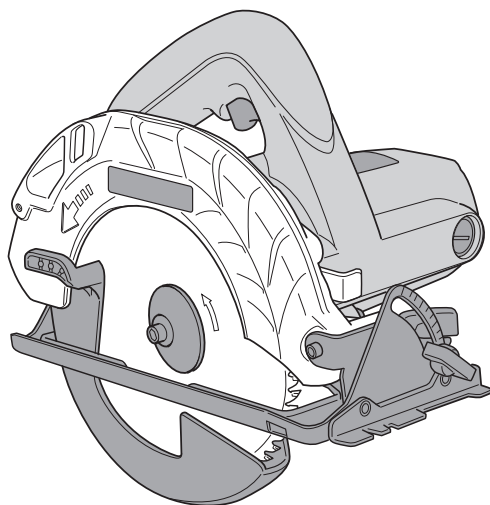


HIKOKI

Circular Saw Model C 7SS

Handling instructions



Note:

Before using this Electric Power Tool, carefully read through these **HANDLING INSTRUCTIONS** to ensure efficient, safe operation. It is recommended that these **INSTRUCTIONS** be kept readily available as an important reference when using this power tool.



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.

1) Work area safety

- a) **Keep work area clean and well lit.**

Cluttered or dark areas invite accidents.

- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.**

Power tools create sparks which may ignite the dust or fumes.

- c) **Keep children and bystanders away while operating a power tool.**

Distractions can cause you to lose control.

2) Electrical safety

- a) **Power tool plugs must match the outlet.**

Never modify the plug in any way.

Do not use any adapter plugs with earthed (grounded) power tools.

Unmodified plugs and matching outlets will reduce risk of electric shock.

- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.**

There is an increased risk of electric shock if your body is earthed or grounded.

- c) **Do not expose power tools to rain or wet conditions.**

Water entering a power tool will increase the risk of electric shock.

- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.**

Damaged or entangled cords increase the risk of electric shock.

- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.**

Use of a cord suitable for outdoor use reduces the risk of electric shock.

- f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.**

Use of an RCD reduces the risk of electric shock.

3) Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.**

A moment of inattention while operating power tools may result in serious personal injury.

- b) **Use personal protective equipment. Always wear eye protection.**

Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

- c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.**

Carrying power tools with your finger on the switch or 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 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 dust collection can reduce dust related hazards.

4) Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.**

The correct power tool will do the job better and safer at the rate for which it was designed.

- b) **Do not use the power tool if the switch does not turn it on and off.**

Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.**

Such preventive safety measures reduce the risk of starting the power tool accidentally.

- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.**

Power tools are dangerous in the hands of untrained users.

- e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation.**

If damaged, have the power tool repaired before use.

Many accidents are caused by poorly maintained power tools.

- f) **Keep cutting tools sharp and clean.**

Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

- g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.**

Use of the power tool for operations different from those intended could result in a hazardous situation.

5) Service

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.**

This will ensure that the safety of the power tool is maintained.

PRECAUTION

Keep children and infirm persons away.

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

CIRCULAR SAW SAFETY WARNINGS

Cutting procedures

- a) **⚠ DANGER: 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 the power tool by insulated gripping surfaces only, when performing an operation where the cutting tool may contact hidden wiring or its own cord.**

Contact with a "live" wire will also make exposed metal parts of the power tool "live" and could give the operator an electric shock.

- f) **When ripping, always use a rip fence or straight edge guide.**

This improves the accuracy of cut and reduces the chance of blade binding.

- g) **Always use blades with correct size and shape (diamond versus round) of 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.

Kickback causes and related warnings

- 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 to 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 minimise the risk of blade pinching and kickback.**

Large panels tend to sag under their own weight.

Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.

- e) **Do not use dull or damaged blades.**

Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.

- f) **Blade depth and bevel adjusting locking levers must be tight and secure before making cut.**

If blade adjustment shifts while cutting, it may cause binding and kickback.

- g) **Use extra caution when sawing into existing walls or other blind areas.**

The protruding blade may cut objects that can cause kickback.

Lower guard function

- a) **Check lower guard for proper closing before each use. Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position.**

If saw is accidentally dropped, lower guard may be bent.

Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.

- b) **Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use.**

Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.

- c) **Lower guard may be retracted manually only for special cuts such as "plunge cuts" and "compound cuts".**

Raise lower guard by retracting handle and as soon as blade enters the material, the lower guard must be released.

For all other sawing, the lower guard should operate automatically.

- d) **Always observe that the lower guard is covering the blade before placing saw down on bench or floor.**

An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path.

Be aware of the time it takes for the blade to stop after switch is released.

PRECAUTIONS ON USING CIRCULAR 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 circular 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 circular 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 C7SS, the saw blades range should be from 185 mm to 190 mm.
12. Disconnect the plug from the receptacle before carrying out any adjustment, servicing or maintenance.

SPECIFICATIONS

Model		C7SS
Voltage (by areas)*		230 V ~
Cutting Depth	90°	68 mm
	45°	46 mm
Power Input		1050 W
No-Load Speed		5500/min
Weight (without cord)		3.3 kg

* Be sure to check the nameplate on product as it is subject to change by areas.

STANDARD ACCESSORIES

- (1) Saw Blade (mounted on tool) (Dia. 190 mm)

(2) Hex. Bar wrench.....
- 1

1

Standard accessories are subject to change without notice.

OPTIONAL ACCESSORIES (sold separately)

- (1) Dust Collector Set (D)

Connect the suction hose to collect saw dust with the vacuum cleaner (see Fig. 1).

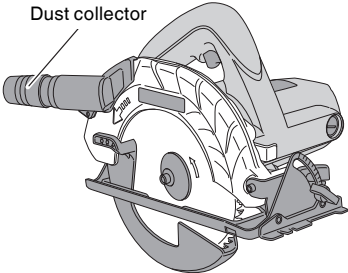


Fig. 1

- (2) Washer (A)

(3) Guide (with wing-bolt)
- for 20 mm (Hole dia. of saw blade)

Optional accessories are subject to change without notice.

APPLICATION

Cutting various types of wood.

PRIOR TO OPERATION

1. Power source

Ensure that the power source to be utilized conforms to the power requirements specified on the product nameplate.
2. 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, which could cause a serious accident.
3. 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.
4. RCD

The use of a residual current device with a rated residual current of 30mA or less at all times is recommended.
5. Prepare a wooden workbench (Fig. 2)

Since the saw blade will extend beyond the lower surface of the lumber, place the lumber on a workbench when cutting. If a square block is utilized as a workbench, select level ground to ensure it is properly stabilized. An unstable workbench will result in hazardous operation.

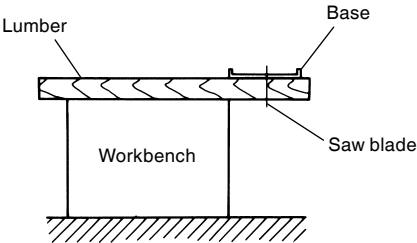


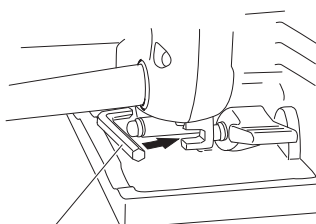
Fig. 2

CAUTION

To avoid possible accident, always ensure that the portion of lumber remaining after cutting is securely anchored or held in position.

6. How to store the hex. bar wrench (Fig. 2)

The hex. bar wrench used for attaching and detaching the saw blade can be stored in the handle.



Hex. bar wrench

Fig. 3

ADJUSTING THE POWER TOOL PRIOR TO USE

1. Adjusting the cutting depth

The cutting depth can be adjusted by moving the base after loosening its lever (A) (Fig. 4).

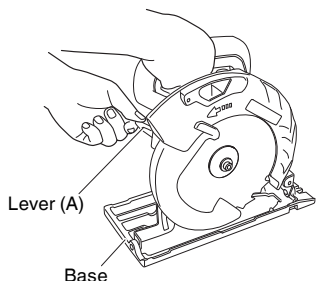


Fig. 4

CAUTION

Should this lever (A) remain loosened, it will create a very hazardous situation. Always thoroughly clamp it.

2. Adjusting the angle of inclination

By loosening the wing bolt at the scale, the saw blade can be tilted up to maximum angle of 45° against the base (Fig. 5).

The angle of inclination can also be regulated by loosening the wing bolt at the scale (Fig. 5).

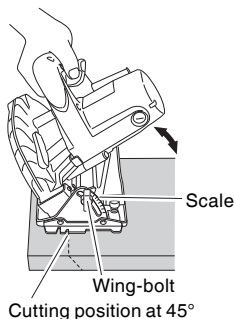


Fig. 5

CAUTION

It is very hazardous to allow this wing bolt to remain loosened. Always thoroughly clamp it.

3. Regulating the guide (Optional accessory)

The cutting position can be regulated by moving the guide to the left or right after loosening its wing bolt.

The guide can be mounted on either the left or the right side.

CUTTING PROCEDURES

1. Place the saw body (base) on the lumber, and align the cutting line with the saw blade at the front scale (Fig. 6).

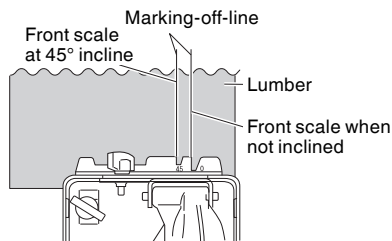


Fig. 6

2. Turn ON the switch before the saw blade contacts the lumber. The switch is turned ON when the trigger is squeezed, and turned OFF when the trigger is released.

CAUTIONS

Prior to cutting operation, make sure the material you are going to cut. If the material to be cut is expected to generate harmful / toxic dusts, make sure the dust bag or appropriate dust extraction system is connected with dust outlet tightly.

Wear the dust mask additionally, if available.

- Before starting to saw, confirm that the saw blade has attained full-speed revolution.
- Should the saw blade stop or make an abnormal noise while operating, promptly turn OFF the switch.
- Always take care in preventing the power cord from coming near to the revolving saw blade.
- Using the circular saw with the saw blade facing upwards or sideways is very hazardous. Such uncommon applications should be avoided.
- When cutting materials, always wear protective glasses.
- When finished with a job, pull out the plug from the receptacle.

MOUNTING AND DISMOUNTING THE SAW BLADE

CAUTION

To avoid serious accident, ensure the switch is in the OFF position, and the power source is disconnected.

1. Dismounting the saw blade

- (1) Set the cutting volume at maximum, and place the Circular Saw as shown in Fig. 7.
- (2) Depress the lock lever, lock the spindle, and remove the hexagonal-socket bolt with the hex. bar wrench.
- (3) While holding the lower guard lever to keep the lower guard fully retracted into the saw cover, remove the saw blade.

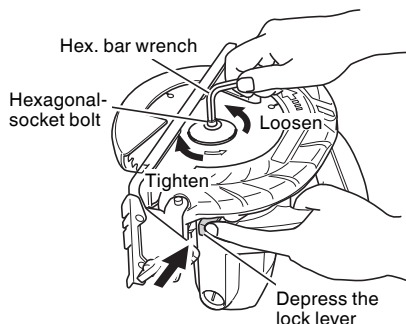


Fig. 7

2. Mounting the Saw Blade

- (1) Thoroughly remove any sawdust which has accumulated on the spindle, bolt and washers.
- (2) For saw blades with hole diameters of 20 mm, as shown in Fig. 8, the side of Washer (A) with a projected center the same diameter as the inner diameter of the saw blade and the concave side of Washer (B) must be fitted to the saw blade sides.
- (3) To assure proper rotation direction of the saw blade, the arrow direction on the saw blade must coincide with the arrow direction on the saw cover.
- (4) Using the fingers, tighten the hexagonal-socket bolt retaining the saw blade as much as possible. Then depress the lock lever, lock the spindle, and thoroughly tighten the hexagonal-socket bolt.

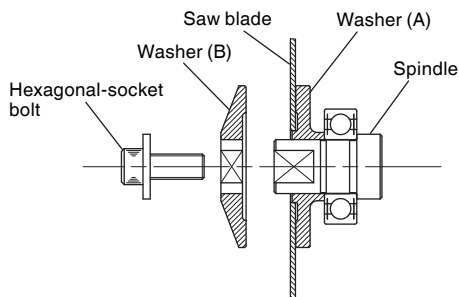


Fig. 8

CAUTION

After having attached the saw blade, reconfirm that the lock lever is firmly secured in the prescribed position.

MAINTENANCE AND INSPECTION

1. Inspecting the saw blade

Since use of a dull saw blade will degrade efficiency and cause possible motor malfunction, sharpen or replace the saw blade as soon as 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

For your continued safety and electrical shock protection, carbon brush inspection and replacement on this tool should ONLY be performed by a HiKOKI Authorized Service Center.

5. Replacing supply cord

If the replacement of the supply cord is necessary, this has to be done by the manufacturer of this agent in order to avoid a safety hazard.

6. Adjusting the base and saw blade to maintain perpendicularity (only aluminum base type)

The angle between the base and the saw blade has been adjusted to 90°, however should this perpendicularity be lost for some reason, adjust in the following manner:

- (1) Turn the base face up (Fig. 9) and loosen the wing-bolt (Fig. 5).
- (2) Apply a square to the base and the saw blade and turning the slotted set screw with a slotted-head screwdriver, shift the position of the base to produce the desired right angle.

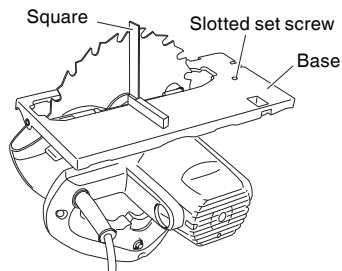


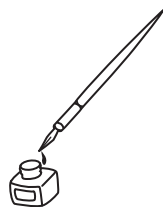
Fig. 9

CAUTION

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

NOTE

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



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