

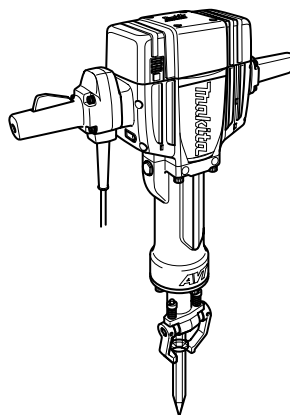
INSTRUCTION MANUAL



Electric Breaker

HM1801

HM1810



006198



DOUBLE INSULATION

⚠ WARNING:

For your personal safety, READ and UNDERSTAND before using.
SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

SPECIFICATIONS

Model	HM1801	HM1810
Blows per minute	1,100	1,100
Overall length	824 mm (32-1/2")	824 mm (32-1/2")
Net weight	30 kg (66 lbs)	32 kg (70 lbs.)

- Due to our continuing programme of research and development, the specifications herein are subject to change without notice.
- Note: Specifications may differ from country to country.

GENERAL SAFETY RULES

GEA001-2

WARNING:

Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term “power tool” in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

SAVE THESE INSTRUCTIONS

Work area safety

1. **Keep work area clean and well lit.** Cluttered 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 or fumes.
3. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

Electrical safety

4. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
5. **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
6. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

7. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
8. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

Personal safety

9. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
10. **Use safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
11. **Avoid accidental starting. Ensure the switch is in the off-position before plugging in.** Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
12. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
13. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
14. **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
15. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust-related hazards.

Power tool use and care

16. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
17. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
18. **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
19. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
20. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
21. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
22. **Use the power tool, accessories and tool bits etc. in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

Service

23. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

SPECIFIC SAFETY RULES

GEB004-2

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to hammer safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

1. **Wear ear protectors.** Exposure to noise can cause hearing loss.

2. **Use auxiliary handles supplied with the tool.** Loss of control can cause personal injury.
3. **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.
4. **Wear a hard hat (safety helmet), safety glasses and/or face shield. Ordinary eye or sun glasses are NOT safety glasses. It is also highly recommended that you wear a dust mask and thickly padded gloves.**
5. **Be sure the bit is secured in place before operation.**
6. **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.**
7. **In cold weather or when the tool has not been used for a long time, let the tool warm up for a while by operating it under no load. This will loosen up the lubrication. Without proper warm-up, hammering operation is difficult.**
8. **Always be sure you have a firm footing. Be sure no one is below when using the tool in high locations.**
9. **Hold the tool firmly with both hands.**
10. **Keep hands away from moving parts.**
11. **Do not leave the tool running. Operate the tool only when hand-held.**
12. **Do not point the tool at any one in the area when operating. The bit could fly out and injure someone seriously.**
13. **Do not touch the bit or parts close to the bit immediately after operation; they may be extremely hot and could burn your skin.**
14. **Do not operate the tool at no-load unnecessarily.**
15. **Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.**

SAVE THESE INSTRUCTIONS

⚠ WARNING:
MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

SYMBOLS

USD293-1


The followings show the symbols used for tool.

V.....volts


Aamperes

Hz.....hertz

alternating or direct current

Class II Construction

.../min.....revolutions or reciprocation per minute

number of blow

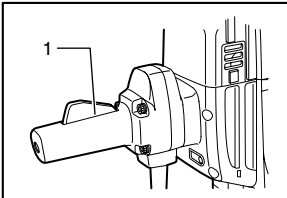
FUNCTIONAL DESCRIPTION

CAUTION:

- Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

Switch action

006199



1. Switch lever

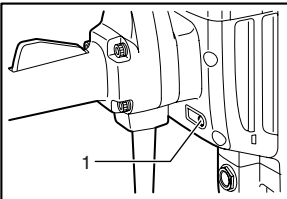
CAUTION:

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

To start the tool, simply squeeze the switch lever. Release the switch lever to stop.

Indicator lamp

006200



1. Indicator lamp

The green power-ON indicator lamp lights up when the tool is plugged to the mains. If the indicator lamp is lit but the tool does not start even if the tool is switched ON, the carbon brushes may be worn out, or the motor or the switch may be defective. If the indicator lamp does not light up, the mains cord or the indicator lamp may be defective.

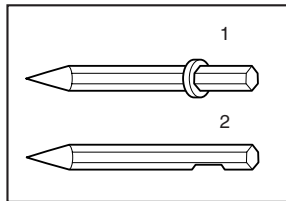
ASSEMBLY

CAUTION:

- Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.

Installing or removing the bit

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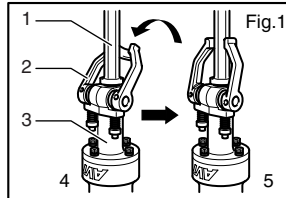
1. Bit with collar
2. Bit without collar

This tool accepts bits either with or without a collar on its shank.

To install the bit, follow either procedure (1) or (2) described below.

(1) For bits with a collar

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1. Bit
2. Tool retainer
3. Tool holder
4. When the bit is inserted
5. When the bit is retained

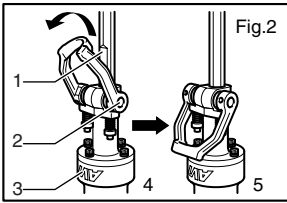
Pivot the tool retainer back and slightly downward. Insert the bit into the tool holder as far as it will go. To securely retain the bit, return the tool retainer to its original position.

CAUTION:

- Always assure that the bit is securely retained by attempting to pull the bit out of the tool holder after completing the above procedure.

(2) For bits without a collar

006201



1. Notched portion
2. Tool retainer shaft
3. Barrel
4. When the bit is inserted
5. When the bit is retained

Pivot the tool retainer front and slightly downward. With the notched portion of the bit facing the tool retainer shaft, insert the bit into the tool holder as far as it will go. Then pivot the tool retainer further downward toward the barrel to securely retain the bit.

⚠ CAUTION:

- Always assure that the bit is securely retained by attempting to pull the bit out of the tool holder after completing the above procedure.
- The bit without a collar cannot be retained by the method shown in Fig.(1).

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

OPERATION

Chipping/Scaling/Demolition

Hold the tool firmly with both hands. Turn the tool on and apply slight pressure on the tool so that the tool will not bounce around, uncontrolled. Pressing very hard on the tool will not increase the efficiency.

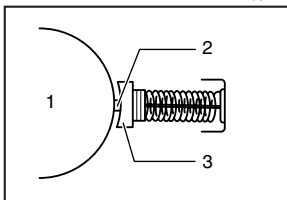
MAINTENANCE

⚠ CAUTION:

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

Replacing carbon brushes

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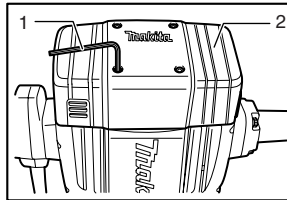
1. Commutator
2. Insulating tip
3. Carbon brush

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. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.

Use a hex wrench to remove the motor housing cover.

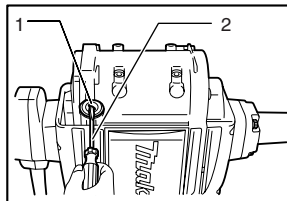
006203



1. Hex wrench 5
2. Motor housing cover

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.

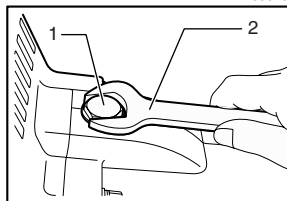
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1. Brush holder cap
2. Screwdriver

Lubrication

006205



1. Cap
2. Wrench 23

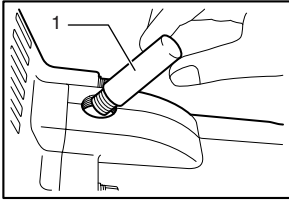
This tool requires no hourly or daily lubrication because it has a grease-packed lubrication system. It should be relubricated after every 6 months of operation. Send the complete tool to Makita Authorized or Factory Service Center for this lubrication service. However, if circumstances require that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

First, switch off and unplug the tool.

Remove the cap using a wrench 23, then replenish with fresh grease (60 g; 2 oz). Use only Makita genuine hammer grease (optional accessory). Filling with more than the specified amount of grease (approx. 60 g; 2 oz) can

cause faulty hammering action or tool failure. Fill only with the specified amount of grease.

006206



1. Hammer grease

Reinstall the cap and secure with the wrench.

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. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita service center.

- Bull point
- Cold chisel
- Scaling chisel
- Clay spade
- Rammer
- Safety goggles
- Hammer grease
- Hex wrench
- Wrench 23