories must fit the angle grinder's spindle exactly** (find the spindle size on page 12). Accessories that are too loose will rotate unevenly, vibrate heavily, and make you lose control of the tool.
- ✓ **Mount the abrasive surface of the grinding discs below the level of the protective edge** to keep the disc protected. The protective guard must be securely attached and positioned so that the least amount of disc is exposed towards you.
- ✓ **Keep the cutting tools sharp and clean.** Blunt blades are much more prone to getting jammed and are harder to control.
- ✓ **Make sure there is nothing stuck in the moving parts of your angle grinder before turning it on.** It moves fast – and it will ruin your day even faster.
- ✓ **Do not turn the angle grinder on or off while it's in contact with the workpiece.**
- ✓ **Keep your fingers, hands, limbs, and any other body parts, *as well as the power cable* away from the moving parts.** If the grinder can cut tile, just imagine what it could do to your digits.
- ✓ **Do not use your angle grinder if it doesn't work as it should.** Get it repaired or replaced before using. Should you have any problems or concerns about anything, let us know by emailing wecare@nocry.com.
- ✓ **To avoid or reduce the impact of kickback,** hold the tool firmly, have your body and arms in a stable position, and outside of the area the tool could move in case of kickback, and do not use the tool with any accessories that have “teeth”.
- ✓ **Exercise extra caution when working with corners, sharp edges etc.,** as rotating accessories can bounce or get snagged.
- ✓ **Wait until the tool has come to a complete stop before carrying it, putting it down, or changing an accessory.** The alternative is completely losing control of the tool, as it starts moving around the floor or table.

- ✓ Your angle grinder has a paddle trigger lock, meaning the grinder won't simply stop working should you release your finger. **Ensure that you disengage the paddle switch lock before making any adjustments, inserting a battery or accessory, or putting the tool in storage.** Seems reasonable, doesn't it.
- ✓ **To keep your angle grinder well-maintained,** regularly check if any parts are misaligned, damaged or broken, or if there's anything else that might affect its performance. If you notice anything odd, definitely take your angle grinder for repair before using it or let us know by emailing wecare@nocry.com and we'll get on the case right away.
- ✓ **Clean the ventilation openings on a regular basis.** The motor fan draws dust into the housing, and leads to an accumulation of dust, which in turn creates an electric hazard and could prevent your grinder working as well as it should.
- ✓ **Work or repairs on the angle grinder should only be carried out by a professional.** It's best to leave the really serious stuff to a qualified repair person who only uses original replacement parts.
- ✓ **Make sure that anyone using your angle grinder or servicing it is acquainted with this manual.** The exception to the rule are children and infirm people - they shouldn't be using your angle grinder even if they remember every word written here.
- ✓ **Store your angle grinder away from children.** Enough said.

Battery and fast charger safety

- ✓ **Only use original NoCry 20V batteries.** Use of unoriginal batteries may lead to explosions. And who needs that?
- ✓ **Do not try to open the battery.** You risk the danger of short-circuiting, being electrocuted, and it will also void your warranty (see page 24)
- ✓ **When a battery pack is not in use, keep it away from other metal objects** such as paper clips, coins, keys, nails, screws etc. Shorting the battery terminals may cause burns or a fire.
- ✓ **The battery has built-in temperature-dependent overload protection:** When the load is too high or when the temperature goes above 158°F, the speed of the grinder will automatically be reduced until it cools to within its normal temperature range.
- ✓ Hazardous vapors may be emitted from the battery if it's damaged, and can irritate your respiratory system. **If you smell fumes or feel other than your usual self, stop the work, ventilate the work area properly, and seek medical help.**
- ✓ **Under abusive conditions, liquid may leak from the battery;** stay well clear. Liquid from the battery may cause irritation or burns. If you should make accidental contact, make sure to wash the affected areas thoroughly with water. If liquid contacts eyes, seek immediate medical attention.
- ✓ The fast charger is designed to **charge your batteries indoors only and away from living areas.** Ideally batteries should be charged on a bench in a workshop or garage. If you do not have such a space, charge your batteries away from people in an area of infrequent use, just in case anything should happen. Better safe than sorry.
- ✓ **Keep your fast charger away from any kind of liquid or moisture,** as we don't need to tell you - electricity and water don't mix.

- ✓ **If the battery pack is cracked or damaged in any way, do not insert it in the charger.** There is a danger of electric shock or electrocution.
- ✓ When charging multiple batteries, **always allow the charger to cool down before charging another battery.**
- ✓ **Do not abuse the cord of the fast charger.** Never use it for carrying or pulling anything or forcefully unplug it. Keep the cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- ✓ **Do not use the charger if it has been subjected to a heavy knock, dropped or otherwise damaged in any way.** Take the charger to an authorized service centre for a check or repair or contact us at wecare@nocry.com, and we'll sort it out ASAP.

Work area safety

- ✓ **Keep your work area clean and well illuminated.** Accidents are much more likely to happen in dirty, unorganized, or poorly lit workspaces - accidents that are easy to avoid with basic upkeep.
- ✓ **Secure any movable workpiece(s) you're working on.** A workpiece secured with suitable clamps or in a vice is much more likely to be steady and stay in place than one held by hand.
- ✓ **Do not operate your power tools in dusty or explosive areas,** such as in the presence of flammable liquids or gases, for a very simple reason - power tools may create sparks which could ignite the dust or fumes.
- ✓ **Use appropriate dust extraction or collection equipment if working in closed environments, along with respiratory protection.**

- ✓ **If you're working in areas where the angle grinder *might* come in contact with concealed electric cables,** hold it by the insulated grip surfaces at all times. That way, you will reduce the possibility of electrocution in case the grinder touches a live conductor.
- ✓ **Do not expose your angle grinder to rain and moisture.** Water and electric tools don't mix.
- ✓ **If damp conditions are unavoidable,** use a residual current device (RCD) protected supply for charging your grinder.
- ✓ **Keep children and bystanders away.** Distractions can easily cause you to lose control, so consider operating your power tools a solo venture. You'll catch up with everyone later, when you've made progress with your project.
- ✓ **If you absolutely *must* have children in the working area, ensure that they're always closely supervised by another, *responsible*, adult,** and do not interfere with your work.
- ✓ **Familiarize yourself with your local general rules of occupational health and safety.** The sooner you do that, the sooner you can start using your angle grinder.

Personal safety

- ✓ **Eye, ear, face, hand, and respiratory protection is a must** when operating your angle grinder. Do not underestimate the power of personal safety equipment.
- ✓ **Do not wear loose-fitting clothing or jewelry** when working with your angle grinder, and make sure your hair cannot get stuck in the moving parts.
- ✓ **Do not take unnecessary risks by trying to reach areas that are obviously too far away to reach safely.** Keep proper footing and balance at all times - it'll help you keep control in unexpected circumstances, whether it be the angle grinder slipping out of your hands, or someone deciding it would be fun to attempt to pull a jumpscare on you in your workshop.
- ✓ **Make sure to use and maintain the angle grinder correctly, and take enough breaks during the work** to avoid health problems related to vibration in hands and arms.
- ✓ **Common sense is the best protection, isn't it?** Stay alert - watch what you're doing, exercise common sense, and do not operate power tools when you're tired or under the influence of drugs, alcohol, or strong medication.
- ✓ **Exercise extra caution if you have an active or passive medical implants.** Consult with your doctor and/or the manufacturer of the implant *before* using the angle grinder, as it produces an electromagnetic field during operation.

NB! NoCry Work & Safety Gear and the manufacturing plant shall not be liable for any changes made to the tool, nor for any damage resulting from such changes.

Meaning of safety symbols

These symbols are on your angle grinder for a reason - to keep you aware and safe. Please take them into account.



This angle grinder conforms with North American safety standards.



Read the instructions before starting to use this angle grinder.



Do not throw this angle grinder out with regular waste, but dispose of it in the appropriate manner so it can be recycled. See page 23 for how to responsibly dispose.



This angle grinder is intended for indoor use only.



Exercise overall caution when operating your angle grinder.



This angle grinder has a thermal fuse rating of 266°F. Fuse will blow to protect your grinder should this temperature be exceeded.



This angle grinder is Class II (double insulated).



Do not expose or immerse the battery to moisture, rain or water.



Do not burn or expose the battery to heat or open flames.



Do not throw this angle grinder out with regular waste, but dispose of it in the appropriate manner so it can be recycled. See page 24 for how to responsibly dispose.



Battery has a max operating temperature of 122°F. This operating temperature should not be exceeded.



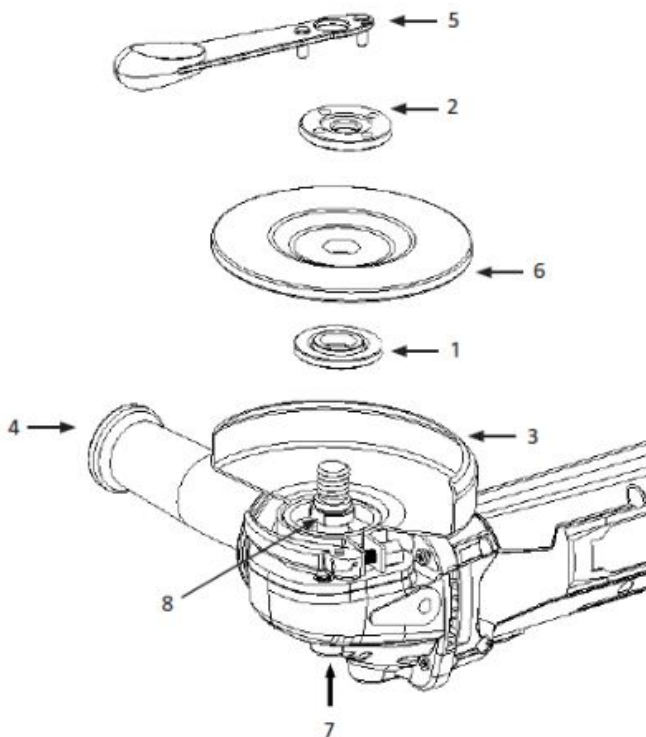
Li-Ion

Battery contains lithium ion. Do not dispose of batteries with household items. Return exhausted batteries to your local collection or recycling point.



This angle grinder contains parts that can be recycled and should be done so in accordance with proper disposal practices.

TECHNICAL SPECIFICATIONS



- 1.** Inner flange disc **2.** Outer flange disc **3.** Guard **4.** Handle **5.** Tightening key
6. Grinding / cut-off disc **7.** Spindle lock button **8.** Spindle

Model	NoCry NCG-8000 4 1/2 Inch Angle Grinder
Voltage	100-130V AC, 60 Hz
Motor type	Brushed
Guard size	4 1/2in / 115mm

Rated voltage	20V
Maximum speed	10,000rpm
Sound pressure level	$L_{pA} = 78.50 \text{ dB(A)}$ $K_{pA} = 3 \text{ dB}$
Sound power level	$L_{WA} = 89.50 \text{ dB(A)}$ $K_{WA} = 3 \text{ dB}$
Vibration level for surface grinding*	$a_{hv} \text{ AG} = 7.54 \text{ m/s}^2$ $K = 1.5 \text{ m/s}^2$
Runtime	60 minutes/ 4 Ah battery
Battery	Lithium-Ion 20V 4000 mAh
Battery model	NBP-4.0 Ah
Battery max temperature	122 °F
Battery charging time	2 hours
Charging voltage	100-130V AC 50-60Hz 60W
Weight of the main body	3.97lbs
Spindle thread	M16 (5/8in)
Hole diameter of the grinding/cut-off disc	55/64in

*The actual vibration level when using the angle grinder can deviate from the indicated value, depending on how the tool is used.

INCLUDED ACCESSORIES & THEIR PURPOSES

These are the accessories you should find included in your cordless angle grinder kit (a bare tool version is also available). If there's anything missing, let us know to wecare@nocry.com, and we'll sort it out ASAP.

- ✓ **1 handle** for mounting on either side of the angle grinder for improved stability when working. See page 16 for instructions on how to attach it.
- ✓ **1 lock nut wrench** that's kept inside the handle for convenience and safekeeping.
- ✓ **1 cutting guard** - full enclosure. See page 15 for instructions on how to attach it.
- ✓ **1 grinding guard** - half enclosure. See page 15 for instructions on how to attach it.
- ✓ **1 cutting disc** (not included with bare tool) - see page 16 for instructions on how to attach it.
- ✓ **1 diamond cutting disc** (not included with bare tool) for more difficult cuts - like cutting tile and masonry. See page 16 for instructions on how to attach it.
- ✓ **1 grinding disc** (not included with bare tool) for sharpening rough-and-tumble tools like hoes, shovels and ice scrapers, and for the initial grinding of axes, hatchets and lawnmower blades. See page 16 for instructions on how to attach it.
- ✓ **1 rechargeable 4Ah battery** (not included with bare tool) that holds charge for up to 1h if run continuously at full speed. Rechargeable from 0 to 100% in approximately 2h, and lasts for up to 200 charging cycles. Can be used with other NoCry cordless power tools.

- ✓ **1 fast charger** (not included with bare tool) for charging your NoCry batteries only. LED lights show when the battery is fully charged. With a charge rate of 2 Ah per hour, means it will take 45 minutes to charge a 1.5 Ah battery, 1.5 hours for 3 Ah, and 2 hours for 4 Ah batteries.
- ✓ **1 canvas bag** (not included with bare tool) for storing your new angle grinder. Elastic hook'n'loop straps securely hold and store your tool, battery and fast charger, protecting them from accidental knocks while carrying.

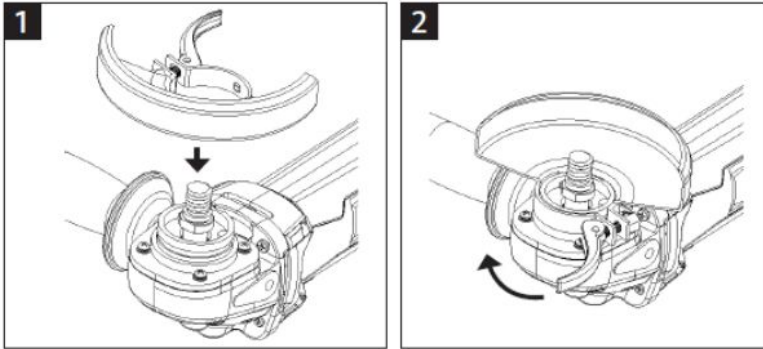
HOW TO USE YOUR ANGLE GRINDER

How to turn the angle grinder on/off

Very straightforward: Plug the angle grinder in, and press the on/off switch upwards to turn the tool on, and push it downwards to turn the angle grinder off.

How to fit the guard

- 1.** Press and hold the guard adjusting lever, while putting the guard on the angle grinder.
- 2.** Rotate the guard until the lever lines up with the notches on the guard.
- 3.** Adjust the clamping force of the locking arm by tightening the hex screw out or in when the locking arm is unloaded.

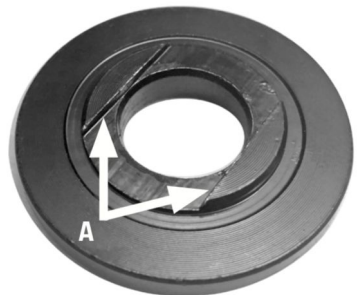
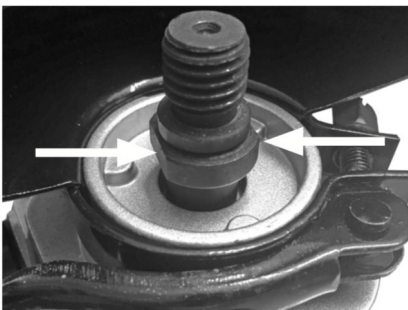


How to attach the handle

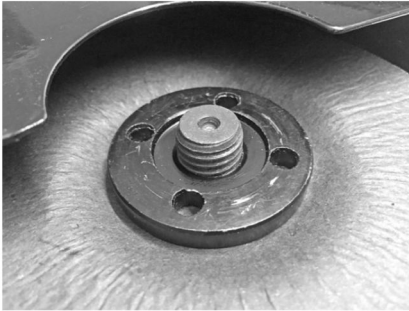
1. Choose whether you'd like to install the handle on the left or right side of the angle grinder.
2. Simply rotate the handle clockwise until it's tight in the angle grinder. Done!

How to attach a grinding/cut-off disc

1. Place the inner flange disc over the spindle with the locking edges (A) facing down, and making sure that the disc and spindle's edges meet. The flange disc must not rotate freely, but follow the rotation of the spindle.



2. Place the grinding or cut-off disc on the inner flange disc, and align the hole against the shoulder.
3. Fit the outer flange disc, and tighten with the tightening key. Press and hold the spindle lock button (indicated with an arrow in the photo) to prevent the spindle from rotating during tightening.



4. When the disc is attached, test-run the grinder at low speed for a few minutes, not placing the disc against an object. If the disc shows any signs of being damaged during this test run, replace it immediately.

How to grind with the angle grinder

- ✓ Only attempt to grind ceramic, steel and stone - not wood or soft metals such as lead, which will quickly "clog" the grinding disc and make it unusable and cause damage.
- ✓ Grind by moving the angle grinder from side to side in a 10-15° angle, applying light yet steady pressure for maximum material removal. There is no need to use the angle grinder with extreme force, as the weight of the angle grinder provides sufficient pressure.

How to cut rebar with the angle grinder

- 1.** Mount a cut-off disc onto your angle grinder (see page 16 for a short how-to), and turn the tool on.
- 2.** Prop up the long side of the rebar, and hold it securely.
- 3.** Move the cutoff disc through the metal, allowing the weight of the tool to do most of the work. Allow for the short end to drop freely to avoid binding the blade.

How to cut a frozen bolt with the angle grinder

- 1.** Mount a cut-off disc onto your angle grinder (see page 16 for a short how-to), and turn the tool on.
- 2.** Move the disc through the bolt, flush to concrete. You can brush the cut-off disc against the surface, but make sure to not cut into it, as that will break the disc.

How to cut tile, stone or concrete with the angle grinder

- 1.** Mount a diamond cut-off disc onto your angle grinder (see page 16 for a short how-to), and turn the tool on.
- 2.** Mark the outline of the cut accurately both on the front and back of the tile.
- 3.** Clamp the tile onto your workbench, and score the outline by about 1/8in deep on the front side of the tile.
- 4.** Flip the tile over, and cut through it from the back. Extend the cuts slightly past the lines at the corners to make them crisp and square.

How to sharpen blades with the angle grinder

- 1.** Mount a grinding disc onto your angle grinder (see page 16 for a short how-to).
- 2.** Secure the blade with clamps, so it does not move during sharpening.
- 3.** Orient the grinder, and adjust the blade guard to deflect sparks from your face and body. Align the grinding disc with the angle on the blade.
- 4.** Start the grinder and move the grinding disc steadily across the blade while applying light pressure. Pushing the grinder too hard will overheat the metal, changing its color and not letting it stay sharp for long.

How to grind mortar with the angle grinder

- 1.** Mount a diamond cut-off disc onto your angle grinder (see page 16 for a short how-to), and start the tool.
- 2.** Make two or three 1/2in deep passes to completely clear the joint. Stay about 1/8in from the brick to avoid damaging it.

THE ABC'S OF NOCRY BATTERIES

Only original NoCry 20V lithium ion batteries can be used with your cordless angle grinder, using other branded batteries are incompatible and can lead to injuries and pose a fire hazard.

How to remove or insert a battery

Place the grinder on a flat surface, and check that the direction switch is in the centre position.

To remove a battery...



1. Hold the grinder by the handle in one hand, and press and hold the unlock button with the other.

2. Gently slide the body of the tool away from the base of the battery. There's no need to exert any unnecessary force as you can damage the battery power contacts.

To insert a battery...



1. Line the connectors of the battery up with the base of the grinder's handle.






2. Slide the tool and the battery towards each other. Ensure the contacts meet and make a 'click' noise.

3. Check the battery is securely attached to the angle grinder before using again.

When to charge the battery

Despite coming partially charged out of the box, we recommend completely charging your battery **before** using your power tool for the first time.

The battery charge level indicators on the back of the battery tells you know how much charge remains in your battery. Simply press the charge indicator button to see how much juice you have left. The handy table below shows the charge level indicators in relation to how much battery remains.

Charge level indicator	Amount of charge remaining
	0-10%
	10-25%
	25-50%
	50-75%
	75-100%

The battery has a built-in safety shut off system that protects the tool preventing the voltage from falling below a certain level. This causes the LED lights to show two or three remaining charge levels - even though the tool is effectively flat. When this occurs, don't be alarmed, your tool and battery are fine - just charge the battery as normal.

We recommend not to use or store your battery in temperatures below 32°F so as not to cause the battery to drain

prematurely. A battery's charge will naturally dissipate over time and therefore its best to charge your battery again if not in use for a long period.

NB! Be on the lookout for when your battery pack nears the end of its lifecycle, which should be after 200 charging cycles, or 1-2 years of regular use. Should your tool start acting strange, it might be time to replace the battery. Please remember to properly dispose of the battery. See our 'responsible disposal' guide on page 23.

MAINTENANCE

On a regular basis, check that the frame and motor of the angle grinder are not damaged or exposed to oil or water, tighten all screws and bolts, and make sure that the tool is free from dust after every use. Once a year, bring your angle grinder to an authorized service centre for cleaning and lubrication.

There are no parts inside your angle grinder that require professional maintenance. All that's needed is some good old fashioned TLC.

However, for safety reasons and for your overall peace of mind, we recommend having your angle grinder given the once-over by an expert at least every 12 months to ensure that it will continue to operate safely. We must mention though that all (potentially deviating) national inspection and maintenance regulations must be observed.

ANGLE GRINDER LIABILITY

This product is covered by an EU directive, valid since 01.01.1990, specifying that the manufacturer is only liable for products if all the parts originate from the manufacturer or are approved by them, and if the units are mounted and operated properly.

If accessories or spare parts from third parties are used, liability can be partially or completely inapplicable. So no using those shifty parts you picked up on the cheap. In extreme cases the responsible authorities can prohibit the use of the entire unit.

We recommend you always buy original parts and accessories as compliance with all safety regulations is guaranteed, meaning you are covered and protected.

DISPOSAL

This product has been marked with a symbol relating to removing electric and electronic waste.

The Waste Electrical & Electronic Equipment Regulations (WEEE) requires that any product showing this marking must not be disposed of with other household or commercial waste. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate any such products from other waste types and recycle it responsibly at your local recycling facility. Check with your local authority, recycling centre or retailer for recycling advice. Don't just chuck it in the trash or leave out on the street.

WARRANTY

All NoCry products are inspected and tested to ensure their quality before leaving the factory. If you're not happy with your NoCry product, please contact us within 30 days of receiving it at wecare@nocry.com to return it for free for a replacement product or to receive a full refund. The choice is yours.

Each NoCry electric product is warranted to be free of defects in material and workmanship for the period of FOUR years from the date of original purchase. Warranty does not cover normal wear and tear, abuse, altered products, modifications, and products that have been repaired or attempted to be repaired by others than NoCry. At NoCry's discretion, a defective product will be repaired or replaced.

This warranty gives you specific legal rights, but may be superseded by any other rights or warranties in effect, which may vary from state to state (or based on your local jurisdiction). If you think you might have a defective product, please contact us at wecare@nocry.com. Our customer care team will be happy to help and start the (free) procedure to determine whether your product is defective.

NoCry's warranty applies to ONLY products being sold by Authorized Resellers. We regretfully will not provide any warranty for products sold by any other sources. Proof of purchase will be required to obtain warranty. Please review the warranty carefully, and contact us if you have any questions.

HOW TO CONTACT NOCRY

We're glad to have you join the NoCry community, and we hope you are happy with your new NoCry paint sprayer. If you have any questions or concerns, let us know by emailing **wecare@nocry.com**.

We'd also love to connect with you via social media. You can find us on Instagram, Facebook and Pinterest by searching "NoCry Work & Safety Gear".

So was it a thumbs up or a thumbs down for your experience with your NoCry Angle Grinder?



If this is your response, know that at NoCry, we try to treat everyone like we'd treat our own mom. On her birthday, no less. So **please let us know what went wrong by sending us an email at wecare@nocry.com**. We'll be on the case right away.



If you're happy with your purchase, why not spread the word to others who are looking for an angle grinder AND **help us serve you better and grow as a company**, by leaving a review on Amazon? To leave a review, go to Amazon > Orders (top menu) > Write a product review. Or search for the NoCry angle grinder on Amazon, and leave your review that way.