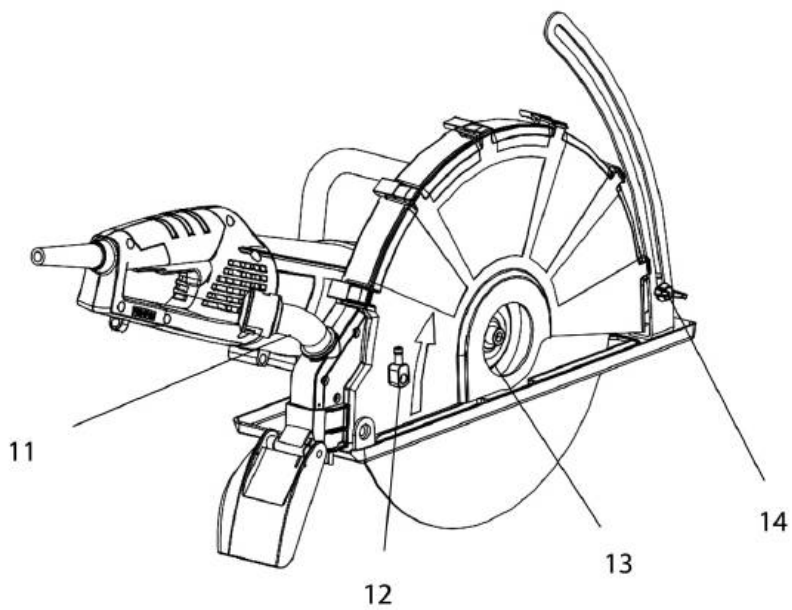
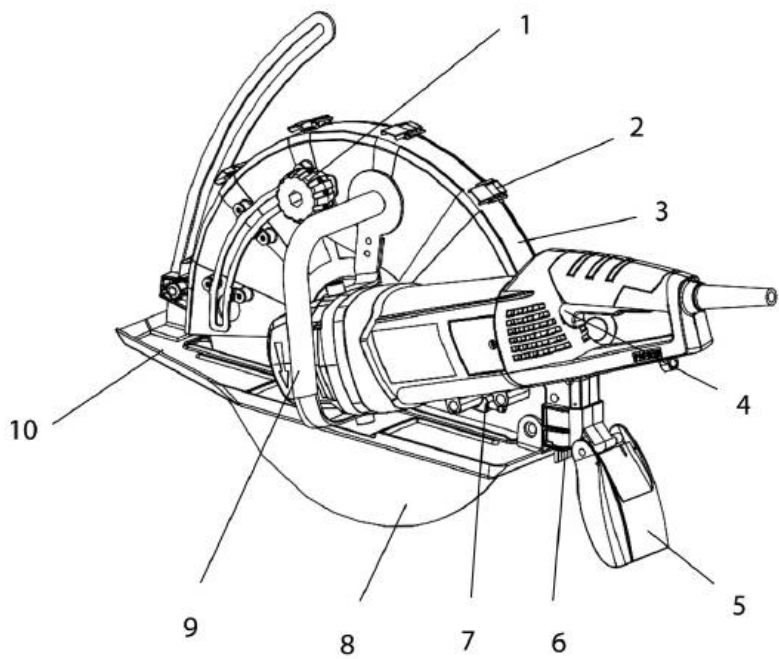
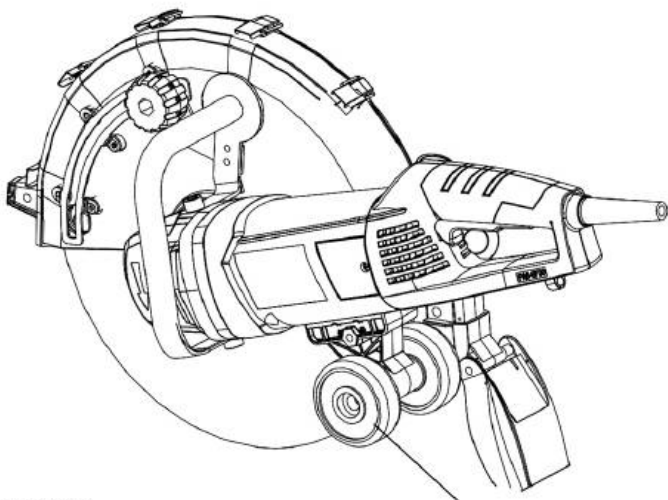


CONCRETE SAW

Model No:KX355D








1. Clamping Nut
2. Toggle Latches
3. Adjustable Wheel Guard
4. Trigger Switch
5. Splash Guard
6. Blade Guard Brush
7. Alternate Feed Nozzle 1
8. Saw Blade
9. Anti-vibration Front handle
10. Base
11. Vacuum port
12. Alternate Feed Nozzle 2
13. Outer/Inner Flange
14. Wing Bolt
15. Guide Roller

15

Technical Data

Item	KX355D
Power	2600W
Voltage	220V-240V,50-60Hz
No Load Speed	4300rpm
Cutting dis diameter	350mm
Max. cutting depth	125mm

GENERAL POWER TOOL SAFETY WARNINGS

 **WARNING! Read all safety warnings and all instructions.** Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference. The term “power tool” in the warnings refers to your mains operated (corded) power tool or battery-operated (cordless) power tool.

General Power Tool Safety Warnings - 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.

General Power Tool Safety Warnings - 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.

General Power Tool Safety Warnings - 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 energising 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.

General Power Tool Safety Warnings - 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.

General Power Tool Safety Warnings - 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.

Symbols used in this manual

V.....volts

A.....amperes

Hz.....hertz

W.....watt

~.....alternating current

nRated speed
min⁻¹revolutions or reciprocation per minute



.....Protective earth



.....Warning of general danger



.....read these instructions



.....Always wear eye protection



.....Always wear a dust mask.



.....Always wear hearing protection



.....Wear safety-approved hard hat



.....DANGER! Keep hands away from cutting area and the blade.



do not dispose of electric tools, accessories and packaging together with household waste material

SAFETY INSTRUCTIONS FOR CUTTING-OFF OPERATIONS



Cut-off machine safety warnings

- a. **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.
- b. **Use only diamond or abrasive cut off wheels for your power tool.** Just because an accessory can be attached to your power tool, it does not assure safe operation.
- c. **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.
- d. **Wheels must be used only for recommended applications. For example: do not grind with the side of a cut-off wheel.** Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.
- e. **Always use undamaged wheel flanges that are of correct diameter for your selected wheel.** Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage.
- f. **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.
- g. **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.
- h. **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.

- i. 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 filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- j. 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.
- k. 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.
- l. 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.
- m. 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.
- n. 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.
- o. 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.
- p. Do not operate the power tool near flammable materials.** Sparks could ignite these materials.



Cut-Off Machine Safety Warnings - 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.

- a. Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up.** The operator can control torque reactions or kickback forces, if proper precautions are taken.

- b. **Never place your hand near the rotating accessory.** Accessory may kickback over your hand.
- c. **Do not position your body in line with the rotating wheel.** Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
- d. **Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory.** Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
- e. **Do not attach a saw chain, woodcarving blade, segmented diamond wheel with a peripheral gap greater than 10 mm or toothed saw blade.** Such blades create frequent kickback and loss of control.
- f. **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.
- g. **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.
- h. **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.
- i. **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.
- j. **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.

Cut-Off Machine Safety Warnings - Additional Safety Rules

WARNING: Avoid cutting in the upper quadrant of the blade, especially when beginning the cut. This area is highly likely to lead to kickback.

WARNING: When cutting plastics, do not allow the plastic to melt. If the plastic melts, it can stick to the blade, leading to kickback.

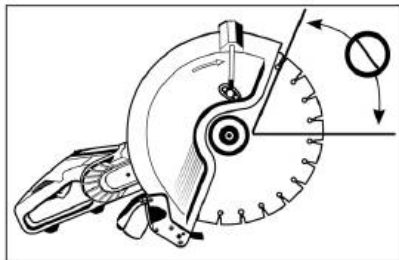


Table A Required Gauges for Extension Cords

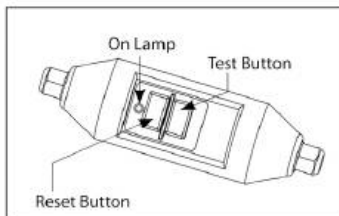
Ampere Rating		Volts	Total length of cord in feet			
		110-120	25(8m)	50(15m)	100(30m)	150(50m)
		220-240	50(15m)	100(30m)	150(50m)	300(100m)
More Than	Not More Than	Minimum gauge for cord (AWG)				
12	16	12(4.0mm ²)	12(4.0mm ²)	Not Recommended		

ELECTRICAL CONNECTION

The network voltage must conform to the voltage indicated on the tool name plate. Under no circumstances should the tool be used when the power supply cable is damaged. A damaged cable must be replaced immediately by an authorized Customer Service Center. Do not try to repair the damaged cable yourself. The use of damaged power cables can lead to an electric shock.

WARNING: Never operate a damaged machine. Always tag a damaged machine and take it out of service until repairs can be made.

WARNING: These machines are equipped with a Portable Residual Current Device (PRCD) also known as a Ground Fault Circuit Interrupter (GFCI). Always use this device whenever using the machine to reduce the risk of shock hazards. Always position the PRCD as close as possible to the power source. Test and reset the PRCD device before each use. Press the "Test" button to test. Press the "Reset" button to energize the circuit to the machine.




Note: PRCD (GFCI) appearances vary according to the requirements of various regions. Photos for reference only

WARNING: Always connect the plug into the wall socket with a drip loop. If the cable leads downward directly into the wall socket, any water on the cable could run into the socket, causing a hazard.

INTRODUCTION

This machine is equipped with two handles and a blade guard. The motor has overload and overheat protection. It has an integrated water feed system as required for diamond cutting and has a portable residual current device (PRCD) for electrical safety. It is used primarily with diamond blades, but abrasive wheels may also be used with this machine. It is intended for cutting masonry, stone, concrete, reinforced concrete and similar materials. All other uses are prohibited.

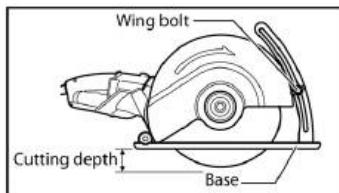
FUNCTIONAL DESCRIPTION

 **CAUTION:** Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

Adjusting the depth of cut

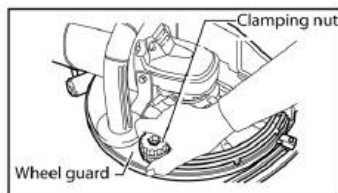
Loosen the wing bolt on the depth guide and move the base up or down. At the desired depth of cut, secure the base by tightening the wing bolt.

Only case you adjust the cutting depth to the maximum one, always be sure to do the adjustment after adjustment of the wheel guard.



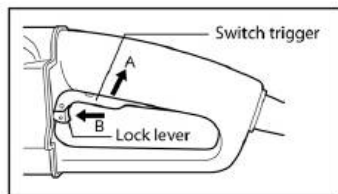
Securing wheel guard

⚠ CAUTION: The wheel guard must be adjusted on the tool so that the closed side of the guard always points toward the operator. The wheel guard can be adjusted about 80 degrees, after you loosen the clamping nut. Adjust to the desired angle, then secure the clamping nut.



Switch action

⚠ CAUTION: Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.



⚠ CAUTION: Switch can be locked in "ON" position for ease of operator comfort during extended use. Apply caution when locking tool in "ON" position and maintain firm grasp on tool. To start the tool, simply pull the switch trigger. (A direction) Release the switch trigger to stop. For continuous operation, pull the switch trigger (A direction), push in the lock lever (B direction) and then release the switch trigger. To stop the tool from the locked position, pull the switch trigger (A direction) fully, then release it.

⚠ CAUTION: Do not pull the switch trigger hard without pressing the lock lever. This can cause switch breakage. To prevent the switch trigger from accidentally pulled, a lock lever is provided. To start the tool, push in the lock lever (in the B direction) and then pull the switch trigger (in the A direction). Release the switch trigger to stop.

ASSEMBLY

⚠ CAUTION: Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.

BLADE GUARD BRUSH

There is a removable brush at the rear of the guard to help contain sparks, dust, debris and slurry. To install, simply push the brush into the slot in the bottom of the dust port bracket until it clicks in place. This brush may be pulled straight out to replace when worn.

SPLASH GUARD

The spring-loaded splash guard is useful to help to contain slurry which splashes toward the back. To install, simply clip into place on the back of the dust port bracket. To remove, tilt upward to pop free. If the splash guard is not needed, such as when cutting dry, it may be clipped up out of the way. Simply engage the male clip on the flap with the female clip on the mount. Unclip to release.

WATER CONNECTION

Water is a basic requirement for diamond sawing with wet-type diamond blades. The water serves as a coolant to avoid the working surface of the diamond segments from overheating.

When the diamond bit becomes overheated, both the bond matrix and even the diamonds break down, thus destroying the blade. Besides cooling, water also keeps down dust and flushes away abrasive particles.

WARNING: Always use the PRCD (GFCI) when operating with water **WARNING: Never allow water to enter the motor. It could lead to an electric shock.**

WARNING: Check all connections of the water feed system to ensure there are no leaks. Inspect hoses and other critical parts which could deteriorate.

WARNING: The maximum water pressure should not exceed 70 psi (4 bar).

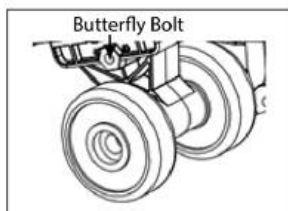
Use a water collector with a wet vacuum to collect cooling water if nearby objects could be damaged by water. The water feed system is built into the machine. To connect with the water supply, first pull the quick-release collar to remove the female side of the water coupling. Then unscrew the nut and engage the coupling to the water hose. Now reconnect the water coupling to the male water feed valve. Press it until it clicks.

The water flow is controlled by the water feed valve. The water to the blade may be finely adjusted to the required amount and no more.

NOTE: Contaminants in the water supply can easily plug up the fine water nozzles in the blade guard. Ensure that the supply water is clean. If you find that there is no water flow to the blade, then clean out the water feed system on the machine.

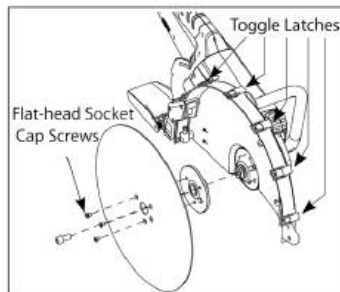
GUIDE ROLLER ASSEMBLY

The guide rollers make it easier to keep the blade plane perpendicular to the workpiece. To install, slacken the butterfly bolt slightly and engage the four claws with the four eyelets on the bottom of the motor housing, then tighten the butterfly bolt. Note that roller assembly is offset to one side to avoid contacting the blade, so it may only be installed in one orientation. If it is not needed, the guide roller assembly may be removed and set aside.



FLUSH CUTTING KIT INSTRUCTIONS (Optional)

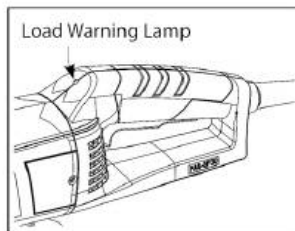
The flush cutting kit enables a flush cut blade (not included) to be mounted to the machine which allows flush cuts to be made while the outer blade guard is temporarily removed. The flush cut blade may be left in place and the operator may return to standard cutting simply by replacing the outer blade guard and securing with the 4 toggle latches. In this way, it is quick and convenient to switch between standard and flush cutting mode. Or if desired, the flush cutting blade and flange may be removed and the machine returned to the standard configuration.



OVERLOAD PROTECTION, OVERHEAT PROTECTION

Overload & Load Warning Lamp

When full load is reached, the load warning lamp will flash red. If full load is exceeded and sustained for too long, the motor will shut down and the load warning lamp will glow solid red. In this case, the motor must be first shut off and then restarted. When this happens, the motor will very likely be near overheating, so it is also a good idea to run the motor at no load for a few minutes to cool it before continuing.



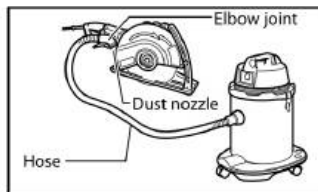
Overheat Thermal Protection

If the temperature of the motor gets too high, the thermal protection will shut the motor down. The switch must be first shut off and then restarted. When this happens, do not immediately start cutting after restarting the motor. Always run the machine at no load for a few minutes to return to a normal operating temperature before continuing.

CAUTION: The motor will be damaged if it is repeatedly overloaded or overheated. Always cool the motor by running at no load for a few minutes whenever it stops from either overheat or overload.

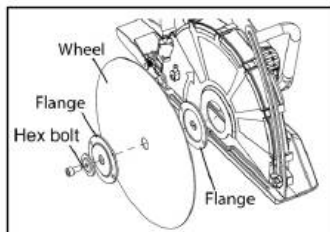
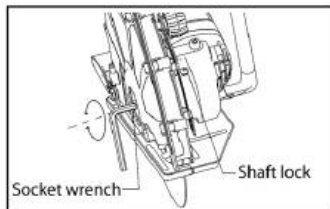
Connecting to vacuum cleaner

When you wish to perform cleaner operation, connect a vacuum cleaner to your tool. Connect a hose of vacuum cleaner to the dust nozzle via an elbow joint (accessory).



Installing or removing the wheel

To remove the wheel, depress the shaft lock to hold the shaft stationary, then loosen the hex bolt clockwise with the socket wrench. To install a wheel, place flange with its partly elevated side facing the tool, and then place ring before installing a wheel onto the spindle (shaft) and another flange with partly elevated side facing outward. Be sure to fully tighten the hex bolt counterclockwise after mounting the new wheel, or operation will be dangerous.



OPERATION

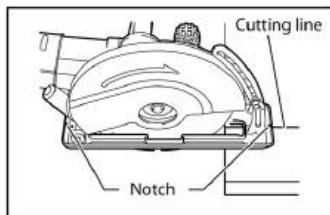
⚠ CAUTION: Be sure to pull the tool when cutting a workpiece.

- This tool should only be used on horizontal surfaces.
- Use this tool for straight line cutting only. Cutting curves can cause stress cracks or fragmentation of the diamond wheel and abrasive cut-off wheel resulting in possible injury to persons in the vicinity.
- After operation, always switch off the tool and wait until the wheel has come to a complete stop before putting the tool down.
- When cutting concrete blocks, tiles or masonry materials, do not make a cut in depth more than 60 mm (2-3/8"). When you need to cut a workpiece over 60 mm (2-3/8") up to 100 mm (4"), make more than two passes of cuts. The depth of the most efficient cut is about 40 mm (1-9/16").

Hold the tool firmly with both hands. First keep the wheel without making any contact with a workpiece to be cut. Then turn the tool on and wait until the wheel attains full speed.

The cut is made by pulling the tool toward you (not by pushing away from you). Align the notch on the base with your cutting line when performing a cut.

Switch off the tool on the position posed when finishing a cut. Raise the tool after the wheel comes to a complete stop.



MAINTENANCE

⚠ CAUTION:

- Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.
- Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

Dressing diamond wheel

If the cutting action of the diamond wheel begins to diminish, use an old discarded coarse grit bench grinder wheel or concrete block to dress the diamond wheel. To do this, tightly secure the bench grinder wheel or concrete block and cut in it.

Replacing carbon brushes

Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps. To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Factory Service Centers, always using FACTORY replacement parts.

