Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.



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When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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	WARNING SYMBOLS AND DEFINITIONS
	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.
	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
<i>NOTICE</i> CAUTION	Addresses practices not related to personal injury.
A DANGER AWARNING ACAUTION NOTICE CAUTION	follow this symbol to avoid possible injury or death. Indicates a hazardous situation which, if not avoided, will result in death or serious injury. Indicates a hazardous situation which, if not avoided, could result in death or serious injury. Indicates a hazardous situation which, if not avoided, could result in death or serious injury. Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. Addresses practices not related to personal injury.

IMPORTANT SAFETY INFORMATION

General Power Tool Safety Warnings

AWARNING

Read all safety warnings and instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. **Save all warnings and instructions for future reference.** The term "power tool" in the warnings refers to your mains-operated (corded) power tool.

Work Area Safety

- 1. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- 2. 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.

Electrical Safety

1. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with grounded power tools. Unmodified plugs and matching outlets will reduce risk of electric shock. 3. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2. Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.

MAINTENANCE

- 3. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- 4. **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.*

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.
- 2. Use personal protective equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- 3. **Prevent unintentional starting.** Ensure the switch is in the off-position before connecting to power source, 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.*
- 4. 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.

Power Tool Use and Care

- 1. **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.*
- 2. 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.
- 3. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- 4. 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.

5. 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.

- 5. **Do not overreach.** Keep proper footing and balance at all times. *This enables better control of the power tool in unexpected situations.*
- 6. **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.*
- 7. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust-related hazards.
- 8. Do not allow the GFCI Plug to become wet. Always use a drip loop.
- 9. Only use safety equipment that has been approved by an appropriate standards agency. Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.
- 5. **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.*
- 6. **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- 7. 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 tool is maintained.

Cut-Off Machine Safety Warnings

- The guard provided with the tool must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. Position yourself and bystanders away from the plane of the rotating wheel. The guard helps to protect operator from broken wheel fragments and accidental contact with wheel.
- 2. Use only bonded reinforced or diamond cutoff wheels for your power tool. Just because an accessory can be attached to your power tool, it does not assure safe operation.
- 3. 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.
- 4. 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 diameter for your selected wheel.
 Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage.
- For tools that can use abrasive cut-off wheels. Do not use worn down reinforced wheels from larger power tools. Wheels intended for a larger power tool are not suitable for the higher speed of a smaller tool and may burst.
- 7. 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.
- 8. The arbor size of wheels and flanges must properly fit the spindle of the power tool. Wheels and flanges with arbor holes that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
- 9. Do not use damaged wheels. Before each use, inspect the wheels for chips and cracks. If power tool or wheel is dropped, inspect for damage or install an undamaged wheel. After inspecting and installing the wheel, position yourself and bystanders away from the plane of the rotating wheel and run the power tool at maximum no load speed for one minute. Damaged wheels will normally break apart during this test time.

- 10. Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and shop 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 filtrating particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- 11. 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 wheel may fly away and cause injury beyond immediate area of operation.
- 12. Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- 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 wheel.
- 14. Never lay the power tool down until the accessory has come to a complete stop. The spinning wheel may grab the surface and pull the power tool out of your control.
- 15. 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.
- 16. 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.
- 17. Do not operate the power tool near flammable materials. Sparks could ignite these materials.
- Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 19. **Avoid unintentional starting.** Prepare to begin work before turning on the tool.

SAFETY

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MAINTENANCE

- 20. Do not lay the tool down until it has come to a complete stop. Moving parts can grab the surface and pull the tool out of your control.
- 21. When using a handheld power tool, maintain a firm grip on the tool with both hands to resist starting torque.
- 22. Do not leave the tool unattended when it is plugged into an electrical outlet. Turn off the tool, and unplug it from its electrical outlet before leaving.
- 23. **This product is not a toy.** Keep it out of reach of children.
- 24. Verify that there are no utility lines or hardware in or near the workpiece. This is especially critical for plunge cuts.
- 25. Do not depress the spindle lock when starting or during operation.
- 26. This product is provided with a ground fault circuit interrupter (GFCI) built into the power cord plug. If replacement of the plug or cord is needed, use only identical replacement parts.

27. GFCI PRECAUTIONS

Test GFCI (Ground Fault Circuit Interrupter) before each use as follows:

- a. Plug GFCI into power outlet and press reset button. Indicator should turn on.
- b. Press test button. Indicator should turn off.
- c. Press reset button again for use.

Do not use if above test fails.

The GFCI device does not protect against electrical shock due to contact with both circuit conductors or a fault in any wiring supplying the GFCI device. **To allow GFCI unit to function properly, EXTENSION CORDS MUST NOT BE USED with this tool.**

- People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:
 Avoid operating alone.
 - Do not use with Trigger locked on.
 - Properly maintain and inspect to avoid electrical shock.

• Any power cord must be properly grounded. Ground Fault Circuit Interrupter (GFCI) should also be implemented – it prevents sustained electrical shock.

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



Kickback and Related Warnings

Kickback is a sudden reaction to a pinched or snagged rotating wheel. Pinching or snagging causes rapid stalling of the rotating wheel which in turn causes the uncontrolled power tool to be forced in the direction opposite of the wheel'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.
- 2. Never place your hand near the rotating accessory. Accessory may kickback over your hand.
- 3. Do not position your body in line with the rotating wheel. Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
- 4. 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 10mm or toothed saw blade. Such blades create frequent kickback and loss of control.

- Do not "jam" the 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.
- 7. 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 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.
- 8. 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 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.
- 10. 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.

Vibration Safety

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

- Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
- 2. **Do not smoke during use.** Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.

- 3. Wear suitable gloves to reduce the vibration effects on the user.
- 4. Use tools with the lowest vibration when there is a choice.
- 5. Include vibration-free periods each day of work.
- Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
- 7. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.



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TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:

Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the

grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

Grounded Tools: Tools with Three Prong Plugs



3-Prong Plug and Outlet

- 1. Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. (See 3-Prong Plug and Outlet.)
- 2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. (See 3-Prong Plug and Outlet.)
- 3. The tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the preceding illustration. (See 3-Prong Plug and Outlet.)

Double Insulated Tools: Tools with Two Prong Plugs



Outlets for 2-Prong Plug

- 1. Tools marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code.
- 2. Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration. (See Outlets for 2-Prong Plug.)

Note: Extensions cords must not be used with this tool.

Service Precautions

Ground Fault Circuit Interrupter Protection

This tool is provided with a ground-fault circuit-interrupter (GFCI) built into the plug of the power-supply cord. This device provides additional protection from the risk of electric shock. Should replacement of the plug or cord become necessary, use only identical replacement parts that include GFCI protection.

Servicing a Double-Insulated Appliance

In a double-insulated product, two systems of insulation are provided instead of grounding. No grounding means is provided on a double-insulated product, nor should a means for grounding be added to the product. Servicing a double-insulated product requires extreme care and knowledge of the system, and should be done only by qualified service personnel. Replacement parts for a double-insulated product must be identical to the parts they replace. A double-insulated product is marked with the words "DOUBLE INSULATION" or "DOUBLE INSULATED." The symbol **D** may also be marked on the product.

SAFE



Symbology

	Double Insulated			Read the manual before set-up and/or use.	
V	Volts			WARNING marking concerning Risk of Hearing Loss.	Ł
~	Alternating Current			Wear hearing protection.	H
				WARNING marking concerning Risk of Fire.	SA
Α	Amperes		Do not cover ventilation ducts. Keep flammable objects away.		
n ₀ xxxx/min.	No Load Revolutions per Minute (RPM)			WARNING marking concerning Risk of Electric Shock.	
	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved safety goggles with side shields.			Properly connect power cord to appropriate outlet.	

Specifications

Electrical Rating	120VAC / 60Hz / 15A
No Load Speed	n ₀ : 4300/min
Maximum Wheel Diameter	14" (Ø355mm)
Arbor	1" (25.4mm) round
Max Cutting Depth	4-9/16" (116mm)



Setup - Before Use:



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Note: For additional information regarding the parts listed in the following pages, refer to *Parts List and Diagram* on page 18.

Functions



Operating Instructions



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Tool Set Up

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION: Release the Trigger and unplug the tool from its electrical outlet before performing any procedure in this section.

TO PREVENT SERIOUS INJURY FROM FLYING FRAGMENTS: Use only bonded reinforced or diamond cut-off wheels for your power tool. Just because an accessory can be attached to your power tool, it does not assure safe operation.

Installing/Replacing Saw Wheel (sold separately):

- 1. While holding Spindle Lock, remove Bolt with included Hex Wrench by turning clockwise.
- Remove Small Flange and Outer Flange, then remove Wheel.
 Do not remove Washer or Inner Flange.
- 3. Install a new Wheel with directional arrow pointing in the same direction as the arrow on the Wheel Guard.

WARNING! TO PREVENT SERIOUS INJURY:

Wheel must be rated to at least 4,300 RPM.

- 4. Replace Outer Flange with flat side facing in, then replace Small Flange.
- 5. Replace Bolt and tighten securely with included Hex Wrench by turning counterclockwise.

Depth Adjustment

- 1. Loosen the Wing Bolt on the Depth Guide and adjust Base Plate as necessary.
- 2. Tighten the Wing Bolt securely.





SAFETY

Installing Splash Guard

- 1. Press Splash Guard onto Splash Guard Bar, below the Dust Port, until it snaps in place.
- 2. When not in use, flip Splash Guard up.
- 3. To remove, tilt the Splash Guard upward until it releases from Splash Guard Bar.



Installing Guide Wheels

- 1. Remove Screws from both sides of Base Plate.
- 2. Remove Wing Bolt (93) from the Base Plate. Remove the Base Plate.
- 3. Spread the brackets apart and connect the Guide Wheel's brackets to both sides of the handles, in the slots that match the brackets.
- 4. Install Wing Nut to secure Guide Wheels to handle.



Adjusting Wheel Guard

- 1. Loosen the Wheel Guard Knob.
- 2. Adjust the Wheel Guard so that the closed end points towards the operator.
- 3. Securely tighten the Wheel Guard Knob.

MAINTENANCE



Wheel Guard Knob

Trigger Lock

- 1. Squeeze Trigger, then push Trigger Lock forward.
- 2. Squeeze Trigger to release Trigger lock.



TO PREVENT SERIOUS INJURY AND ELECTRIC SHOCK:

Do not allow water to enter the motor. Check all water connections for leaks. If leaks are found, do not use Saw for wet sawing until leaks are fixed. Do not exceed water pressure of 70 PSI.

- 1. Attach wet vacuum to Dust Port.
- 2. Connect Water Tube:
 - a. Connect to Water Connector 1 for water output on both sides of Wheel.
 - b. Connect to Water Connector 2 for water output on left side of Wheel.
- 3. Close Water Valve.
- 4. Connect garden hose to Tube's Water Hose Connector.
- 5. Open garden hose valve slightly.
- 6. Open Tube's Water Valve. Water should flow smoothly over the wheel. Adjust garden hose valve as necessary.



Attach dust collection system to Dust Port.

Work Piece and Work Area Set Up

- 1. Work piece selection: This tool is designed to cut masonry, stone, concrete, reinforced concrete, and similar materials. Choose the proper wheel for the material being cut.
- 2. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.
- Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord to possible damage. The power cord must reach the work area with enough extra length to allow free movement while working.

Closed

Open

Water Valve

 Verify that there are no utility lines or hardware in or near the workpiece. This is especially critical for plunge cuts. Water

Connector 1

Water Connector 2

9)-

Garden Hose Connector

General Operating Instructions

TO PREVENT ELECTRIC SHOCK AND DEATH: Test Ground Fault Circuit Interrupter (GFCI) before each use. The GFCI does not protect against electrical shock due to contact with both circuit conductors or a fault in any wiring supplying in this device. Do not alter or disable the GFCI. Do not use an extension cord.

TO PREVENT SERIOUS INJURY FROM KICKBACK: 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.

When cutting concrete blocks, tiles or masonry materials, do not make a cut in depth more than 2-3/8" (60 mm).

For workpieces over 2-3/8" (60 mm) up to 4" (100 mm), make more than two passes of cuts. The depth of the most efficient cut is about 1-9/16" (40 mm). This tool must only be used on horizontal surfaces.

- 1. Make all necessary adjustments to the Saw.
- 2. Make sure that all guards are in place in proper working order and that all adjustment knobs are tight before operation.
- 3. Make sure Trigger is in OFF position, then plug the GFCI power cord into dedicated, grounded 120VAC outlet, then:
 - a. Press RESET button. Indicator should light up.
 - b. Press TEST button. Indicator should turn off.
 - c. Press **RESET** button again. Indicator should light up, unit is ready for use.



<u>WARNING!</u> TO PREVENT SERIOUS INJURY: Do not start the Saw if the Wheel is in contact with anything.

- 4. Firmly grip the Main Handle with one hand and the Auxiliary Handle with the other hand.
- 5. Squeeze Trigger to turn on the Saw. To stop the Saw, release the Trigger.

Note: If the unit does not turn on or turns off suddenly, turn Power Switch to OFF position, then check and reset the GFCI.

6. Allow the Saw Wheel to reach full speed before feeding Saw Wheel into the workpiece.

<u>WARNING!</u> TO PREVENT SERIOUS INJURY: If Wheel binds, hold saw motionless and release Trigger. Wait for the Wheel to come to a complete stop.

- 7. Make straight cuts only. DO NOT twist Saw while cutting. If this occurs, the Saw Wheel will "bind" in the workpiece causing kickback, potential injury, and/or damage to the workpiece and Saw.
- 8. Do not force the Saw to cut faster than it is designed to cut. Feed the Saw Wheel gradually into the workpiece.
- Release Trigger if the Saw Wheel is to be backed out of an uncompleted cut. Wait until the Wheel stops spinning before removing the Saw. Do not press against the Wheel to stop it.

10. Overload Warning

- a. The warning light will flash red when the full load is reached.
- b. When full load is exceeded, the motor will shut down and warning light will be on solid red.
- c. To avoid damaging the motor after the Saw has stopped due to over heating, always cool the motor by running it at no load for a few minutes before continuing.



- 11. Once the cutting job is completed, release the Trigger and wait until the Saw Wheel stops spinning.
- 12. To prevent accidents, unplug the Power Cord from its electrical outlet. Clean, then store the tool indoors out of children's reach.

Maintenance and Servicing



Procedures not specifically explained in this manual must be performed only by a qualified technician.

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION: Release the Trigger and unplug the tool from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE: Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

- 1. **BEFORE EACH USE**, inspect the general condition of the tool. Check for loose hardware, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.
- 2. **AFTER USE,** wipe external surfaces of the tool with clean cloth. Do not use solvents. Do not immerse in liquid.
- OCCASIONALLY, clean the ventilation openings. Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator and blow out vents with compressed air.
- 4. **OCCASIONALLY,** or as needed, remove and flush the Water Hose and connections.
- 5. AWARNING! TO PREVENT SERIOUS INJURY: If the supply cord or GFCI unit of this power tool is damaged, it must be replaced only by a qualified service technician.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Tool will not start.	1. Cord not connected.	1. Check that cord is plugged in.
	2. No power at outlet.	 Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure circuit is right capacity for tool and circuit has no other loads.
	3. GFCI circuit breaker tripped.	3. Press reset button on GFCI.
	 Tool's thermal reset breaker tripped (if equipped). 	 Turn off tool and allow to cool. Press reset button on tool (if equipped).
	5. Internal damage or wear. (Carbon brushes or switch, for example.)	5. Have technician service tool.
Tool operates slowly.	Extension cord too long or cord diameter too small.	Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See <i>Extension Cords</i> section on page 8.
Saw stops suddenly	1. GFCI circuit breaker tripped.	1. Press reset button on GFCI.
	2. Water leaking from housing.	 SHOCK HAZARD! IMMEDIATELY discontinue use. Have the unit repaired by a qualified technician before further use.
Performance	1. Wheel dull or damaged.	1. Keep Wheel sharp. Replace as needed.
decreases over time.	2. Carbon brush worn or damaged.	2. Replace Carbon Brush.
Excessive noise or rattling.	Internal damage or wear. (Carbon brush or bearings, for example.)	Have qualified technician service tool.
Overheating.	1. Forcing tool to work too fast.	1. Allow tool to work at its own rate.
	2. Accessory misaligned.	2. Check and correct accessory to fence and/or table alignment.
	3. Accessory dull or damaged.	3. Keep cutting accessories sharp. Replace as needed.
	4. Blocked motor housing vents.	 Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air.
	 Motor being strained by long or small diameter extension cord. 	 Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See <i>Extension Cords</i> section on page 8.
No water on Wheel	1. Water tube not connected.	1. Connect water tube to water inlet on Saw. Open water valve.
	2. Blocked water tube	2. Flush water tube.



SAFETY

SETUP

Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Record Product's Serial Number Here:_

Note: If product has no serial number, record month and year of purchase instead.

<u>Note:</u> Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts. Specify UPC 193175434302 when ordering parts.

Parts List and Diagram

Parts List

Part	Description	Qty
1	Bolt, M4 x10	2
2	Water Connector 1	2
3	Wheel Guard	1
4	Bolt, M10 x 20	1
5	Small Flange	1
6	Outer Flange	1
7	Washer	1
8	Inner Flange	1
9	Screw, M5 x 12	8
10	Shield Press Cover	1
11	Screw, ST4 25 (flat)	4
12	Dust Port Buckle 1	1
13	Dust Port Hook	1
14	Connect Pin	1
15	Splash Guard	1
16	Splash Guard Bar	1
17	Splash Guard Spring	1
18	Splash Guard Connector	1
19	Wheel Guard Brush	1
20	Dust Port Plug	1
21	Dust Port, Ø1.52"	1
22	Dust Port Buckle 2	1
23	Shield	1
24	Screw, M4 x 10	6
25	Water Connector 2	1
26	Latch	6
27	Output Shaft	1
28	Key, 4 x 13	1
29	Dust Cover 1	1
30	Friction Plate	1
31	Screw Set, M5 x 22	4
32	Front Cover	1
33	Dust Cover 3	1
34	Bearing, 6004/2RS	1
35	Output Shaft Spacer	1
36	Self-Locking Pin	1
37	O-Ring, 5 x 2	1
38	Spring	1
39	Cap De origen Dreese Couver	1
40	Bearing Press Cover	1
41	Rubber Ring, 2 x 88	1
42	Big Gear	1
43	Circlip, Ø20	
44	Dealing, 00002	1
40		
40	Wing Polt M9 x 25	4
4/	VIIIY DUIL, IVIO X 23	1
40	Sorow M5 x 12	E I
49 50	Wheel Guard Kneb	0
50	Nut M8	1
51		

Part	Description	Qty
52	Auxiliary Handle	1
53	Screw, M10 x 20	1
54	Auxiliary Handle Support	2
55	Gear Box	1
56	Middle Cover	1
57	Wind Ring	1
58	Small Gear	1
59	Ring, 35 x 1.5	1
60	Bearing 6202	1
61	Dust Cover 2	1
62	Rotor	1
63	Ring	1
64	Bearing 629	1
65	Bearing Sleeve	1
66	Screw, ST5 x 80	2
67	Stator	1
68	Housing	1
69	Brush Holder	2
70	Screw, ST4 x 10	4
71	Carbon Brush	2
72	Brush Cover	2
73	Screw, ST4 x 16	2
74	Spring	1
75	Wing Nut, M6	1
76	Roller Bracket 2	1
77	Soft Start	1
78	Roller Bracket 1	1
79	Hex Bolt, M6 x 50	1
80	Guide Wheel	2
81	Washer, Ø8	4
82	Roller Shaft	1
83	Circlip, Ø8	2
84	Screw, ST4 x 50	2
85	Screw, ST4 x 16	6
86	Right Handle	1
87	Trigger	1
88	Left Handle	1
89	Power Cord	1
90	GFCI	1
91	Power Cord Sleeve	1
92	Press Plate	1
93	Wing Bolt, M8 x 20	1
94	Washer, Ø8	1
95	Flat Washer, Ø8	1
96	Base Plate	1
97	Screw	2
98	Hex Wrench	1
99	Water Tube, Ø8 x 6mm	1
100	Water Valve	1
101	Water Hose Connector	1
102	Water Tube Connector	1



Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.



26677 Agoura Road • Calabasas, CA 91302 • 1-888-866-5797