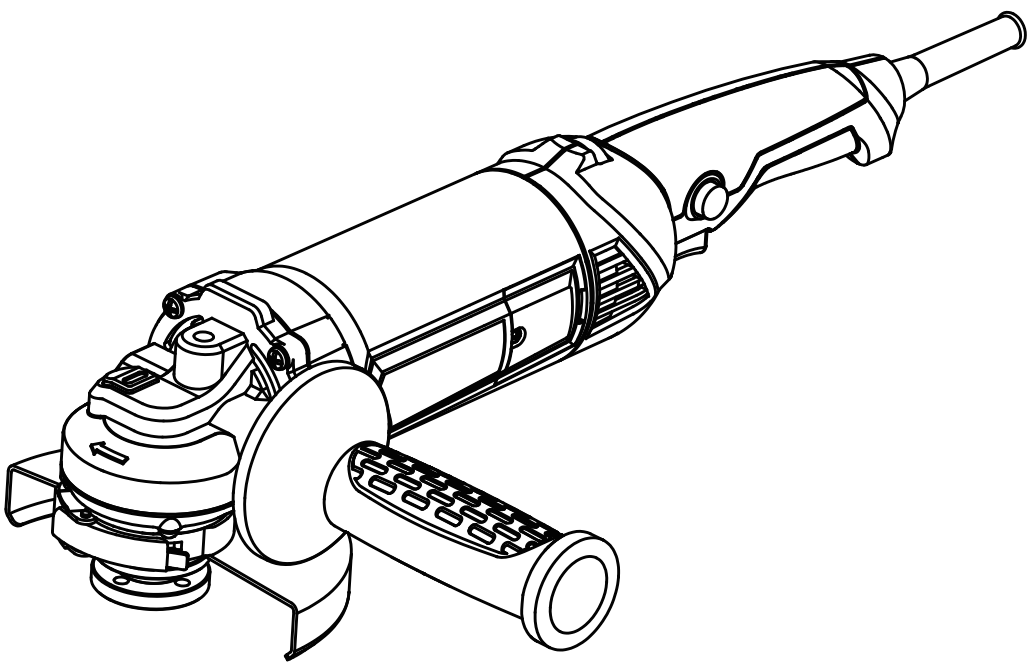
model no.: 054-7151-0

Mastercraft®MD

ANGLE GRINDER/CUT-OFF TOOL



IMPORTANT:
Please read this manual carefully before using this angle grinder/cut-off tool and save it for reference

INSTRUCTION MANUAL

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NOTE:

If any parts are missing or damaged, or if you have any questions, please call our toll–free helpline at 1–800–689–9928.

SAVE THESE INSTRUCTIONS

This manual contains important safety and operating instructions. Read all instructions and follow them when using this product.

SPECIFICATIONS

Motor	120V~, 60 Hz, 9A
Single speed	11,000 RPM (no load)
Arbor size	5/8” (16 mm)
Disc diameter	5” (125 mm)
Weight	5 lb 7 oz (2.45 kg)
Protection class	Class II

WORK AREA SAFETY

- **Keep your work area clean and well lit.** Cluttered, dark areas invite accidents.
- **Do not operate power tools in explosive atmosphere, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks that can ignite 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 electrical shock.
- **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electrical shock if your body is earthed or grounded.
- **Do not expose power tool to rain or wet conditions.** Water entering a power tool will increase the risk of electrical 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 electrical 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 electrical 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 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 when 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 dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

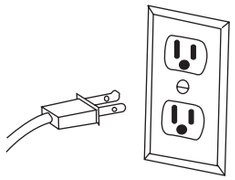
WARNING!

- To reduce the risk of injury, read the instruction manual.
- Read all safety and all instructions. Failure to follow the warnings and instructions may result in electrical shock, fire and/or serious injury.
- Save all warnings and instructions for future reference.

- **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 fingers on the switch or energising power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

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 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 battery pack from the power tool before making any adjustments, changing accessories, or storing power tool.** Such preventative safety measures reduce the risk of starting the 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. 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.

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 tools is maintained.

SAFETY WARNINGS COMMON FOR GRINDING, ABRASIVE 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 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.
- **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 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 arbour size of wheels, flanges, backing pads or any other accessory must properly fit the spindle of the power tool.** Accessories with arbour holes that do not match the mounting hard ware 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, or 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 a face shield, safety goggles or safety glasses. As appropriate, wear a dust mask, hearing protectors, gloves and a workshop apron capable of stopping small abrasive or workpiece fragments.** The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.

- **Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment.** Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.
- **Hold 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 shock the operator.
- **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.
- **Do not use Type 11 (flaring cup) wheels on this tool.** Using inappropriate accessories can result in injury.
- **Always use side handle. Tighten the handle securely.** The side handle should always be used to maintain control of the tool at all times.

KICKBACK AND RELATED WARNINGS

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

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

- **Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up.** The operator can control torque reactions or kickback forces, if proper precautions are taken.
- **Never place your hand near the rotating accessory.** Kickback may propel the accessory over your hand.
- **Do not position your body in the area where power tool will move if kickback occurs.** Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
- **Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory.** Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
- **Do not attach a saw chain woodcarving blade or toothed saw blade.** Such blades create frequent kickback and loss of control.

SAFETY WARNINGS SPECIFIC FOR GRINDING AND ABRASIVE CUTTING-OFF OPERATIONS

- **Use only wheel types that are recommended for your power tool and the specific guard designed for the selected wheel.** Wheels for which the power tool was not designed cannot be adequately guarded and are unsafe.
- **The 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 operator from broken wheel fragments and accidental contact with wheel.
- **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.
- **Always use undamaged wheel flanges that are of correct size and shape for your selected wheel.** Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage. Flanges for cut-off wheels may be different from grinding wheel flanges.
- **Do not use worn down wheels from larger power tools.** Wheels intended for larger power tools are not suitable for the higher speed of a smaller tool and may burst.

ADDITIONAL SAFETY WARNINGS SPECIFIC FOR ABRASIVE 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 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 or 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 reenter 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 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.
- **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 INFORMATION

- Do not use flat abrasive or diamond wheels without the proper cutting wheel guard.
- **Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water.** Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.

WARNING!

ALWAYS use safety glasses. Everyday eyeglasses are NOT safety glasses. Also use face or dust mask if operation is dusty. ALWAYS WEAR CERTIFIED SAFETY EQUIPMENT:

- ANSI Z87.1 eye protection (CAN/CSA Z94.3).
- ANSI S12.6 (S3.19) hearing protection.
- NIOSH/OSHA/MSHA respiratory protection.

WARNING!

Use of this tool can generate and/or disperse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.

WARNING!

Always wear proper personal hearing protection that conforms to ANSI S12.6 (S3.19) during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

WARNING!

Always use eye protection. All users and bystanders must wear eye protection that conforms to ANSI Z87.1.

WARNING!

When not in use, place grinder on a stable surface where it will not move inadvertently, roll or cause a tripping or falling hazard.

DOUBLE INSULATION

- Double insulation is a concept in safety in electric power tools, which eliminates the need for the usual three-wire grounded power cord. All exposed metal parts are isolated from the internal metal motor components with protecting insulation. Double-insulated tools do not need to be grounded.

ELECTRICAL CONNECTION

- This tool has a precision-built electric motor. It should be connected to a **power supply that is 120 volts, AC only (normal household current), 60 Hz.** Do not operate this tool on direct current (DC). A substantial voltage drop will cause a loss of power and the motor will overheat. If the tool does not operate when plugged into an outlet, double-check the power supply.

EXTENSION CORDS

- When using a power tool at a considerable distance from a power source, be sure to use an extension cord that has the capacity to handle the current the tool will draw. An undersized cord will cause a drop in line voltage, resulting in overheating and loss of power. Use the chart to determine the minimum wire size required in an extension cord. Only round-jacketed cords listed by Underwriter's Laboratories (UL) should be used.

NOTE:

Servicing of a tool with double insulation requires extreme care and knowledge of the system and should be performed only by a qualified service technician. For service, we suggest you return the tool to your nearest authorized service centre for repair. Always use original factory replacement parts when servicing.

CAUTION!

To reduce the risk of personal injury, use extra care when working into a corner or edge because a sudden, sharp movement of the tool may be experienced when the wheel or other accessory contacts a secondary surface or a surface edge.

WARNING!

- The double-insulated system is intended to protect the user from shock resulting from a break in the tool's internal insulation. Observe all normal safety precautions to avoid electrical shock.

- When working outdoors with a tool, use an extension cord that is designed for outside use. This type of cord is designated with “WA” or “W” on the cord’s jacket.
- Before using any extension cord, inspect it for loose or exposed wires and cut or worn insulation.

MINIMUM GAUGE FOR CORD SETS

Ampere rating of the tool (120 V circuit only)		Total length of cord			
		25’ (7.62 m)	50’ (15.24 m)	100’ (30.48 m)	150’ (45.72 m)
more than	not more than	Minimum Gauge for the extension cord (AWG)			
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not recommended	

WARNING ICONS

Some of the following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and more safely.

	Class II Construction	Designated double-insulated construction tools.
	Read the Instruction Manual	To reduce the risk of injury, user must read instruction manual.
	Wear eye protection	Always wear eye protection when operating this product.
	Warning symbol	Alerts user to warning messages.
	Warning symbol	Must not be used for face or angle grinding
	Warning symbol	Only use for cut-off applications

WARNING!

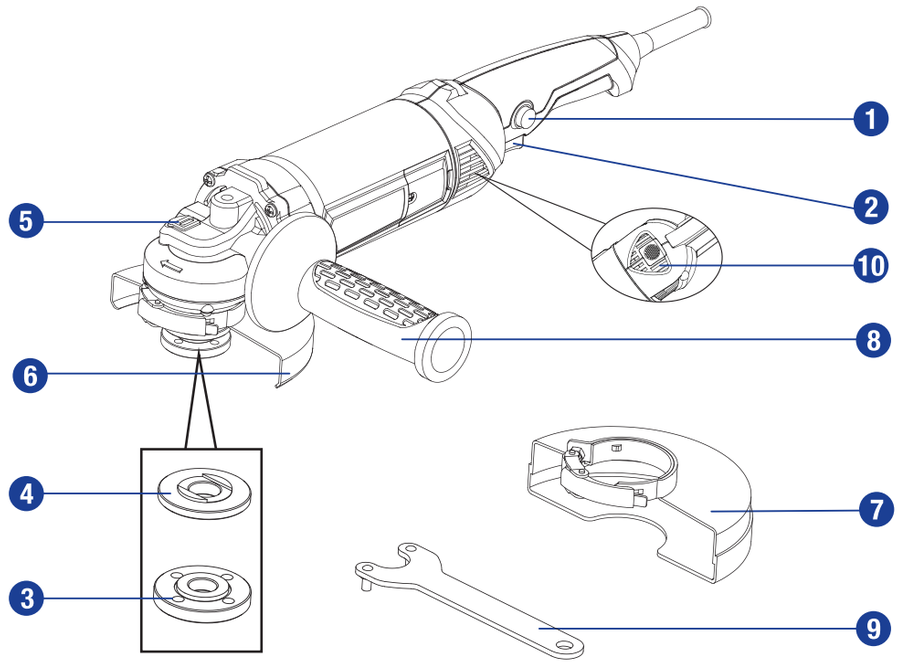
Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools, or other obstructions while you are working with a power tool. Failure to do so can result in serious personal injury.

WARNING!

Check extension cords before each use. If damaged, replace immediately. Never use tool with a damaged cord since touching the damaged area could cause electrical shock resulting in serious injury.

No.	Description
1	Lock-off button
2	Trigger switch
3	Threaded clamp nut
4	Backing flange
5	Spindle lock button

No.	Description
6	Grinding wheel guard
7	Cutting wheel guard
8	Side handle
9	Wrench
10	90° rotating handle



NOTE:

Before attempting to use your tool, familiarize yourself with all of the operating features and safety requirements.

WARNING!

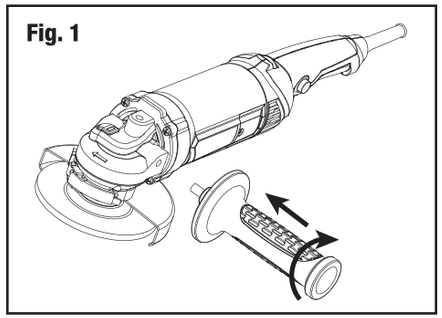
Carefully remove the tool and any accessories from the box. Make sure that all items listed in the packing list are included. Inspect the tool carefully to make sure that no breakage or damage occurred during shipping.

WARNING!

Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.

INSTALLING THE SIDE HANDLE (Fig. 1)

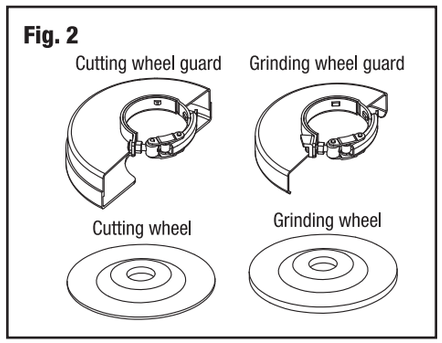
- Unplug the grinder.
- Screw the side handle into the gear housing.
- Tighten the side handle securely.



MOUNTING THE WHEEL GUARD (Fig. 2, 3, 4)

It is important to choose the correct guards to use with grinder accessories. See Fig. 2 for information on choosing the correct accessories.

The grinding wheel guard and the cutting wheel guard are both attached and removed using the same steps:



NOTE:

You can install the side handle on either side or the top of the grinder, depending on operator preference. It must always be used to prevent loss of control and possible serious injury.

CAUTION!

Accessories must be rated for at least the speed recommended on the tool label. Wheels running over their rated speed may fly apart and cause injury. Accessory ratings must always be above tool speed as shown on tool nameplate.

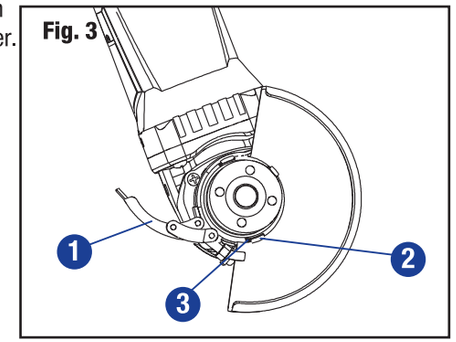
CAUTION!

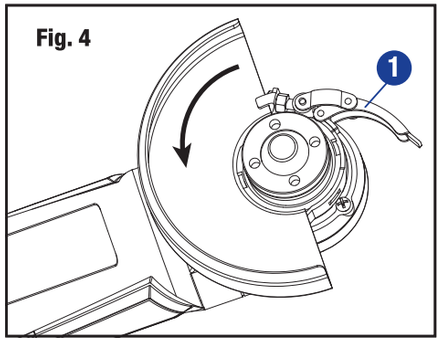
Guards must be used with grinding wheels and cut–off wheels. The grinder is provided with a grinding guard intended for use with grinding wheels and a cutting guard intended for use with cutting wheels.

WARNING!

To prevent accidental operation, turn off and unplug tool before performing the following operations. Failure to do this could result in serious personal injury.

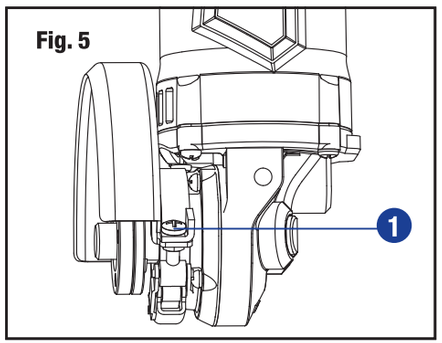
- Open the guard latch (1), and align the lugs (2) on the guard with the slots (3) on the gear case cover.
- Push the guard down until the guard lugs engage and rotate freely in the groove on the gear case hub.
- With the guard latch open, rotate the guard into the desired working position. The guard body should be positioned between the spindle and the operator to provide maximum operator protection.
- Close the guard latch (1) to secure the guard on the gear case. You should not be able to rotate the guard by hand when the latch is closed. Do not operate the grinder with a loose guard or the guard latch in open position.
- To remove the guard, open the guard latch, rotate the guard so that the lugs and slots are aligned and pull up on the guard.





ADJUSTING THE WHEEL GUARD (Fig. 5)

The guard is pre-adjusted to the diameter of the gear case hub at the factory. If, after a period of time, the guard becomes loose, tighten the adjusting screw (1) with latch in the closed position and guard installed on the tool.



CAUTION!

Do not tighten the adjusting screw with the latch in the open position. Undetectable damage to the guard or the mounting hub may result.

CAUTION!

If the guard cannot be tightened by the guard latch, do not use the tool and take the tool and guard to a service centre to repair or replace the guard.

SPINDLE LOCK (Fig. 6, 7)

The spindle lock button (1) is provided to prevent the spindle from rotating when installing or removing wheels. Operate the spindle lock only when the tool is turned off and the wheel has come to a complete stop.

To engage the lock, depress the spindle lock button (1) and rotate the spindle until you are unable to rotate the spindle further.

Fig. 6

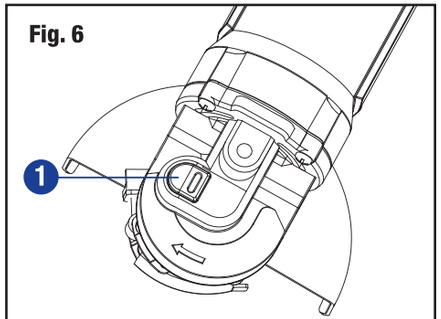
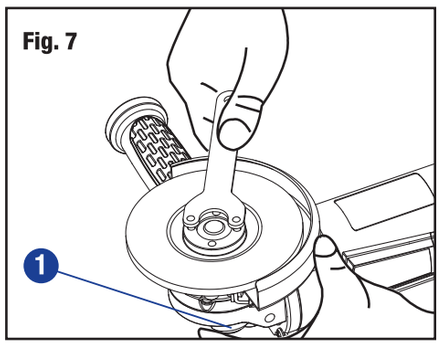


Fig. 7



WARNING!

To prevent accidental operation, turn off and unplug tool before installing and removing the grinding wheels. Failure to do this could result in serious personal injury.

WARNING!

Do not engage the spindle lock while the tool is operating. Damage to the tool will result and attached accessory may spin off possibly resulting in injury.

INSTALLING AND REMOVING THE WHEEL (Fig. 8, 9)

Depressed centre wheel must be used with included flanges.

- Turn off and unplug the tool.
- Install the unthreaded backing flange on spindle with the raised section (pilot) against the wheel.
- Place wheel against the backing flange, centring the wheel on the raised section (pilot) of the backing flange.
- While depressing the spindle lock button, thread the threaded clamp nut on spindle.

If the wheel you are installing is more than 1/8" (3 mm) thick, place the threaded clamp nut on the spindle so that the raised section (pilot) fits into the centre of the wheel (see Fig. 8).

If the wheel you are installing is 1/8" (3 mm) thick or less, place the threaded clamp nut on the spindle so that the raised section (pilot) is not against the wheel (see Fig. 9).

- While depressing the spindle lock button, tighten the threaded clamp nut with included wrench.
- To remove the wheel, depress the spindle lock button and loosen the threaded clamp nut with included wrench.

Fig. 8

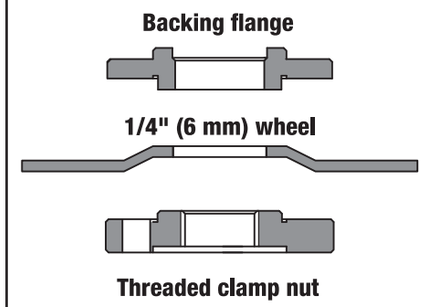
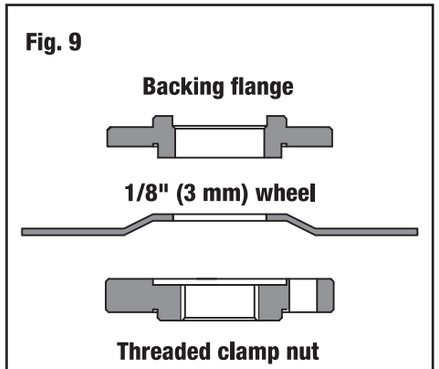


Fig. 9



NOTE:

If the wheel spins after the threaded clamp nut is tightened, check the orientation of the threaded clamp nut. If a thin wheel is installed with the pilot on the clamp nut against the wheel, it will spin because the height of the pilot prevents the clamp nut from holding the wheel.

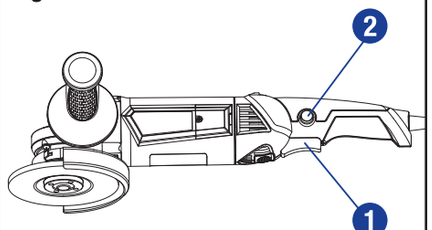
ASSEMBLY AND ADJUSTMENTS

TRIGGER SWITCH (Fig. 10)

The angle grinder/cut-off tool is controlled by a trigger switch (1) and lock off button (2).

The lock off button must be pressed down before the trigger switch will turn the angle grinder/cut-off tool on. Releasing the trigger turn the angle grinder/cut-off tool off.

Fig. 10



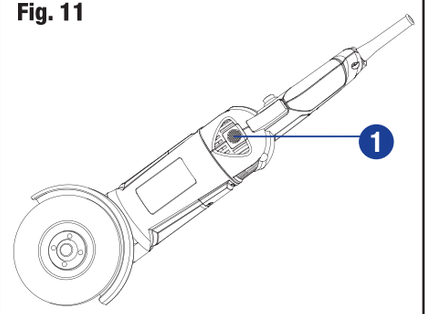
90˚ ROTATING HANDLE (Fig. 11)

The handle on the angle grinder/cut-off tool can rotate 90˚ to the left or the right for ease of operation.

To adjust the 90˚ rotating handle:

- Press and hold handle lock button (1).
- Rotate the handle to the desired position and release the handle lock button.

Fig. 11



NOTE:

Never cover air vents. They must always be open for proper motor cooling.

NOTE:

To reduce unexpected tool movement, do not switch the tool on or off while under load conditions. Allow the grinder to run up to full speed before touching the work surface. Lift the tool from the surface before turning the tool off. Allow the tool to stop rotating before putting it down.

CAUTION!

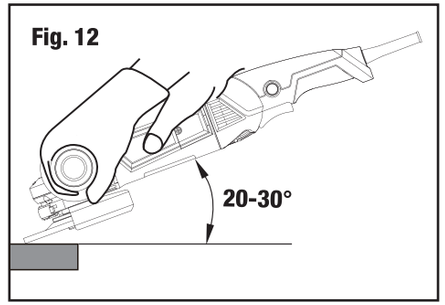
Hold the auxiliary handle and body of the tool firmly to maintain control of the tool at start up and during use and until the wheel or accessory stops rotating. Make sure the wheel has come to a complete stop before laying the tool down.

GRINDING WITH GRINDING WHEELS (Fig. 12)

Always carefully select and use grinding wheels that are recommended for the material to be ground. Make sure that the operating speed of any accessory wheel selected is rated at 11,000 RPM or more.Pay attention to the dimensions of the grinding tools. The mounting hole diameter must fit the mounting flange without play. Do not use reducers or adapters.

- Secure all work in a vise or clamp to a work-bench.
- Hold the grinder in front and away from you with both hands, keeping the grinding wheel clear of the workpiece.
- Turn on the grinder and let the motor and grinding wheel build up to full speed.

Fig. 12



NOTE:

Make sure the handle lock button on the 90º rotating handle clicks and locks into place when changing handle positions.

NOTE:

If the grinder is held in one spot too long, it will gouge and cut grooves in the workpiece. If the grinder is held at too sharp an angle, it will also gouge the workpiece because of concentration of pressure on a small area.

NOTE:

Heavy pressure will decrease the grinder's speed and put a strain on the motor. Normally the weight of the tool alone is adequate for most grinding jobs. Use light pressure when grinding jagged edges or loose bolts where there is the potential for the grinder to snag on the metal edge.

WARNING!

To prevent loss of control and possible serious personal injury, always operate the grinder with both hands, keeping one hand on the side handle.

- Lower the grinder gradually until the grinding wheel contacts the workpiece.
- Maintain a 20 to 30˚ angle between the tool and work surface.
- Move the grinder continuously at a steady, consistent pace.
- Use just enough pressure to keep the grinder from chattering or bouncing.
- Lift the grinder away from the workpiece before turning off the grinder.

USING CUTTING WHEELS

- Allow tool to reach full speed before touching tool to work surface.
- Apply minimum pressure to work surface, allowing tool to operate at high speed. Cutting rate is greatest when the tool operates at high speed.
- Once a cut is begun and a notch is established in the workpiece, do not change the angle of the cut. Changing the angle will cause the wheel to bend and may cause wheel breakage.
- Remove the tool from work surface before turning tool off. Allow the tool to stop rotating before setting it down.

WARNING!

Cutting wheel guard must be used while using cutting wheels.

DANGER!

Never use the grinder with the wheel guard removed and always be sure the wheel guard is locked into place. It has been designed for use only with the wheel guard installed. Attempting to use grinder with wheel guard removed will result in loose particles being thrown against the operator resulting in serious personal injury.

MAINTENANCE

CLEANING

Use only mild soap and a damp cloth to clean the tool. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

LUBRICATION

Tools are properly lubricated at the factory and are ready for use. Tools should be lubricated regularly every year depending on usage. (Tools used on heavy duty jobes and tools exposed to heat may require more frequent lubrication.) This lubrication should be attempted only by trained power tool repair person such as those at service centres or other qualified service personnel.

STORAGE AND HANDLING OF THE WHEELS

When not in use,the wheels should be stored carefully in a rack or box to protect from chipping or breakage. All the wheels must be handled carefully to prevent dropping and bumping.

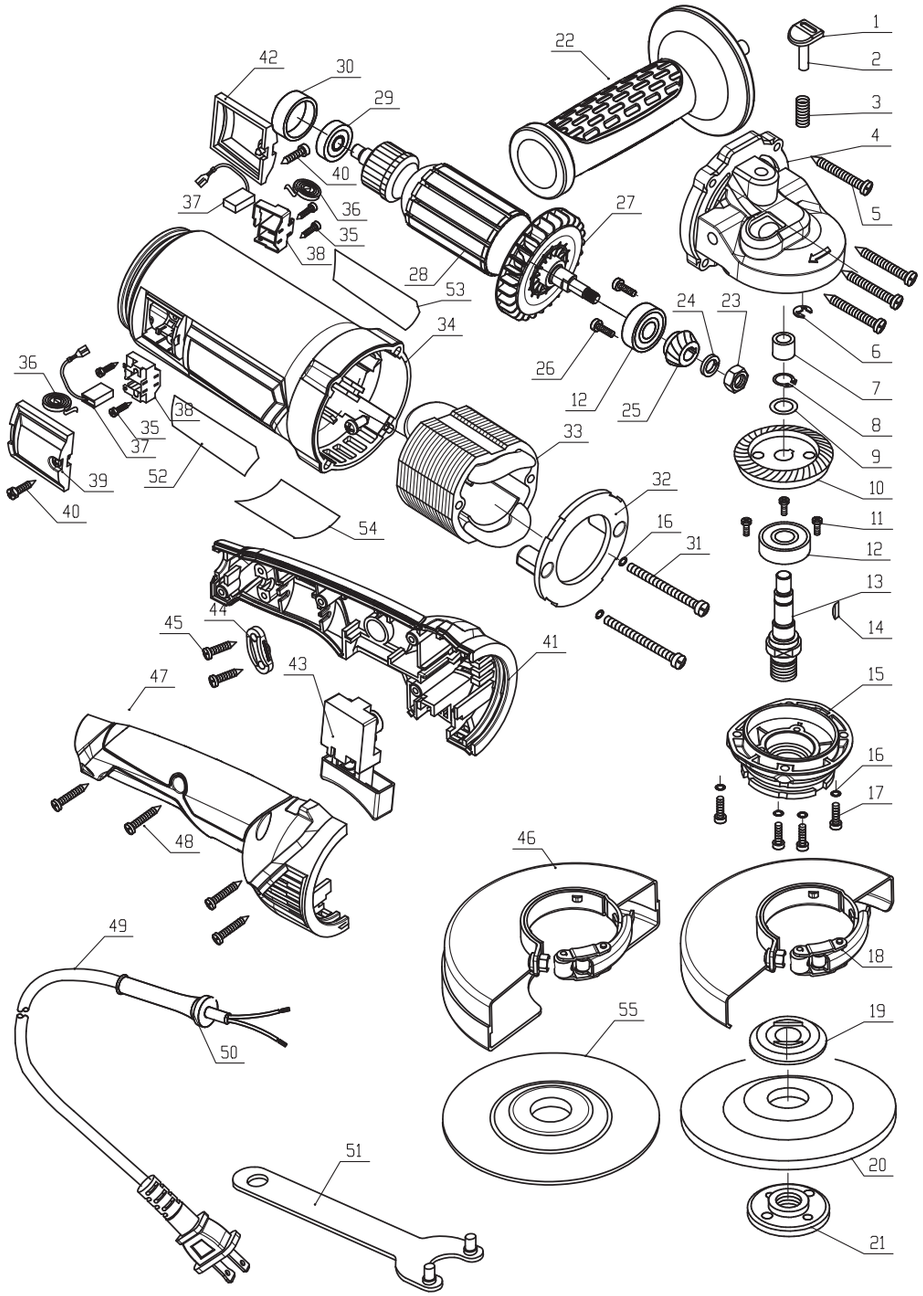
NOTE:

It is suggested to have the carbon brushes replaced by an authorized service centre.

WARNING!

Blowing dust and grit out of the motor housing using compressed air is a necessary mainte–nance procedure. Dust and grit from metal grinding often accumulate on interior surfaces and could create an electrical shock hazard if not cleaned out.

PROBLEM	PROBABLE CAUSE	SUGGESTED CORRECTIVE ACTION
Tool will not start	Power cord is not plugged in.	Plug tool into power source.
	Power source fuse or circuit breaker tripped.	Replace fuse or reset tripped circuit breaker. (If the product repeatedly causes the circuit or fuse to trip/blow, discontinue use immediately and have it serviced by an authorized service centre.)
	Cord damaged.	Inspect cord for damage. If damaged, have cord replaced by an authorized service centre.
	Burned out switch.	Have switch replaced by an authorized service centre.
Tool does not come up to speed	Extension cord has insufficient gauge or is too long.	Replace with adequate extension cord.
	If equipped with variable speed, tool may not be set at maximum RPM.	If equipped with variable speed, check speed setting.
	Low house voltage.	Contact your electric company.



MASTERCRAFT® 5" (12.5 cm) ANGLE GRINDER/CUT-OFF TOOL

When servicing the Mastercraft® Angle Grinder/Cut-off Tool, use only Mastercraft® replacement parts. The use of any other parts may cause damage to the product. All servicing of the angle grinder/cut-off tool should be performed by a qualified service technician. For more information, call the toll-free helpline at 1-800-689-9928.

No.	Description	Qty	No.	Description	Qty
01	Spindle lock button	1	29	Bearing	1
02	Lock pin	1	30	Bearing set	1
03	Spring	1	31	Screw	2
04	Gear box	1	32	Fan guide	1
05	Screw	4	33	Stator	1
06	Split washer	1	34	Housing	1
07	Bearing	1	35	Screw	4
08	Circlip	1	36	Brush spring	2
09	Wave washer	1	37	Brush	2
10	Gear	1	38	Brush holder	2
11	Screw	3	39	Brush cover (right)	1
12	Bearing	2	40	Screw	2
13	Spindle	1	41	Handle (left)	1
14	Semicircular key	1	42	Brush cover (left)	1
15	Front cover	1	43	Switch	1
16	Spring washer	7	44	Cord press plate	1
17	Screw	4	45	Screw	2
18	Grinding wheel guard	1	46	Cutting wheel guard	1
19	Backing flange	1	47	Handle (right)	1
20	Grinding wheel	1	48	Screw	4
21	Threaded clamp nut	1	49	Power cord and plug	1
22	Side handle	1	50	Cord sleeve	1
23	Nut	1	51	Spanner	1
24	Spring washer	1	52	Label	1
25	Pinion	1	53	Label	1
26	Screw	2	54	Nameplate	1
27	Fan	1	55	Cutting wheel	1
28	Armature	1			

3-Year Limited Warranty

This Mastercraft product is guaranteed for a period of 3 years from the date of original retail purchase against defects in workmanship and materials, except for the following component:

a) Component A: Batteries, chargers and carrying case, which are guaranteed for a period of 2 years from the date of original retail purchase against defects in workmanship and materials;
b) Component B: Accessories, which are guaranteed for a period of 1 year from the date of original retail purchase against defects in workmanship and materials.

Subject to the conditions and limitations described below, this product, if returned to us with proof of purchase within the stated warranty period and if covered under this warranty, will be repaired or replaced (with the same model, or one of equal value or specification), at our option. We will bear the cost of any repair or replacement and any costs of labour relating thereto.

These warranties are subject to the following conditions and limitations:

a) a bill of sale verifying the purchase and purchase date must be provided;

b) this warranty will not apply to any product or part thereof which is worn or broken or which has become inoperative due to abuse, misuse, accidental damage, neglect or lack of proper installation, operation or maintenance (as outlined in the applicable owner's manual or operating instructions) or which is being used for industrial, professional, commercial or rental purposes;

c) this warranty will not apply to normal wear and tear or to expendable parts or accessories that may be supplied with the product that are expected to become inoperative or unusable after a reasonable period of use;

d) this warranty will not apply to routine maintenance and consumable items such as, but not limited to, fuel, lubricants, vacuum bags, blades, belts, sandpaper, bits, fluids, tune-ups or adjustments;

e) this warranty will not apply where damage is caused by repairs made or attempted by others (i.e. persons not authorized by the manufacturer);

f) this warranty will not apply to any product that was sold to the original purchaser as a reconditioned or refurbished product (unless otherwise specified in writing);

g) this warranty will not apply to any product or part thereof if any part from another manufacturer is installed therein or any repairs or alterations have been made or attempted by unauthorized persons;

h) this warranty will not apply to normal deterioration of the exterior finish, such as, but not limited to, scratches, dents, paint chips, or to any corrosion or discolouring by heat, abrasive and chemical cleaners; and

i) this warranty will not apply to component parts sold by and identified as the product of another company, which shall be covered under the product manufacturer's warranty, if any.

Additional Limitations

This warranty applies only to the original purchaser and may not be transferred. Neither the retailer nor the manufacturer shall be liable for any other expense, loss or damage, including, without limitation, any indirect, incidental, consequential or exemplary damages arising in connection with the sale, use or inability to use this product.

Notice to Consumer

This warranty gives you specific legal rights, and you may have other rights, which may vary from province to province. The provisions contained in this warranty are not intended to limit, modify, take away from, disclaim or exclude any statutory warranties set forth in any applicable provincial or federal legislation.

Made in China
Imported by Mastercraft Canada Toronto, Canada M4S 2B8