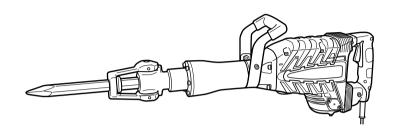
HITACHI

Model Modèle Modelo

H 65SD2

Demolition hammer Marteau de démolition Martillo demoledor



INSTRUCTION MANUAL AND SAFETY INSTRUCTIONS

↑ WARNING

Improper and 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 others before they use the power tool.

MODE D'EMPLOI ET INSTRUCTIONS DE SECURITE

↑ AVERTISSEMENT

Une utilisation incorrecte et dangereuse de cet outil motorisé peut entraîner la mort ou de sérieuses blessures corporelles !

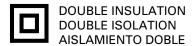
Ce mode d'emploi contient d'importantes informations à propos de la sécurité de ce produit. Prière de lire et de comprendre ce mode d'emploi avant d'utiliser l'outil motorisé. Garder ce mode d'emploi à la disponibilité des autres utilisateurs avant qu'ils utilisent l'outil motorisé.

MANUAL DE INSTRUCCIONES E INSTRUCCIONES DE SEGURIDAD

ADVERTENCIA

¡La utilización inapropiada e insegura de esta herramienta eléctrica puede resultar en lesiones serias o en 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 que utilicen la herramienta eléctrica.



Hitachi Koki

English	CON	IENIS —
	Page	Page
	ANT INFORMATION 3	ASSEMBLY AND OPERATION 10
MEANI	IGS OF SIGNAL WORDS 3	APPLICATIONS10
		PRIOR TO OPERATION 10
SAFETY 4		HOW TO USE THE DEMOLITION
GENERAL SAFETY RULES 4		HAMMER 12
SPECIFIC SAFETY RULES AND SYMBOLS 6		
	INSULATION FOR SAFER	MAINTENANCE AND INSPECTION 13
OPI	RATION 8	
		ACCESSORIES 15
FUNCTION	IAL DESCRIPTION 9	STANDARD ACCESSORIES 15
NAME (OF PARTS 9	OPTIONAL ACCESSORIES 15
SPECIFI	CATIONS 9	
		PARTS LIST 46

Français	TABLE DES MATIERES		
	Page		Page
	IATIONS IMPORTANTES17 CATION DES MOTS	ASSEMBLAGE ET FONCTIONNEMENT APPLICATIONS	
D'AVERTISSEMENT 17		AVANT L'UTILISATIONCOMMENT UTILISER LE MARTEAU	24
SECURITE 18		PIQUEUR	26
REGLES GENERALE DE SECURITE 18			
REGLES DE SECURITE SPECIFIQUES ET SYMBOLES		ENTRETIEN ET INSPECTION	27
DOUBLE ISOLATION POUR UN		ACCESOIRES	
FON	NCTIONNEMENT PLUS SUR 22	ACCESSOIRES STANDARD	
1		ACCESSOIRES SUR OPTION	29
DESCRIPTION FONCTIONNELLE			
	ES PARTIES 23	LISTE DES PIECES	46
SPECIFICATIONS23			

INID	ire
Español	ICE -
Página	Página
INFORMACIÓN IMPORTANTE31	MONTAJE Y OPERACIÓN38
SIGNIFICADO DE LAS PALABRAS DE	APLICACIONES 38
SIGNIFICADO DE LAS PALABRAS DE SEÑALIZACIÓN31	ANTES DE LA OPERACIÓN 38
	FORMA DE USAR EL MARTILLO
SEGURIDAD 32	DEMOLEDOR 40
NORMAS GENERALES DE SEGURIDAD 32	
NORMAS Y SÍMBOLOS ESPECÍFICOS	MANTENIMIENTO E INSPECCIÓN41
DE SEGURIDAD34	
AISLAMIENTO DOBLE PARA OFRECER UNA	ACCESORIOS 43
OPERACIÓN MÁS SEGURA 36	ACCESORIOS ESTÁNDAR43
	ACCESORIOS OPCIONALES 43
DESCRIPCIÓN FUNCIONAL 37	
NOMENCLATURA 37	LISTA DE PIEZAS 46
ESPECIFICACIONES 37	
1	

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 situation which, if ignored, could result in death or serious injury.

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

NOTE emphasizes essential information.

SAFETY

GENERAL SAFETY RULES

MARNING: Read and understand all instructions.

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

SAVE THESE INSTRUCTIONS

1. Work Area

- (1) Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.
- (2) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust of fumes.
- (3) Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

2. Electrical Safety

- (1) Double Insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the 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 eliminates the need for the three wire grounded power cord and grounded power supply system.
- (2) Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
- (3) Don't expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- (4) Do not abuse the cord. Never use the cord to carry the tools or pull the plug from a receptacle. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
- (5) When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

3. Personal Safety

- (1) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- (2) Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- (3) Avoid accidental starting. Be sure switch is off before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.

- (4) Remove adjusting keys or wrenches before turning the tool on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- (5) Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
- (6) Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

4. Tool Use and Care

- (1) Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- (2) Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- (3) Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- (4) Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- (5) Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hand of untrained users.
- (6) Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.
- (7) Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- (8) Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool, may become hazardous when used on another tool.

5. Service

- (1) Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
- (2) When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instruction may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES AND SYMBOLS

- 1. Hold tools 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 make exposed metal parts of the tool "live" and shock the operator.
- 2. ALWAYS wear ear protectors when using the tool for extended periods.



Prolonged exposure to high intensity noise can cause hearing loss.

3. Never touch moving parts.

Never place your hands, fingers or other body parts near the tool's moving parts.

4. Never operate without all guards in place.

Never operate this tool without all guards or safety features in place and in proper working order. If maintenance or servicing requires the removal of a guard or safety feature, be sure to replace the guard or safety feature before resuming operation of the tool.

5. Use right tool.

Don't force small tool or attachment to do the job of a heavy-duty tool.

Don't use tool for purpose not intended —for example— don't use circular saw for cutting tree limbs or logs.

6. Never use a power tool for applications other than those specified.

Never use a power tool for applications other than those specified in the Instruction Manual.

7. Handle tool correctly.

Operate the tool according to the instructions provided herein. Do not drop or throw the tool. Never allow the tool to be operated by children, individuals unfamiliar with its operation or unauthorized personnel.

8. Keep all screws, bolts and covers tightly in place.

Keep all screws, bolts, and plates tightly mounted. Check their condition periodically.

9. Do not use power tools if the plastic housing or handle is cracked.

Cracks in the tool's housing or handle can lead to electric shock. Such tools should not be used until repaired.

10. Blades and accessories must be securely mounted to the tool.

Prevent potential injuries to yourself or others. Blades, cutting implements and accessories which have been mounted to the tool should be secure and tight.

11. Keep motor air vent clean.

The tool's motor air vent must be kept clean so that air can freely flow at all times. Check for dust build-up frequently.

12. Operate power tools at the rated voltage.

Operate the power tool at voltages specified on its nameplate.

If using the power tool at a higher voltage than the rated voltage, it will result in abnormally fast motor revolution and may damage the unit and the motor may burn out.

13. Never use a tool which is defective or operating abnormally.

If the tool appears to be operating unusually, making strange noises, or otherwise appears defective, stop using it immediately and arrange for repairs by a Hitachi authorized service center.

14. Never leave tool running unattended. Turn power off.

Don't leave tool until it comes to a complete stop.

15. Carefully handle power tools.

Should a power tool be dropped or struck against hard materials inadvertently, it may be deformed, cracked, or damaged.

16. Do not wipe plastic parts with solvent.

Solvents such as gasoline, thinner benzine, carbon tetrachloride, and alcohol may damage and crack plastic parts. Do not wipe them with such solvents.

Wipe plastic parts with a soft cloth lightly dampened with soapy water and dry thoroughly.

17. **ALWAYS** wear eye protection that meets the requirement of the latest revision of ANSI Standard Z87.1.



- 18. **NEVER** touch the tool bit with bare hands after operation.
- 19. **NEVER** wear gloves made from materials likely to roll up such as cotton, wool, cloth or string, etc.
- 20. ALWAYS attach the side handle and securely grip the Demolition Hammer.
- 21. ALWAYS be careful with buried object such as an underground wiring.

Touching live wiring or electric cable with this tool may result in electric shock. Confirm before use whether hidden objects are present, such as electric cables within the wall, floor or ceiling.

22. Definitions for symbols used on this tool

Vvolts
Hzhertz
Aamperes
Nono load speed

W watt

Class II Construction

---/min revolutions per minute

 $_{\sim}\,$ Alternating currentDOUBLE INSULATION FOR SAFER OPERATION

DOUBLE INSULATION FOR SAFER OPERATION

To ensure safer operation of this power tool, HITACHI has adopted a double insulation design. "Double insulation" means that two physically separated insulation systems have been used to insulate the electrically conductive materials connected to the power supply from the outer frame handled by the operator. Therefore, either the symbol "\subseteq" or the words and "Double insulation" appear on the power tool or on the nameplate.

Although this system has no external grounding, you must still follow the normal electrical safety precautions given in this Instruction Manual, including not using the power tool in wet environments.

To keep the double insulation system effective, follow these precautions:

- Only HITACHI AUTHORIZED SERVICE CENTER should disassemble or assemble this power tool, and only genuine HITACHI replacement parts should be installed.
- Clean the exterior of the power tool only with a soft cloth moistened with soapy water, and dry thoroughly.
 - Never use solvents, gasoline or thinners on plastic components; otherwise the plastic may dissolve.

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

FUNCTIONAL DESCRIPTION

NOTE:

The information contained in this Instruction Manual is designed to assist you in the safe operation and maintenance of the power tool.

NEVER operate, or attempt any maintenance on the tool unless you have first read and understood all safety instructions contained in this manual.

Some illustrations in this Instruction Manual may show details or attachments that differ from those on your own power tool.

NAME OF PARTS

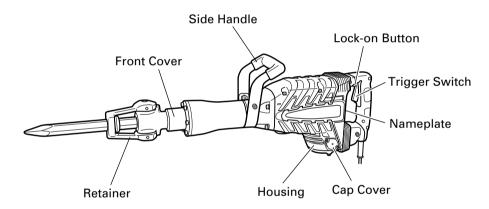


Fig. 1

SPECIFICATIONS

Motor	Single-Phase, Series Commutator Motor	
Power Source	Single-Phase, 120 V AC 60 Hz	
Current	10.8 A	
Full-load Impact Rate	1,400/min.	
Weight	40.8 lbs (18.5 kg)	

ASSEMBLY AND OPERATION

APPLICATIONS

The demolition hammer should be applied to demolishing concrete, chiseling concrete, grooving, bar cutting, and driving piles in installation of piping and wiring, sanitary facility installation, machinery installation, water supply and drainage work, interior jobs, harbor facilities and other civil engineering work.

PRIOR TO OPERATION

- 1. Power source
 - Ensure that the power source to be utilized conforms to the power source requirements specified on the nameplate of this demolition hammer.
- 2. Power switch
 - Ensure that the switch is in the OFF position. If the plug is connected to a receptacle while the switch is in the ON position, this demolition hammer will start operating immediately and can cause serious injury.
- 3. Extension cord
 - When the work area is remote from the power source, use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as practicable.

⚠ WARNING: Damaged cord must be replaced or repaired.

- 4. Check the receptacle
 - If the receptacle loosely accepts the plug, the receptacle must be repaired. Contact the nearest authorized service center for repair service.
 - If such a faulty receptacle is used, it may cause overheating, resulting in a serious hazard.
- Confirming condition of the environment:
 Confirm that the work site is placed under neat, clean conditions conforming to prescribed precautions.
- 6. Installing an accessory, such as a bull point, a cutter, etc.
- CAUTION: To prevent accidents, make sure to turn the switch off and disconnect the plug from the receptacle.

NOTE: When using accessories such as bull points, cutters, etc., make sure to use the genuine parts designated by our company.

- * It is possible to attach accessories such as bull points, cutters, etc., with any of the three types of shank bit shapes shown below (Fig. 2).
- Mounting air tool shank and standard hexagonal shank tools.
 - Clean, then smear the accessory shank portion with grease or machine oil.
 - (2) Move the retainer to open position A and seat the accessory, such as a bull point, a cutter, etc., in the hexagonal hole in the front cover (See Fig. 3).
 - (3) Clamp the accessory into place by bringing the retainer to the clamp position. To make sure that the accessory is properly mounted, pull on the accessory (Fig. 4).
- Mounting standard hexagonal shanks and retaining groove shanks without collars.
 - Clean, then smear the accessory shank portion with grease or machine oil.
 - (2) Move the retainer to position (a). Align the accessory shank portion so that its recessed portion is under clamp and seat the accessory such as a bull point, a cutter, etc., in the hexagonal hole in the front cover (See Fig. 5).
 - (3) Clamp the accessory into place by bringing the retainer to clamp position
 B. To make sure that the accessory is properly mounted, pull on the accessory (Fig. 6).

NOTE: When removing the accessory, such as a bull point, a cutter, etc., carry out the above procedures in reverse.

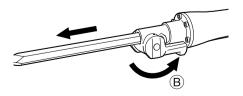
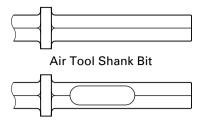


Fig. 6

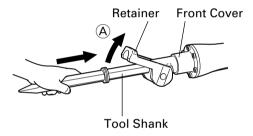


Standard Hex. Shank Bit (Combo Type)



Retaining Groove Bit without Collar

Fig. 2



Fia. 3



Fig. 4

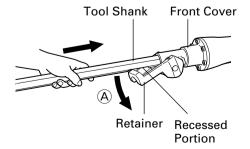


Fig. 5

HOW TO USE THE DEMOLITION HAMMER

- 1. After placing the tip of the accessory, such as a bull point, etc. on concrete surface, switch ON.
 - The switch can be turned ON if the trigger is pulled and OFF when it is released.
 - If the lock-on button is pressed while the trigger for the switch is pulled, even if your finger is released from the trigger, the switch remains ON convenient for continuous operation. To turn the switch OFF, pull the trigger again, and the lock-on button will release.
- In some cases, it is necessary to thrust the tip of the accessory, such as a bull point, a cutter, etc. against the crushing position forcibly in order to begin the striking motion.
 - This is not due to malfunction of this demolition hammer. It means that the safe guard mechanism against no-load striking is working.
- By utilizing the empty weight of this demolition hammer and by firmly holding this demolition hammer by both hands, you can effectively control the subsequent recoil motion.
 Proceed at a moderate work-rate, the use of too much pushing force will impair efficiency.

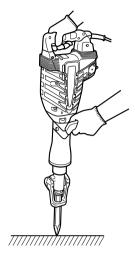


Fig. 7

CAUTION: After long time of use, the front cover becomes hot.

Therefore, be careful not to burn your hands.

MAINTENANCE AND INSPECTION

⚠ WARNING: Be sure to switch power OFF and disconnect the plug from the receptacle during maintenance and inspection.

- 1. Inspecting this demolition hammer
 - Since use of a dull accessory, such as a bull point, a cutter, etc., will degrade efficiency and cause possible motor malfunction, sharpen or replace with a new one 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 loosened, retighten them immediately.

MARNING: Using this demolition hammer with loosen screws is extremely dangerous.

- 3. Inspecting the retainer (Fig. 2 and 3)
 - The retainer may become loose due to excessive use. Always, pay attention to its proper functioning to securely hold the accessory shank portion. If any wear and tear is found, bring this demolition hammer to an authorized service center for maintenance service.
- 4. Inspecting the carbon brushes (Fig. 8)
 The Motor employs carbon brushes which are consumable parts. When they become worn to or near the "wear limit", it results in motor trouble. When an auto-stop carbon brush is equipped, the motor will stop automatically. At that time, replace both carbon brushes with new ones which have the same carbon brush Numbers shown in the figure. In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.

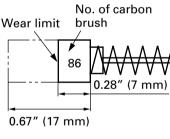


Fig. 8

NOTE: Use HITACHI carbon brush No. 86 indicated in Fig. 8.

- 5. Replacing carbon brushes (Refer to figure for name of parts) Loosen the screws (Hexagon socket hd. bolt M4 × 8) of the cap covers, then remove the cap covers. After removing the brush caps, the carbon brushes can be removed. After replacing the carbon brushes, tighten the brush caps, then mount the cap covers securely.
- 6. Grease replacement

This demolition hammer is a fully oil sealed construction to protect against dust incursion and to prevent lubricant leakage. This demolition hammer can be used without grease replenishment for an extended period of time. However, perform the grease replacement to extend the service life. Replace the grease as described below.

English

Grease Replacement Period

Inspect the grease amount according to the timing replacement period of the carbon brush. (See item 4 in the section MAINTENANCE AND INSPECTION.)

Ask for grease replacement at the nearest authorized service center.

NOTE:

- The Hitachi Electric Hammer Grease A is of the low viscosity type. When the grease is consumed, purchase from the authorized service center.
- O not excessively supply the designated amount of grease. Otherwise, this demolition hammer should not operate accurately.

7. 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, all service and repairs must be performed by a authorized service center, ONLY.

8. Service parts list

CAUTION: Repair, modification and inspection of Hitachi Power Tools must be carried out by a 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 may be changed without prior notice.

ACCESSORIES

igwedge WARNING: ALWAYS use Only authorized HITACHI replacement parts and accessories. NEVER use replacement parts or accessories which are not intended for use with this tool. Contact HITACHI if you are not sure whether it is safe to use a particular replacement part or accessory with your tool.

> The use of any other attachment or accessory can be dangerous and could cause injury or mechanical damage.

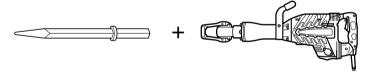
NOTE: Accessories are subject to change without any obligation on the part of the HITACHI.

STANDARD ACCESSORIES

(1) Case (Code No. 314179)	1
(2) Allen Wrench (for 8 mm bolt) (Code No. 872422)	1
(3) Allen Wrench (for 4 mm holt) (Code No. 943277)	1

OPTIONAL ACCESSORIES...... sold separately

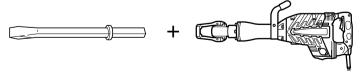
Demolitioning



(1) Bull Point

Overall Length	16-9/64" (410 mm)
Code No.	996372

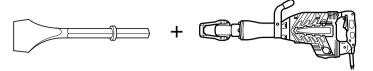
Groove digging and edging



(1) Cold chisel

Overall Length	16-9/64" (410 mm)	20-15/32" (520 mm)
Code No.	996373	985231

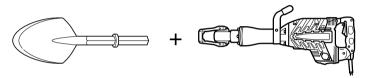
Asphalt Cutting



(1) Cutter

Overall Length	16-9/64" (410 mm)	20-15/32" (520 mm)
Code No.	996374	985232

Scooping Work



(1) Scoop

Overall Length	21-1/2" (546 mm)	
Code No.	985233	

O Hammer Grease A

1.1 lbs (500 g) (in a can) (Code No. 980927)

0.15 lbs (70 g) (in a tube) (Code No. 308471)

0.07 lbs (30 g) (in a tube) (Code No. 981840)

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