

Makita

アメリカ

Power Scraper

MODEL HK1810

Variable Speed

INSTRUCTION MANUAL



 **DOUBLE
INSULATION**

SPECIFICATIONS

Blows per minute	Overall length	Net weight
0 - 3,200	315 mm (12-3/8")	3.2 kg (7.0 lbs)

- * Manufacturer reserves the right to change specifications without notice.
- * Note: Specifications may differ from country to country.

IMPORTANT SAFETY INSTRUCTIONS

(For All 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 use power tools in damp or wet locations. Keep work area well lit. Don't expose power tools to rain. Don't use tool in presence of flammable liquids or gases.
- 3. KEEP CHILDREN AWAY.** All visitors should be kept away from work area. Don't let visitors contact tool or extension cord.
- 4. STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place — out of reach of children.
- 5. DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
- 6. 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.
- 7. DRESS PROPERLY.** Don't 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.
- 8. USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty.
- 9. DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- 10. 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.
- 11. DON'T OVERREACH.** Keep proper footing and balance at all times.
- 12. 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.
- 13. DISCONNECT TOOLS.** When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.

14. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
15. **AVOID UNINTENTIONAL STARTING.** Don't carry tool with finger on switch. Be sure switch is OFF when plugging in.
16. **EXTENSION CORDS.** 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 1 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.

TABLE 1 MINIMUM GAGE FOR CORD SETS

			Total Length of Cord in Feet			
			0 – 25	26 – 50	51 – 100	101 – 150
Ampere Rating More Than	Not More Than		A W G			
0	–	6	18	16	16	14
6	–	10	18	16	14	12
10	–	12	16	16	14	12
12	–	16	14	12	Not Recommended	

17. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
18. **STAY ALERT.** Watch what you are doing, use common sense. Don't 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. Don't use tool if switch does not turn it on and off.
20. **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
21. **REPLACEMENT PARTS.** When servicing, use only identical replacement parts.
22. **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 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 the proper outlet. Do not change the plug in any way.

VOLTAGE WARNING: Before connecting the tool to a power source (receptacle, outlet, etc.) be sure the voltage supplied is the same as that specified on the nameplate of the tool. A power source with voltage greater than that specified for the tool can result in **SERIOUS INJURY** to the user — as well as damage to the tool. If in doubt, **DO NOT PLUG IN THE TOOL**. Using a power source with voltage less than the nameplate rating is harmful to the motor.

ADDITIONAL SAFETY RULES

1. Wear ear protectors when using for extended periods.
2. Be sure the scaling chisel is secured in place before operation.
3. Under normal operation, the tool is designed to produce vibration. The screws can come loose easily, causing a breakdown or accident. Check tightness of screws carefully before operation.
4. In cold weather or when the tool has not been used for a long time, let the tool warm up for several minutes by operating it under no load. This will loosen up the lubrication. Without proper warm-up hammering operation is difficult.
5. Always be sure you have a firm footing.
Be sure no one is below when using the tool in high locations.
6. Hold the tool firmly with both hands.
7. Keep hands away from moving parts.
8. Do not leave the tool running. Operate the tool only when hand-held.
9. Do not point the tool at any one in the area when operating. The scaling chisel or bull point could fly out and injure someone seriously.
10. When chipping into walls, floors or wherever “live” electrical wires may be encountered, **DO NOT TOUCH ANY METAL PARTS OF THE TOOL!**
Hold the tool only by the plastic handle or the side grip to prevent electric shock if you chip into a “live” wire.
11. Do not touch the scaling chisel immediately after operation; they may be extremely hot and could burn your skin.

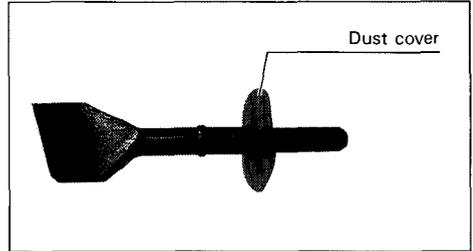
SAVE THESE INSTRUCTIONS.

Installing or removing scaling chisel or other bit (bull point, etc.)

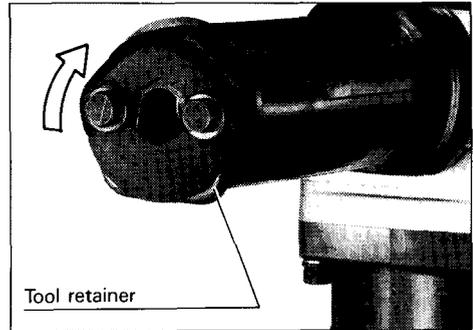
CAUTION:

Always be sure that the tool is switched off and unplugged before installing or removing the bit.

To install the bit, first attach the dust cover provided to the bit as shown in the figure.



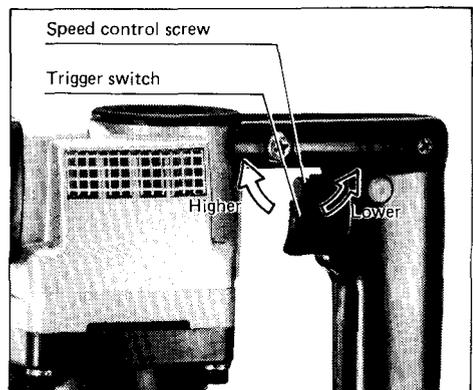
Then turn the tool retainer in the direction of the arrow and insert the bit into the tool barrel as far as it will go. Now turn the tool retainer in the opposite direction to secure the bit.



To remove the bit, follow the installation procedure in reverse.

Switch action

Tool speed is increased by increasing pressure on the trigger. To start the tool, simply pull the trigger. Release the trigger to stop. A speed control screw is provided so that maximum tool speed can be limited (variable). Turn the speed control screw clockwise for higher speed, and counter-clockwise for lower speed.



CAUTION:

Before plugging in the tool, always check to see that the trigger switch actuates properly and returns to the "OFF" position when released.

Operation

Position the chisel at the location to be scaled, then pull the trigger. Apply light pressure to the tool. Forcing the tool will only decrease the tool performance.



MAINTENANCE

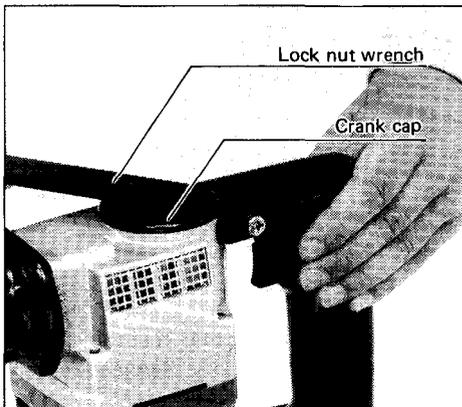
CAUTION:

Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

Lubrication

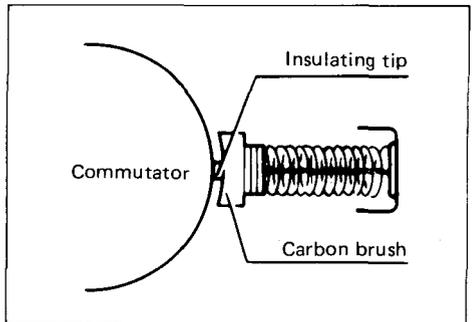
This tool requires no hourly or daily lubrication because it has a grease-packed lubrication system. It should be relubricated after every 6 months of operation. Send the complete tool to Makita Authorized or Factory Service Center for this lubrication service. However, if circumstances require that you should lubricate it by yourself, proceed as follows.

Run the tool for several minutes to warm it up. Switch off and unplug the tool. Remove the crank cap using a Makita lock nut wrench 28 (optional accessory). Rest the tool on the table with the bit end pointing upwards. This will allow the old grease to collect inside the crank housing. Wipe out the old grease inside and replace with a fresh grease (20 g; 2/3 oz). Use only Makita genuine grease (optional accessory). Filling with more than the specified amount of grease (approx. 20 g; 2/3 oz) can cause faulty hammering action or tool failure. Fill only with the specified amount of grease. Reinstall the crank cap and tighten with the lock nut wrench. Do not tighten the crank cap excessively. It is made of resin and is subject to breakage.

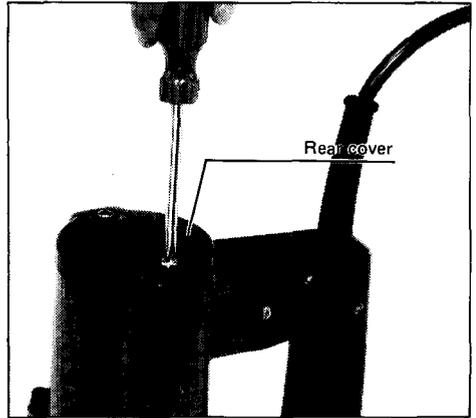


Replacing carbon brushes

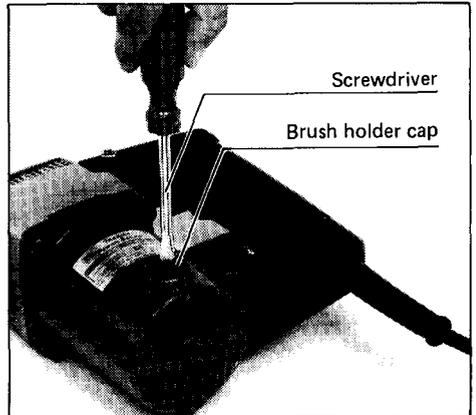
When the resin insulating tip inside the carbon brush is exposed to contact the commutator, it will automatically shut off the motor. When this occurs, both carbon brushes should be replaced at the same time. Use only identical carbon brushes.



Use a screwdriver to remove the rear cover as shown in the figure.



Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.



To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

ACCESSORIES

CAUTION:

These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. The accessories or attachments should be used only in the proper and intended manner.

- **Scaling chisel**



Part No.	Size (mm)
798265-3	30 (1-3/16") x 150 (5-7/8")
798264-5	50 (2") x 150 (5-7/8")

- **Hammer grease**

Part No. 181490-7



- **Safety goggles**

Part No. 191686-2



- **Steel carrying case**

Part No. 181856-1



- **Dust cover**

Part No. 423154-0



- **Bull point**

Part No. 798266-1



- **Scraper assembly**

Part No. 122349-9



- **Grooving chisel**



Part No.	Size (mm)
798277-6	8 (5/16") x 170 (6-11/16")
798276-8	12 (1/2") x 170 (6-11/16")

- **Hex wrench**

Part No. 783203-8

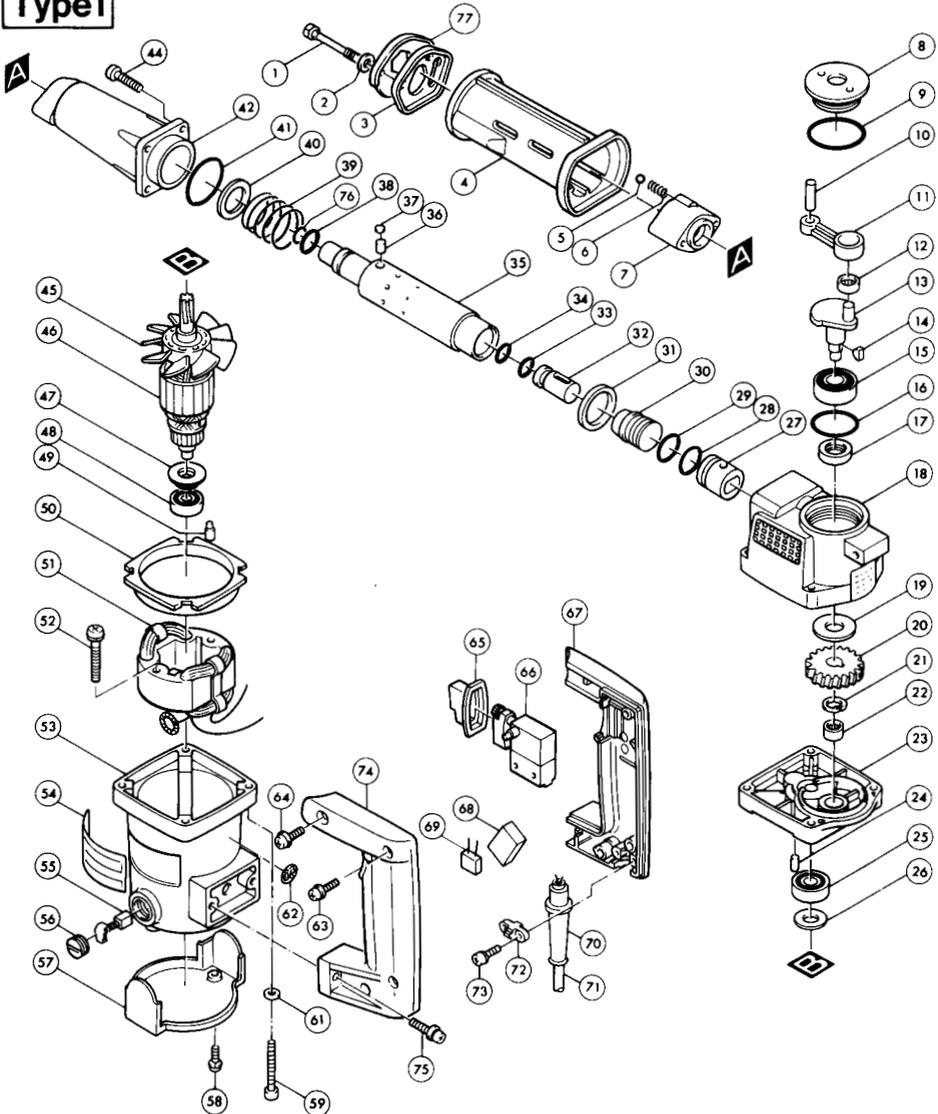


- **Lock nut wrench 28**

Part No. 782402-9



POWER SCRAPER Model HK1810

Type1


Note: The switch, noise suppressor and other part configurations may differ from country to country.

ITEM NO.	NO. USED	DESCRIPTION	ITEM NO.	NO. USED	DESCRIPTION
<u>MACHINE</u>			<u>MACHINE</u>		
1	2	Hex. Bolt M6x46	38	1	O Ring 19
2	2	Flat Washer 8	39	1	Compression Spring 24
3	1	Tool Retainer	40	1	Flat Washer 25
4	1	Barrel Cover	41	1	O Ring 39
5	1	Steel Ball 5.6	42	1	Barrel
6	1	Compression Spring 3	44	4	Hex. Socket Head Bolt M6x25 (With Washer)
7	1	Tool Holder	45	1	Fan 67
8	1	Crank Cap	46	1	ARMATURE ASSEMBLY
9	1	O Ring 44			(With Item 25, 26 & 45 - 48)
10	1	Pin 6	47	1	Insulation Washer
11	1	Rod	48	1	Ball Bearing 608LB
12	1	Needle Bearing 810	49	1	Rubber Pin 4
13	1	Crank Shaft	50	1	Baffle Plate
14	1	Woodruff Key 3	51	1	FIELD ASSEMBLY
15	1	Ball Bearing 6002LLB	52	2	Pan Head Screw M4x40 (With Washer & Bond)
16	1	O Ring 32	53	1	Motor Housing
17	1	Oil Seal 15	54	1	Name Plate
18	1	Crank Housing	55	2	Carbon Brush
19	1	Flat Washer 15	56	2	Brush Holder Cap
20	1	Helical Gear 36	57	1	Rear Cover
21	1	Retaining Ring S-12	58	2	Pan Head Screw M5x12 (With Washer)
22	1	Needle Bearing 1010	59	4	Hex. Socket Head Bolt M6x45
23	1	Gear Housing	61	4	Flat Washer 6
24	1	Rubber Pin 6	62	1	Label
25	1	Ball Bearing 6001LLB	63	3	Pan Head Screw M5x25 (With Washer)
26	1	Flat Washer 12	64	2	Pan Head Screw M6x18 (With Washer)
27	1	Piston	65	1	Dust Cover
28	1	O Ring 19	66	1	Switch
29	1	O Ring 19	67	1	Handle Set (With Item 74)
30	1	Striker	70	1	Cord Guard
31	1	Ring 28	71	1	Cord
32	1	Impact Bolt	72	1	Strain Relief
33	1	O Ring 12	73	2	Pan-Head Screw M4x18 (With Washer)
34	1	O Ring 12	74	1	Handle Set (With Item 67)
35	1	Cylinder Liner 24	75	2	Pan Head Screw M6x25 (With Washer)
36	2	Pin 6	76	1	O Ring 19
37	2	Cushion Plate	77	1	Dust Cover

Note: The switch and other part specifications may differ from country to country.

MAKITA LIMITED ONE YEAR WARRANTY

Warranty Policy

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one-year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:

- repairs have been made or attempted by others;
- repairs are required because of normal wear and tear;
- The tool has been abused, misused or improperly maintained;
- alterations have been made to the tool.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE-YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

Makita Corporation

3-11-8, Sumiyoshi-cho,
Anjo, Aichi 446 Japan

883483B069

PRINTED IN JAPAN
1995 - 3 - N