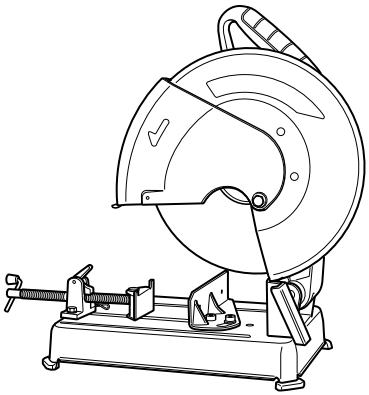
HITACHI

Model **Modèl** **Modelo**	**CC 14SE**	**Cut-Off Machine** **Machine à meule** **Tronzadora**



SAFETY INSTRUCTIONS AND INSTRUCTION MANUAL

⚠ WARNING

IMPROPER OR UNSAFE use of this power tool can result in death or serious bodily injury!
This manual contains important information about product safety. Please read and understand this manual BEFORE operating the power tool. Please keep this manual available for other users and owners before they use the power tool. This manual should be stored in safe place.

INSTRUCTIONS DE SECURITE ET MODE D'EMPLOI

⚠ AVERTISSEMENT

Une utilisation **INCORRECTE OU DANGEREUSE** de cet outil motorisé peut entraîner la mort ou de sérieuses blessures corporelles!
Ce mode d'emploi contient d'importantes informations à propos de la sécurité de ce produit. Prière de lire et de comprendre ce mode d'emploi AVANT d'utiliser l'outil motorisé. Garder ce mode d'emploi à la disponibilité des autres utilisateurs et propriétaires avant qu'ils utilisent l'outil motorisé. Ce mode d'emploi doit être conservé dans un endroit sûr.

INSTRUCCIONES DE SEGURIDAD Y MANUAL DE INSTRUCCIONES

⚠ ADVERTENCIA

¡La utilización **INAPROPIADA O PELIGROSA** de esta herramienta eléctrica puede resultar en lesiones de gravedad o la muerte!
Este manual contiene información importante sobre la seguridad del producto. Lea y comprenda este manual ANTES de utilizar la herramienta eléctrica. Guarde este manual para que puedan leerlo otras personas antes de utilizar la herramienta eléctrica. Este manual debe ser guardado en un lugar seguro.

DOUBLE INSULATION
DOUBLE ISOLATION
AISLAMIENTO DOBLE

Hitachi Koki

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IMPORTANT SAFETY INFORMATION

Read and understand all of the safety precautions, warnings and operating instructions in the Instruction Manual before operating or maintaining this power tool.

Most accidents that result from power tool operation and maintenance are caused by the failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing a potentially hazardous situation before it occurs, and by observing appropriate safety procedures.

Basic safety precautions are outlined in the “SAFETY” section of this Instruction Manual and in the sections which contain the operation and maintenance instructions.

Hazards that must be avoided to prevent bodily injury or machine damage are identified by WARNINGS on the power tool and in this Instruction Manual.

NEVER use this power tool in a manner that has not been specifically recommended by HITACHI.

MEANINGS OF SIGNAL WORDS

WARNING indicates a potentially hazardous situations which, if ignored, could result in death or serious injury.

CAUTION indicates a potentially hazardous situations which, if not avoided, may result in minor or moderate injury, or may cause machine damage.

NOTE emphasizes essential information.

SAFETY

SAFETY RULES FOR POWER TOOLS.

READ ALL OF THE WARNINGS AND OPERATING INSTRUCTIONS IN THIS MANUAL BEFORE OPERATING OR MAINTAINING THIS TOOL.

⚠ **WARNING: When using this electric tool, take all necessary precautions to minimize the risk of electric shock or other personal injury.**
In particular, always comply with the following safety rules:

1. **ALWAYS KEEP GUARDS IN PLACE** and in working order.
2. **ALWAYS REMOVE ADJUSTING KEYS, WRENCHES AND STOPPER BEFORE STARTING TOOL.** Always confirm that all keys, adjusting wrenches and stopper have been removed from the tool before it is turned on.
3. **ALWAYS KEEP WORK AREA CLEAN.** Avoid injuries by not cluttering the work areas and work benches.
4. **NEVER USE TOOL IN HAZARDOUS ENVIRONMENTS.** Never use power tools in damp or wet places, and never expose them to rain. Always keep the work area well lighted.
5. **KEEP CHILDREN AWAY.** All visitors should be kept safe distance from work area.
6. **MAKE WORKSHOP KID PROOF** with padlocks, master switches, or by removing starter keys.
7. **NEVER FORCE THE TOOL.** It will do the job better and more safely if it is operated at the rate for which it was designed.
8. **ALWAYS USE THE RIGHT TOOLS.** Never force a tool or an attachment to do a job for which it was not designed.
9. **ALWAYS WEAR PROPER APPAREL WHEN WORKING WITH THE TOOL.** Never wear loose clothing, gloves, neckties, rings, bracelets or other jewelry which may get caught in the moving parts. Always wear non-slip footwear, preferably with steel toes. Wear protective hair covering to contain long hair.
10. **ALWAYS USE EYE PROTECTION WHEN WORKING WITH THE TOOL, TO PREVENT EYE INJURY.** Ordinary eyeglasses only have impact resistant lenses, they are NOT safety glasses. Also, use a face mask for additional safety, and wear a dust mask if the cutting operation produces dust.
11. **ALWAYS SECURE THE WORKPIECE TO THE VISE OR THE BASE.**
Use clamps or a vise to hold the workpiece in place. It's safer than using your hand, and it frees both hands to operate the tool.
12. **NEVER OVERREACH.** Always keep proper footing and balance when working with the tool.
13. **ALWAYS MAINTAIN TOOLS WITH CARE.** Always keep tools sharp and clean for best and safest performance. Always follow instructions for lubricating the tool and for changing accessories.
14. **ALWAYS DISCONNECT THE TOOL** before servicing and before changing cut-off wheels or other accessories.
15. **NEVER RISK UNINTENTIONAL STARTING WHEN PLUGGING IN THE TOOL.** Always confirm that the switch is in the "OFF" position before inserting the power plug into the receptacle.

16. **ALWAYS USE RECOMMENDED ACCESSORIES ONLY, WHEN OPERATING THIS TOOL.** Consult this instruction manual for descriptions of recommended accessories. To avoid personal injuries, use only recommended accessories in conjunction with this tool.
17. **NEVER STAND ON TOOL.** Prevent serious injury by not tipping the tool and by not risking unintentional contact with the cut-off wheel.
18. **ALWAYS CHECK FOR DAMAGED PARTS BEFORE USING TOOL.** Always check the guard and all other components for damage before using the tool, to assure that they will function properly. Check all moving parts for proper alignment, freedom from binding and other conditions that might affect proper operation. Always repair or replace any damaged guards or other damaged components before using the tool.
19. **NEVER LEAVE THE TOOL RUNNING WHILE UNATTENDED; ALWAYS TURN THE POWER OFF WHEN THE TOOL IS NOT IN USE.** Always unplug the power cord when the tool is not in use. Don't leave tool until it comes to a complete stop.
20. This tool was not designed to be used for mass-production applications, and should not be used in mass-production environments.
21. This tool is intended for residential use only.
22. When servicing this tool, use only authorized replacement parts.
23. Apply AC 120 volts only to this tool. Applying the wrong voltage could cause the POWER TOOL to operate improperly and could cause serious personal injury or damage to the tool.

Specific Safety Rules for Use of this Power Tool

⚠ WARNING: The following specific operating instructions must be observed when using this POWER TOOL, to avoid injury:

DO's

ALWAYS OBSERVE THE FOLLOWING RULES, TO ASSURE SAFE USE OF THIS TOOL:

1. Review this Manual and familiarize yourself with the safety rules and operating instructions for this POWER TOOL, before attempting to use it.
2. Always confirm that the POWER TOOL is clean, before using it.
3. Always wear snug-fitting clothing, non-skid footwear (preferably with steel toes) and eye protection, when operating the POWER TOOL.
4. Always handle the POWER TOOL carefully. If the POWER TOOL is dropped or struck against a hard object, it might become deformed or cracked or sustain other damage.
5. Always cease operating the tool at once, if you notice any abnormality whatsoever.
6. Always confirm that all components are mounted properly and securely, before using the tool.
7. When replacing the cut-off wheel, always confirm that the rpm rating of the new wheel is correct for use on this tool.
8. Always shut off the power and wait for the cut-off wheel to completely stop rotating, before undertaking any maintenance or adjustments.
9. Always clamp or otherwise secure the workpiece to the vise; otherwise the workpiece might be thrown from the base and cause bodily harm.
10. Always confirm that the cut-off wheel is free from any cracks, before using the tool.
11. Always confirm that the parts which fix the cut-off wheel are not damaged. Damaged parts cause the breakage of the cut-off wheel.

12. Always make a trial run first, before attempting any new use of the tool.
13. Always use only the peripheral surface of the cut-off wheel.
14. Always handle the cut-off wheel with care, when dismounting and mounting it.
15. Always keep your hands out of the line of the cut-off wheel.
16. Always confirm that the safety cover are in the proper places, before using the tool.
17. Inspect the tool power cord periodically.
18. Always confirm that the proper lengths and types of extension cords are being utilized, when if needed, before starting the tool.
19. Always confirm that the motor air vents are fully open, before using the tool.
20. Always wait until the motor has reached full speed, before starting a cut.
21. Always keep the handles dry, clean and free of oil and grease. Hold the tool firmly, when in use.
22. Always fix the motor section using the chain when carrying about the tool.
23. Always keep the cut-off wheels in a dry place, as humidity affects the strength of the cut-off wheels.

DON'Ts

NEVER VIOLATE THE FOLLOWING RULES, TO ASSURE SAFE USE THIS TOOL:

1. Never operate the POWER TOOL unless you fully understand the operating instructions contained in this Manual.
2. Never leave the POWER TOOL, unattended, without first unplugging the power cord.
3. Never operate the POWER TOOL when you are tired, or after you have taken any medications or have consumed any alcoholic beverages.
4. Never use the POWER TOOL for applications not specified in the Instruction Manual.
5. Never operate the tool while wearing loose clothing, a necktie or jewelry, or while your hair is uncovered, to protect against getting caught in the moving machinery.
6. Never reach around or behind the cut-off wheel.
7. Never touch any moving parts, including the cut-off wheel, while the tool is in use.
8. Never remove any safety devices or wheel guards; use of the tool without them would be hazardous.
9. Never lock the safety cover, (always confirm that it slides smoothly, before using the tool).
10. Never abuse the power cord of the tool.
11. Never attempt to move a plugged-in POWER TOOL while your finger is on the starting switch.
12. Never use the POWER TOOL if the starting switch doesn't turn on and off properly.
13. Never use the POWER TOOL if the plastic housing or the handle is cracked or deformed.
14. Never use the POWER TOOL near flammable liquids or gases, since sparking could cause an explosion.
15. Never clean plastic components with solvents, since the plastic may dissolve.
16. Never operate the tool unless all of the wheel guards are in place.
17. Never allow the cut-off wheel to be struck against a hard object, as it might get cracked.
18. Never twist the cut-off wheel during cutting operation.
19. Never expose hands, feet and fragile things to the grinding sparks, as the grinding sparks may harm them.
20. Never use the lateral side of the cut-off wheel.

WARNING

For Your Own Safety Read This Instruction Manual Before Operating The Cut-Off Machine.

1. Always wear eye protection, when using the tool.
2. Always keep hands out of the line of the cut-off wheel.
3. Never operate the tool without the guards in place.
4. Never perform any freehand operation with the tool.
5. Never reach around the cut-off wheel.
6. Always shut off the power and wait for the cut-off wheel to stop turning before adjusting or maintaining the tool.

FOREWORD

The information contained in this manual is designed to assist you in the safe operation and maintenance of the POWER TOOL. Some illustrations in this manual may show details or attachments that differ from those on your own POWER TOOL.

REPLACEMENT PARTS

When servicing use only identical replacement parts.
Repairs should be conducted only by a Hitachi authorized service center.

POLARIZED PLUGS

To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.

DOUBLE INSULATION FOR SAFER OPERATION

To ensure safer operation of this electric power tool, HITACHI has adopted a double insulation system. “Double insulation” as used here, means a system of two insulations physically separated and arranged between electrically conductive materials connected to the power supply and to the outer frame handled by the operator. Therefore, the nameplate shows both the “ ” mark and “Double insulation” or either one on the power tool.
Although this system has no external grounding, you must still follow the normal safety precautions given in this manual.
To keep the double insulation system effective, follow these precautions;

* To avoid lessening the double insulation-feature, always get in touch with your dealer or an authorized HITACHI power tool repair shop when assembling, disassembling or replacing parts other than accessories or carbon brushes.
* Clean the exterior of the tool with a soft cloth moistened in soap water, and dry thoroughly.
  Don’t use chloric solvent, gasoline or thinner on plastic components; otherwise they might dissolve.

SAVE THESE INSTRUCTIONS AND MAKE THEM AVAILABLE TO OTHER USERS AND OWNERS OF THIS TOOL!

PART NAMES

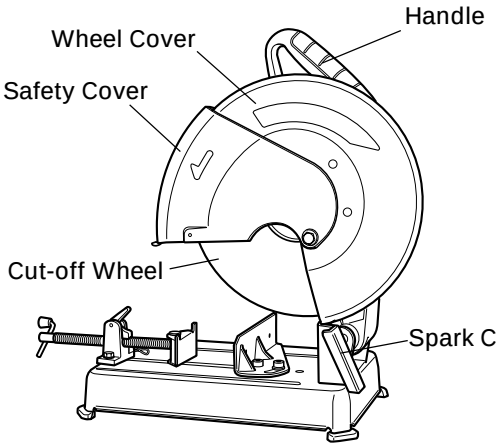


Fig. 1

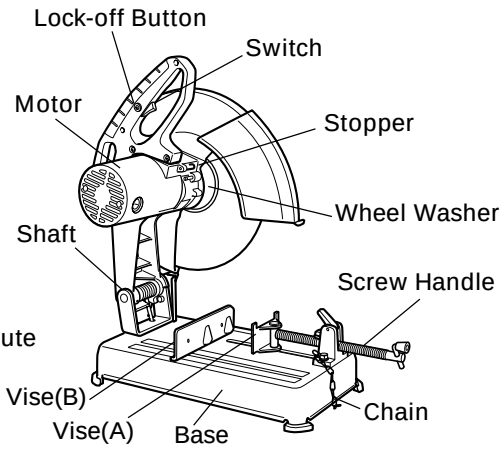


Fig. 2

SPECIFICATIONS

Item	Model	CC 14SE
Motor	Type	Protected type, series commutator motor
	Power source	Single-phase AC 60Hz
	Voltage	120 Volts
	Full-load current	15 Amp
Cut-off wheel	Type	Reinforced resinoid cut-off wheel
	Dimensions	Outside Dia 14" (355 mm) Thickness 7/64" (2.8 mm) Hole Dia. 1" (25.4 mm)
	Max. working peripheral speed	16000 ft/min (4800 m/min)
No-load speed		3700 /min
No-load peripheral speed		13540 ft/min (4125 m/min)
Applicable workpiece materials		Round bars, pipes and various types of shaped steel
Max. cutting dimensions	90°	Max. Height 4-17/32" (115 mm) Max. Height 2-49/64" (70 mm) Max. Width 5-1/8" (130 mm) Max. Width 9-1/4" (235 mm)
	45°	Max. Height 4-11/64" (106 mm) Max. Width 4-11/64" (106 mm)
Max. opening of vise		9-29/64" (240 mm)
Net weight		36 lbs. (16.5 kg)
Cord		2 conductor type cabtire cable 8 ft (2.3 m)

STANDARD ACCESSORIES

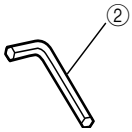


Fig. 3

① Cut-Off Wheel 14" × 7/64" × 1"(355 × 2.8 × 25.4 mm) 1pc. (Code No.)
(Attached to the main body)
② Hex. bar wrench

⚠ WARNING: The use of attachment or accessories not recommended in this manual may be hazardous.

PREPARATION BEFORE OPERATION

Make the following preparations before operating the power tool:

1. Installation
   The machine may be bolted (2 bolts) down to a level location using the bolt holes in the base.
2. Extension Cord.

Ampere rating (on nameplate)	12.1 to 16.0
Ext. cord length	Wire gauge size A.W.G (mm^2)
25 ft (7.5 m)	14 A.W.G (2.0 mm^2)
50 ft. (15 m)	12 A.W.G (3.5 mm^2)
100 ft. (30.5 m)	Not recommended

To use the power tool when no suitable power source is nearby, use an extension cord of suitable size to ensure safety, and to prevent power loss and overheating.
Determine from the accompanying table the required extension cord wire size.
Check power cord and extension cords for loose or exposed wires and damaged insulation, before using.
Repair or replace as needed, before using the power tool.

NOTE: The lower the wire size number, the heavier the wire, and the farther it will carry current without a voltage drop.

⚠ WARNING: Never connect this unit to an electrical power source until all operating instructions have been read and understood.

3. Take off the chain.
   As the movable part is pulled down by a chain when shipping out, slightly push the handle down and take off the chain from the handle.

BEFORE USING

1. Make sure the power source is appropriate for the tool.

   ⚠ **WARNING: Never connect the power tool unless the available AC power source is of the same voltage as that specified on the nameplate of the tool.**

2. Make sure the trigger switch is turned OFF.

   ⚠ **WARNING: If the power cord is connected to the power source with the trigger switch turned ON, the power tool will start suddenly and could cause a serious accident.**

3. Check the cut-off wheel for visible defects.
   Confirm that the cut-off wheel is free of cracks or other visible damages.
4. Confirm that the cut-off wheel is fixed securely to the power tool.
   Using the supplied hex. bar wrench, tighten the clamping bolt on the cut-off wheel mounting shaft to secure the cut-off wheel.

   ⚠ **WARNING: When the clamping bolt is loose, the cut-off wheel may be damaged when the wheel axle starts revolving, causing a hazardous condition.**

5. Check the safety covers for proper operation.
   Possible accidents such as a cracked out-off wheel is prevented by this safety cover (wheel cover).
   Although it has been fully clamped at the factory prior to delivery, securely reclamp the mounting screws for safety.
   Safety cover and wheel cover are designed to protect the operator from coming into contact with the cut off wheel during operation of the tool.

   ⚠ **WARNING: NEVER OPERATE THE POWER TOOL if the safety covers do not function smoothly.**

6. Use cut-off wheels whose peripheral speed ratings are over the maximum working peripheral speed.
   When replacing the cut-off wheel, ensure that the replacement cut-off wheel has a designed peripheral speed in excess of 16000 ft/min (4800m/min).

   ⚠ **WARNING: Never use cut-off wheels whose peripheral speed ratings are under the maximum working peripheral speed.**

7. Confirm the stopper position.
   Confirm that the stopper which was used for installtion and removal of the cut-off wheel has returned to the retract position.
8. Securely fix the cutting material.
   Ensure that the material is securely fastened with the vise. If it is not, a serious accident could be caused if the material comes loose or the cut-off wheel breaks during operation.

9. Check the Power Receptacle.
   To prevent overheating, accidental stopping or intermittent operation, confirm that the power plug fits properly in the electrical receptacle and does not fall out after it is inserted.
   Repair or replace the receptacle, if it is faulty.
10. Confirm that the tool's cabtire power cable is not damaged.
    Repair or replace the power cord if an inspection of the cabtire cable indicates that it is damaged.

AFTER CONNECTING THE POWER PLUG TO AN APPROPRIATE AC POWER SOURCE, CHECK THE OPERATION OF THE TOOL, AS FOLLOWS:

11. Trial Run.
    After confirming that no one is standing in front of it, step away from the front position and start the power tool and confirm that no operating abnormalities exist before attempting a cutting operation.
    Trial run periods:
    When replacing the cut-off wheel ..... Over 3 minutes.
    When starting routine work..... Over 1 minute.
12. Inspect the rotating stability of the cut-off wheel.
    For precise cutting, rotate the cut-off wheel and check for deflection to confirm that the wheel is not noticeably unstable; otherwise vibration might occur and cause an accident.

PRACTICAL APPLICATIONS

⚠ **WARNING: Never remove or install a workpiece while the cut-off wheel is rotating, to avoide personal injury.**

1. Procedure for fixing the cutting material (Fig. 4 and 5).
   Quick Vise
   Place the workpiece material between Vise (A) and Vise (B), raise the clutch and push the Screw Handle to bring Vise (A) lightly into contact with the workpiece material, as shown in Fig. 4. Then, turn the clutch down, and securely fix the workpiece material in position by turning the Screw Handle. When the cutting job is completed, turn the Screw Handle 2 or 3 times to loosen the vise, and remove the workpiece material, as shown in Fig. 5.

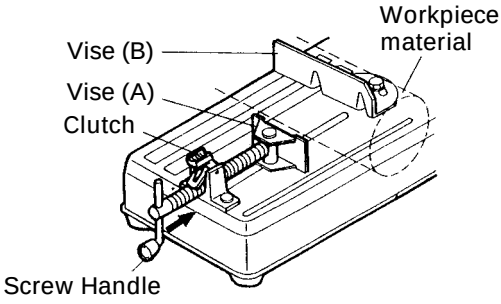


Fig. 4

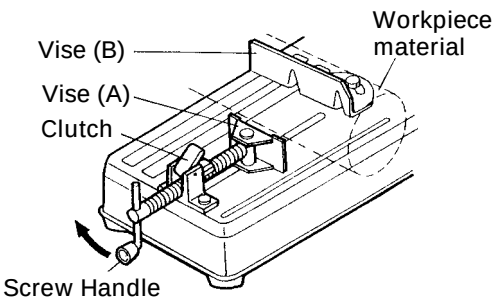


Fig. 5

2. Switch operation.

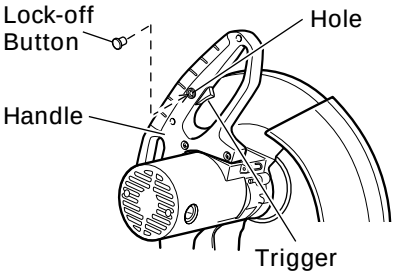


Fig. 6

The trigger switch lock-off button is designed to prevent inadvertent operation of the power tool. To operate the power tool, it is necessary to first fully insert the lock-off button into the hole on the handle (see Fig.6).
The trigger switch will not operate unless the lock-off button has been pushed in.
When the trigger switch is released, the power goes off and the lock-off button automatically returns to its original position, locking the trigger switch.

⚠ **WARNING: Always remove the lock-off button from the handle when the power tool is not in use. This will ensure that the power tool cannot be turned on accidentally, or by someone (especially a child) not qualified to use the power tool. If the lock-off button is left in the handle, serious personal injury could result. Since the lock-off button fits rather tightly, it may be necessary to turn it to the left and right during mounting and removing.**

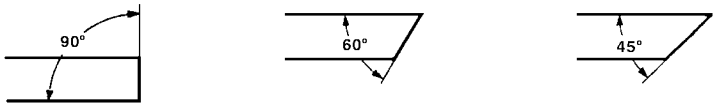
3. Cutting operation.
   (1) Rotate the cut-off wheel, gently press down the handle, and bring the cut-off wheel close to the material to be cut.
   (2) When the cut-off wheel contacts the material, gently press down the handle further and start cutting.
   (3) When cutting (or designated slotting) is completed, raise the handle and restore it to its original position.
   (4) At the termination of each cutting process, turn OFF the switch to stop rotation and proceed with the subsequent cutting job.

⚠ **WARNING: Confirm that the trigger switch is turned OFF and that the power plug has been removed from the receptacle, whenever the tool is not in use.**
Always remove the lock-off button from the handle, and store it in a secure place, after completing the work.

⚠ **CAUTION:**

- **Increased pressure on the handle will not increase the cutting speed. On the contrary, too much pressure may result in overload of the motor and/or decreased cutting efficiency.**

4. Cutting at angles (Fig. 7 and 8).
The machine permits cutting at angles of 45° or 60°



When setting at an angle of 0° | When setting at an angle of 30° | When setting at an angle of 45°

Fig. 7

Loosen the two M10 hexagon socket head bolts on the vise (B), then set the working surface on the vise-jaw at any angles of 0°, 30° or 45° as shown in Fig. 7.
Upon completion of setting, securely tighten the two M10 hexagon socket head bolts, as shown in Fig. 8.

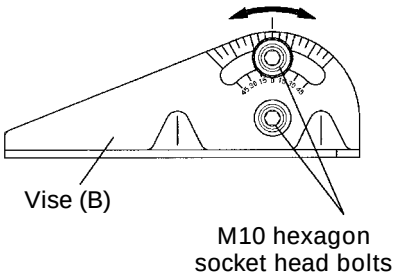


Fig. 8

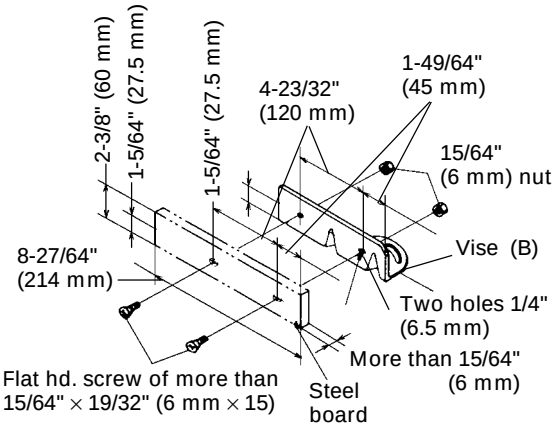
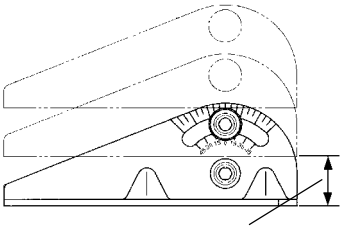


Fig. 9

When wide material is to be cut at an angle, it should be firmly clamped by fixing a steel board like Fig. 9 to the vise (B), as shown in Fig. 9.

5. Moving the stationary vise-jaw (Fig. 10).

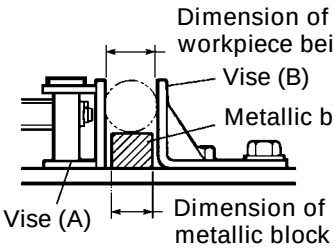


The vise jaws open to 6-11/16" (170 mm) while the vise can be set in two steps 8-5/64" (205 mm) and 9-7/16" (240 mm)

Fig. 10

The vise opening is set at the maximum of 6-11/16" (170 mm) when shipped from the factory.
In case an opening more than 6-11/16" (170 mm) is required, move the vise-jaw to the position shown by the chain line, after unscrewing the two bolts.
The maximum opening can be set in two steps 8-5/64" (205 mm) and 9-7/16" (240 mm).
When the material to be cut is excessively wide, the vise can be effectively used by repositioning the stationary side of the vise jaws.

6. Using a Metallic Block (Fig. 11).



(Should be slightly smaller than the workpiece being cut)

Fig. 11

When the cut-off wheel has a reduced outer diameter, insert between the vise (A) and (B) a metallic block slightly smaller than the dimension of workpiece being cut to use the cut-off wheel economically.

CUT-OFF WHEEL DISMOUNTING AND MOUNTING

⚠ **WARNING: Always turn off the trigger switch and disconnect the power plug from the receptacle before dismounting or mounting a wheel, to prevent accidental injury.**

1. Dismounting the Cut-Off Wheel (Fig. 12).

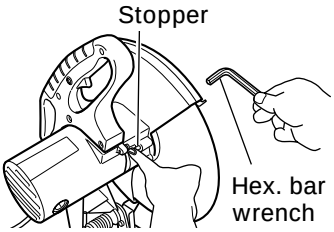


Fig. 12

(1) Press the stopper and loosen the bolt with a spanner.

NOTE: When the mounting shaft for cut-off wheel cannot be fixed by pressing the stopper, turn the bolt with a hex. bar wrench while pressing the stopper.
The mounting shaft for cut-off wheel is fixed when the stopper has been lowered.

(2) Remove the bolt, washer (A), and the wheel washer and detach the cut-off wheel.

2. Mounting the Cut-Off Wheel.

Thoroughly remove dust from the wheel washers, washer (A) and bolt, then mount the wheel by following the dismounting procedures in reverse order.

⚠ **CAUTION:**

- **Confirm that the stopper has returned to the retract position after installing or removing the cut-off wheel.**
- **Tighten the bolt so that it doesn't come loose during operation of the cut-off wheel. Confirm that the bolt has been properly tightened before the power tool is started.**

MAINTENANCE AND INSPECTION

⚠ **WARNING: Always confirm that the trigger switch is turned OFF and that the power plug has been disconnected from the receptacle before performing any maintenance or inspection of this tool, to avoid accidental injury.**

1. Replacing a cut-off wheel.
   When the cut-off wheel has already become dull by frequent use, it can cause overload to the motor.
   Consequently, re-dress or replace a dull cut-off wheel to ensure cut-off efficiency.
2. Inspecting the carbon brushes (Fig. 13 and 14).
   The carbon brushes in the motor are expendable parts.
   If the brushes become excessively worn, motor trouble might occur.
   Therefore, inspect the brushes periodically, and replace them when they have become worn to the wear limit line, as shown in Fig. 13.
   Also, keep the carbon brushes clean be so that they will slide smoothly within the brush holders. The carbon brushes can easily be removed after disassembling the brush caps (see Fig. 14) with a slotted (minus) screwdriver.

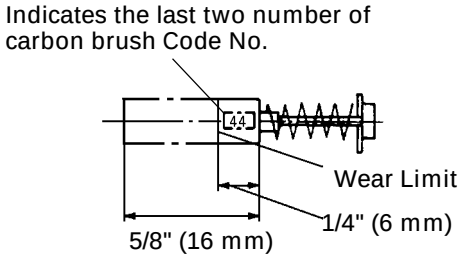


Fig. 13

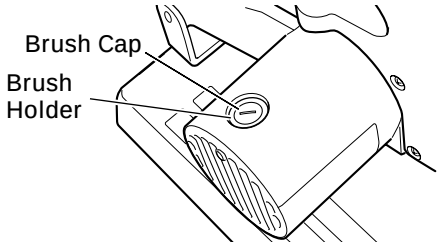


Fig. 14

3. Inspecting the mounting screws.
   Regularly inspect each component of the power tool for looseness.
   Re-tighten mounting screws on any loose part.

⚠ **WARNING: Never operate the power tool if any components are loose, to prevent personal injury.**

4. Inspecting the safety cover for condition and proper operation.
   Before each use of the tool, test the safety cover (see Fig. 1) to assure that it is in good condition and that it moves smoothly.
   Never use the tool unless the safety cover operates properly, and unless it is in good mechanical condition.
5. Storage.
   Confirm that the trigger switch is turned OFF, that the power plug has been removed from the receptacle and that the lock-off button has been removed and has been stored in a secure place, after operation of the tool has been completed.
   When the tool is not in use, keep it stored in a dry place out of the reach of children.

6. Lubrication.
   Lubricate the following sliding surfaces once a month to keep the power tool in good operating condition for a long time (see Fig.1 and 2). Use of machine oil is recommended.
   Oil supply points:
   - *Rotary portion of shaft.
   - *Rotary portion of vise.
   - *Rotary portion of vise-jaw.
   - *Quick vise.
7. Cleaning.
   Periodically remove chips and other waste material from the surface of the power tool with a damp, soapy cloth. To avoid a malfunction of the motor, protect it from contact with oil or water.
8. Service parts list
   A: Item No.
   B: Code No.
   C: No. Used
   D: Remarks

⚠ CAUTION

Repair, modification and inspection of Hitachi Power Tools must be carried out by an Hitachi Authorized Service Center.
This Parts List will be helpful if presented with the tool to the Hitachi 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.

MODIFICATIONS

Hitachi Power Tools are constantly being improved and modified to incorporate the latest technological advancements.
Accordingly, some parts (i.e. code numbers and/or design) may be changed without prior notice.

SERVICE AND REPAIRS

All quality power tools will eventually require servicing or replacement of parts because of wear from normal use. To assure that only authorized replacement parts will be used, and that the double insulation system will be protected, all service (other than routine maintenance) must be performed by an AUTHORIZED HITACHI POWER TOOL REPAIR CENTER, ONLY.

NOTE: Specifications are subject to change without any obligation on the part of HITACHI.