



TWIN CUTTER

OWNER'S MANUAL



WARNING:

Read carefully and understand all **ASSEMBLY AND OPERATION INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item# 45994

Thank you very much for choosing an Ironton product! For future reference, please complete the owner's record below:

Model: _____ Purchase Date: _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This machine is designed for certain applications only. The distributor cannot be responsible for issues arising from modification. We strongly recommend this machine not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted the distributor to determine if it can or should be performed on the product.

For technical questions please call **1-800-222-5381**.

INTENDED USE






Thanks to the revolutionary counter rotating twin blade technology, it is now possible to cold, clean cut metal, wood and plastic without any pesky blade changes.

The twin blade design also allows you to cut forward, backward and to make plunge cuts while reducing kickback to increase user safety and cutting accuracy.

Metal upper and lower guards give added durability while the sure grip covered handle increases user comfort.

TECHNICAL SPECIFICATIONS

Rated Voltage	120/60Hz
Rated Power	8A
No Load Speed	5500rpm
Disc Size	5 in.
Max Cutting Capacity	Wood: 1.1 in./Hard Metal: 0.08 in./Soft Metal:0.12 in.

Symbol	Name	Designation/ Explanation
	Safety Alert	Precautions that involve your safety
	Class II Construction	Double insulated construction
	Eye Protection	Always wear safety goggles, safety glasses with side shields, or a full face shield when operating this product
	Inhalation Protection	Wear respiratory protection to reduce the risk of inhalation of harmful dust
	Hearing Protection	Wear hearing protection to reduce the risk of inhalation of harmful dust

GENERAL SAFETY RULES



WARNING: Read and understand all instructions. Failure to follow all instructions listed below may result in serious injury.



CAUTION: Do not allow persons to operate or assemble this Twin Cutter until they have read this manual and have developed a thorough understanding of how the Twin Cutter works.



WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors that cannot be built into this product, but must be supplied by the operator.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY CONSIDERATIONS



WARNING: Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference. The term “power tool” in the warnings refers to your corded power tool.

1. Work area safety

- a. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks, which may ignite the dust or fumes.
- c. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2. Electrical safety

- a. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b. Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e. When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f. If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

3. Personal safety

- a. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b. Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Prevent unintentional starting. Ensure the switch is in the off-position 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.
- d. Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

- e. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- g. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

4. Power tool use and care

- a. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b. Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g. Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

5. Service

- a. Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

SAFETY INSTRUCTIONS FOR ALL SAWS



DANGER: To prevent serious injury or death the below instructions must be followed.

- a) **Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle, or motor housing.** If both hands are holding the saw, they cannot be cut by the blade.
- a) **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.
- c) **Adjust the cutting depth to the thickness of the workpiece.** Less than a full tooth of the blade teeth should be visible below the workpiece.
- d) **Never hold piece being cut in your hands or across your leg. Secure the workpiece to a stable platform.** It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- e) **Hold power tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a “live” wire will also make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- f) **When ripping always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.
- g) **Always use blades with correct size and shape (diamond versus round) of arbor holes.** Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- h) **Never use damaged or incorrect blade washers or bolt.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

FURTHER SAFETY INSTRUCTIONS FOR ALL SAWS

Kickback causes and related warnings:

Causes of Kickback:

- kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator;
- when the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator;
- if the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood, causing the blade to climb out of the kerf and jump back toward the operator.



WARNING: To prevent serious injury the below instructions must be followed.

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

- a) **Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade.** Kickback could cause the saw to jump backwards, but the operator can control kickback forces, if proper precautions are taken.

b) When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur. Investigate and take corrective actions to eliminate the cause of blade binding.

c) When restarting a saw in the workpiece, center the saw blade in the kerf and check that saw teeth are not engaged into the material. If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.

d) Support large panels to minimize the risk of blade pinching and kickback. Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.

e) Do not use dull or damaged blades. Unsharpened or improperly set blades produce narrow kerf, causing excessive friction, blade binding and kickback.

f) Blade depth and bevel adjusting locking levers must be tight and secure before making cut. If blade adjustment shifts while cutting, it may cause binding and kickback.

g) Use extra caution when sawing into existing walls or other blind areas. The protruding blade may cut objects that can cause kickback.

INSTRUCTIONS FOR SAWS WITH INNER PENDULUM GUARDS

Lower guard function

a) Check lower guard for proper closing before each use. Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position. If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.

b) Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use. Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.

c) Lower guard may be retracted manually only for special cuts such as “plunge cuts” and “compound cuts.” Raise lower guard by retracting handle and as soon as blade enters the material, the lower guard must be released. For all other sawing, the lower guard should operate automatically.

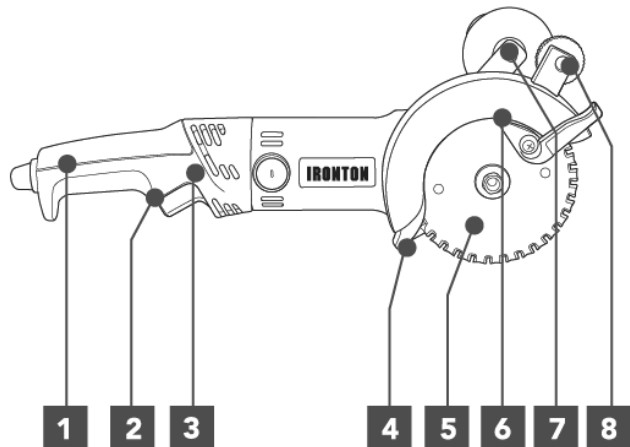
d) Always observe that the lower guard is covering the blade before placing saw down on bench or floor. An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

TWIN CUTTER USE AND CARE

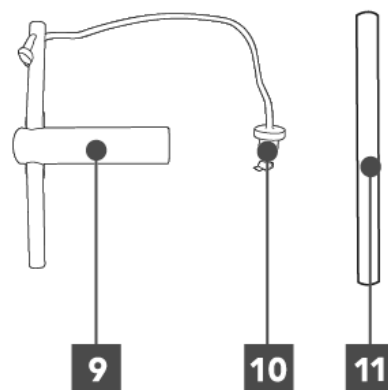
- **Do not modify the Twin Cutter in any way.** Unauthorized modification may impair the function and/or safety and could affect the life of the equipment. There are specific applications for which the Twin Cutter was designed.
- **Always check of damaged or worn out parts before using the Twin Cutter.** Broken parts will affect the Twin Cutter operation. Replace or repair damaged or worn parts immediately.
- **Store idle Twin Cutter.** When Twin Cutter is not in use, store it in a secure place out of the reach of children. Inspect it for good working condition prior to storage and before re-use.

TWIN CUTTER

1. Main Handle
2. On/Off Switch
3. Lock Off Switch
4. Lower Blade Guard
5. TCT Blades
6. Upper Blade Guard
7. Side Handle
8. Wax Feeder Knob



9. Wrench
10. Locking Pin
11. Wax Sticks x 6

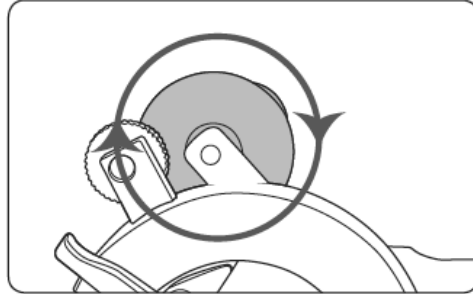


ASSEMBLY

1. SIDE HANDLE

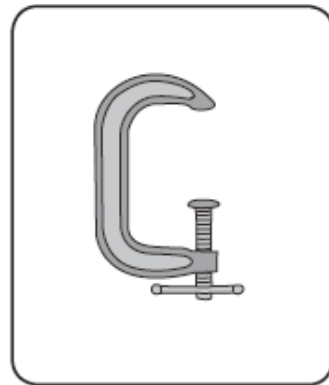
Side Handle

1. Attach the side handle to the twin cut saw.



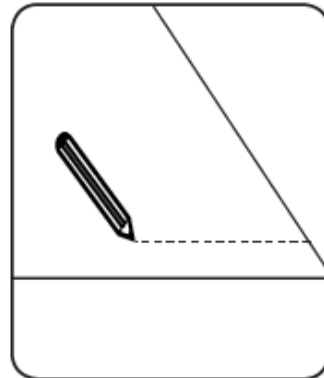
Preparing your workpiece

1. Securely clamp the workpiece.



2. Mark your cutting line.

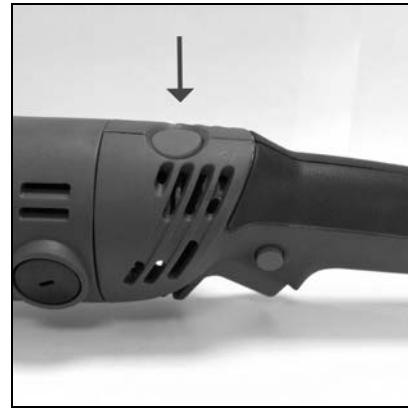
NOTE: The kerf (width of cut) is 0.18 in. Allow for this when making a cut.




Rear Handle

The rear handle can be rotated to increase user comfort and to gain better access to hard to reach or confined places.

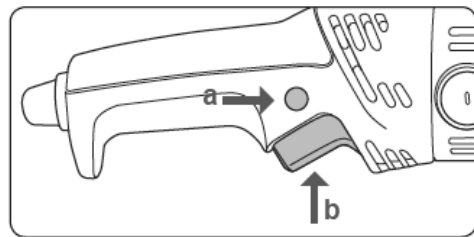
1. Press and hold the handle rotation button.
2. Rotate the rear handle 90° until it clicks into place.



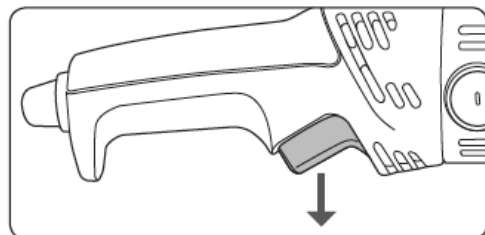
2. MAXIMUM CUTTING CAPACITIES

 **WARNING:** Always ensure that the lower guard is releasing freely and is fully closed before commencing work. If it is binding or sticking, do not proceed and contact the distributor. The tool is recommended for use with a residual current device with a rated residual current of 30mA or less.

1. To turn the saw on, depress the lock off switch (a) then the on/off switch (b).



2. To turn the saw off, release the on/off switch.



OPERATION

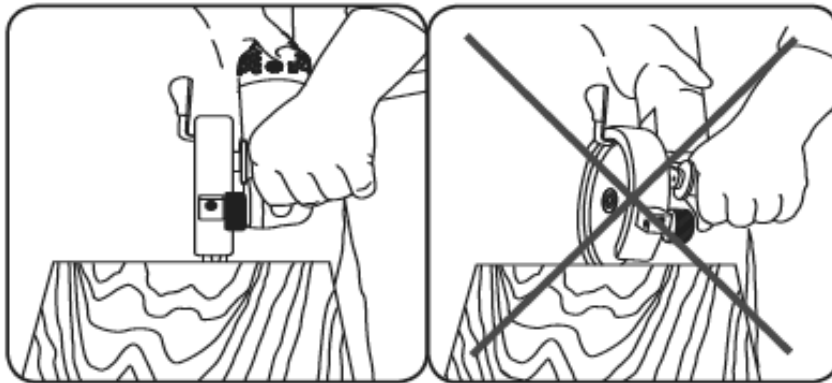
1. CUTTING WOOD

1. Turn on the Twin Cutter.

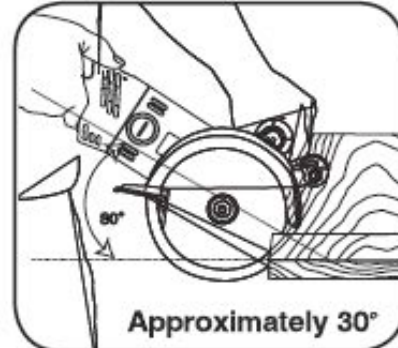


WARNING: ALLOW THE BLADE TO REACH FULL SPEED BEFORE CUTTING. OTHERWISE “KICKBACK” MAY RESULT, CAUSING SERIOUS INJURY.

2. Hold the saw so that the blades are perpendicular to the workpiece.



3. Tilt the saw upwards so that it is angled at approximately 30°, keeping the blade perpendicular to the plane of the workpiece.



4. Move the blades along the cutting line. Do not use excessive force. Allow the Twin Cutter to do the work.

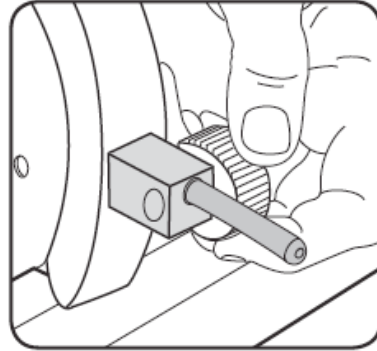


CAUTION: WHEN YOU RELEASE THE ON/OFF SWITCH, ALLOW THE BLADES TO COME TO A COMPLETE STOP.

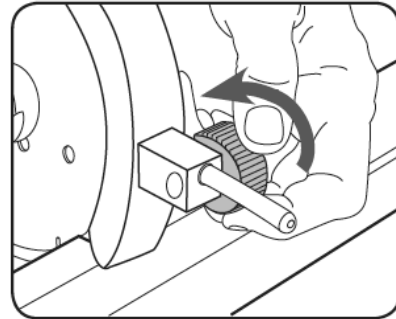
1. CUTTING METAL

Always use the wax lubricating system when cutting aluminum, copper, stainless steel sheet and cast iron up to 3mm thick.

1. Fully insert the wax stick into the holder.



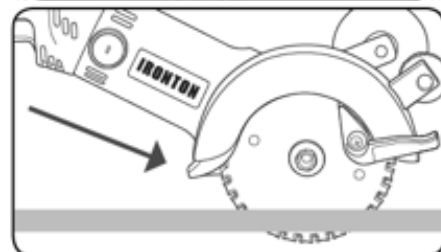
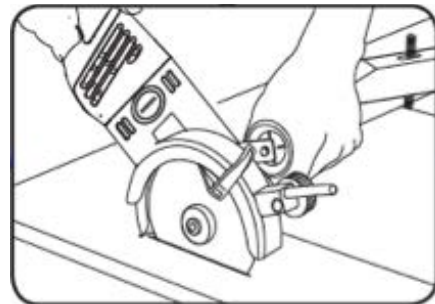
2. Turn the wax feeder wheel 1/4 turn.



3. Follow the instructions for cutting wood.

PLUNGE CUTTING

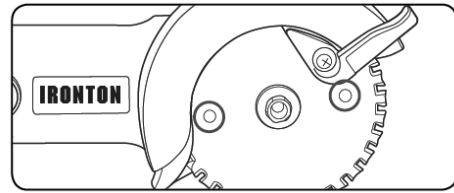
1. Raise the lower guard and keep it raised with the thumb of your left hand while gripping the side handle.



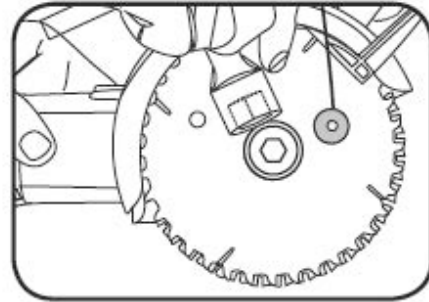
2. REMOVING BLADES

1. Unplug the Twin Cutter and allow the blades to cool.

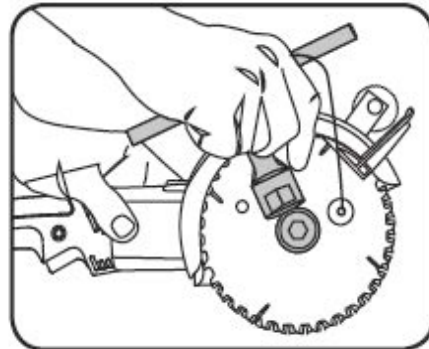
2. Rotate the blades independently until the holes in both blades are aligned.



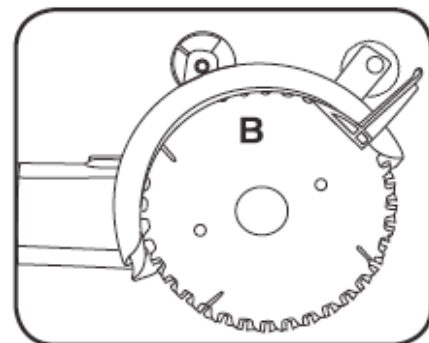
3. Place the lock pin attached to the wrench through the holes to lock the blades.



4. Unscrew the lock nut and remove it.



5. Retract the lower blade guard.



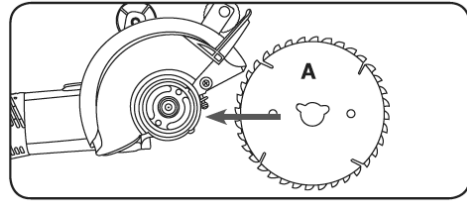
6. Remove "Blade B" and then "Blade A".

2. FITTING BLADES

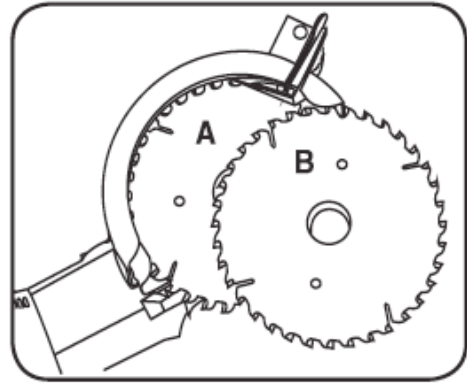


CAUTION: The Twin Cutter is not designed for use with abrasive wheels.

1. Place Blade A onto the blade flange with the pins of the flange in the corresponding holes in the blade.



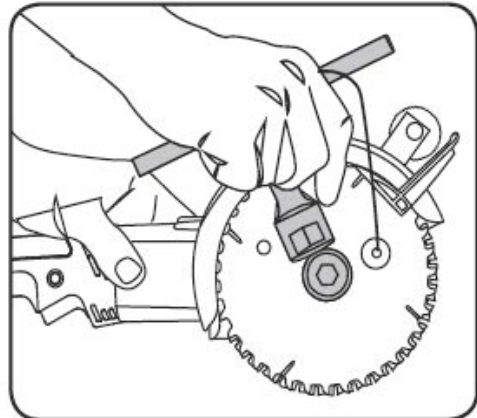
2. Place Blade B over the shaft.



3. Screw in the blade bolt but do not tighten.

4. Turn the blades so that the holes are aligned.

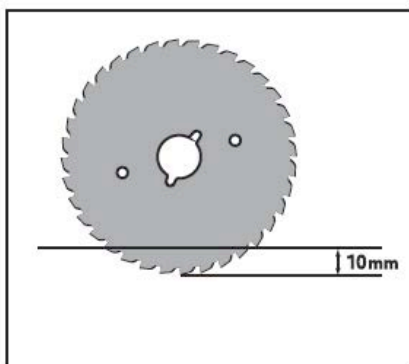
5. Place the lock pin through the holes to hold the blades. Tighten the lock nut.



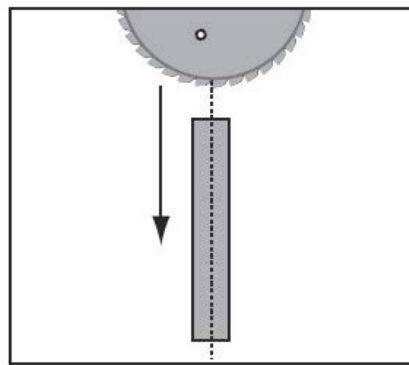
6. Turn the blades by hand to check that they easily turn in opposite directions.

CUTTING TIPS

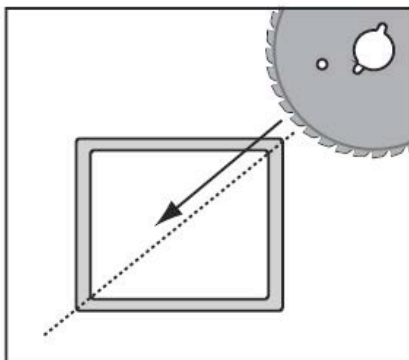
- Always hold the main handle with one hand and the side handle with the other.
- Maintain a firm grip and operate the on/off switch with a positive action.
- Always wait until the blades have reached full speed before commencing to cut the workpiece.
- Always hold the saw so that the blades are at right angles to the workpiece and the saw is inclined at an angle of approximately 30°.
- Always keep your body positioned behind the blades and to one side – not directly behind the blades.
- Never force the saw. Use light and continuous pressure.
- When cutting is interrupted, to resume cutting, depress the lock-off button and squeeze the on/off switch and allow the blade to reach full speed, re-enter the cut slowly and resume cutting.
- The kerf (width of cut) is 0.18 in. Allow for this width of cut when sawing.



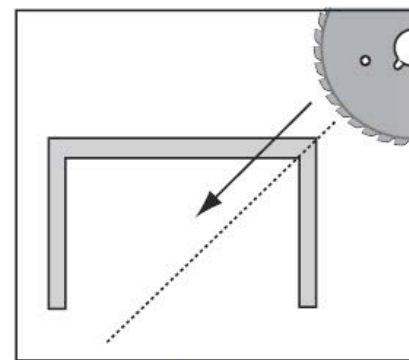
Thin Plates



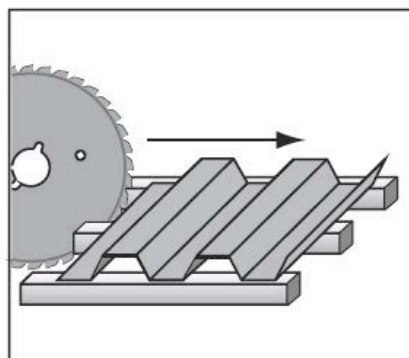
Iron Bar



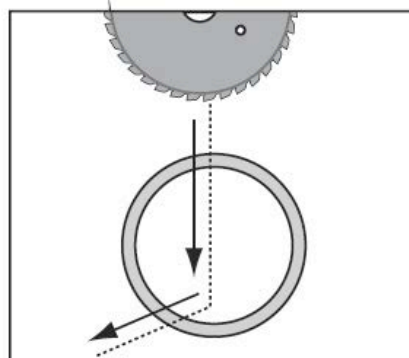
Rectangular/ Square Objects



U-Section Objects



Shaped Plates



Pipes

Cutting Depths

- Wood up to a maximum depth of 1-1/10 in.
- Mild steel pipe or sheets with a maximum wall or sheet thickness of 0.08 in. When cutting these materials, the wax lubricating sticks must be used.
- Copper, stainless steel, aluminum, cast iron pipe, or sheets with a maximum thickness of 0.12 in. When cutting these materials, the wax lubricating sticks must be used.
- Plastic pipe or sheets with a wall or sheet thickness of 0.12 in.



CAUTION: THE SAW MUST NOT BE USED TO CUT MASONRY, CONCRETE OR BRICK MATERIAL UNLESS FITTED WITH APPROPRIATE MASONRY CUTTING BLADES.

MAINTENANCE

- **Maintain your Twin Cutter.** It is recommended that the general condition of any Twin Cutter be examined before it is used. Keep your Twin Cutter in good repair by adopting a program of conscientious repair and maintenance. Have necessary repairs made by qualified service personnel.
- Keep the vents of the saw clean at all times. If possible, prevent foreign matter from entering the vents.
- After each use, blow air through the saw housing and guard, to ensure it is free from all dust particles which may build up. Build up of dust particles may cause the saw to overheat and fail.
- If the enclosure of the saw requires cleaning, do not use solvents but a moist soft cloth only. Never let any liquid get inside the saw; never immerse any part of the saw into a liquid.

Carbon Brushes



When the carbon brushes wear out, the saw will spark and/or stop. Discontinue use as soon as this happens. They should be replaced prior to recommencing use of the saw. Carbon brushes are a wearing component of the saw therefore not covered under warranty. Continuing to use the saw when carbon brushes need to be replaced may cause permanent damage to the saw. Carbon brushes will wear out after many uses. When the carbon brushes need to be replaced, take the saw to an electrician or a power tool repairer for a quick and low cost replacement. Always replace both carbon brushes at the same time.

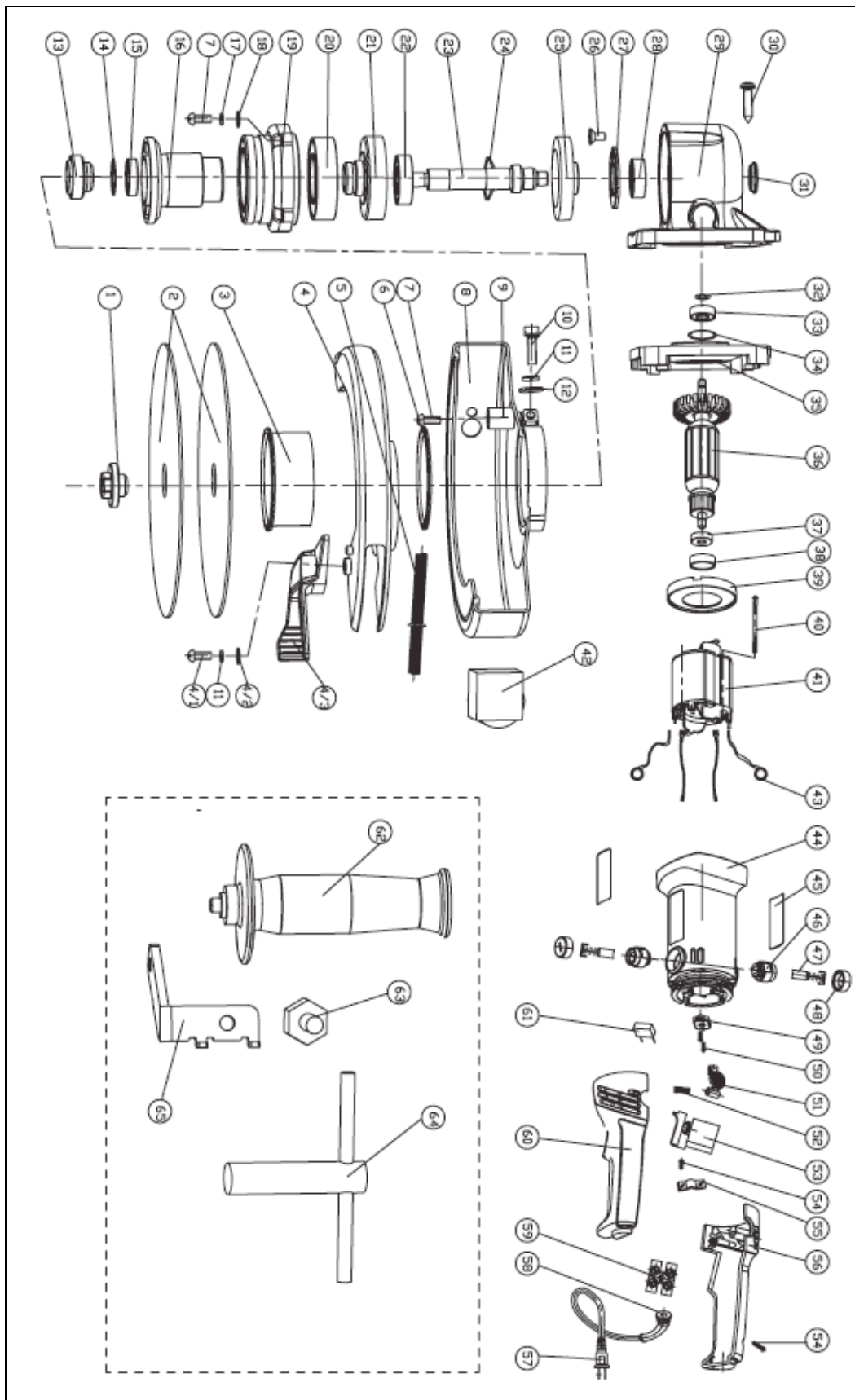
Sparking visible through the housing air vents

A small amount of sparking may be visible through the housing vents. This is normal and does not indicate a problem.

Excessive sparking visible through the housing air vents and/or the saw failing to operate may indicate the carbon brushes have worn out and need to be replaced. Carbon brushes should only be replaced by a qualified electrician or power tool repairer.

PROBLEM	CAUSE	SOLUTION
Excessive Sparks	Broken or missing teeth	Replace blade
	Teeth are blunt	Replace blade
	Cutting speed action too slow	Increase cutting speed action
Breaking Blades/ Over Heating	Cutting speed action too fast	Decrease cutting speed action
	Broken or missing teeth	Replace blade
	Blunt teeth	Replace blade
	Deformed or cracked blades	Replace blade
	Too much pressure applied when cutting	Reduce pressure
	Insufficient lubrication applied to blades	Increase lubrication used when cutting metals
	Teeth Breaking	Cutting speed action too fast
Saw Overheating/ Overloaded	Material being cut is too hard	Replace blade
	Blades incorrectly installed	Replace blade
	Blades are blunt	Replace blade
	Cutting speed action too fast	Reduce cutting speed action
	Blades are damaged	Replace blade
Guard is Binding	Blades are missing teeth	Replace blade
	Blades not correctly installed	Replace blade
	Insufficient lubrication applied to blades	Replace blade
	Guard or Blades have become misshapen	Contact the distributor

DIAGRAM AND PARTS LIST



NO.	Part Name	QT	NO.	Part Name	QT
1	Lock Nut	1	32	Circlip for Shaft \varnothing 12	1
2	Blade A&B	1	33	Ball Bearing 6000-2Z	1
3	Guard Plate	1	34	O-Ring 25X2	1
4	Active Guard	1	35	Intermediate Cover	1
4/1	Screw M5X10	1	36	Armature	1
4/2	Gbig Plate \varnothing 5	1	37	Ball Bearing 607-2Z	1
4/3	Active Guard Grip	1	38	Bearing Bushing	1
5	Active Guard Spring	1	39	Fan Guide	1
6	Guard Washer	1	40	Tapping Screw ST4.2X70	2
7	Screw M4X14	5	41	Armature	1
8	Fixed Guard	1	42	Lubricating System	1
9	Rubber Pin	1	43	Connector	2
10	Screw M5X20	1	44	Housing	1
11	Spring Washer \varnothing 5	2	45	Name Plate	1
12	Plate \varnothing 5	1	46	Brush Holder	2
13	Arbor Nut	1	47	Carbon Brush	2
14	Circlip for Hole \varnothing 21	1	48	Brush Cap	2
15	Ball Bearing 61801-2RS	1	49	Plate for Inner Wire	1
16	Inner Driver	1	50	Taping Screw ST2.9X9.5	2
17	Spring Washer \varnothing 4	4	51	Rotation Button	2
18	Plate \varnothing 4	4	52	Spring for Button	1
19	Packer	1	53	Switch	1
20	Ball Bearing 6005-2Z	1	54	Tapping Screw ST4.2X16	6
21	Gear A	1	55	Cord Plate	1
22	Ball Bearing 6001-2Z	1	56	Right Handle	1
23	Spindle	1	57	Power Cord with Plug	1
24	Washer	2	58	Cord Armor	1
25	Gear B	1	59	Terminal	1
26	Screw M4X6	3	60	Left Handle	1
27	Bearing Cover	1	61	Capacitor	N/A
28	Ball Bearing 608-2RS	1	62	Help Handle	1
29	Gear Case	1	63	Hex Nut M8X10	1
30	Tapping Screw ST4.2X32	4	64	Box Wrench	1
31	Cap	1	65	Help Handle Support	1

For replacement parts or technical questions please call **1-800-222-5381**.



WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

WARRANTY

THIS WARRANTY FORM SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES

PURCHASED FROM: _____

DATE PURCHASED: _____

The warranty is only made available by returning the tool to the place of purchase with a confirmed register receipt.

6-MONTH REPLACEMENT WARRANTY

Your IRONTON tool is covered by a 6-month replacement warranty from the date of purchase. Industrial or high-frequency use will void this warranty. The warranty covers faulty parts or workmanship.

WARNING

The following actions will result in the warranty being void.

- If the tool has been operated on a supply voltage other than that specified on the unit.
- If the tool shows signs of damage or defects caused by or resulting from abuse accidents or alterations.
- If the tool has been disassembled or tampered with in any way.

Warranty excludes consumable parts such as brushes, batteries, sanding pads, blades, discs and drill bits.



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