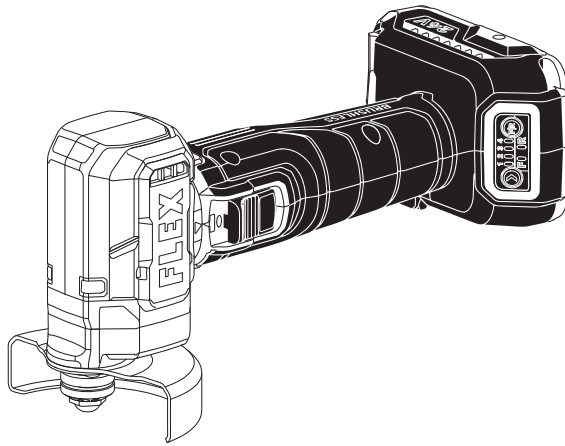


# FLEX

## OPERATOR'S MANUAL



## Model: FXA3111A

### 24V 76MM MINI GRINDER/CUT OFF TOOL

**⚠ WARNING:** To reduce the risk of injury, the user must read and understand the Operator's Manual before using this product. Save these instructions for future reference.



Please contact FLEX customer service in Australia 1300 000 346 or New Zealand 0508 000 346 any time you have questions or warranty claims.

# SAFETY SYMBOLS

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols and the explanations with them deserve your careful attention and understanding. The symbol warnings do not, by themselves, eliminate any danger. The instructions and warnings they give are no substitutes for proper accident prevention measures.

**⚠ WARNING** Be sure to read and understand all safety instructions in this Operator's Manual, including all safety alert symbols such as "**DANGER**," "**WARNING**," and "**CAUTION**" before using this tool. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

The definitions below describe the level of severity for each signal word. Please read the manual and pay attention to these symbols.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, will result in minor or moderate injury.

# GENERAL POWER TOOL SAFETY WARNINGS



**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.

## 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.

### 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.

### 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 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.

### 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 energizing 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 jewelry. Keep your hair, and clothing away from moving parts.** Loose clothes, jewelry 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.

### **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.

### **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 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 behavior resulting in fire, 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.

### **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 authorised service providers.

## SAFETY INSTRUCTIONS FOR MINI GRINDER/ CUT OFF TOOL

Safety warnings common for grinding or cutting-off operations:

- **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.
- **Operations such as sanding, wire brushing, polishing, hole cutting are not to be performed with this power tool.** Operations for which the power tool was not designed may create a hazard and cause personal injury.
- **Do not convert this power tool to operate in a way which is not specifically designed and specified by the tool manufacturer.** Such a conversion may result in a loss of control and cause serious personal injury.
- **Do not use accessories which are not specifically designed and specified by the tool manufacturer.** Just because the accessory can be attached to your power tool, it does not assure safe operation.
- **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.
- **The dimensions of the accessory mounting must fit the dimensions of the mounting hardware of the power tool.** 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 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 applications. The dust mask or respirator must be capable of filtering particles generated by the particular application. 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.
- **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.
- **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.

### 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.

- **Maintain a firm grip with both hands on the power tool and position your body and arms 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, segmented diamond wheel with a peripheral gap greater than 10 mm 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 cutting-off operations:

- **Use only wheel types that are specified 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 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.
- **Wheels must be used only for specified 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.
- **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.** A wheel intended for larger power tool is not suitable for the higher speed of a smaller tool and may burst.
- **When using dual purpose wheels always use the correct guard for the application being performed.** Failure to use the correct guard may not provide the desired level of guarding, which could lead to serious injury.

## Additional safety instructions for cutting-off operations

### Additional safety warnings specific for cutting-off operations:

- **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.



- **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.
- **When the wheel is binding or when interrupting a cut for any reason, switch off the power tool and hold it 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.

- **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.
- **Support panels or any oversized workpiece to minimise 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.
- **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.
- **Do not attempt to do curved cutting.** 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, which can lead to serious injury.

# SYMBOLS

**IMPORTANT:** Some of the following symbols may be used on your tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

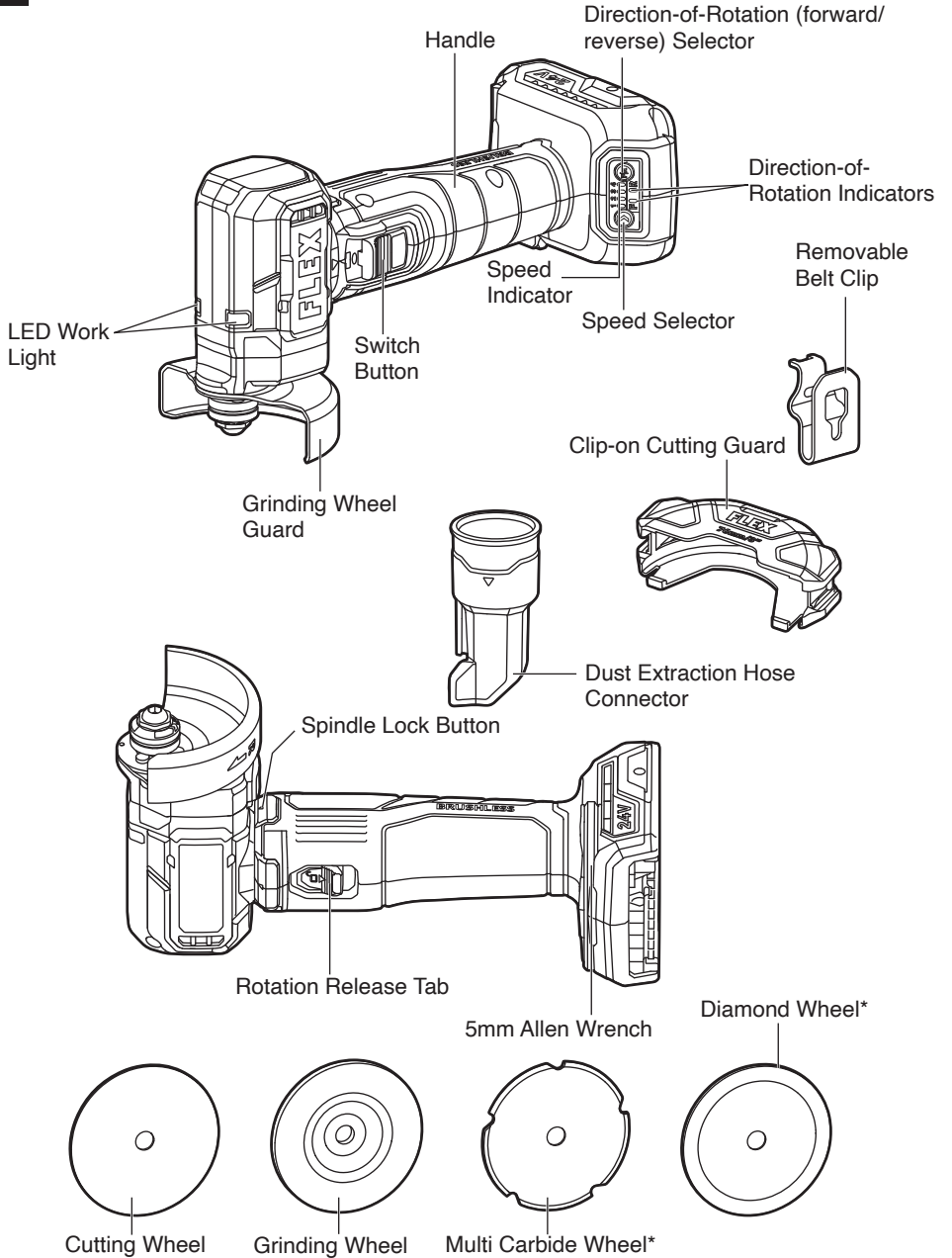
Symbol	Name	Designation/Explanation
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
kg	Kilograms	Weight
min	Minutes	Time
s	Seconds	Time
Wh	Watt-hours	Battery capacity
Ah	Ampere-hours	Battery capacity
∅	Diameter	Size of drill bits, grinding wheels, etc.
$n_0$	No load speed	Rotational speed, at no load
n	Rated speed	Maximum attainable speed
.../min	Revolutions or reciprocations per minute (rpm)	Revolutions, strokes, surface speed, orbits, etc. per minute
O	Off position	Zero speed, zero torque...
1,2,3,... I,II,III,	Selector settings	Speed, torque, or position settings. Higher number means greater speed
	Infinitely variable selector with off	Speed is increasing from 0 setting
	Arrow	Action in the direction of arrow
	Alternating current (AC)	Type or a characteristic of current
	Direct current (DC)	Type or a characteristic of current
	Alternating or direct current (AC / DC)	Type or a characteristic of current
	Class II tool	Designates Double Insulated Construction tools.
	Read the instructions	Alerts user to read manual
	Wear eye protection symbol	Alerts user to wear eye protection

Symbol	Name	Designation/Explanation
	WEEE	Waste electrical products should not be disposed of with household waste. Take to an authorised recycler.
	Regulatory compliance mark	This product complies with applicable Australian standards.

# FUNCTIONAL DESCRIPTIONS AND SPECIFICATIONS

## Mini Grinder/Cut Off Tool

Fig. 1



\* NOT STANDARD INCLUDED

Model No.	FXA3111A
Rated Voltage	24 V d.c.
No-load Speed	5000 - 20000 RPM
Blade Diameter	76 mm
Blade Arbor Hole	9.5 mm
Wheel Type	Type 27 & Type 41
Max. Grinding Wheel Thickness	4 mm
Max. Cutting Wheel Thickness	4 mm
Max. Cutting Depth	22 mm
Spindle lock	Yes
Soft start	Yes
Restart protection	Yes
Overload protection	Yes
Anti-kickback	Yes
Electric brake	Yes
Head rotation	Yes / 180°
Forward and reverse	Yes
LED light	Yes / Dual light
Recommended ambient operating temperature	-20 – 40 °C
Recommended storage temperature	< 50 °C

#### **Intended Use**

The tool is intended for grinding or cutting and roughing of metal, concrete, stone, tiles, wood, plastics and similar materials.

## ASSEMBLY

**⚠ WARNING** Detach the battery pack from the tool before making any assembly, adjustments or changing accessories. Such preventive safety measures reduce the risk of starting the tool accidentally.

### TO ATTACH/DETACH BATTERY PACK (FIG. 2)

#### To attach the battery pack:

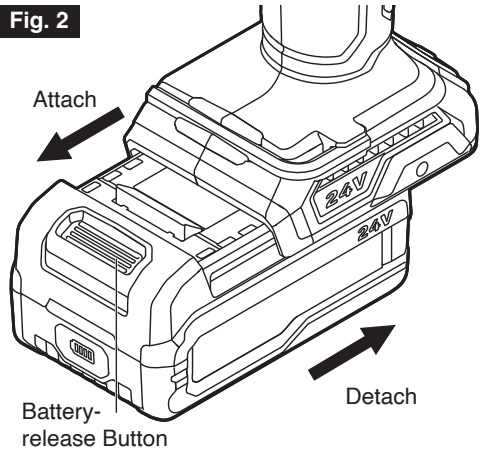
Align the raised rib on the battery pack with the grooves in the tool, and then slide the battery pack onto the tool.

**NOTICE** When placing the battery pack onto the tool, be sure that the raised rib on the battery pack aligns with the groove inside the tool and that the latches snap into place properly. Improper attachment of the battery pack can cause damage to internal components.

#### To detach the battery pack:

Depress the battery-release button located on the front of the battery pack to release the battery pack. Pull the battery pack out and remove it from the tool.

Fig. 2



**⚠ WARNING** Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious injury.

### TO DETACH/ATTACH CLIP-ON CUTTING GUARD

**⚠ WARNING** Only use the tool if the guard is in place. Always use the guard provided for the respective wheel!

**⚠ WARNING** Always attach the clip-on cutting guard when performing cutting work. Before use, check for cracks, deformations or signs of severe wear and tear.

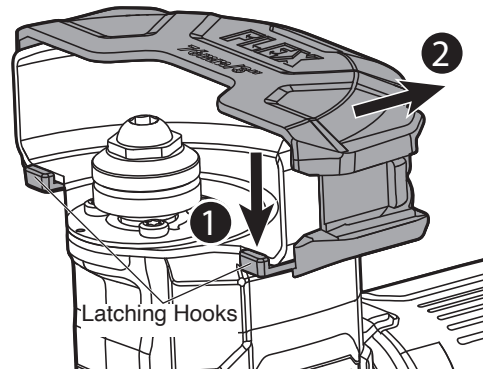
This tool is shipped with two guards:

- The grinding wheel guard is factory-installed on the tool and cannot be removed.
- The clip-on cutting guard is snapped onto on the grinding wheel guard when shipped and can be removed.

#### To detach the clip-on cutting guard (Fig. 3a)

Bend one of the two latching hooks carefully until the latching hook no longer engages the guard rim. Then pull the clip-on cutting guard and keep it in a safe place for future cut-off operations.

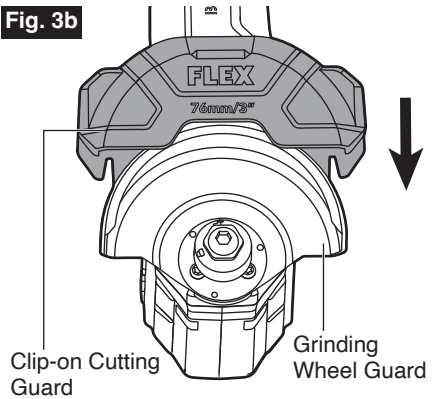
Fig. 3a



**To attach the clip-on cutting guard (Fig. 3b)**

Push the clip-on cutting guard onto the grinding wheel guard until it snaps in place.

**Fig. 3b**

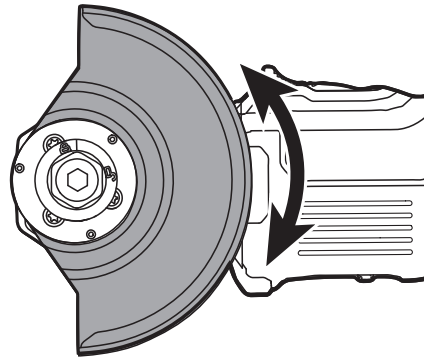


**TO ADJUST THE GUARD (FIG. 4)**

The guard features 11 adjustment positions with 15° step between positions. The range of the adjustment position is -75° – 75°. When the maximum position is reached, the guard will stop and can only be adjusted in the other direction.

The guard should be correctly positioned to provide maximum protection to the operator. Never use the tool without the guard correctly in place.

**Fig. 4**



## CUTTING WHEEL SELECTION

Selecting the correct type of wheel is important in order to obtain the best performance from the grinder. Select the wheel based on the application and on the material you wish to cut. Selecting the right wheel will give you a smoother, faster cut and prolong the life of the wheel.

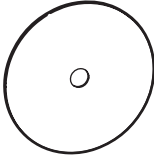
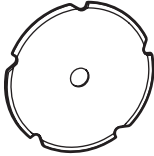
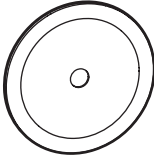
Even the best cutting wheels will not cut efficiently if they are not kept clean and sharp.

Using a dull wheel will place a heavy load on the grinder and increase the danger of kickback.

Keep extra wheels on hand so that sharp wheels are always available.

Always carefully select and use cutting wheels that are recommended for the material being cut. Make sure that the minimum operating speed of any accessory wheel selected is 20,000 /min (RPM) or more.

Refer to the table below to select a suitable cutting wheel.

Cutting wheel		Application
	Cutting Wheel	Cutting metal sheets, metal pipes.
	Multi Carbide Wheel*	Cutting wood, dry wall, PVC pipes.
	Diamond Wheel*	Cutting tile.

**\* NOT STANDARD INCLUDED**

**TO INSTALL AND REMOVE THE WHEEL  
(FIG. 5a-5b)**

**Fig. 5a**

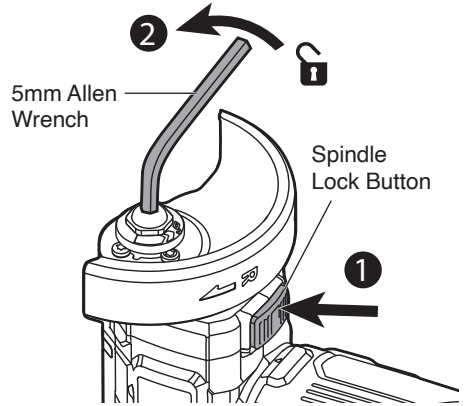
**⚠ WARNING** When working with cutting wheels, snap the clip-on cutting guard onto the grinding wheel guard.

**To install the wheel**

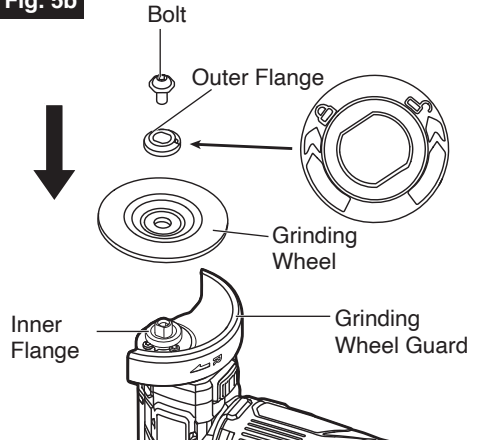
- a. Remove the battery pack.
- b. Press and hold down the spindle lock button.
- c. Use the 5mm allen wrench to loosen the bolt counterclockwise and remove the bolt and outer flange.
- d. Place the wheel onto the inner flange.
- e. Reinstall the outer flange.
- f. Press and hold down the spindle lock, tighten the bolt with the allen wrench clockwise.
- g. Install the battery pack.
- h. Switch on the grinder and leave the grinder running for approximately 30 seconds. Check for imbalances and vibrations.
- i. Switch off the grinder and remove the battery pack.

**To remove the wheel**

- a. Remove the battery pack.
- b. Press and hold down the spindle lock button.
- c. Loosen the bolt using the allen wrench and remove the bolt and outer flange from the spindle.
- d. Remove the wheel.



**Fig. 5b**

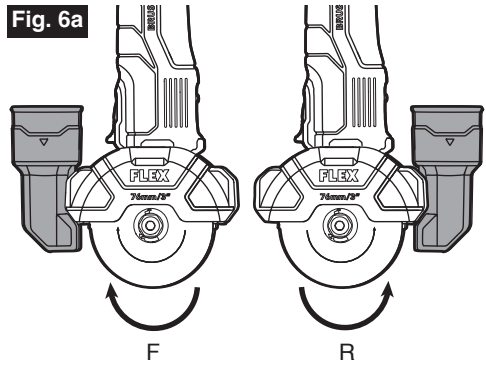


## DUST EXTRACTION HOSE CONNECTOR (FIG. 6a-6c)

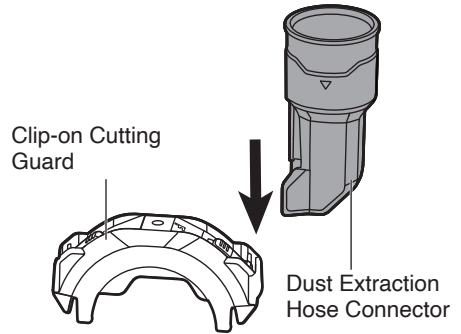
**⚠ WARNING** The dust extraction hose connector is only for tile/concrete and drywall cutting applications to connect to a vacuum for dust collecting. Do not use the dust extraction hose connector when cutting metal.

- Select the dust extraction hose connector installation position according to the cutting wheel rotation direction. When the tool is in reverse rotation, the dust extraction hose connector should be installed on the left side of the tool, as shown in the left picture in Fig. 6a. When the tool is in forward rotation, the installation of the connector is shown in the right picture in Figure 6a.
- Insert the dust extraction hose connector to either end of the clip-on cutting guard until snaps in place.
- Mount the clip-on cutting guard to the grinding wheel guard, refer to chapter **“TO DETACH/ ATTACH CLIP-ON CUTTING GUARD.”**
- To remove the dust extraction hose connector, press the latch on the clip-on cutting guard and pull the dust extraction hose connector out.

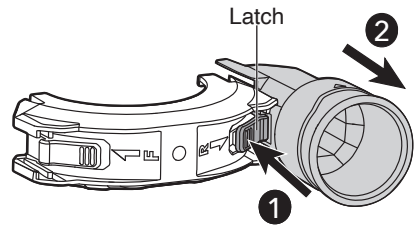
**Fig. 6a**



**Fig. 6b**



**Fig. 6c**



### REMOVEABLE BELT CLIP (FIG. 7)

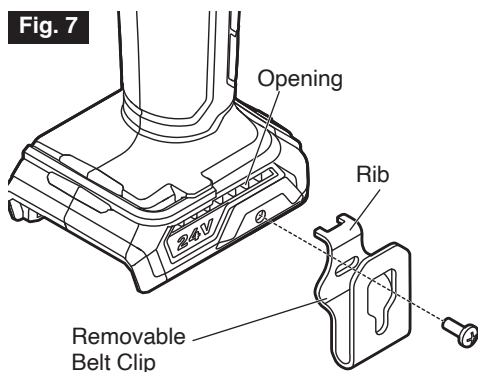
Your tool is equipped with a removable belt clip that can be positioned on the side of the tool for convenient transportation.

#### Install the belt clip onto the tool:

- Remove the battery pack from the tool.
- Align the rib and the hole of the belt clip with the opening and the threaded hole on the base of the tool, respectively.
- Insert the screw and securely tighten the screw with a screwdriver (not included).

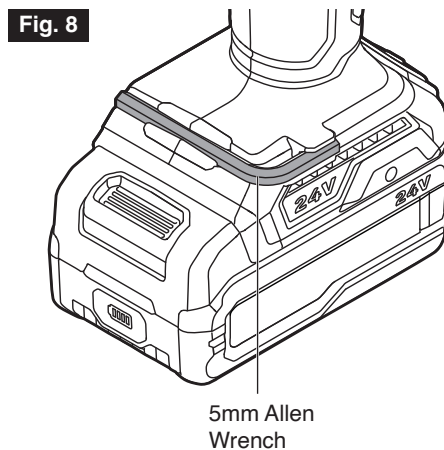
#### Remove the belt clip from the tool:

- Remove the battery pack from the tool.
- Use a screwdriver to loosen the screw that attaches the belt clip to the tool.
- Remove the screw and the belt clip.



### ALLEN WRENCH STORAGE (FIG. 8)

When not in use, store the 5mm allen wrench as shown in the Fig. 8 to keep it from being lost.



## OPERATING INSTRUCTIONS

**⚠ WARNING** To reduce the risk of fire, personal injury, and product damage due to a short circuit, never immerse your charger or battery pack in fluid or allow a fluid to flow inside them.

Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach-containing products, etc. can cause a short circuit.

**⚠ WARNING** If any parts are damaged or missing, do not operate this product until the parts are replaced. Use of this product with damaged or missing parts could result in serious personal injury.

**This mini grinder/cut off tool must be used only with the FLEX 24V series battery packs and chargers.**

**NOTICE:** Please refer to the battery pack and charger manuals for detailed operating information.

**⚠ WARNING** To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the tool when assembling or adjusting parts.

**⚠ WARNING** Always wear eye protection. Eye protection does not fit all operators in the same way. Make sure the chosen eye protection has side shields or provides protection from flying debris both from the front and sides.

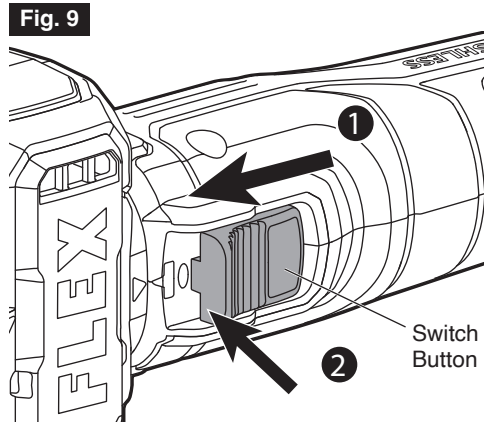
### SWITCH ON AND OFF (FIG. 9)

To turn the tool “ON”, slide the switch button forward by applying pressure ONLY at the REAR portion of the button.

When pressure is released the switch button will snap to the “OFF” position.

To lock the switch “ON”, slide the switch button forward, then press on the FRONT portion of the button. This way the tool will keep running without the need to keep pressing the switch.

To turn the tool “OFF”, simply press and release the REAR portion of the button. The switch is spring loaded and will snap back automatically.

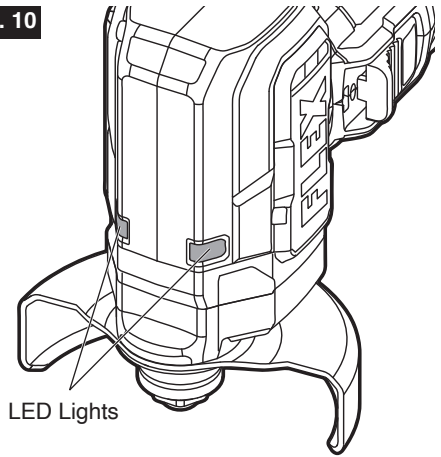


### LED LIGHTS (FIG. 10)

The LED lights will turn on when the tool is switched on or the speed selector/direction-of-rotation selector is depressed. This provides additional illumination of the work surface.

The LED light will turn off approximately 10 seconds after the trigger switch is released.

**Fig. 10**



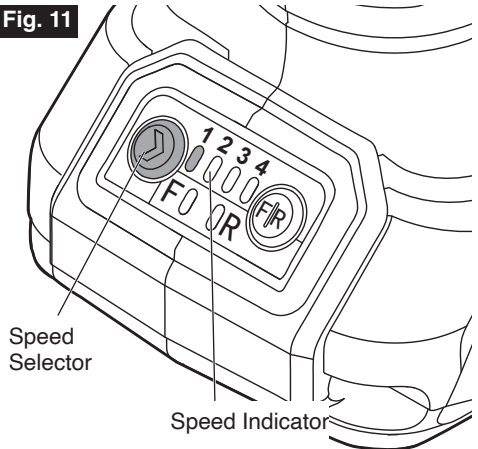
### SPEED SELECTOR (FIG. 11)



















**⚠ WARNING** Do not adjust the speed when the tool is operating.

Press the speed selector to cycle through four modes. Each press changes the speed by one level. After turning the tool off, the tool will revert to the previous setting the next time it is turned on.

The table below shows the relationship between rotational speed and the number of speed indicators that are illuminated on the foot of the tool.

**Fig. 11**



Speed Indicators	Speed (RPM)
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  ON                 </div> <div style="text-align: center;">  OFF                 </div> </div>	
<div style="display: flex; justify-content: space-around; align-items: center;">     </div>	5000
<div style="display: flex; justify-content: space-around; align-items: center;">     </div>	10000
<div style="display: flex; justify-content: space-around; align-items: center;">     </div>	15000
<div style="display: flex; justify-content: space-around; align-items: center;">     </div>	20000

## DIRECTION-OF-ROTATION (FORWARD/REVERSE) SELECTOR (FIG. 12a-12b)

**NOTICE** To prevent damage, always allow the wheel to come to a complete stop before changing the direction of rotation.

**WARNING** When cutting metal, it is not recommended to choose forward direction. Sparks generated during cutting will direct towards your body, which may cause serious injury.

The tool is equipped with a direction-of-rotation selector. The user can decide which direction of rotation to run the tool in depending on various factors, such as direction of the spark ejection.

- a. Attach the battery pack.
- b. Press the direction-of-rotation selector to select the direction. Every time you press the selector, the direction of rotation will be switched. The direction-of-rotation indicator will illuminate to indicate the active direction of rotation.
- c. If you choose “F”, the wheel will rotate counterclockwise in the direction of wheel rotation “F” marked on the guard. If you choose “R”, the wheel will rotate clockwise in the direction of wheel rotation “R” marked on the guard.
- d. The tool will remember the previous direction rotation the next time the tool is turned on.
- e. The direction-of-rotation indicator will turn off approximately 1 minute after the switch button is released.

Fig. 12a

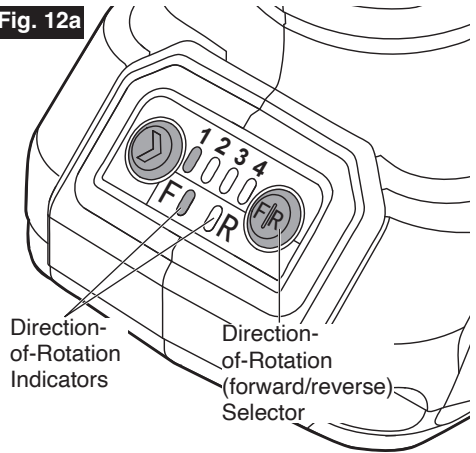
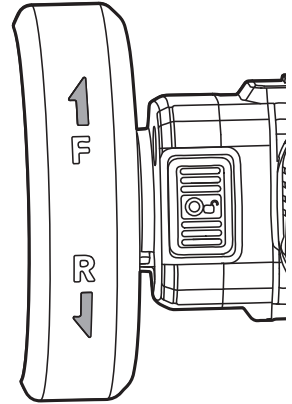


Fig. 12b



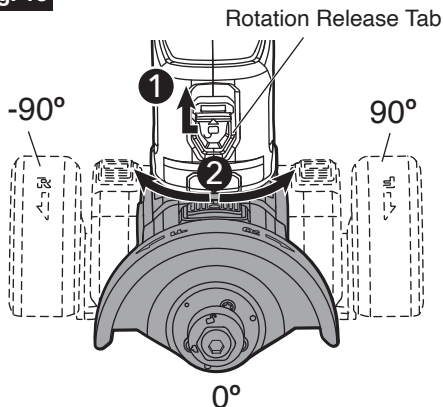
**WARNING****ALWAYS REMOVE THE BATTERY PRIOR TO ADJUST ANGLE OF THE TOOL HEAD****TO ADJUST THE ANGLE OF THE TOOL HEAD (FIG. 13)**

The tool head can be adjusted to 3 different working positions, 0°, -90° and 90°.

- Ensure the switch button is in OFF position.
- Remove the battery pack.
- While pulling down the rotation release tab all the way, rotate the tool head and release the button.
- Continue to rotate the tool head until it locks in place with a “click”.



**NOTICE** The switch button must be in the OFF position, otherwise the head cannot be turned.

**Fig. 13****USING WITH GRINDING WHEEL (FIG. 14)****WARNING****Never use cutting wheels for grinding operation.****WARNING****Always wear safety goggles or safety glasses with side shields during power tool operation. If the operation is dusty, also wear a dust mask.**

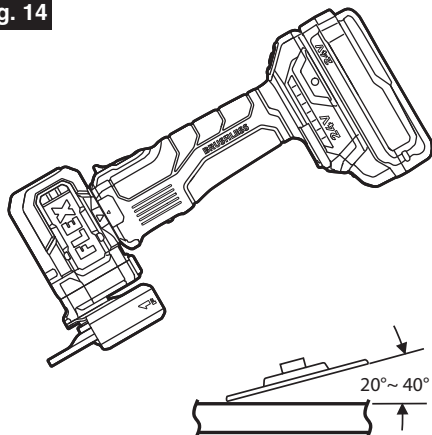
Check the grinding wheels before application. Discard wheels that have been dropped, bumped, subjected to extreme changes in temperature, or have come into contact with solvents or liquids.

Check the grinding wheels before application. Discard wheels that have been dropped, bumped, subjected to extreme changes in temperature, or have come into contact with solvents or liquids.

- Before beginning a period of work, test the tool by letting it spin for one minute before applying it to the workpiece.
- Make sure that the workpiece is firmly clamped in place.
- Hold the tool securely and start the tool.

**NOTE:** If the battery is inserted when the tool switch is in the “ON” position, the tool will not run. Turn the tool off, then back on to begin work.

- Allow the accessory to reach full speed before applying it to the workpiece.
- For a uniform finish, hold the tool at an angle of approximately 20° to 40° and apply constant pressure. Too great an angle causes concentrated pressure on small areas, which may gouge or burn the work surface.

**Fig. 14**

- Control the pressure and surface contact between accessory and workpiece.

**Do not apply too much pressure. Too much pressure will cause the tool to overload and may cause personal injury.**

- When finished, turn off the tool and make sure that it comes to a complete stop before laying it down.

USING WITH CUTTING WHEEL (FIG. 15a-15b)

**⚠ WARNING** Always wear safety goggles or safety glasses with side shields during power tool operation. If the operation is dusty, also wear a dust mask.

**⚠ WARNING** The clip-on cutting guard must be installed when using a cutting wheel to provide maximum protection for the operator.

**⚠ WARNING** Never use cutting wheels for grinding. Using the cutting wheel in a grinding operation will cause the wheel to crack and break, resulting in serious personal injury.

Guide the tool evenly at a speed suitable for the material being cut.

Do not tilt, apply excessive force or sway from side to side.

**⚠ WARNING** The direction of the arrow on the diamond wheel\* must be consistent with the direction of the arrow on the guard.

Fig. 15a

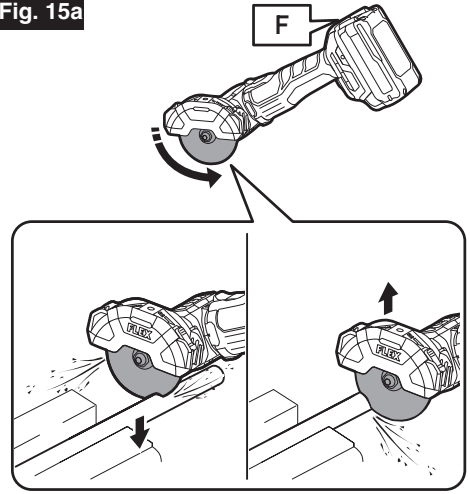
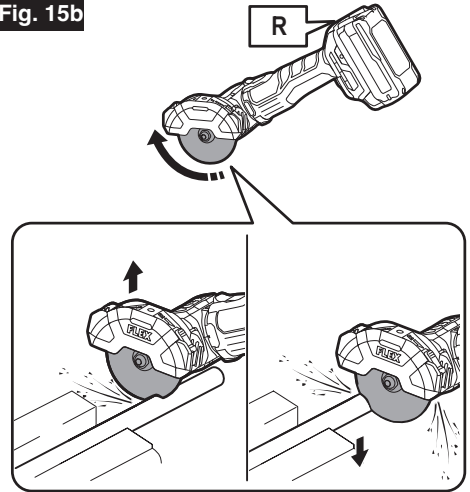


Fig. 15b



# MAINTENANCE

## SERVICE

**⚠ WARNING** Preventive maintenance performed by unauthorised personnel may result in misplacing of internal wires and components which could cause a serious hazard. We recommend that all tool service be performed by a FLEX Factory Service Centre or Authorised FLEX Service Station.

## GENERAL MAINTENANCE

**⚠ WARNING** When servicing, use only identical replacement parts. Use of any other parts could create a hazard or cause product damage. Periodically inspect the entire product for damaged, missing, or loose parts such as screws, nuts, bolts, caps, etc. Tighten securely all fasteners and caps and do not operate this product until all missing or damaged parts are replaced. Please contact customer service or an authorised service centre for assistance.

**⚠ WARNING** To avoid serious personal injury, always remove the battery pack from the charger/tool when cleaning or performing any maintenance.

## CLEANING

The tool may be cleaned most effectively with compressed dry air.

**⚠ WARNING** Always wear safety goggles when cleaning tools with compressed air. Ventilation openings and switch levers must be kept clean and free of foreign matter. Do not attempt to clean by inserting pointed objects through openings.

**⚠ WARNING** Certain cleaning agents and solvents damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia.

## STORAGE

Store the tool indoors in a place that is inaccessible to children. Keep away from corrosive agents.

## WARRANTY STATEMENT

Chervon Australia Pty Ltd (ABN 36 165 077 501) of Unit 14,5 Kelletts Road, Rowville, Victoria, 3178, and Chervon New Zealand Subsidiary Ltd (NZBN 9429049277616) (**Chervon**) provides the following warranty (**Warranty**) to original domestic purchasers in Australia and New Zealand as applicable (**Customers**) of its FLEX 24V Tools, FLEX 24V Batteries and Chargers and FLEX STACK PACK™ Storage System (collectively **Products**).

The benefits of this Warranty are in addition to any rights and remedies imposed by Australian State and Federal or New Zealand legislation that cannot be excluded. Nothing in this Warranty is to be interpreted as excluding, restricting or modifying any legislation relevant to the supply of goods and services in Australia or New Zealand, as applicable, which cannot be excluded, restricted or modified.

In Australia, if the claimant is a “consumer” under the *Australian Consumer Law*, Chervon confirms the following:

Our goods come with guarantees that cannot be excluded under the *Australian Consumer Law*. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

## WARRANTY

Chervon warrants that, subject to the terms of this Warranty and the exclusions and limitations contained herein, the Products will be free from defects in materials and workmanship for the following period, as applicable, calculated from the date of purchase of the Product (**Warranty Period**):

- If the Customer registers its purchase of the Product online at [www.flex-tools.com.au](http://www.flex-tools.com.au) in Australia or [www.flex-tools.co.nz](http://www.flex-tools.co.nz) in New Zealand within 30 days of the date of its purchase (**Registration**), the Warranty Period for the following Products is as follows
  - FLEX 24V Tools: 5 years;
  - FLEX 24V Batteries and Chargers: 5 years;
  - FLEX STACK PACK™ Storage System: 1 year;
  - FLEX Accessories & Consumables: 90 Days
- If the Customer fails to complete Registration as outlined above, the Warranty Period for the following Products is as follows:
  - FLEX 24V Tools: 3 years;
  - FLEX 24V Batteries and Chargers: 3 years;
  - FLEX STACK PACK™ Storage System: 1 year;
  - FLEX Accessories & Consumables: 90 Days

For further clarification and avoidance of doubt please refer to the FLEX product warranty table included below.

If, before the end of the Warranty Period, a defect appears in the manufacture or assembly of a Product, and Chervon finds the Product to be defective in materials or workmanship, it will, in its sole discretion, either:

- replace or repair the Product or the defective part of the Product free of charge; or
- cause the Product or the defective part of the Product to be replaced or repaired free of charge.

Chervon reserves the right to replace a defective Product or part of a Product with parts and components of similar quality, grade and composition where an identical part or component is not available. Where the product is repaired, Chervon may use refurbished parts.

## WARRANTY CLAIMS

1. If a defect covered by Warranty appears, you must first contact Chervon:
  - (a) by telephone on 1300 000 346 (AU); or 0508 000 346 (NZ); or
  - (b) by email at support@flex-tools.com.au.
2. Any Warranty claim must be accompanied by:
  - (a) proof of purchase;
  - (b) full details of the alleged defect;
  - (c) photo evidence of the alleged defect; and
  - (d) any other relevant documents.
3. You must allow Chervon or its authorised agent to inspect and test the Product. If that inspection and test finds no defect in the Product, you must pay Chervon's usual service and testing costs.
4. Unless otherwise agreed in writing by Chervon, you must pay the cost of transporting the Product to and from Chervon or Chervon's authorised agent and any related insurance cost. Any handling and transportation costs (and other expenses incurred in claiming this warranty) are not covered by this warranty and will not be borne by Chervon.
5. The replacement product or part, or repaired product will be made available for your collection at an address nominated by Chervon.
6. Customers are responsible for the care and cleaning of their product prior to sending it to back to Chervon or its nominated authorised repair agents. Any product being sent for repair must be cleaned. It is an Occupational/Work Health and Safety risk for our staff or authorised repairers to inspect, repair or service a product that has come into contact with a hazardous substance.
7. If Chervon or its authorised repair agent is to inspect, repair or service a product that has come into contact with a hazardous substance such as asbestos, silica dust or other hazardous substance then we may not be able to inspect, service or repair the product. If this is the case, Chervon reserves the right to refuse repair under these circumstances and will inform the customer and the product will be returned at the customer's expense.

## EXCLUSIONS

The Warranty does not apply if:

- (a) the Product is not supplied in its final shape and form by Chervon or an authorised FLEX Dealer, which can be confirmed on the website store locator (for avoidance of doubt, third party online stores such as eBay, Gumtree, Amazon, etc. are excluded);
- (b) the Product is altered, modified or repaired by a party other than Chervon or its agent;
- (c) the Product is used other than for its designed purpose;
- (d) the Product is used for rental purposes
- (e) the Product is used or installed other than in accordance with Chervon's instructions;
- (f) the Product has not been maintained or protected in accordance with Chervon's instructions;
- (g) the Product has been subject to abnormal conditions;
- (h) the product suffers normal deterioration of the exterior finish, including but not limited to scratches, dents, paint chips, or to any corrosion or discolouring by heat, abrasive and chemical cleaners.
- (i) the Product is involved in an accident;

- (j) Chervon cannot find any defect in the Product after testing, inspection and assessment;
- (k) the alleged defect is due to abuse, misuse, neglect (including failure to clean) or accident;
- (l) the alleged defect is due to a failure to properly maintain or use the Product;
- (m) the alleged defect in the Product is within acceptable industry standards or tolerances; or
- (n) the alleged defect is due to a request to customise the Product.
- (o) the alleged defect is due to normal wear and tear, misuse or abuse (including overloading of the product beyond capacity and exposure to water or rain)
- (p) The alleged defect has been used or caused due to continuous industrial use

The Warranty does not extend to:

- (a) damage or defects caused by normal wear and tear;
- (b) the Products being damaged by you or a third party;
- (c) accidental or wilful damage, or misuse; or
- (d) theft or vandalism.

This Warranty does not extend to other accessories or attachments.

## LIMITATIONS

Chervon makes no express warranties or representations other than as set out in this document. Chervon will not be liable to you or any other person in connection with this Warranty for any:

- (a) consequential or indirect loss, damage or costs incurred by you or any other person; or
- (b) damage to property, loss of turnover, loss of profits, loss of business or loss of good will.

## CONTACT

For Warranty Service or to make a claim please contact Chervon on the details below between the hours of Monday to Friday 9:00am to 5:00pm AEST/NZST (as applicable)

Chervon Australia Pty Ltd

Unit 14, 5 Kelletts Rd, Rowville, VIC. 3178.

Ph Australia; 1300 000 346. Email: support@flex-tools.com.au

Chervon New Zealand Subsidiary Ltd

4th Floor, Smith & Caughey Building, 253 Queen St, Auckland, 1141.

Ph New Zealand; 0508 000 346. Email: support@flex-tools.com.au

WARRANTY TYPE	LIMITED STANDARD WARRANTY PERIOD	LIMITED EXTENDED WARRANTY PERIOD
CONDITIONS	Without Registration / OR Registration after 30 days from date of purchase	Registration within 30 days from date of purchase
FLEX 24V Power Tools	3 Years	5 Years
FLEX 24V Chargers	3 Years	5 Years
FLEX 24V Lithium-ion Batteries	3 Years	5 Years
FLEX Accessories & Consumables	90 Days	
FLEX STACK PACK™ Storage System	1 Year	

\*Original purchaser must register the product(s) within 30 days of purchase and retain their receipt as proof of purchase. This warranty applies only to the original purchaser from an authorised FLEX dealer and may not be transferred. If original purchaser does not register their product within 30 days, the warranty will apply for the duration set out in table above in column "LIMITED STANDARD WARRANTY PERIOD". For avoidance of doubt please refer to warranty table above and full warranty details in this manual or on our website at [www.flex-tools.com.au](http://www.flex-tools.com.au)

