

HiKOKI

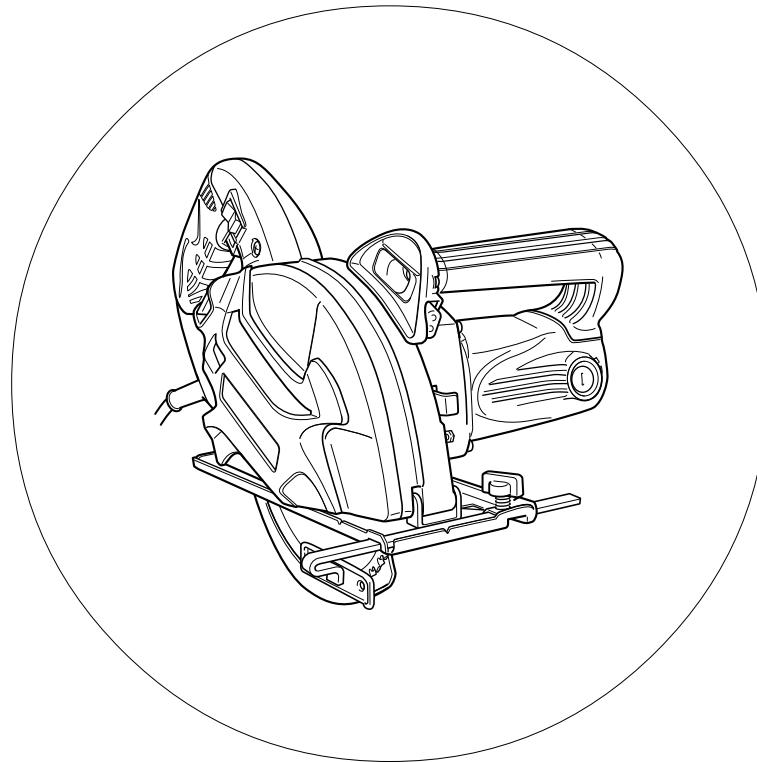
Metal Cutting Saw

金屬切斷機

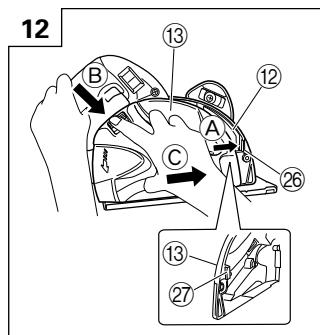
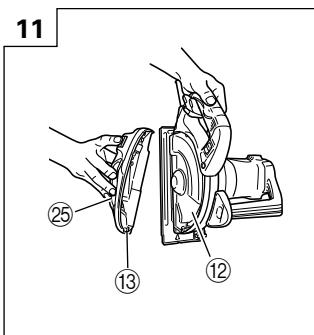
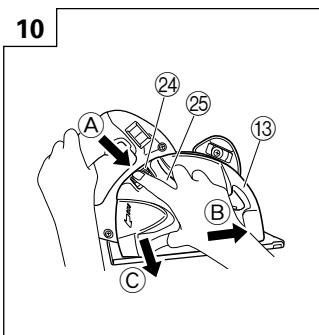
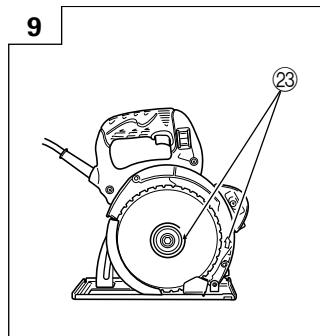
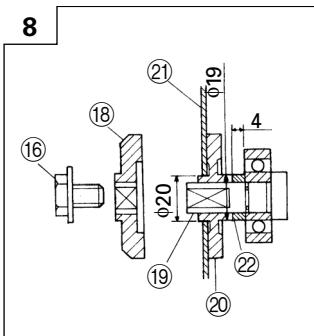
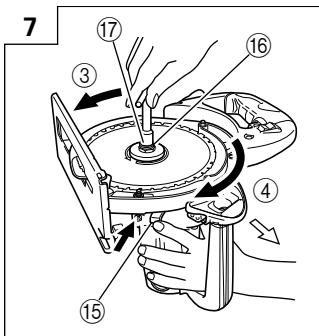
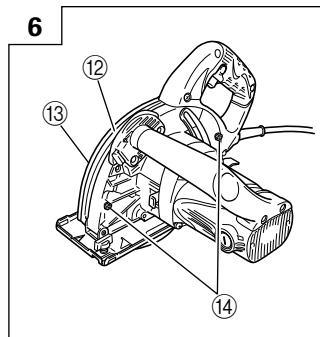
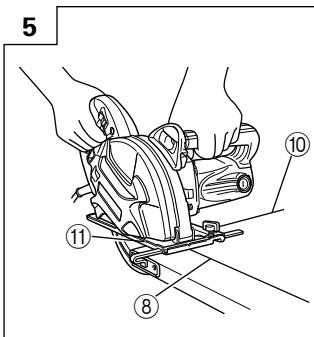
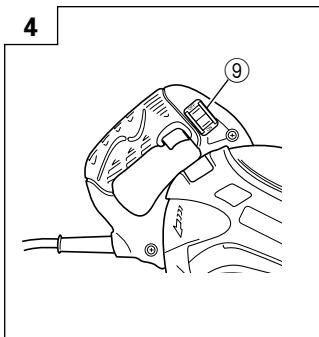
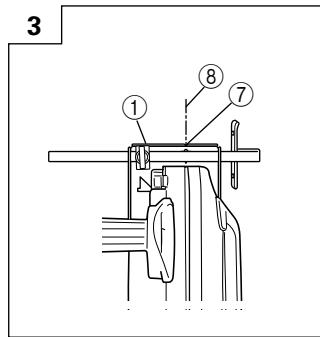
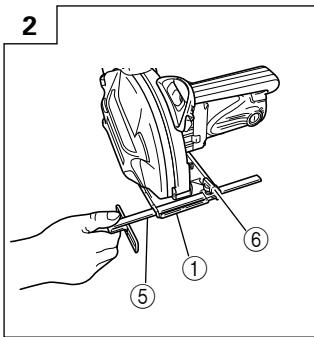
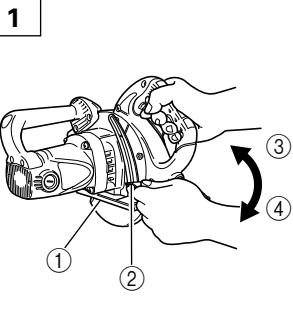
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HANDLING INSTRUCTION

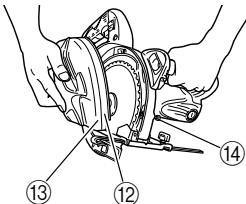
使用說明書



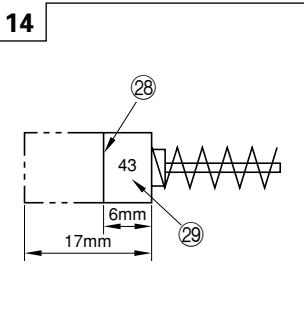
Read through carefully and understand these instructions before use.
使用前務請詳加閱讀



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①	Base	底座
②	Lever	控制桿
③	Loosen	放鬆
④	Tighten	緊固
⑤	Guide	導桿
⑥	Wing bolt	蝶形螺栓
⑦	Slit	凹槽
⑧	Cutting line	切作業線
⑨	Light switch	燈光開關
⑩	Workpiece	切割材料
⑪	Guide slit on the base seat	底座導桿凹槽
⑫	Dust cover (A)	防塵罩 (A)
⑬	Dust cover (B)	防塵罩 (B)
⑭	Special bolt	特殊螺栓
⑮	Lock lever	鎖定桿
⑯	Bolt (W/Washer)	螺栓 (帶有墊圈)
⑰	Box wrench	套筒扳手
⑱	Washer (B)	墊圈 (B)
⑲	Spindle	主軸
⑳	Washer (A)	墊圈 (A)
㉑	Carbide tipped saw blade	硬質合金鋸片
㉒	Distance piece	定距片
㉓	Align in the direction of the arrow	依箭頭方向校準
㉔	Latch	插銷
㉕	Knob	旋鈕
㉖	Hole for inserting the hook	鉤孔
㉗	Hook	鉤
㉘	Wear limit	磨損極限
㉙	No. of carbon brush	碳刷號

GENERAL SAFETY RULES

WARNING!

Read all instructions

Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

The term "power tool" in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

SAVE THESE INSTRUCTIONS

1) Work area

a) Keep work area clean and well lit.

Cluttered and 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 of 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.

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 safety 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.

c) Avoid accidental starting. Ensure the switch is in the off position before plugging in.

Carrying power tools with your finger on the switch or plugging in 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 jewellery. Keep your hair, clothing and gloves away from moving parts.

Loose clothes, jewellery 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 these devices 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 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 tools 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 and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.

Use of the power tool for operations different from 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.

PRECAUTION

Keep children and infirm persons away.

When not in use, tools should be stored out of reach of children and infirm persons.

SAFETY INSTRUCTIONS FOR ALL SAWS

DANGER:

- 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.
- b) **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 shock the operator.
- 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 arbour 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.
- i) **Never use any abrasive wheels**
Burst of abrasive wheel cause serious injury of operator or persons around the working area.

FURTHER SAFETY INSTRUCTIONS FOR ALL SAWS

Causes and operator prevention 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.

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 either side of the blade, but not in line with the blade.

Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, 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, centre 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 making a "plunge cut" into existing walls or other blind areas.**
The protruding blade may cut objects that can cause kickback.

SAFETY INSTRUCTIONS FOR SAWS WITH INNER PENDULUM GUARD

- 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 depth 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 build-up of debris.
- c) **Lower guard should 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.

PRECAUTIONS ON USING METAL CUTTING SAW

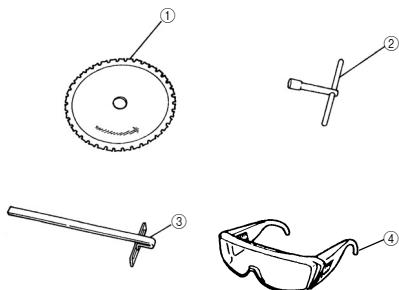
1. Do not use saw blades which are deformed or cracked.
2. Do not use saw blades made of high speed steel.
3. Do not use saw blades which do not comply with the characteristics specified in these instructions.
4. Do not stop the saw blades by lateral pressure on the disc.
5. Always keep the saw blades sharp.
6. Ensure that the lower guard moves smoothly and freely.
7. Never use the metal cutting saw with its lower guard fixed in the open position.
8. Ensure that the retraction mechanism of the guard system operates correctly.
9. Never operate the metal cutting saw with the saw blade turned upward or to the side.
10. Ensure that the material is free of foreign matters such as nails.
11. For model CD7SA, the saw blades should be from 180mm to 185mm.
12. For model CD7SA, be careful of brake kickback. Model CD7SA features an electric brake that functions when the switch is released. As there is some kickback when the brake functions, be sure to hold the main body securely.
13. Sparks can sometimes appear caused by braking operation when the switch is turned off since model CD7SA employ electric brakes. Be informed, however, that this phenomenon is not a machine trouble.
14. For model CD7SA, when the brake becomes ineffective, replace the carbon brushes with new ones.
15. Disconnect the plug from the receptacle before carrying out any adjustment, servicing or maintenance.

SPECIFICATIONS

Voltage	110V ∼
Power input	1100W
No-load speed	3700/min
Max. cutting depth	63 mm
Saw blade	185 mm (external dia.) × 2.0 mm (thickness) × 20 mm (hole dia.)
Weight (without cord)	4.0 kg

STANDARD ACCESSORIES

- ① Carbide Tipped Saw Blade 1
- ② Box Wrench 1
- ③ Guide 1
- ④ Eye Protection 1



Standard accessories are subject to change without notice.

OPTIONAL ACCESSORIES (sold separately)

Carbide tipped saw blade

Blade	Outer diameter	Hole diameter	Tip width	Thickness of saw blade	Number of teeth
For cutting soft steel materials	180 mm	20 mm	1.8 mm	1.5 mm	34 teeth
	185 mm	20 mm	2.0 mm	1.6 mm	38 teeth
For cutting soft steel materials (Low noise type)	185 mm	20 mm	2.0 mm	1.6 mm	38 teeth
For cutting thin, soft steel materials	185 mm	20 mm	2.0 mm	1.6 mm	48 teeth
For cutting thin, soft steel materials (Low noise type)					
For cutting aluminium sash materials	185 mm	20 mm	2.0 mm	1.4 mm	60 teeth
For cutting stainless steel materials	180 mm	20 mm	1.8 mm	1.4 mm	56 teeth

Optional accessories are subject to change without notice.

APPLICATIONS

	Blades	Uses
Standard accessories	Soft steel use blade	<input type="radio"/> For cutting various types of soft steel materials such as flat steel strips, pipe, steel channels ("C" channels, "L" angles, etc.).
Optional accessories	Tipped saw blades: For cutting soft steel materials For cutting soft steel materials (Low noise type)	<input type="radio"/> * Caution: Cannot be used for cutting tempered steel materials.
	Tipped saw blades: For cutting thin, soft steel materials For cutting thin, soft steel materials (Low noise type)	<input type="radio"/> For cutting aluminum sash materials only.
	Tipped saw blades: Aluminum sash material cutting use	<input type="radio"/> For cutting stainless steel materials such as flat steel sheets, round pipes, etc.
	Tipped saw blades: Stainless steel material cutting use	<input type="radio"/> For cutting stainless steel materials such as flat steel sheets, round pipes, etc.

- Refer to Page 8: "Selecting the proper tipped saw blade for different materials"

PRIOR TO OPERATION

1. This product has double insulation. However, to avoid electric shocks, be sure to use a power source that is equipped with a circuit breaker to cope with power leakage and sudden surges.

2. **Power source**

Ensure that the power source to be utilized conforms to the power requirements specified on the product nameplate.

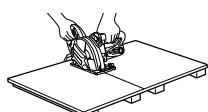
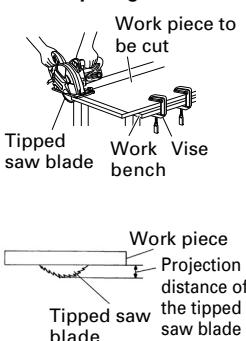
3. Power switch

Ensure that the power switch is in the OFF position. If the plug is connected to a receptacle while the power switch is in the ON position, the power tool will start operating immediately, inviting serious accident.

4. Extension cord

When the work area is removed from the power source, use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as practicable.

5. Preparing a wooden work bench



In situations like this, it is safer to make sure that the material is firmly secured in place using a vise so that both hands can be used to operate the metal cutting saw.

If the piece to be cut off is large in size, care must be taken to see that the weight of the piece being cut off does not press on the saw blade. To prevent the saw blade from being caught between the two pieces, the piece being cut off should be supported using a stable bench or braced in place using wooden supports.

If separate wooden supports are to be used to support the piece being cut off, when cutting at a work bench, they should be positioned on a flat surface and fixed in place. It is dangerous to allow the work bench to wobble or shift position while cutting materials with the metal cutting saw.

6. Checking to see that the tipped saw blade is attached firmly in position

Always check to see that the tipped saw blade is attached firmly in position. For details, see Page 9: "Attached and removing the tipped saw blade".

7. Check the lever to see that is properly tightened.

Insufficient tightening of the cutting adjustment lever may cause personal injury.

Be sure to check that it is firmly tightened.

8. Check to see whether the lower guard moves.

CAUTION

Do not fasten the lower guard permanently in one position. Make sure that it can move smoothly. Leaving the tipped saw blade exposed can result in accidents.

The lower guard is used to prevent the body of the user from coming into contact with tipped saw blade. Be sure that the lower guard can be moved into place and is covering the blade. If for any reason, the lower guard will not move into position to cover the blade, discontinue the use of the metal cutting saw. Please contact an Authorized HiKOKI Service Center for repair.

9. Making adjustments before using the metal cutter

(1) Adjusting the cutting depth (Fig. 1)

CAUTION

If the cutting depth lever is not firmly tightened, accidents may result. After adjusting the cutting depth, make sure to tighten the cutting depth lever firmly.

Loosen the lever and move the base, then you can adjust the depth of cutting.

(2) Attaching and adjusting the guide (Fig. 2)

Loosen the wing bolt and slide the guide into the slot at the base. Move the guide left or right to adjust the location of the cut to be made. After adjusting the guide, fix it firmly in place by tightening the wing bolt.

10. Check to see that the brake is functioning properly

This metal cutting saw is designed so that when the switch is turned off, the brake automatically functions. If for any reason the brake fails to operate, please contact an Authorized HiKOKI Service Center for repair.

CAUTION

The metal cutting saw will recoil when the brake operates.

This can cause the operator to drop the metal cutting saw, resulting in accidents.

11. Check the power plug

If the power plug is loose or pulls out easily from the socket, call your local electric repair service and have the connection repaired.

SELECTING THE CORRECT TIPPED SAW BLADE FOR DIFFERENT MATERIALS

In order to get the best performance from your metal cutting saw, it is important to select the correct type of tipped saw blade for the type of material to cut.

Please use the blades best suited for cutting different thickness of different materials as shown below.

Selecting the best blade by type of material to be cut		<input checked="" type="radio"/> Most suitable		<input type="radio"/> Suitable	
Tipped saw blade type	Material T (mm)	Blades for cutting soft steel materials	Blades for cutting thin, soft steel materials	Blade for cutting aluminum sash materials.	Blades for cutting stainless steel materials
Lip channels	1.6 ~ 3.2	<input checked="" type="radio"/>	<input checked="" type="radio"/>	—	—
Light U channels	1.6 ~ 2.3	<input checked="" type="radio"/>	<input checked="" type="radio"/>	—	—
	3.2	<input checked="" type="radio"/>	<input checked="" type="radio"/>	—	—
Steel base support forms	0.5 ~ 0.8	<input checked="" type="radio"/>	<input checked="" type="radio"/>	—	—
	3	<input checked="" type="radio"/>	<input checked="" type="radio"/>	—	—
Angle forms	4 ~ 6	<input checked="" type="radio"/>	—	—	—
Steel plate	4 ~ 12	<input checked="" type="radio"/>	—	—	—
	1.2 ~ 2.3	<input checked="" type="radio"/>	<input checked="" type="radio"/>	—	—
Square pipe	3.2 ~ 3.5	<input checked="" type="radio"/>	<input checked="" type="radio"/>	—	—
	1.2 ~ 2.8	<input checked="" type="radio"/>	<input checked="" type="radio"/>	—	—
Round pipe (Structural use, wiring conduit use, pressure use)	3.2 ~ 3.5	<input checked="" type="radio"/>	<input checked="" type="radio"/>	—	—
Aluminum sashes		—	—	<input checked="" type="radio"/>	—
Stainless plate	2	—	—	—	<input checked="" type="radio"/>
Stainless pipe (round)	2	—	—	—	<input checked="" type="radio"/>

HOW TO USE

CAUTION:

- If the tipped saw blade stops suddenly, makes an abnormal sound, etc., immediately turn off the switch.
- Do not use cutting oil on the blade. Such substances as cutting oil, polishing oils and waxes can catch fire from sparks when cutting.
- When using the metal cutting saw, always wear eye protection.
- Be sure that the materials are secured firmly in position. If the materials are not properly secured in position, they may fly about causing damage to the tipped saw blade.
- When cutting is finished, immediately turn off the power and unplug the metal cutting saw.
- Be careful as not to cut the unit cord with the rotating tipped saw blade.
- Discard cutting dust before the dust cover becomes completely full. If the metal cutting saw is used when the cutting dust is pressed against the dust cover, the

performance of the dust collector will drop and the temperature of the dust cover (B) will rise. This may cause dust cover (C) to warp or melt.

- Wear ear plugs to protect ears from effects of the sound.
- If the cutting depth adjustment is too shallow, the cut may tend to open lowering the performance of the cutting dust collector.
- When cutting the surface of a wall, the rate of accumulation of cutting dust inside the dust cover may change and may lower the performance of the cutting dust collector.
- Use a tipped saw blade that is suitable for the material being cut.
- When cutting, push the blade straight and forward without letting the blade curve to the left and right.
- Push the blade forward slowly, especially when beginning to cut and when coming to the end of the cut.
- Do not turn on the metal cutting saw with the blade pressed against the cutting material. Do not turn off the metal cutting saw in the midst of cutting

a piece of material. In a case where it is absolutely necessary to turn the metal cutting saw off in the middle of cutting a work piece, pull the chip saw back with the blade still turning and after it is no longer in contact with the work piece material, then turn the power switch off.

- Do not to try to cut the same work piece two times in the same location.
- 1. Place the main body (base) on the surface of the work piece and align the slit on the forward edge of the base with the sighting line. The arrow mark on the projection in the dust cover (A) and the slit in the base will be aligned and can be used for positioning the metal cutting saw. (See Fig. 3)
If the sighting line is hard to see when working in a dark place etc., turn on the LED light and align the sighting line with the slit in the forward edge of the base. (See Fig. 4)
- 2. Without allowing the blade to touch the material, turn on the power switch. When the blade has attained its maximum speed, push the metal cutting saw slowly forward and maintain the same speed until the cut is completed.
To keep the cut clean, push the saw forward at the same speed.
- 3. The slit in the base indicates the position of the edge of the blade at further end of the cut. This is useful when cutting the work piece to a midway point. (See Fig. 5)

ATTACHING AND REMOVING BLADES

CAUTION:

- Always turn the power switch off first and remove the plug from the socket.
- Use the box wrench that is supplied with the metal cutting saw. Do not use other tools as this may result in over-tightening or in sufficient tightening of the wing bolt that holds the blade in place causing accidents.

1. Removing the blade

- (1) Loosen the two special bolts and remove dust covers (A) and (B). (See Fig. 6)
- (2) Adjust the cutting depth of the blade to the minimum position and place the tipped saw cutter on a flat, stable surface. (See Fig. 7)
- (3) While pushing in the lock lever, slowly unscrew the bolt using the box wrench provided.
- (4) Holding the spindle in position, turn the box wrench counter-clockwise and remove the bolt and the washer (B).
- (5) Remove the tipped saw blade in direction (A).

2. Attaching the blade

CAUTION:

- After using the tipped saw blade, dust covers (A) and (B) may become hot. Take caution when handling.
- Do not forget to use the distance piece.
- Before plugging in the metal cutting saw, be sure to check to see whether the lock lever has been returned to its original position and that the tipped saw blade can rotate smoothly.

- (1) Follow the blade removal routine in reverse.
- (2) Remove any cutting dust that may have adhered to the spindle or the washers.

(3) When a chip saw blade with a 20mm diameter is to be attached, place washer (A) with the shallow recessed portion turned toward the blade side. When the hole diameter is 19mm, place the side of washer (A) with the more deeply recessed portion toward the blade.

For both cases, the (B) washer is used with its recessed portion facing toward the blade. (See Fig. 8)

- (4) Make sure that the arrow mark on the side of the blade is aiming the direction as the direction of arrow on the gear cover. (See Fig. 9)
- (5) Be sure to tighten the bolt sufficiently.

THROWING AWAY THE CUTTING DUST

CAUTION:

- To prevent possible accidents, always turn the metal cutting saw off and unplug before attempting to empty out the cutting dust.
- Cutting dust from metal materials may be very hot. Do not touch the cutting dust or dust covers (A) or (B) with bare hands.
- Be careful when handling dust covers (A) and (B) as not to bend them. If they become bent, cutting dust may spill out.

1. Throwing away the cutting dust

If too much cutting dust accumulates inside dust covers (A) and (B), the performance of dust collector may decrease. Be sure to empty out the cutting dust before the dust receptacle becomes full.

- (1) ① Hold the (resin) knob and push the latch down to disengage the lock. (See Fig. 10 Ⓐ)
② Pull dust cover (B) back to remove. (See Fig. 10 Ⓑ, Ⓒ)
③ Remove dust cover (B) and throw away the cutting dust. (See Fig. 11)
- (2) Remove any cutting dust that has adhered to dust covers (A) and (B) and wipe them with a rag, etc.
- (3) ① Insert the dust cover (B) hook into the hole for inserting the hook in dust cover (A). (See Fig. 12 Ⓑ)
② Push the latch down. (See Fig. 12 Ⓒ)
③ Push dust cover (B) forward to replace. (See Fig. 12 Ⓓ)
After replacing the dust cover, check that the lock is securely engaged.
- When the two special bolts are loosened, dust covers (A) and (B) can be removed with the cutting dust still inside. (See Fig. 13)
The cutting dust can then be thrown away without spilling it.

MAINTENANCE AND INSPECTION

1. Inspecting the carbide tipped saw blade

Since use of a dull saw blade will cause motor malfunctioning and degraded efficiently, replace with a new one without delay when abrasion is noted.

2. Inspecting the mounting screws

Regularly inspect all mounting screws and ensure that they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in serious hazard.

3. Maintenance of the motor

The motor unit winding is the very "heart" of the power tool. Exercise due care to ensure the winding does not become damaged and/or wet with oil or water.

4. Inspecting the carbon brushes (Fig. 14)

The motor employs carbon brushes which are consumable parts. Since an excessively worn carbon brush can result in motor trouble, replace the carbon brushes with new ones having the same carbon brush No. shown in the figure when they become worn to or near the "wear limit". In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.

5. Replacing carbon brushes

Disassemble the brush caps with a slotted-head screwdriver. The carbon brushes can then be easily removed.

6. Service parts list

CAUTION

Repair, modification and inspection of HiKOKI Power Tools must be carried out by a HiKOKI Authorized Service Center.

This Parts List will be helpful if presented with the tool to the HiKOKI Authorized Service Center when requesting repair or other maintenance.

In the operation and maintenance of power tools, the safety regulations and standards prescribed in each country must be observed.

MODIFICATION

HiKOKI Power Tools are constantly being improved and modified to incorporate the latest technological advancements.

Accordingly, some parts may be changed without prior notice.

NOTE

Due to HiKOKI's continuing program of research and development, the specifications herein are subject to change without prior notice.

一般安全規則

警告！

閱讀所有說明，未遵守下列之說明可能導致電擊、火災及/或嚴重傷害。

「電動工具」一詞在下列警告中，關係到電源操作（有線）之電動工具或電池操作（無線）之電動工具。

記住這些說明

1) 工作場所

- a) 保持工作場所清潔及明亮。
雜亂及昏暗區域易發生意外。
- b) 勿在易產生爆炸之環境中操作，譬如易燃液體、瓦斯或粉塵存在之處。
電動工具產生火花會引燃粉塵或煙氣。
- c) 當操作電動工具時，保持兒童及過往人員遠離。
分神會讓你失去控制。

2) 電氣安全

- a) 電動工具插頭必須與插座配合，絕不可以任何方法修改插頭，且不得使用任何轉接插頭於有接地之電動工具。
不修改插頭及所結合之插座可減少電擊。
- b) 避免身體接觸到接地面諸如管子、散熱器、爐灶及冰箱。
如果你的身體接地或搭地，會增加電擊的危險。
- c) 勿讓電動工具淋雨或曝露在潮濕的環境下。
電動工具進水會增加電繫的危險。
- d) 勿濫用電源線。絕勿使用電源線去纏繞、拖拉電動工具或拔插頭，保持電源線遠離熱氣、油氣、尖角或可動零件。
損壞或纏繞的電源線會增加電繫之危險。
- e) 電動工具在室外操作時要使用一適合室外用的延長線。
使用合適之室外用延長線會減少電擊的危險。

3) 人員安全

- a) 保持機警，注意你正在做什麼，並運用普通常識操作電動工具。
當你感到疲勞或受藥品、酒精或醫療影響時，勿操作電動工具。
操作中瞬間的不注意可能造成人員嚴重的傷害。

b) 使用安全裝備，常時佩戴安全眼鏡。

安全裝備有防塵口罩、防滑安全鞋、硬帽，或在適當情況下使用聽覺防護，可減少人員傷害。

c) 避免意外地啟動。在插電前確認開關是在“off”的位置。

以手指放在開關握持電動工具，或在電動工具的開關於“on”的狀況下插上插頭，都會導致意外發生。

d) 在將電動工具啟動前，先卸下任何調整用鑰匙或扳手。

扳手或鑰匙遺留在電動工具的轉動部位時，可能導致人員傷害。

e) 身體勿過度伸張，任何時間要保持站穩及平衡。

以便在不預期的狀態下，能對電動工具有較好的控制。

f) 衣著要合宜，別穿太鬆的衣服或戴首飾。

保持你的頭髮、衣服及手套遠離轉動部位。
寬鬆的衣服、首飾及長髮會被捲入轉動部位。

g) 如果裝置要用於粉塵抽取及集塵設施，要確保其連接及正當使用。

使用此類裝置能減少與粉塵有關之危害。

4) 電動工具之使用及注意事項

a) 勿強力使用電動工具，使用正確之電動工具為你所需。

正確使用電動工具會依其設計條件使工作做得更好更安全。

b) 如果開關不能轉至開及關的位置，勿使用電動工具。

任何電動工具不能被開關所控制是危險的，必須要修理。

c) 在做任何調整、更換配件或收存電動工具時，要將插頭與電源分開，且/或將電池從電動工具中取出。

此種預防安全措施可減少意外開啟電動機之危險。

d) 收存停用之電動工具，遠離兒童，且不容許不熟悉電動工具或未瞭解操作電動工具說明書的人操作電動工具。

在未受過訓練的人手裡，電動工具極為危險。

e) 保養電動工具，檢核是否有可動零件錯誤的結合或卡住、零件破裂及可能影響電動工具操作的任何其他情形。

電動工具如果損壞，在使用前要修好。許多意外皆肇因於不良的保養。

- f) 保持切割工具銳利清潔。
適當的保養切割工具，保持銳利之切削鋒口，可減少卡住並容易控制。
- g) 按照說明書使用電動工具，配件及刀具等，使用特殊型式之電動工具時要考量工作條件及所執行之工作。
使用電動工具未如預期用途之操作時，會導致危害。

5) 維修

- a) 讓你的電動工具由合格修理人員僅使用相同的維修零件更換。
如此可確保電動工具的安全得以維持。

注意事項：

不可讓孩童和體弱人士靠近工作場所。
應將不使用的工具存放在孩童和體弱人士伸手不及的地方。

○ 不可使用任何砂輪

砂輪所產生的爆裂會造成操作員或工作區附近的人員之嚴重傷害。

所有圓鋸機之詳細安全說明

反衝作用之發生原因與防止：

- 反衝作用是因鋸片受夾住，卡住或不對準而導致鋸片失控舉起或脫離工作件而朝向操作員的作用力；
- 當鋸片堅固地夾住、卡住於切口時，此時馬達會有反向作用力朝向操作員；
- 鋸切時鋸片扭曲或不正，鋸片後緣的齒部便會嵌入木材的上表面而造成鋸片脫離切口並回彈朝向操作員。

反衝作用是圓鋸機誤用與/或操作程序或條件不正確所造成的結果，以下所列的正確防範措施可以避免此類問題的發生。

- a) 兩手保持緊握圓鋸機並且將手臂置於適當的位置以抵抗反衝作用力。
身體須位於鋸片的任一側，身體與鋸片不可成一直線。
反衝作用力會導致圓鋸向後彈跳，但如果採取適當的預防措施，反衝作用力是可以被操作者所控制。
- b) 當鋸片被夾住時或者由於某些原因中斷時，請鬆開扳機並且保持圓鋸機不動，直到鋸片作動完全停止。
當鋸片在運行中或者有可能發生反衝作用力時，決不可試圖從工件上移開圓鋸機或者將圓鋸機向後拉。
須進行研究並且採取矯正措施以消除鋸片夾住的原因。
- c) 重新啟動鋸切工件時，須將鋸片定位在切口中央並檢查鋸片是否未夾入材料中。
如果鋸片有夾入，則重新啟動鋸片時可能會造成工件的移動或產生反衝作用力。
- d) 採用大面板支撐座，使鋸片受夾住或產生反衝作用力的風險降到最低。
由於其自身重力，大面板支撐座趨於下陷。
支撐座必須置於面板兩側的下方，靠近鋸切路徑與面板邊緣。
- e) 不要使用不鋒利或已損壞的鋸片。
裝設不鋒利或不正確的鋸片會產生狹窄切口而造成過大的磨擦力、鋸片夾住以致產生反衝作用力。

所有圓鋸機之安全說明

危險：

- a) 手部必須遠離鋸片與切割區域。另一手須握持輔助把手或馬達外殼。
如果雙手皆握住圓鋸機，雙手便可免於鋸片所傷。
- b) 不可碰觸下方的工作。
否則保護罩無法保護您免於鋸片所傷。
- c) 調整工件厚度的相對鋸切深度。
在工件下方應可看到小於鋸片全齒深之深度。
- d) 不可使用手按住或腿壓住正在鋸切的工作。必須將工件固定於平穩的工作台。
減少身體的暴露、鋸片卡住或失控，是正確的完成工作的重要憑藉。
- e) 在鋸切工具可能接觸到隱藏線路或其本身的線路之情況下進行操作時，須握持鋸切工具的絕緣握持面。
否則接觸到「有電」的線路與置身在電動工具的金屬部位時，將會造成操作員觸電的危險。
- f) 進行鋸切時應使用鋸切護罩或直線導向器。
此舉可改善鋸切的精確度並減少發生鋸片卡住的機會。
- g) 使用正確的軸孔尺寸與形狀(菱形端或圓端)的鋸片。
鋸片安裝不正確將有導致鋸切失控的危險。
- h) 不可使用已損壞或不正確的鋸片墊圈或螺栓。
鋸片墊圈與螺栓是特別專為圓鋸機所設計以提供最佳的性能表現與最安全的操作。

f) 在進行鋸切之前，鋸片深度與斜度調整鎖定控制桿必須安全固定。
如果鋸片調整裝置在鋸切時移動，可能會造成夾住並產生反衝作用力。

g) 在進行牆壁或其他隱蔽區域之鋸切時請格外小心。
鋸片可能會鋸切到足以產生反衝作用力的物體。

具有內部鐘擺護罩的圓鋸機安全說明

a) 在每次使用之前，先檢查下罩是否能正確的關閉。
如果下罩無法自由移動與立即關閉，決不可操作圓鋸機。不可將下罩夾入或拴入開啟位置。
如果圓鋸機不慎掉落，其下罩可能會折彎。
使用縮回操作以升起下罩，並確定它可自由移動而且在各種角度和深度之鋸切皆不會接觸到鋸片或者任何其他部位。

b) 檢查下罩彈簧之作動狀況。如果下罩與彈簧皆無法正確的作動，請在使用之前必須先行將它們修復。
下罩可能由於零件損壞、黏膠沉澱，殘屑生成而造成作動遲滯。

c) 僅在使用「切入式鋸切(plunge cuts)」與「複合式鋸切(compound cuts)」之類的特殊鋸切方式時才須使用手動縮回下罩。利用縮回把手可將下罩舉起，當鋸片開始鋸切工件材料時，必須釋放下罩。
所有圓鋸機的下罩皆應可自動的作動。

d) 在將圓鋸機置於工作台或地板上之前，先檢查下罩是否有覆蓋於鋸片上。
一個未受保護、限制的鋸片將會導致圓鋸機反向行進而產生任意鋸切的情形。請務必明瞭在鬆開開關後至鋸片完全停止時所需的时间。

使用金屬切斷機時的注意事項

1. 不要使用變形或斷裂的鋸片。
2. 不要使用由高速鋼所做成的鋸片。
3. 不要使用未依照規定的鋸片。
4. 不要在圓盤上施加橫向壓力使鋸片停止。
5. 隨時保持鋸片鋒利。
6. 確定下罩可平順且自由的移動。
7. 切勿在下護蓋固定於開啟位置的狀況下，使用金屬切斷機。
8. 確定護罩系統的縮回機構能正確的作動。
9. 使用金屬切斷機時，不可使鋸片指向上方或側面。
10. 確保工件材料沒有鐵釘之類的異物。
11. CD7SA 機種的鋸片（直徑）應為180 mm至185mm。
12. 須注意CD7SA 機種的鋸片會產生煞車回振；CD7SA機種具有電力煞車功能，在開關被鬆開時會啟動煞車作動。
當啟用制動功能時，會產生些許反衝作用力，請務必安全緊握圓鋸機本體。
13. 因CD7SA機種使用電力煞車，開關關閉時可能會出現火花。不過，此現象並非機器有問題。
14. 對於機種CD7SA而言，當剎車變得無效時，請更換新的碳刷。
15. 在進行任何調整，保養或維修之前，須先拔下插座上的插頭。

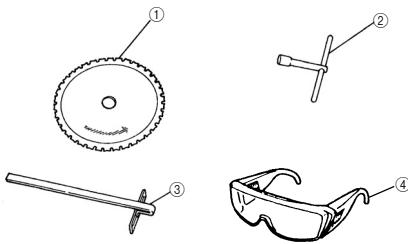
規 格

電 壓	110V ~
輸入功率	1100W
空載轉速	3700 轉／分
最大鋸切深度	63 mm
鋸片	185 mm (外徑) × 2.0mm (厚度) × 20mm (孔徑)
重 量 (不含線纜)	4.0 kg

標準附件

① 硬質合金鋸片 1
 ② 套筒扳手 1
 ③ 導桿 1
 ④ 護目鏡 1

標準附件可能不預先通告而徑予更改。



選購附件 (分開銷售)

硬質合金鋸片

鋸片	外徑	孔徑	鋸齒寬度	鋸身厚度	齒數
軟鋼材的切割	180 mm	20 mm	1.8 mm	1.5 mm	34枚
	185 mm	20 mm	2.0 mm	1.6 mm	38枚
軟鋼材的切割 (低噪音)	185 mm	20 mm	2.0 mm	1.6 mm	38枚
薄壁軟鋼材的切割	185 mm	20 mm	2.0 mm	1.6 mm	48枚
薄壁軟鋼材的切割 (低噪音)	185 mm	20 mm	2.0 mm	1.4 mm	60枚
鋁窗格的切割	185 mm	20 mm	2.0 mm	1.4 mm	56枚
不銹鋼的切割	180 mm	20 mm	1.8 mm	1.4 mm	56枚

選售附件可能不預先通告而徑予更改。

用 途

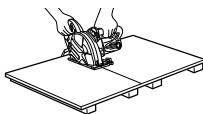
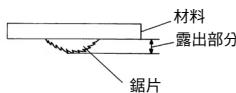
	刀具	用途
標準附件	軟鋼材用鋸片	○ 各種軟鋼材的切割 扁鋼、鋼管、緣槽鋼 (C 形槽鋼)、等邊角鋼 (L 形角鋼) 等
選購附件	鋸片： 軟鋼材的切割 軟鋼材的切割 (低噪音)	
	鋸片： 薄壁軟鋼材的 切割 薄壁軟鋼材的 切割 (低噪音)	※ 不能切割淬火材料之類的硬質鋼材。
	鋁窗框用鋸片	○ 鋁窗框的切割 ※ 鋁窗框專用。
	鋸片： 不銹鋼材用於 切割	○ 不銹鋼的切割 扁鋼、圓形鋼管等

○ 請參閱第 16 頁 “各種切割材料適用鋸片的選擇方法”一節。

作 業 之 前

1. 本產品採用雙重絕緣結構，但是為了防止萬一發生觸電事故，建議您將其連接在帶有漏電斷路器的電源上。
2. **電源：**
確認所使用的電源與工具銘牌上標示的規格是否相符。
3. **電源開關：**
確認電源開關是否切斷。若電源開關接通，則插頭插入電源插座時電動工具將出其不意地立刻轉動，從而招致嚴重事故。
4. **延伸線纜：**
若作業場所移到離開電源的地點，應使用容量足夠、鎧裝合適的延伸線纜，並且要盡可能地短些。
5. **作業台 (木製) 的布置**
鋸片在切割過程中會從材料的下面露出，因此請將材料放在作業台上進行切割。





再者，應注意勿使鋸片尖端及下護蓋觸碰工作下方的表面（例如工作台面、地板、地面等）。為防範此情況發生，須將工件（欲被切割材料）架起，使其下方表面高度離鋸板凸出工作底面部分至少3倍的距離。
請固定好被切割材料的切剩部分。
此時如果用固定鉗固定好材料則更為安全，並可用雙手同時進行作業。

如果材料的切除部分較大，則為了避免鋸片在切割過程中因材料本身的重量而被夾住，請將穩定性好的台子或方棒料放在切除部分的下面。
用方棒料做作業台時，請選擇地面平坦之處，並固定好方棒料。
使用金屬切斷機作業時，切勿使工作台搖晃或移動，以維護安全。

6. 確認鋸片是否緊固

請確保鋸片已經完全緊固妥貼。
詳情請參閱第 17 頁“鋸片的安裝和拆卸”一節。

7. 確認控制桿是否緊固

如果切割調整用控制桿變鬆，則會造成人身傷害，因此請確保其充分緊固。

8. 檢查確認下護蓋是否可自由移動

注意：切勿將下護蓋永久固定於單一位置，確認下護蓋可自由移動。
鋸齒外露會導致意外。

下護蓋的功能是防範使用者身體接觸到鋸齒。應確保下護蓋能移到定位並遮蔽鋸板。

若下護蓋無法移到定位而遮蔽鋸板，無論原因為何，應立即停止使用金屬切斷機。
此時請與 HIKOKI 授權維修中心聯繫修理。

9. 切割前的調整

(1) 切割厚度的調整（圖 1）

注意：如果切割調整用控制桿變鬆，則會造成人身傷害。
調整後請緊固妥貼。

放鬆控制桿並活動底座便可調整切割厚度。

(2) 導桿的安裝和調整（圖 2）

放鬆蝶形螺栓，並將附帶的導桿插入底座的孔中。左右活動導桿，調整切割位置。
調整後請將蝶形螺栓緊固妥貼。

10. 確認制動器已經處於制動狀態

本機採用在切斷電源開關的同時制動作用隨之生效的結構。

使用前請檢查制動器是否在起作用。萬一制動器作用失常，則應委託 HIKOKI 授權維修中心予以修理。

注意：請注意制動器動作時的回彈力。
機體摔落會傷及身體。

11. 電源插座的檢查

如果插頭在插入後發生晃動或很快就要脫出，則必須進行修理。此時請與附近的電氣商店等聯繫。

如果照用不誤，則會因過熱而引發事故。

各種切割材料適用鋸片的選擇方法

為了充分發揮本機的性能，並進行高效作業，選擇使用適合於切割材料的鋸片是非常重要的。
請參照下表來使用適合切割材料種類和板厚的鋸片。

各種切割材料適用鋸片的選擇方法					<input checked="" type="radio"/> 最適合 <input type="radio"/> 適合
鋸片的種類		軟鋼材用鋸片 低噪音鋸片	薄壁軟鋼材用鋸片 低噪音鋸片	鋁窗框用鋸片	不銹鋼材用鋸片
鋸片的種類					
切割材料	板厚 (mm)	外徑 185mm 齒數 38 枚 外徑 180mm 齒數 34 枚	外徑 185mm 齒數 48 枚	外徑 185mm 齒數 60 枚	外徑 180mm 齒數 56 枚
緣槽鋼	1.6~3.2	○	◎	—	—
直槽鋼	1.6~2.3	○	◎	—	—
	3.2	◎	◎	—	—
鋼製底材	0.5~0.8	◎	◎	—	—
	3	○	◎	—	—
角鋼	4~6	◎	—	—	—
鋼板	4~12	○	—	—	—
方形鋼管	1.2~2.3	◎	◎	—	—
	3.2~3.5	○	○	—	—
圓形鋼管 (結構用 (管道、壓力管用)	1.2~2.8	○	◎	—	—
	3.2~3.5	◎	○	—	—
鋁窗框		—	—	◎	—
不銹鋼 板材	2	—	—	—	◎
不銹鋼 圓管	2	—	—	—	◎

使 用 方 法

注意：

- ・如果在使用過程中鋸片停止運轉或出現異常聲音，請立即切斷電源開關。
- ・切割時請勿塗抹切削油。
切削油、磨削液以及蠟等種類的物質有時會因切割時所產生的火花而起火。
- ・切割時務請戴上護目鏡。
- ・請固定穩妥切割材料。如果沒有固定好，則會使切割材料飛散開去或損壞鋸片。
- ・作業結束後務請切斷電源開關，並拔掉電源插頭。
- ・請注意不要被轉動的鋸片切斷線纜。
- ・請在切屑盛滿前及早將其倒掉。
如果在防塵罩內已經積滿切屑的情況下繼續使用鋸片，則會降低集塵性能，使防塵罩 (B) 產生高溫，並使防塵罩 (C) 發生變形甚至熔化。
- ・為了保護耳朵免受噪音的侵擾，請戴上耳塞。
- ・如果在使用過程中使切割厚度變薄，則由於刀口空開，從而使集塵性能下降。
- ・當切割壁面時，防塵罩內切屑的蓄積狀態會發生變化，從而降低集塵性能。
- ・請使用適合於切割材料的鋸片。
- ・切割時請筆直地向前推，而不要扭轉或硬撬。
- ・切割時，特別是在切割開始和結束時請慢慢推進。
- ・請勿在鋸片緊貼切割材料的情況下打開電源開關。請勿在切割過程中斷開電源開關。如果要在中途停止切割，請在鋸片繼續旋轉的情況下退出機身，並在鋸片離開切割材料後切斷電源開關。
- ・請勿切割疊起來的切割材料。

1. 將機身主體（底座）放在被切割材料上，並用底座前端的凹槽對準鋸片和劃線。
將防塵罩 (A) 凸出部分上的箭頭正對著底座的凹槽，因此在校準金屬切斷機位置時請使用該箭頭。
(圖 3)
如果在暗處工作時難以看清劃線，請打開LED燈，然後用劃線對準底座前端的凹槽。
(圖 4)
2. 在鋸片尚未觸及被切割材料的狀態下接通電源開關。當達到全速旋轉後，將本機緩緩推向前方，請保持這種狀態直至本次切割結束。
為使切割面保持平滑，請按一定速度筆直推進。
3. 底座側部的凹槽用來指示最大切入深度時鋸片的鋸齒位置。該凹槽為將材料切割到中途為止等場合提供了方便。
(圖 5)

鋸 片 的 安 裝 和 拆 卸

注意：

- ・為了防止萬一發生事故，務請切斷電源開關，並拔下電源插頭。
- ・如果使用本機附帶的套筒扳手以外的工具來拆卸和安裝帶墊圈的螺栓，則會出現緊固過度或緊固不足，並造成人身傷害。

1. 拆卸方法

- (1) 放鬆蝶形螺栓 (2 根)，拆下防塵罩 (A) 和 (B)。(圖 6)
- (2) 使切割厚度達到最小，並將鋸片切割機放在穩定的地板上。(圖 7)
- (3) 在推入鎖定桿的同時，用附帶的套筒扳手慢慢轉動螺栓。
- (4) 當固定好主軸以後，沿逆時針方向轉動套筒扳手，然後卸下螺栓和墊圈 (B)。
- (5) 沿 (A) 方向取出鋸片。

2. 安裝方法

注意：

- ・請注意，切割作業之後，鋸片和防塵罩 (A) 和 (B) 會發熱。
- ・請勿忘記放入定距片 (寬 4mm)。
- ・在插入電源插頭前，請確保鎖定桿已返回原處，同時鋸片也能旋轉自如。

- (1) 請按與拆卸方法相反的步驟進行安裝。
- (2) 擦淨附在主軸和墊圈上的切屑。
- (3) 安裝孔徑為 20mm 的鋸片時，請將墊圈 (A) 的凹陷部分較淺的一方作為鋸片的一側。
安裝孔徑為 19mm 的鋸片時，應將墊圈 (A) 的凹陷部分較深的一方作為鋸片的一側。
另外，不論在哪種情況下，都應將墊圈 (B) 的凹陷部分作為鋸片的一側。
(圖 8)
- (4) 鋸片的箭頭應當與齒輪罩的箭頭方向保持一致。
(圖 9)
- (5) 請充分擰緊螺栓。

切屑的清除方法

注意：

- 為了防止萬一發生事故，務請切斷電源開關，並拔下電源插頭。
- 金屬切屑會產生高溫，防塵罩（A）和（B）也會隨之發熱。請勿用手直接接觸切屑或防塵罩（A）和（B）。
- 操作時應當小心謹慎，以免使防塵罩（A）和（B）發生變形。
如果發生變形，則積蓄在防塵罩內部的切屑會很容易漏出。

1. 切屑的清除方法

如果防塵罩（A）和（B）內切屑積蓄過多，集塵性能將會減弱。請在積滿前提早倒掉切屑。

- (1) ① 握住（樹脂）把手同時向下壓，使鎖扣脫離。（圖 10 ④）
② 將防塵罩（B）向後拉，使其卸下。（圖 10 ⑤、⑥）
③ 卸下防塵罩（B），然後倒掉切屑。（圖 11）
- (2) 清除附在防塵罩（A）和（B）上的切屑，再用抹布擦淨。
- (3) ① 將防塵罩（B）的鉤子插入防塵罩（A）內使其固定。（圖 12 ④）
② 壓下扣梢。（圖 12 ⑤）
③ 將防塵罩（B）向前推使其定位。（圖 12 ⑥）
防塵罩定位後，檢查鎖扣是否確實扣住。
○ 鬆開兩顆蝶形螺栓後，可在切屑仍在其內部時卸下防塵罩（A）和（B）。（圖 13）
然後可倒掉切屑，而不會將其灑落。

維護和檢查

1. 檢查硬質合金鋸片

因為使用遲鈍的鋸片容易引起發動機的故障和退化，若其磨損顯著，請及時用新的更換。

2. 檢查安裝螺釘

要經常檢查安裝螺釘是否緊固妥善。若發現螺釘鬆了，應立即重新扭緊，否則會導致嚴重的事故。

3. 電動機的維護

電動機繞線是電動工具的心臟部。應仔細檢查有無損傷，是否被油液或水沾濕。

4. 檢查碳刷（圖 14）

電動機上的碳刷是一種消耗品，其磨耗度一旦超出了“磨耗極限”，電動機將發生障礙。因此，磨耗了的碳刷應即更換新件。此外，碳刷必須常保干淨狀態，這樣才能在刷握裡自由滑動。

5. 更換碳刷

用無頭螺絲刀卸下碳刷蓋，然後可以很容易地取下碳刷。

6. 維修零部件一覽表

注意

HIKOKI 電動工具的修理、維護和檢查必須由 HIKOKI 維修服務中心進行。

需要維修時，將此零件目錄和工具一同交給 HIKOKI 維修服務中心，將有助於進行維修或其他保養。

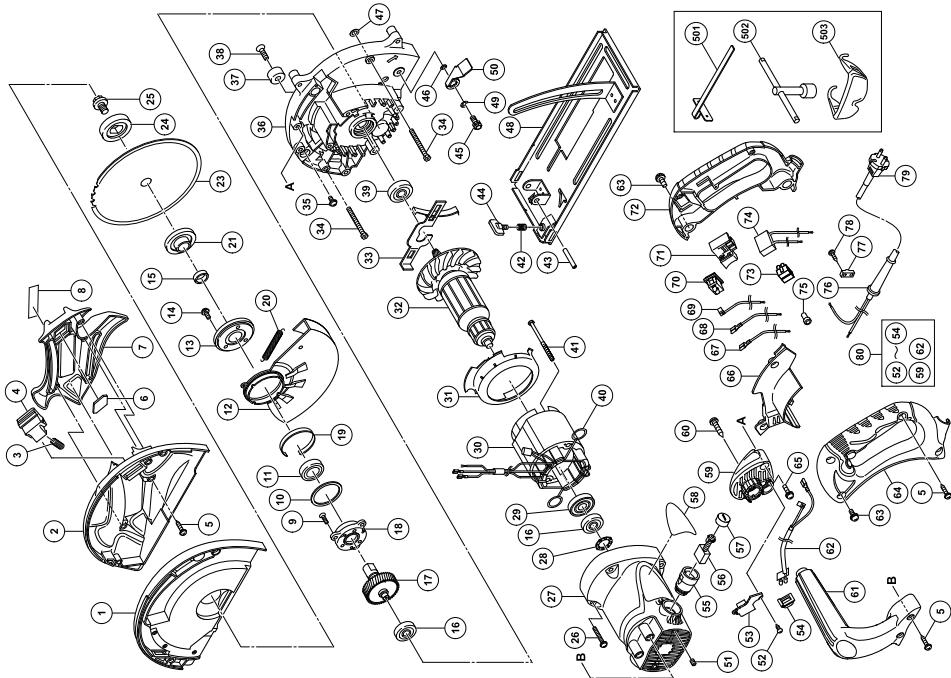
電動工具的操作與保養必須遵照各國家的安全規定及標準。

改進

HIKOKI 電動工具不斷進行改進，以適應最新的科技發展。因此，部份零件的變更可能無法事先通知。

注：為求改進，本手冊所載規格可能不預先通告而徑予更改。

Item No.	Part Name	Q'TY	Item No.	Part Name	Q'TY
1	DUST COVER (A)	1	46	WASHER M6	1
2	DUST COVER (B)	1	47	O-RING (4PC-5)	2
3	SPRING	1	48	BASE	1
4	KNOB	1	49	RETAINING RING (E-TYPE) FOR DB SHAFT	1
5	TAPPING SCREW (W/FLANGE) D4x20	7	50	LINK LEVER	1
6	GLASS PLATE	1	51	HEX. SOCKET SET SCREW M5x8	2
7	DUST COVER (C)	1	52	TAPPING SCREW D2.6x10	2
8	BRAND PLATE	1	53	LED COVER (B)	1
9	SEAL LOCK FLAT HD. SCREW M5x12	3	54	LED HOLDER	1
10	WASHER	1	55	BRUSH HOLDER	2
11	BALL BEARING 6202VVCMPS2L	1	56	CARBON BRUSH	2
12	LOWER GUARD	1	57	BRUSH CAP	2
13	BEARING CAP	1	58	NAME PLATE	1
14	MACHINE SCREW (W/SP. WASHER) M4x10	3	59	SIDE HANDLE (A)	1
15	DISTANCE PIECE	1	60	TAPPING SCREW (W/FLANGE) D5x20	1
16	BALL BEARING 608VVC2FS2L	2	61	SIDE HANDLE (B)	1
17	SPINDLE AND GEAR SET	1	62	LED	1
18	BEARING HOLDER	1	63	MACHINE SCREW (W/WASHER) M5x16	4
19	BUSHING	1	64	HANDLE (A)	1
20	RETURN SPRING	1	65	MACHINE SCREW (W/WASHER) M5x20	2
21	WASHER (A)	1	66	LED COVER	1
23	TCT SAW BLADE	1	67	INTERNAL WIRE (A)	1
24	WASHER (B)	1	68	INTERNAL WIRE (A)	1
25	BOLT (W/WASHER) M7x17.5	1	69	INTERNAL WIRE	1
26	MACHINE SCREW (W/WASHER) M5x40	4	70	SWITCH (W/COVER)	1
27	HOUSING ASSY	1	71	SWITCH	1
28	THRUST WASHER	1	72	HANDLE (B)	1
29	DUST SEAL	1	73	PILLAR TERMINAL	2
30	STATOR ASSY	1	74	NOISE SUPPRESSOR	1
31	FAN GUIDE	1	75	CONNECTOR	1
32	ARMATURE	1	76	CORD ARMOR	1
33	LOCK LEVER	1	77	CORDCLIP	1
34	BOLT M6x40	2	78	TAPPING SCREW (W/FLANGE) D4x16	2
35	MACHINE SCREW (W/WASHER) M4x10	2	79	CORD	1
36	GEAR COVER	1	80	SIDE HANDLE (A) ASSY	1
37	CUSHION	1	80.1	GUIDE	1
38	FLAT HD. SCREW M6x20	1	502	BOX WRENCH 10MM	1
39	BALL BEARING 6001VVCMPS2L	1	503	SAFETY GLASSES	1
40	BRUSH TERMINAL	2			
41	HEX. HD. TAPPING SCREW D5x70	2			
42	SPRING	1			
43	ROLL PIN D6x32	1			
44	WING BOLT M6x12	1			
45	SPECIAL; BOLT M6	1			



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