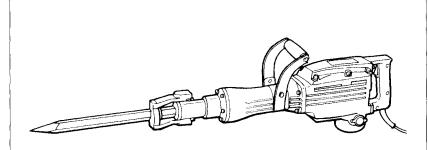
# HITACHI

# DEMOLITION HAMMER MODEL H 65

## INSTRUCTION MANUAL



#### Note:

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

We sincerely thank you for selecting a HITACHI ELECTRIC POWER TOOL. To operate this electric power tool safely and efficiently, please read this INSTRUCTION MANUAL carefully to get a good understanding of the precautions in operation, capacity of the electric power tool, use and the like.

#### IMPORTANT INFORMATION: SAFETY RULES FOR POWER TOOLS

**WARNING:** When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following.

#### **READ ALL INSTRUCTIONS**

- 1. KEEP WORK AREA CLEAN. Cluttered areas and benches invite injuries.
- 2. CONSIDER WORK AREA ENVIRONMENT.

Don't expose power tools to rain.

Don't use power tools in damp or wet locations.

Keep work area well lit.

Don't use tool in presence of flammable liquids or gases.

Power tools produce sparks during operation. They also spark when switching ON/OFF. Never use power tools in dangerous sites containing lacquer, paint, benzine, thinner, gasoline, gases, adhesive agents, and other materials which are combustible or explosive.

- **3. GUARD AGAINST ELECTRIC SHOCK**. Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges refrigerator enclosures.
- KEEP CHILDREN AWAY. Do not let visitors contact tool or extension cord. All
  visitors should be kept away from work area.
- 5. STORE IDLE TOOLS. When not in use, tools should be stored in dry, and high or locked-up place-out of reach of children.
- DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was intended.
- 7. **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.
- 8. **DRESS PROPERLY.** Do not wear loose clothing or jewelry. They can be caught in moving parts.
  - Rubber gloves and non-skid footwear are recommended when working outdoors.
  - Wear protective hair covering to contain long hair.
- USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty.

All persons in the area where power tools are being operated should also wear safety eye protectors and face or dust masks.

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- **10. DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
- 11. SECURE WORK. Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
- 12. DON'T OVERREACH. Keep proper footing and balance at all times.
- MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for better and safer performance.

Follow instructions for lubricating and changing accessories.

Inspect tool cords periodically and if damaged, have repaired by authorized service facility.

Inspect extension cords periodically and replace if damaged.

Keep handles dry, clean, and free from oil and grease.

- DISCONNECT TOOLS. When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
- 15. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- 16. AVOID UNINTENTIONAL STARTING. Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
- 17. OUTDOOR USE EXTENSION CORDS. When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
- **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
- 19. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual.

Have defective switches replaced by authorized service center.

Do not use tool if switch does not turn it on and off.

- 20. AVOID USING A POWER TOOL FOR APPLICATIONS OTHER THAN THOSE SPECIFIED. Never use a power tool for applications other than those specified in the instruction manual.
- 21. ENSURE SAFE OPERATION THROUGH CORRECT HANDLING. Secure safe operation through correct handling by observing the instructions described herein.

Do not employ accessories other than those specified herein; otherwise, a hazardous condition may be created.

Never allow a power tool to be used by persons not familiar with correct handling (such as children) or by those who cannot handle the tool correctly.

- 22. CONFIRM THAT NO ITEMS SUCH AS AN ELECTRIC CABLE OR CONDUIT ARE BURIED INSIDE. In places where live wiring may be hidden behind a wall, floor, ceiling, etc. do not hold or contact any metal parts of the tool. In such cases, metal parts could become electrically live and present a serious shock hazard.
- 23. **KEEP THE RIGHT PARTS IN THE RIGHT POSITIONS.** Do not remove covers and screws which have been factory-mounted. They perform important respective roles. Keep them in the right positions.
- 24. SECURELY MOUNT ACCESSORIES AND BLADES TO THE TOOL MAIN BODY. Extra care must be taken when using tools on elevated location (such as a roof ladder, scaffold, or the like) to prevent injury to someone on a lower level in the event the tool and/or accessory should drop.
- 25. ALWAYS KEEP THE MOTOR AIR VENT FULLY OPENED. A constantly open motor air vent is necessary to allow air to come in and out for cooling the motor. Do not allow it to become clogged up, even if dust is blown through it.
- **26. OPERATE POWER TOOLS AT THE RATED VOLTAGE.** Operate power tools at voltages specified on their nameplates.
- 27. **NEVER TOUCH THE MOVING PARTS**. Never touch the moving parts such as blades, bits, cutters and others.
- 28. STOP OPERATION IMMEDIATELY IF ANY ABNORMALITY IS DETECTED.

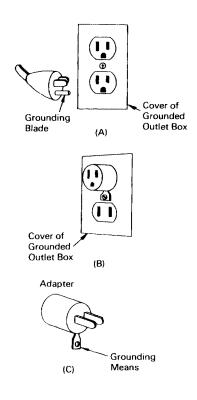
  Should a power tool be detected as out of order or should other abnormalities be observed during operation, stop using the tool immediately.
- 29. **NEVERLEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.
- CAREFULLY HANDLE POWER TOOLS. Should a power tool be dropped or struck against hard materials inadvertently, it may be deformed, cracked, or damaged.
- 31. 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.
- **32.** WHEN REPLACING A COMPONENT PART, ADOPT THE SAME TYPE. When replacing a component part with a new one, adopt the same type of new part. Also, never attempt to repair a power tool yourself.

#### **GROUNDING INSTRUCTIONS**

This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with a threeconductor cord and three-prong grounding type plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. If your unit is for use on less than 150 volts, it has a plug that looks like that shown in sketch (A) in Figure on the right. An adapter, see sketches (B) and (C), is available for connecting sketch (A) type plugs to twoprong receptacles. The green-colored rigid ear, lug, or the like, extending from the adapter must be connected to a permanent ground, such as a properly grounded outlet box.

#### Note:

The grounding adaptor, sketch (C), is prohibited in Canada by Canadian Electrical Code Part 1. Therefore, the instructions for its use are not applicable in Canada.



#### **EXTENSION CORD**

Use only three-wire extension cords that have three-prong grounding-type plugs and three-pole receptacles that accept the tool's plug. Replace or repair damaged cord.

Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

MIN	IIMUM GAG	SE FOR CORE	) SETS	
	Total Length of Cord in Feet (Meter)			
	0 – 25 (0 – 7.6)		51 – 100 (15.5 – 30.5)	101 – 150 (30.8 – 45.7)
Ampere Rating More Not More Than Than		AWG		
0 – 6	18	16	16	14
6 – 10	18	16	14	12
10 – 12	16	16	14	12
12 – 16	14	12	Not Recommended	

#### PRECAUTIONS ON DEMOLITION HAMMER

- 1. Wear a mask when turning your head upward.
- 2. Use earplugs to keep your ears noise-free while working.
- 3. Wear protective shoes to protect your feet.
- 4. Properly set the bit holder.
- Always hold the body handle and side handle of the power tools firmly. Otherwise the counterforce produced may result in inaccurate and even dangerous operation.
- 6. Since the bit becomes very hot during operation, exercise extremes very hot.
- 7. At the start of work, confirm the oil supply and screw tightening.
- 8. When working at a highly elevated location, pay attention to articles and persons below.

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

#### NAME OF PARTS

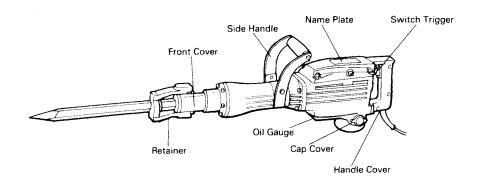


Fig. 1

#### **SPECIFICATIONS**

Motor Single-Phase, Series Commutator Motor

Power Source Single-Phase, 115V AC, 60 Hz

Current 11.4A Full-Load Impact Rate: 1,400/min

Weight 39.7 lbs (18 kg)

#### **ACCESSORIES**

#### CAUTION:

Recommended accessories for this Electric Power Tool are mentioned in this manual.

The use of any other attachment or accessory might be hazardous.

#### STANDARD ACCESSORIES

(1)	Steel Case	1
(2)	Bull Point (Code No. 985230)	. 1
(3)	Oil Feeder (Code No. 931848)	. 1
(4)	Hexagon Bar Wrench for M8 (Code No. 872422)	. 1
(5)	Wrench (Code No. 971109)	. 1

#### **OPTIONAL ACCESSORIES...sold separately**

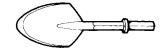
#### 1. Bull point



#### 2. Cold chisel



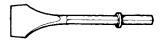
#### 3. Scoop



Overall length: 21-1/2" (546 mm)

Code No.: 985233

4. Cutter



Overall length: 20-1/2" (520 mm)

Width: 3 Code No.: 5

3" (75 mm) 985232

5. Electric Hammer Oil

Capacity:

1 liter

Code No.:

955009

#### **APPLICATION**

Breaking concrete, chipping off concrete, grooving, bar cutting, and driving piles.
 (Application examples)

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 requirements specified on the product name plate.

#### 2. Power switch

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

If the power receptacle only loosely accepts the plug, the receptacle must be repaired. Contact the nearest electric store for repair service.

If such a faulty receptacle is used, it may cause overheating, resulting in a serious hazard.

#### 5. Confirming condition of the environment

Confirm that the work site is placed under appropriate conditions conforming to prescribed precautions.

#### 6. Feeding oil (refer to the paragraph on oil feeding)

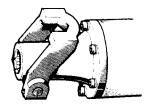
Prior to using the power tool, remove the oil gauge and do not fail the oil tank with the provided oil. (Although the oil tank is built in, it contains only a small volume of oil when shipped from the HITACHI Works.)

#### 7. Mounting a tool

- (1) With the retainer directed backward, insert the tool shank into the hole on the front cover. (Fig. 2)
- (2) Swing the retainer back into place so that it engages the tool shank and prevents tool from coming all the way out of front cover. (Fig. 3)

#### NOTE:

Use a manual hammer to open/close the retainer.



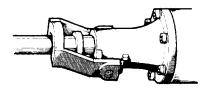


Fig. 2

Fig. 3

#### NOTE:

When removing the tool, follow the above procedure in reverse order.

#### **OPERATION**



- 1. Pullthe trigger switch after applying the tip of the bit to the crushing position.
  - In some cases, it is necessary to punch the tip of the bit against the crushing position forcibly in order to begin the striking stroke.
  - This is not due to malfunction of the tool. It means that the safe guard mechanism against no-load striking is working.
- Operate the tool by utilizing its own weight. The performance will not be better even if the tool is pressed or thrust forcibly against the work surface.
  - Hold the tool with aforce just sufficient to counteract the reaction.

#### CAUTION:

Sometimes the tool does not begin the striking stroke even when the motor rotates because the oil has become thick.

If the tool is used at low temperatures or if it is used after a long time idle, the tool should be used running in for five minutes in order to warm it up.

Fig. 4

#### OIL FEEDING

#### CAUTION:

Prior to oil feeding, always disconnect the plug from the power supply receptacle. Since an oil chamber is built in this HITACHI Demolition Hammer, it can be used for approximately 20 days without supplying lubricating oil, assuming that the machine is used continuously  $3 \sim 4$  hours daily.

Feed oil into the oil tank as described below before using this Hammer. (See Figs 5 and 6)

- 1. Just before no oil is visible in the oil gauge window when the device is held upright, feed oil without fail.
- Before feeding oil, use the provided wrench to remove the oil gauge.Be careful not to lose the rubber packing attached below the oil gauge.

- 3. Check the oil level once daily, confirming that oil is filled.
- 4. After feeding oil, securely clamp the oil gauge.

#### NOTE:

As an optional accessory, oil for the HITACHI Demolition Hammer (one liter) is sold separately. Use this oil when oil in the tank is depleted.

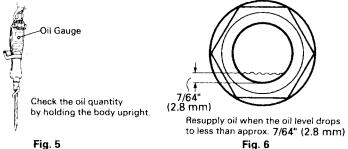


Fig. 5

#### MAINTENANCE AND INSPECTION

#### CAUTION:

Be sure to switch power OFF and disconnect the plug during maintenance and inspection.

#### 1. Inspecting the tool

Since use of a dull tool will cause motor malfunctioning and degraded efficiently, whet it or 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. Inspecting the carbon brushes: (Fig. 7)

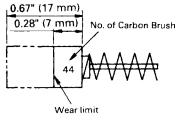


Fig. 7

The motor employs carbon brushes which are consumable parts.

Since an excessively worn carbon brush could result in motor trouble, replace the carbon brush with a new one which has the same carbon brush No. shown in figure when it becomes worn to or near "wear limit".

In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.

#### Replacement steps

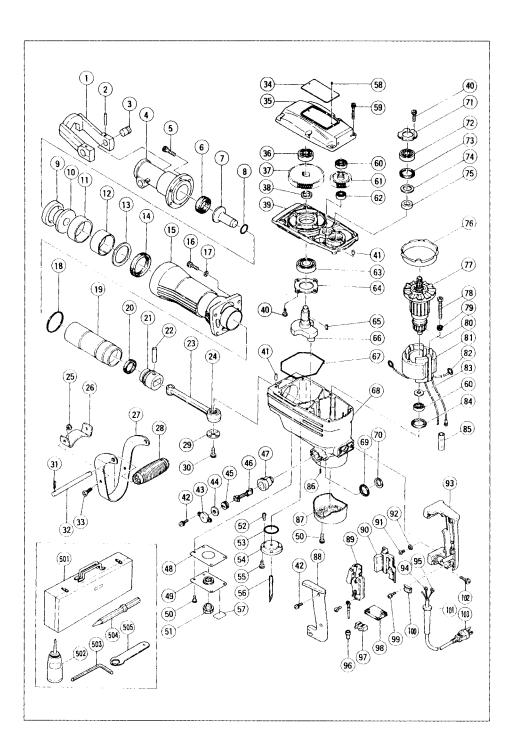
The carbon brush can be removed by removing the cap cover, cap rubber and brush cap in that order at the interior.

#### 4. Keeping after use

When not in use, the Electric Power Tool should be kept in a dry place out of the reach of children.

#### NOTE:

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



ltem No.	Part Name	
1	Retainer	
2	Roll Pin	D6×36
3	Lever Pin	
4	Front Cover	
5	Hexagon Socket Hd. Bolt	M8×30
6	Damper (B)	
7	Second Hammer	
8	O-Ring	
9	Damper	
10	Shank Sleeve	
11	Mouth Cover	
12	Mouth	
13	Mouth Washer	
14	Urethane Ring	
15	Cylinder Case	
16	Hexagon Socket Hd. Bolt	M8×35
17	Bolt Washer	
18	O-Ring (1AS-60)	
19	Striker	
20	L-Ring	
21	Piston	
22	Piston Pin	
23	Connecting Rod Ass'y	
24	Needle Bearing	
25	U-Nut (B)	M8
26	Handle Stay	
27	Side Handle Ass'y	
28	Grip	
29	Crank Washer	
30	Hexagon Socket Hd. Bolt	M8×16
31	Split Pin	D8×25
32	Handle Shaft	
33	High Tension Bolt	M4×16
34	Name Plate	10.000
35	Gear Cover	
36	Ball Bearing (6302VVCM)	
37	Final Gear	
38	Distance Ring (B)	
39	Inner Cover	
40	Hexagon Socket Hd. Bolt	M5×20
41	Pin	D5×15.8
42	Machine Screw	M4×12
43	Cap Cover	
44	Cap Rubber	
45	Brush Cap	
46	Carbon Brush	
47	Brush Holder	
48	Cover Seal	
49	Cover Plate	
50	Hexagon Socket Hd. Bolt	M5×12
51	Oil Gauge	
52	Valve	
53	O-Ring (S-40)	
54	Felt Holder	
55	Hexagon Socket Hd. Bolt	M4×12
55	Hexagon Socket Hd. Bolt	IV14×12

	··	
Item No.	Part Name	
56	Oil Felt	
57	Caution Plate	
58	Rivet	D2.5×4.8
59	Hexagon Socket Hd. Bolt	M6×45
60	Ball Bearing (6201VVCM)	
61	Countor Gear	
62	Ball Bearing (6001VVCM)	
63	Ball Bearing (6205DDCM)	
64	Bearing Cover	
65	Woodruff Key	
66	Crank Shaft	
67	Seal Ring (A)	
68	Housing Ass'y	
69	Rubber Washer	
70	Stop Plate	
71	Bearing Cover (A)	
72	Ball Bearing (6203VVCM)	
73	Urethane Washer (A)	
74	Felt Packing	
75	Distance Ring (A)	
76	Fan Guide	
77	Fan	
78	Bolt	M5×60
79	Special Washer	
80	Armature Ass'y	
81	Stator Ass'y	
82	Brush Terminal	
83	Bearing Washer	
84	Urethane Washer (A)	
85	Vinyl Tube (I.D. 7×T0.5×50	
86	Hexagon Socket Hd. Bolt	M5×8
87	Tail Cover	
88	Handle Cover	
89	Switch	
90	Support (C)	
91	Machine Screw	M4×6
92	Spring Lock Washer	
93	Handle	
94	Terminal	
95	Terminal (50051)	
96	Connector	
97	Pillar Terminal	
98	Support	
99	Machine Screw	M4×12
100	Cord Clip	
101	Cord Armor	
102	Hexagon Socket Hd. Bolt	M6×25
103	Cord	
501	Case	
502	Oil Feeder (120cc)	
503	Hexagon Bar Wrench 6 mm	
504	Bull Point 520 mm	
505	Wrench 23 mm	
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Parts are subject to possible modification without notice due to improvements.

### Hitachi Koki Co.,Ltd.

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