

FEIDER

MACHINES

INSTRUCTION MANUAL

ANGLE GRINDER

FM2030



READ THIS INSTRUCTIONS MANUAL BEFORE USE THE TOOL

FEIDER

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INSTRUCTIONS OF SECURITY

General Power Tool Safety Warnings



WARNING Read all safety warnings and all instructions. Failure to follow the warnings and instructions 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

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

2) Electrical safety

- a) **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.
- b) **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.
- c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e) **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.
- f) **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

- a) **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.
- b) **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Prevent unintentional starting. Ensure the switch is in the off-position connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- d) **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.
- e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f) **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.
- g) **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.

4) Power tool use and care

- a) **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.
- b) **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.

- c) **Disconnect the plug from the power source and/or the battery pack 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.*
 - d) **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.*
 - e) **Maintain power tools. 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.*
 - f) **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
 - g) **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.*
- 5) **Service**
- a) **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.*

Safety instructions for all operations

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

- a) **This power tool is intended to function as a grinder 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.*
- b) **Operations such as sanding, wire brushing or polishing are not recommended to be performed with this power tool.** *Operations for which the power tool was not designed may create a hazard and cause personal injury*
- c) **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.*
- d) **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.*
- e) **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.*
- f) **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.*
- g) **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 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.*
- h) **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.*
- i) **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.*
- j) **Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** *Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.*
- k) **Position the cord clear of the spinning accessory.** *If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.*
- l) **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.*
- m) **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.

- n) **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.*
- o) **Do not operate the power tool near flammable materials.** *Sparks could ignite these materials.*
- p) **Do not use accessories that require liquid coolants.** *Using water or other liquid coolants may result in electrocution or shock*

Further safety instructions for all operations

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.

- a) **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.*
- b) **Never place your hand near the rotating accessory.** *Accessory may kickback over your hand.*
- c) **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.*
- d) **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.*
- e) **Do not attach a saw chain woodcarving blade or toothed saw blade.** *Such blades create frequent kickback and loss of control.*

Additional safety instructions for grinding and cutting-off operations

Safety Warnings Specific for Grinding and Abrasive Cutting-Off Operations

- a) **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.*
- b) **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.*
- c) **The guard must be securely attached to the power tool and positioned 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 wheel and sparks that could ignite clothing.*
NOTE the above warning may be omitted for grinders or cut-off grinders with a rated capacity of less than 55 mm.
- d) **Wheels must be used only for recommended applications. For example: do not grind with the side of cut-off wheel.** *Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.*
- e) **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.*
- f) **Do not use worn down wheels from larger power tools.** *Wheel intended for larger power tool is not suitable for the higher speed of a smaller tool and may burst.*

Additional safety instructions for cutting-off operations

Additional Safety Warnings Specific for Abrasive Cutting-Off Operations

- a) **Do not "jam" the cut-off wheel or apply excessive pressure. Do not attempt to make an excessive depth of cut.** *Overstressing the wheel increases the loading and susceptibility to twisting or binding of the wheel in the cut and the possibility of kickback or wheel breakage.*
- b) **Do not position your body in line with and behind the rotating wheel.** *When the wheel, at the point of operation, is moving away from your body, the possible kickback may propel the spinning wheel and the power tool directly at you.*

- c) **When wheel is binding or when interrupting a cut for any reason, switch off the power tool and hold the power tool motionless until the wheel comes to a complete stop. Never attempt to remove the cut-off wheel from the cut while the wheel is in motion otherwise kickback may occur.** *Investigate and take corrective action to eliminate the cause of wheel binding.*
- d) **Do not restart the cutting operation in the workpiece. Let the wheel reach full speed and carefully re-enter the cut.** *The wheel may bind, walk up or kickback if the power tool is restarted in the workpiece.*
- e) **Support panels or any oversized workpiece to minimize the risk of wheel pinching and kickback.** *Large workpieces tend to sag under their own weight. Supports must be placed under the workpiece near the line of cut and near the edge of the workpiece on both sides of the wheel.*
- f) **Use extra caution when making a “pocket cut” into existing walls or other blind areas.** *The protruding wheel may cut gas or water pipes, electrical wiring or objects that can cause kickback.*

Additional safety warnings:

- a) Check that the maximum speed indicated on the grinding disc corresponds to the maximum speed of the machine. The speed of the machine must not exceed the value on the grinding disc.
- b) Make sure that the dimensions of the grinding disc correspond to the specifications of the machine.
- c) Make sure that the grinding disc has been mounted and fastened properly. Do not use reducing rings or adapters to make the grinding disc fit properly.
- d) Do not use the machine for grinding workpieces with a maximum thickness exceeding the maximum grinding depth of the grinding disc.
- e) Do not use grinding discs for deburring.
- f) When grinding discs have to be mounted on the thread of the spindle, make sure that the spindle has sufficient thread. Make sure that the spindle is sufficiently protected and does not touch the grinding surface.
- g) Before use, inspect the grinding disc for any damage. Do not use grinding discs which are cracked, ripped or otherwise damaged.
- h) Before use, let the machine run idle for 30 seconds.
- i) Immediately switch off the machine in case of abnormal vibrations or occurrence of another defect. Carefully inspect the machine and grinding disc before switching the machine on again.
- j) Make sure that sparks do not put people into danger or that they contact highly flammable substances.
- k) Make sure that the workpiece is sufficiently supported or clamped. Keep your hands away from the surface to be cut.
- l) Always wear safety goggles and hearing protection. Also use a helmet when appropriate.
- m) Ensure that mounted wheels and points are fitted in accordance with the manufacturer's instructions.
- n) Ensure that blotters are used when they are provided with the bonded abrasive product and when they are required.
- o) The tool must be always used with the guard. Never use the tool without the guard.
- p) For tools intended to be fitted with threaded hole wheel, ensure that the thread in the wheel is long enough to accept the spindle length.
- q) Ensure that ventilation openings are kept clear when working in dusty conditions. If it should become necessary to clear dust, first disconnect the tool from the mains supply (use non-metallic objects) and avoid damaging internal parts.

SYMBOLS



Refer to the instructions manual



Wear ear protection



Wear eyes protection



WEEE symbol for disposal

THE PRODUCT

1) Description



2)



- | | |
|--------------------|------------------------|
| 1. Spindle lock | 6. Auxiliary handle |
| 2. Handle assembly | 7. Guard |
| 3. Lock off button | 8. Disk (Not included) |
| 4. Supply cord | 9. Carbon brushes |
| 5. ON/OFF switch | 10. Wrench |

NOTE: the grinding disc is not supplied with this tool. You can buy disc in specialized stores. Ask your retailer for advice.

3) Technical data

Model	FM2030
Voltage	230-240V~ 50Hz
Power	2000W
Rated speed in revolution per minute	6500/min
Rated capacity in mm	Ø230mm
Spindle thread size	M14
Disc thickness	6mm
Weight	5.3kg
Sound pressure level Lpa	93.0 dB(A), K=3 dB(A)
Sound power level Lwa	104 dB(A) , K=3 dB(A)
Vibration value	Max: ah,AG=4.87 m/s ² ,K=1,5 m/s ²

Information

- The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another;
- The declared vibration total value may also be used in a preliminary assessment of exposure.

Warning

- The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used; and
- It is necessary to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

Wear hearing protection

USE

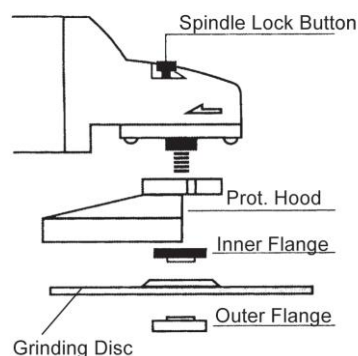
1) Intended use

This angle grinder is designed for grinding and roughing metal such as metal or stone.
Do not use this tool for commercial purposes; it is only for a private household use.

2) Before the first use

Check if the package is complete and not damaged. If some parts are missed or are damaged, please do not use the tool and bring it back to your dealer.

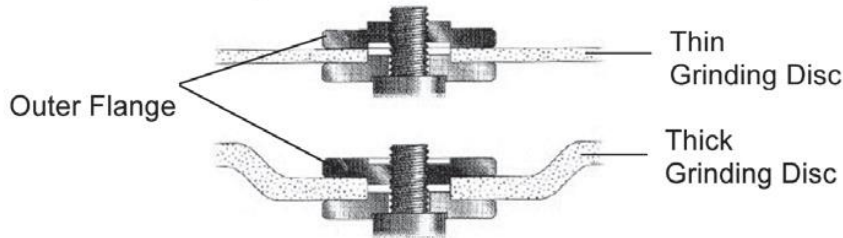
3) Assembly



The tool must be always switched off and unplugged before assembly.

- Installation of the guard
Turn back the tool. Put the guard in the correct position (see above drawing). Screw it firmly and lock it with its knob.
- Installation of the disk
 - o Place the inner flange on the spindle.
 - o Place then the corresponding disk.
 - o Place the outer flange the disk and screw it firmly with the pin wrench.

Following the disk, the outer flange can be installed on the two sides:



- Installation of the auxiliary handle
The auxiliary handle can be installed in 3 positions: top of the tool and both sides of the tool. The place where to install the auxiliary handle will depend of the position where you will use the tool. Screw firmly the handle with the provided wrench until it locks in place. See the operation part for install the handle according the position of tool.

4) **Operation**

Before plug the tool, find the correct work position. You can turn the main handle position to 90° (left or right). To change the position, push and hold the lock off button and turn the tool to desired position and lock it in place. Then install the auxiliary handle (as explained above) according the position of the tool. Push and hold the same lock off button to put the tool at its original position.

NOTE: always switch off the tool before change the position of the main handle and the auxiliary handle.

Plug the supply cord to a socket.

The ON/OFF switch has a safety switch which prevents inadvertent starting. To start the operation, push forward the safety switch and push the ON/OFF switch. The safety switch and the ON/OFF switch must be hold together during the operation.

To stop the operation, releases the switches button.

The tool will not operate if the safety switch is not pushed.

Rough grinding

For the best rough grinding results, hold the grinding wheel at an angle of between 30° and 40° to the work-piece surface and guide back and forth over the work-piece in steady movements.

Cutting

When you use the right-angle grinder for cutting purposes, avoid tilting it in the cutting plane. The cutting wheel must have a clean cutting edge. A diamond cutting wheel is best used to cut hard stone. It is prohibited to use the machine on asbestos materials!

Never use a cutting wheel for rough grinding.

5) **Replace the disk**

The tool must be completely switched off and unplugged before change the accessories.

Push and hold the spindle lock button. Use the pin wrench to unscrew the outer flange. Remove with your hands the outer flange.

Remove the disk and install in place the other disk. Replace in place the outer flange and screw it firmly with the pin wrench.

SERVICNG AND MAINTENANCE

No specific cleaning must be provided. You can wipe the body of the tool and the accessories with a dry cloth.

After use, check for any damages and wear. Any servicing and maintenance must be provided by our after-sales service department.

If the supply cord of this power tool is damaged, it must be replaced by a specially prepared cord available through the service organization

Carbon brushes that are burned, broken or shorter than 5 mm are to be replaced by original replacement brushes. Always replace the carbon brushes in pairs.

STORAGE

After use and cleaning, store the tool and accessories together in its box. Put the box in a stable and secure place, out of the reach of children. Avoid exposure to direct sunlight, water and excessive temperatures (too hot or too cold).

DISPOSAL



Electrical products should not be discarded with household products. According to the European Directive 2012/19/EU on waste electrical and electronic equipment and its implementation into national law, electrical products used must be collected separately and disposed of at collection points provided for this purpose. Talk with your local authorities or dealer for advice on recycling.

CE DECLARATION



FEIDER
32, rue Aristide Bergès - ZI 31270 Cugnaux - France

Declare that the following tool:
ANGLE GRINDER 2200W 230MM: FM2030
Serial number:

Is in conformity with the requirements of the **Directive Machine 2006/42/EC** and to the followings Europeans Directives:

EMC Directive 2014/30/UE
ROHS Directive 2011/65/EU

This tool is also in conformity with the following these standards:

EN 60745-1: 2009+A11:2010
EN 60745-2-3:2011+A2:2013+A11:2014+A12:2014+A13:2015

EN 55014-1:2006+A1:2009+A2:2011
EN 55014-2:2015

EN 61000-3-2:2014
EN 61000-3-3:2013

Cugnaux, le 12/11/2018

Philippe MARIE / PDG

