

GAZELLE®

GH2810 Rotary Hammer User Manual

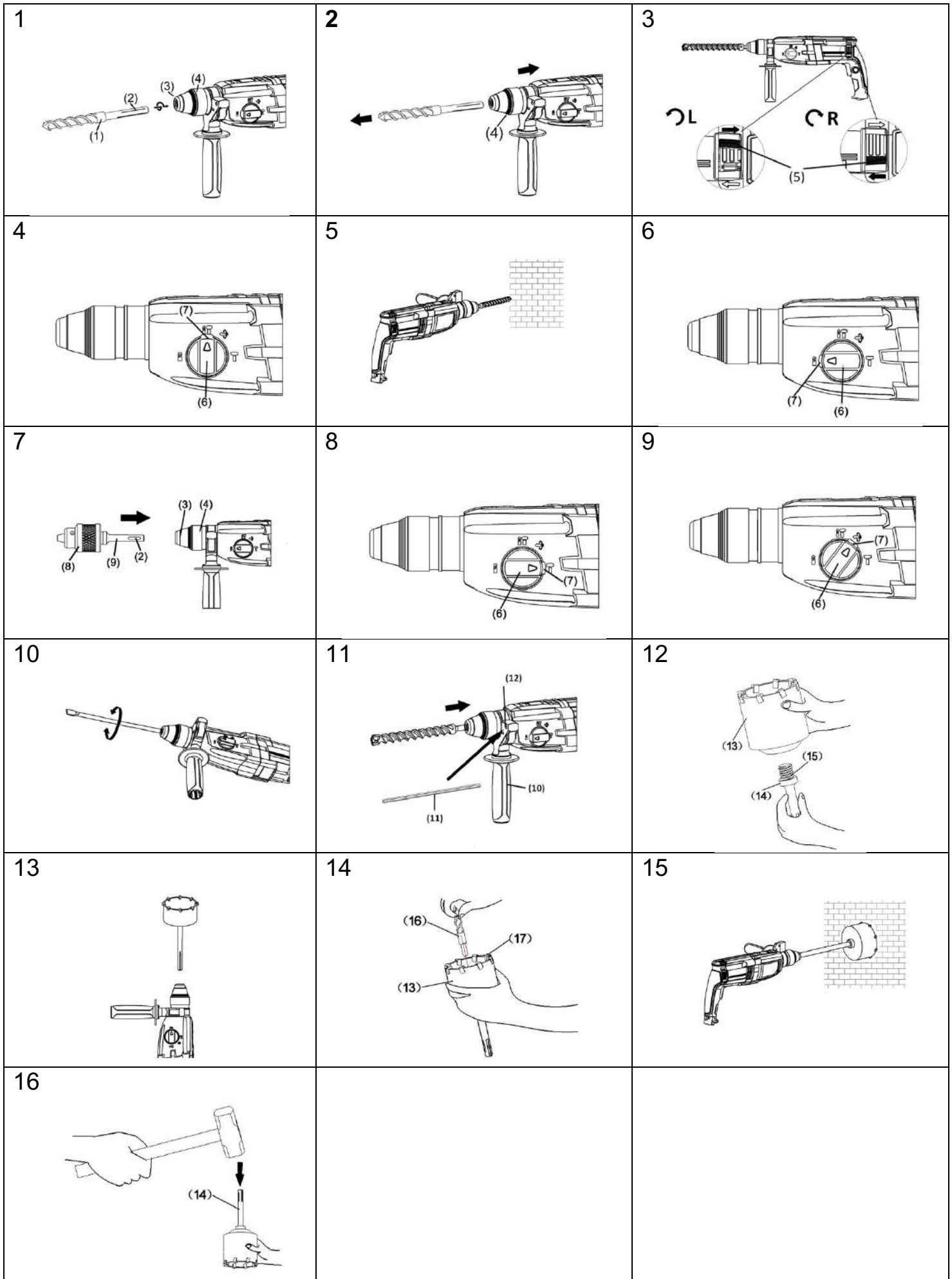




ORIGINAL INSTRUCTIONS

Before using this Gazelle Rotary Hammer, please carefully read through these **HANDLING INSTRUCTIONS**. Ensure that you know how the machine works, and how it should be operated. Maintain the machine in accordance with the instructions, and make certain that the machine work correctly, please store this instruction and other enclosed documents with the machine together.





1	Drill bit
2	Part of SDS-plus shank
3	Turn Staff Armor
4	Flex Sheath
5	switch reversing bar
6	Function Knob
7	locked Pushbutton
8	Drill chuck
9	Drill chuck shank
10	Auxiliary handle
11	Staff gauge
12	Mounting hole
13	Core bit
14	Core bit shank
15	Thread
16	Drill bit
17	Core bit tip

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GENERAL POWER TOOL SAFETY WARNINGS

⚠ WARNING Read all safety warnings, instructions, illustrations and specifications provided with this power tool. *Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.*

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1. Work area safety

- a. **Keep work area clean and well lit.** *Cluttered or dark areas invite accidents.*
- b. **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.*
- c. **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*

2. Electrical safety

- a. **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.*
- b. **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.*
- c. **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
- d. **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.*
- e. **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.*
- f. **If operating a power tool in a damp location is unavoidable, use a residual current device(RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

3. Personal safety

- a. **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.*
- b. **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.*

- c. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** *Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.*
- d. **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.**
- e. **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
- f. **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewelry or long hair can be caught in moving parts.*
- g. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust collection can reduce dust related hazards.*
- h. **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles .** *A careless action can cause severe injury within a fraction of a second.*

4. Power tool use and care

- a. **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.*
- b. **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.*
- c. **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
- d. **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.*
- e. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*
- f. **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- g. **Use the power tool, accessories and tool bits etc. in accordance with these instructions, 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.*
- h. **Keep handles and grasping surfaces dry, clean and free from oil and grease.** *Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.*

5. Service

- a. **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.*

SPECIAL REQUIREMENTS FOR ROTARY HAMMER

1. Wear ear protectors. *Exposure to noise can cause hearing loss.*
2. Use auxiliary handles, if supplied with the tool. *Loss of control can cause personal injury.*
3. Hold Power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. *Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.*
4. Wear a dust mask. Do not inhale the harmful dusts generated in drilling or chiseling operation. The dust can endanger the health of yourself and bystanders.
5. Before beginning work, check the working area (e.g. with a metal detector) to ensure that no concealed electric cables or gas and water pipes are present. Contact with electric lines can lead to fire and electric shock. Damaging a gas line can lead to explosion. Penetrating a water line causes property damage or may cause an electric shock.
6. If the supply cord of this power tool is damaged, it must be replaced by a specially prepared cord available through the service organization.
7. Do not touch the bit during or immediately after operation. The bit becomes very hot during operation and could cause serious burns.
8. Do not use the power tool with a damaged cord. Do not touch the damaged cord and pull the plug from the outlet when the cord is damaged while working. Damaged cords increase the risk of an electric shock.
9. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
10. **Warning:** Reduce the working time to avoid risks related with too much vibration.

Residual risks








Even when the power tool is used as prescribed it is not possible to eliminate all residual risk factors. The following hazards may arise in connection with the power tool's construction and design:

1. Damage to lungs if an effective dust mask is not worn.
2. Damage to hearing if effective hearing protection is not worn.
3. Damages to health resulting from vibration emission if the power tool is being used over longer period of time or not adequately managed and properly maintained.

WARNING! This power tool produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their physician and the medical implant manufacturer before operating this machine.

SAFETY INSTRUCTIONS

In this operator's manual/or machine's labels following symbols are used:

	Read the operating instructions before use.		Denote risk of personal injury, loss of life or damage to the tool in case of nonobservance of the instruction in this manual.
	Double insulation		Indicate electrical shock hazard.
	Wear ear and eye protection		Immediately unplug the plug from the main electricity in the case that the cord gets damage and during maintenance.
	Faulty and /or discarded electrical or electronic apparatus have to be collected at the appropriate recycling location.		

SPECIFICATIONS

Model No		GH2810	
Rated Voltage		AC 220-240 V~	
Frequency		50 Hz	
Rated power		850 W	
No load speed		0-1200 min-1	
impact rate		0-5300 min-1	
Impact energy		3.2 J	
Capacity	Concrete	28mm	
	Steel	13mm	
	Wood	32mm	
Weight (without cord)		2.9kg	
Couter-balance Vibration Control		Yes	

The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another.

The declared vibration total value may also be used in a preliminary assessment of exposure.

Warning !

The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used.

There is the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

STANDARD ACCESSORIES

- 1 - Carrying Case
- 1 - Auxiliary handle
- 1 - Staff Gauge

- 1 - Grease
- 1 - Staff Gauge

Standard accessories are subject to change without notice.

OPTIONAL ACCESSORIES (sold separately)

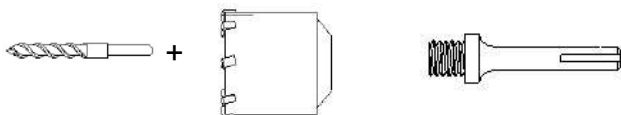
1. Through-hole drilling (Rotation + Hammering)



Drill bit (SDS-plus)

Outer diameter (mm)	Overall length(mm)
8	200
10	200
12	200
14	200
16	300
18	300
20	300
22	300
25	300

2. Large dia. hole boring (Rotation + Hammering)



- (1) Drill bit
- (2) Core bit
- (3) Core bit shank (SDS-plus shank)

- Applied to core bits 30mm to 50 mm

- (2) Core bit

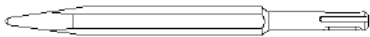
- External dia. 30mm, 35mm, 40mm, 45mm, 50mm

- (3) Core bit shank

- Applied to core bits above 30mm.

3. Demolishing operation(Hammering only)

Tine Chisel (SDS-plus shank)



4. Groove digging and edging (Hammering only)

Flat Chisel (SDS-plus shank)



Big Flat (SDS-plus shank)

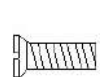


5. Groove (Hammering only)

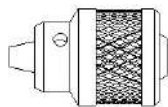
Goose Chisel (SDS-plus shank)



6. Drilling holes (rotation only)



Bolt



Drill chuck



Drill chuck shank(SDS-plus shank)



Drill chuck key

- Drill chuck ass'y (includes Drill chuck key) and chuck (for drilling in steel or wood)

7. Hammer grease (30g)



Optional accessories are subject to change without notice.

APPLICATIONS

Rotation and hammering function

- Drilling anchor holes
- Drilling holes in concrete
- Drilling holes in tile
- Rotation only function
- Drilling in steel or wood (with optional accessories)
- Hammering only function
- Light-duty chiseling of concrete, groove digging and edging.

PRIOR TO OPERATION

1. Power source

Ensure that the power source to be utilized conforms to the power requirements specified on the product nameplate.

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, which could cause a 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. Mounting the drill bit (SDS-plus)

CAUTION:

To prevent accidents, make sure to turn the switch off and disconnect the plug from the receptacle.

NOTE:

When using tools such as bull points, drill bits, etc., make sure to use the genuine parts designates by our company.

- (1) Clean and lightly grease the shank portion of the drill bit.
- (2) Insert the drill bit in a twisting manner into the tool holder until it latches itself (**Fig.1**)
- (3) Pull the drill bit to make sure it is locked completely.
- (4) To remove the drill bit, fully pull the flex sheath in the direction of the arrow and pull out the drill bit (**Fig.2**).

5. Confirm the direction of bit rotation (**Fig.3**)

When turning the reversing knob towards "R" and "←", the drill bit rotates clockwise; When turning the directional knob towards "L" or "→", the drill bit rotates counterclockwise.

HOW TO USE THE ROTARY HAMMER

CAUTION:

To prevent accidents, make sure to turn the switch off and disconnect the plug from the receptacle when the drill bits and other various parts are installed or removed. The power switch should also be turned off during a work break and after work.

1. Switch operation

The speed of the drill bit can be controlled by changing the pulling amount of the switch. Gently pull the switch, resulting in low speed; Pull the switch slightly with force, and the speed will increase.

2. When drilling at "rotation + hammering":

- a. Switching to "rotation + hammering"
 - Push the locked Pushbutton, release lock and turn the function knob.
 - Align ▲ of the function knob and ■T of the Gear Case as illustrated in **Fig.4**.
 - Release the locked Pushbutton to lock the function knob.

NOTE:

Turn the function knob (do not push the locked Pushbutton) to check if it is completely locked and make sure that it does not turn.

b. Mount the drill bit.

c. Pull the switch after applying the drill bit tip to the drilling position (**Fig.5**).

d. Pushing the rotary hammer forcibly is not necessary at all. Pushing slightly so that drill dust comes out gradually is sufficient.

CAUTION:

Although this machine is equipped with a safety clutch, if the drill bit becomes bound in concrete or other material, the resultant stoppage of the drill bit could cause the machine body to turn in reaction. Ensure that the main handle and side handle are gripped firmly during operation.

3. Rotation only

a. Push the locked Pushbutton, release lock and turn the function knob.

b. Align ▲ of the function knob and █ of the Gear Case as illustrated in **Fig.6**

c. Release the locked Pushbutton to lock the function knob.

NOTE:

Turn the function knob (do not push the locked Pushbutton) to check if it is completely locked and make sure that it does not turn.

To drill wood or metal material using the drill chuck and drill chuck shank (optional accessories), proceed as follows.

Installing drill chuck and drill chuck shank (**Fig.7**).

1. Attach the drill chuck to the drill chuck shank.

2. Insert the drill chuck shank SDS-plus in a twisting manner into the tool holder until it latches itself.

CAUTION:

- Application of force more than necessary will not only expedite the work, but will deteriorate the tip edge of the drill bit and reduce the service life of the rotary hammer in addition.
- Drill bits may snap off while withdrawing the rotary hammer from the drilled hole. For withdrawing, it is important to use a pushing motion.
- Do not attempt to drill anchor holes or holes in concrete with the machine set in the rotation only function.
- Do not attempt to use the rotary hammer in the rotation and hammering function with the drill chuck and drill chuck shank attached. This would seriously shorten the service life of every component of the machine.

4. When chipping and chiseling at “hammering”:

1. Switching to “hammering”

a. Push the locked Pushbutton, release lock and turn the function knob.

b. Align ▲ of the function knob and T of the Gear Case as illustrated in **Fig.8**.

c. Release the locked Pushbutton to lock the function knob.

NOTE:

Turn the function knob (do not push the locked Pushbutton) to check if it is completely locked and make sure that it does not turn.

2. Mount the tine chisel or flat chisel.

3. Push the locked Pushbutton, release lock and turn the function knob. Align ▲ of the function knob and ⚙ of the Gear Case as illustrated in **Fig.9**. The rotation is released, turn

adjust the flat chisel to desired position. **(Fig.10)**

4. Switch the selector lever to “hammering” according to the procedures mentioned in the above item (1) and secure the position of the tool.

5. Using Staff Gauge (Fig.11)

1. Loosen the auxiliary handle and insert the straight portion of the orientation staff gauge into the handle bolt hole.
2. Move the orientation staff gauge to the specified position and rotate the grip of the auxiliary handle clockwise to fix the orientation staff gauge.

6. Kick Back

1. When the machine swings rapidly during use, or when the handheld part of the drill bit machine rotates rapidly, the effect of the electrical clutch causes the machine to stop rotating. Protecting operator safety.
2. If the rotation stops, it is necessary to turn on the switch and restart the switch. The electronic clutch will reset to ensure protection for the next use.

HOW TO REPLACE GREASE

Low viscosity grease is applied to this rotary hammer so that it can be used for a long period without replacing the grease. Please contact the nearest service center for grease replacement when any grease is leaking from loosened screw.

Further use of the rotary hammer with lock off grease will cause the machine to seize up reduce the service life.

CAUTION:

A special grease is used with this machine, therefore, the normal performance of the machine may be badly affected by use of other grease. Please be sure to let one of our service agents undertake replacement of the grease.

Maintenance And Inspection



Before do any maintenance and inspection, ensure unplug the plug.

1. Inspecting the tool

Since use of a dull tool will degrade efficiency and cause possible motor malfunction, sharpen or replace the tool 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 loose, retighten them immediately. Failure to do so could result in serious hazard.

3. Maintenance of the motor

The motor unit winding is the very “heart” of the power tool. Exercise due care to ensure the winding does not become damaged and/or wet with oil or water.

4. Inspecting the carbon brushes

The Motor employs carbon brushes which are consumable parts. When they become worn to or near the “wear limit”, it could result 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 of specification with standard. In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.

NOTE: Carbon brush inspection and replacement on this tool should **ONLY** be performed by a after-sales service center.

4. Replacing a carbon brush

When the carbon brushes are worn out, the power tool switches itself off. The power tool must then be sent to an after-sales service agent.

When you have to replacement the carbon brushes by yourself, please following the order:

- **Disassembling**

1. Loosen the five screws on the main handle cover, and remove the main handle cove.
2. Lift out the brush holder together with the carbon brush, while being very careful not to forcibly pull the lead wires within the brush holder.
3. Withdraw the insert piece, and remover the carbon brush from the brush holder.

- **Reassembling**

1. Place a new carbon brush into the insert piece, and connect the brush terminal to the carbon brush.
2. Return the brush holder and other parts to their original positions.
3. Place the lead wire in the specified position. Be very careful not to allow the lead wire to contact the armature or rotating parts of the motor.
4. Replace the main handle cover, while being careful to ensure it does not pinch the lead wire, and secure it firmly with the six screws.

CAUTION:

Should the lead wire be pinched by the main handle cover or come in contact with the armature or rotating parts of the motor, a serious danger of electric shock to the operator will be created.

Exercise extreme caution in disassembling and reassembling the motor, following the above procedures exactly.

Do not attempt to disassemble any parts other than those necessary to effect replacement of the carbon brush.

6.Warranty: For the condition of warranty, please refer to the separately provided warranty card.

7. Environment



Faulty and /or discarded electrical or electronic apparatus have to be collected at the appropriate recycling location.

CAUTION:

Repair, modification and inspection of Gazelle Power tools must be must be carried out by a Gazelle Authorized Service Center.

In the operation and maintenance of power tools, the safety regulations and standards prescribed in each country must be observed.

MODIFICATIONS:

Gazelle 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.

NOTE:

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

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