



BEFORE USING THIS ROTARY HAMMER. PLEASE CAREFULLY READ THOUGH 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 WORKS CORRECTLY. PLEASE STORE THIS INSTRUCTION AND OTHER ENCLOSED DOCUMENTS WITH THE MACHINE TOGETHER.

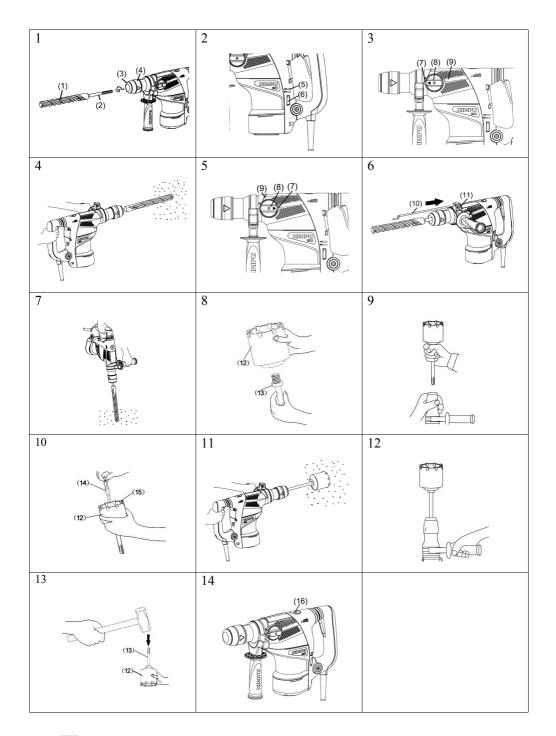
INSTRUCTION MANUAL

CONSUMER SERVICE CENTRE HAMILTON NSW 2303 AUSTRALIA











(1)	Drill bit
(2)	Part of SDS plus shank
(3)	Turn Staff Armor
(4)	Flex Sheath
(5)	Power source Indicator and carbon brushes Indicator
(6)	Speed Adjuster Knob
(7)	locked Pushbutton
(8)	Function Knob
(9)	Cover
(10)	Orientation Staff Guage
(11)	Papilionaceous Short Bolt
(12)	Core bit
(13)	Core bit shank
(14)	Drill bit
(15)	Core bit tip
(16)	Oil Tank Cover

list:

General Power Tool Safety Warnings
Special requirements for rotary hammer
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lubricate
Maintenance And Inspection
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General Power Tool Safety Warnings WARNING:

Read all safety warnings and all instructions. Failure to follow all 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 refer to your mains operated (corded) power tool or battery operated (cordless) power tool.

- 1) Work area
 - a) Keep work area clean and well lit. Cluttered and 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 tools 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 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.
- c) 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.
- 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 jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery 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 these devices can reduce dust related ha2ards.



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 tools 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 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 intended could result in a hazardous situation.

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.
- B) It's Recommended that the tool always be supplied via a residual current device with a rated residual current of 30 mA or less.

Special requirements for rotary hammer

- Wear ear protectors with impact drills. Exposure to noise can cause hearing loss.
- Use auxiliary handles supplied with the tool. Loss of control can cause personal injury.
- 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.
- 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.
- Always hold the body handle and side handle of the power tool firmly. Otherwise the
 counterforce produced may result in inaccurate and even dangerous operation.
- 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.
- In case of damages the replacement of the plug or the supply cord shall always be carried out by the manufacturer of the tool or his service organization



- Do not touch the bit during or immediately after operation. The bit becomes very hot during operation and could cause serious burns.
- Do not use the power tool with a damaged cord. Do not touch the damaged cord and pill the
 plug from the outlet when the cord is damaged while working. Damaged cords increase the risk
 of an electric shock

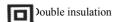
Warning: Reduce the working time to avoid risks related with too much vibration.

2. Safety instructions

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



Accordance with essential applicable safety of European directives





Denote risk of personal injury, loss of life or damage to the tool in case of nonobservance of the instruction in this manual.



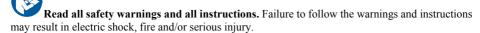
Indicate electrical shock hazard.



Immediately unplug the plug from the main electricity in the case that the cord gets damage and during maintenance.



Wear ear and eye protection.





Waste electrical products should not be disposed of with house hold waste, Please recycle where facilities exist. Check with your local Authority or retailer for recycling advice.



SPECIFICATIONS

Model No	511189
Product No	8 8018 009
Voltage	220-240V
Frequency	50Hz
Rated power	1020W
No load speed	300-720 min ⁻¹
Iimpact rate	1950-4100min ⁻¹
Impact energy	1-9J
Capacity	Drill bit: Φ30mm
	Core bit: Ф90mm
Optimun drilling diameter in concrete	Ф12-Ф22mm
Weight (without cord)	5.8kg

^{*}Be sure to check the nameplate on product as it is subject to change by areas.

STANDARD ACCESSORIES

(1) Carbon Brush (6*10*14mm)
(2) Hammer grease
(3) Auxiliary handle1
(4) Staff Guage
Standard accessories are subject to change without notice

OPTIONAL ACCESSORIES (sold separately)

1. Through-hole drilling (Rotation + Hammering)



(1) Drill bit (SDS-plus shank)

Outer diameter (mm)	Overall length(mm)		
8	280		
10	280		
12	280		
14	280		
16	400		
18	400		
20	400		
22	400		
25	400		
28	400		
30	400		

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





(1)Drill bit

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

(1)Drill bit

• Applied to core bits 30mm to 90 mm

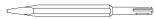
(2) Core bit

External dia.30mm,35mm,40mm,45mm,50m,55mm,60mm,70mm, 75mm, 80mm, 85mm, 90mm

(3) Core bit shank

• Applied to core bits above 30mm.

3. Tine Chisel (SDS-plus shank)



4. Grease (30g)



Optional accessories are subject to change without notice.

APPLICATIONS

- O Drilling holes in concrete
- Drilling anchor holes
- Crushing concrete, chipping, digging, and squaring (by applying optional accessories)

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. How to install Drill bit

CAUTION

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

NOTE:

When using tools such as Tine chisel, drill bits, etc., make sure to use the genuine parts designated by our company.

(1) To attach the drill bit (SDS-plus shank), insert it into the hole until it contacts the innermost end of the hole as illustrated in **Fig.1**.

If you continue to turn the tool with slight pressure, you can feel a spot where there is a hitch. At that spot, pull the flex sheath to the direction of an arrow mark and insert the drill bit all the way until it hits the innermost end



Releasing the flex sheath reverts the flex sheath and secures the tool in place.

- (2) Pull the drill bit to make sure it is locked completely.
- (3) To remove the drill bit, fully pull the flex sheath in the direction of the arrow and pull out the drill bit

5. Regulating the number of rotations and hammering (Fig. 2)

This Rotary Hammer is equipped with a built-in electronic control circuit that can adjust and regulate the number of rotations and times of hammering. This Rotary Hammer can be used by adjusting the speed adjuster knob, depending upon the contents of operation, such as boring holes into fragile materials, chipping, centering, etc.

The scale'1' of the speed adjuster knob is designed for a minimum speed with the number of 300 rotations per minute and 1950 times of blow per minute. The scale '6' is designed for a maximum speed with the number of 720 rotations per minute and 4100 times of blow per minute.

CAUTION:

Do not adjust the speed adjuster knob during operation. Doing so can result in injury because the Rotary Hammer must be held by only one hand, disabling the steady control of the Rotary Hammer.

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



Switch on	Press the switch towards ① direction
Switch off	Release the switch towards @direction

2. When drilling at "rotation + hammering":

If you switch the function knob during motor rotation, the tool can start to rotate abruptly, resulting in unexpected accidents. Be sure to switch the function knob when the motor is at a complete stop.

- (1) Switching to "rotation + hammering"
 - (a) Push the locked Pushbutton, release lock and turn the function knob.
 - (b) Align ▲ of the function knob and **IT** of the cover as illustrated in **Fig.3**.
 - (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 drill bit.
- (3) Pull the trigger switch after applying the drill bit tip to the drilling position Fig.4
- (4) 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. When crushing operation at "hammering":

CAUTION:

- If the function knob is switched during motor rotation, the tool can start to rotate abruptly, resulting
 in unexpected accidents. Make sure to switch the function knob when the motor is at a complete stop.
- If the tine chisel is used at the position of "rotation hammering", the tool can start to rotate, resulting in unexpected accidents. Make sure that they are used at the position of "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 knob support as illustrated in **Fig. 5**.
 - (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

4. Install the Orientation Staff Guage (Fig.6)

- (1) Loosen the papilionaceous short bolt on the auxiliary handle, and insert the staff gauge into the mounting hole on the side handle.
- (2) Adjust the staff gauge position according to the depth of the hole and tighten the papilionaceous short bolt securely.

5. Warming up (Fig. 7)

The grease lubrication system in this unit may require warming up in cold regions.

Position the end of the bit so makes contact with the concrete, turn on the switch and perform the warming up operation. Make sure that a hitting sound is produced and then use the unit.

CAUTION:

When the warming up operation is performed, hold the side handle and the main body securely with both hands to maintain a secure grip and be careful not to twist your body by the jammed drill bit.

HOW TO HANDLE A CORE BIT

When a core bit is used, large diameter holes and blind holes can be drilled. In this case, use optional accessories for core bits (such as a dill bit and core bit shank) for more efficient operation.

1. Mounting

CAUTION:

Prior to mounting a core bit, always disconnect the plug from the power supply receptacle.

- (1) Mount the core bit to the core bit shank. **Fig. 8**Lubricate the thread of the core bit shank to facilitate disassembly.
- (2) Mount the core bit shank on the main body in the same manner as in mounting the drill bit and the bull point. Fig. 9
- (3) Fit in the drill bit by aligning its screw portion with the core bit tip. When the position of the concave is shifted by turning the turn drill bit clockwise, the drill bit never slips off even when the drill is used in a downward direction. Fig. 10

2. Drilling holes (Fig. 11)

- (1) Connect the plug to the power source.
- (2) By straightly and gently pressing dill bit to the wall or floor surface, the entire surface of the core bit tip attains contact to start the hole drilling job.
- (3) When boring about 5mm in depth the position of the hole will be established. Bore after that removing the drill bit from core bit.

CAUTION:

When removing the drill bit, turn OFF the switch and disconnect the plug from the receptacle.

3. How to dismount the core bit



- (1) By holding the rotary hammer (with the core bit inserted) in an upward position, drive the rotary hammer to repeat impact operation two or three times, whereby the screw is loosened and the rotary hammer becomes ready for disassembly. **Fig. 12**
- (2) Remove the core bit shank from the rotary hammer and strike the head of the core bit shank strongly two or three times with a hammer holding the core bit, then the thread becomes loose and the core bit can be removed. Fig. 13

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.

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

CAUTION:

Before replenishing the grease, turn the power off and pull out the power plug.

- (1) Remove the oil tank cover and wipe off the grease inside. Fig. 14
- (2) Supply 30g of Electric Hammer Grease (Standard accessory, contained in tube) to the crank case.
- (3) After replenishing the grease, install the oil tank cover securely.

NOTE:

The Electric Hammer Grease is of the low viscosity type. If necessary purchase from an Authorized Service Center.

MAINTENANCE AND INSPECTION

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.

5. Replacing carbon brushes

When the carbon brushes are worn out, the power tool switches itself off, and also the red indicator light of carbon brush will turn on. The power tool must then be sent to an after-sales service agent.

(Fig. 2)

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



- (2) Remove the brush caps and carbon brushes.
- (3) After replacing the carbon brushes, tighten the brush caps securely and install the fan cover with securely tightening two set screws.
- 7. Warranty: For the condition of warranty, please refer to the separately provided warranty card.

8. Environment



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

CAUTION:

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

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

MODIFICATIONS:

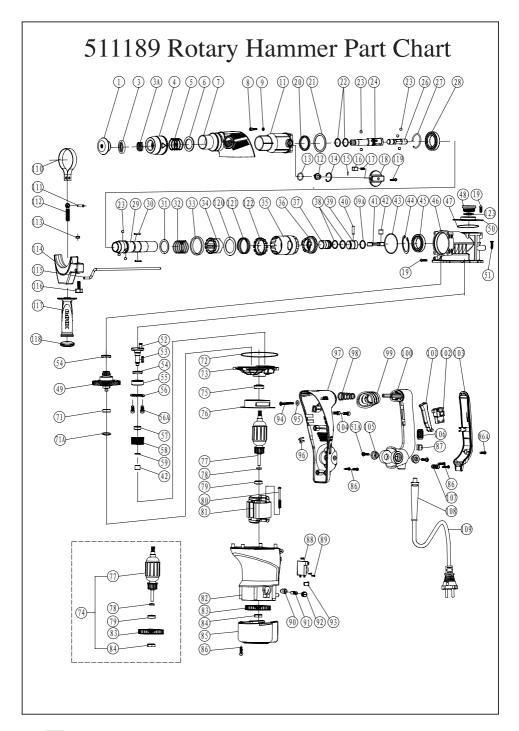
Power Tools are constantly being improved and modified to incorporate the latest technological advancements.

Accordingly, some parts (i.e. code numbers and/or design) may be changed without prior notice.

NOTE:

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







XP-No	Item No.	Part Describe	Quantity	XP-No	Item No.	Part Describe	Quantity
88264120	1	Turn Staff Armor	1	88275045	58	Crankshaft gear 2#Tooth	1
88275037	3	Rotating sleeve ring	1	88210113	59	12 Retaining Ring	1
88224142	3A	Rotating sleeve ring Spring	1	88239004	71	Ball Bearing 627 Z	1
88264125	4	Flex Sheath	1	88224143	71A	Washer 22×14×0.5	1
88224085	5	Flex Sheath Spring 2×31×80	1	88264123	72	Airproof Ring	1
88310009	6	Felt ring 45×40×3.5	1	88290092	73	Inner Cover	1
88264126	7	Cover	1	88280125-1	74	Armature Subassembly	1
88210165	8	Hex.Socket Bolt M5×2512.9	4	88239003	75	Ball Bearing 6001 RS	1
88210051	9	5 Spring Washer	4	88264129	76	Fan Guide	1
88290090	11	front shell	1	88280000	77	Armature	1
88264173	12	Dial Staff Sheath	1	88243033	78	Magnetism Inductorium	1
88264121	13	Fluorin O Ring 14×2.5	1	88239006	79	Ball Bearing 608 RS	1
88210197	14	18 Retaining Ring	1	88210042	80	Tapping Screw ST4.8×58	2
88224122	15	Pushbutton lockpin	1	88280126-1	81	Stator	1
88264160	16	locked Pushbutton	1	88264130	82	Housing Ass'y	1
88224002	17	Pushbutton Spring 0.6×4.4×14	1	882890525	83	Fan	1
88264127	18	Function Knob	1	88210206	84	Nut M8x1x3.8	1
88210032	19	Machine Screw M4×12	5	88264131	85	Fan Cover	1
88264138	20	Oil Seal Ring 35×51×6	1	88210038	86	Tapping Screw ST4.2×18	10
88224088	21	Washer 55×45×1	1	88210132	86A	Tapping Screw ST4.2×22	1
88264081	22	Fluorin O Ring 26×2.1	2	88210076	87	Rivet	2
88210180	23	Steel Ball S7.144	8	88244037	88	Speed Adjuster	1
88275043	24	Rotating sleeve	1	88210202	89	Cross recessed pan head tapping screwsST3.5x14	3
88275050	26	Ram Subassembly	1	88243007	90	Brush Holder	2
88224130	27	Steel Wire Block Ring 32x2	1	88243028	91	Carbon Brush	2
88239001	28	Ball Bearing 6907 RS	1	88243001	92	Brush Cap	2
88275044	29	Cylinder	1	88264158	93	Limit block	1
88210167	30	Palt Key 3x20	2	88210181	94	Machine Screw ST5.5x30	2
88224117	31	Clutch Spring Seat42×32.4×1.5	1	88210183	95	Flat Washer 5.5×12×1	2
88224116	32	Clutch Spring 1.8×36×80	1	88264132	96	Indicator	1
88264084	33	Washer 47×54.5×7	1	88264133	97	Main Handle Seat	1



XP-No	Item No.	Part Describe	Quantity	XP-No	Item No.	Part Describe	Quantity
88224115	34	Clutch1	1	88223057	98	Shock Absorption Spring	1
88264118	35	lining	1	88264124	99	Shock Absorption Jacket	1
88275039	36	Bevel gear1#Tooth	1	88264135	100	Main Handle	1
88275036	37	Impact Piston	1	88264134	101	Switch Trigger	1
88264085	38	Fluorin O Ring 26×3.1	2	88244035	102	Switch	1
88290093	39	Piston	1	88264136	103	Main Handle Cover	1
88264050	39A	Fluorin O Ring 17.7×1.5	1	88210003	104	Hex.Socket Bolt M5×16	2
88224103	40	Piston Pin	1	88223059	105	Main Handle Platen	2
88290094	41	Connecting Rod Ass'y	1	88244008	106	Electricity Feels	1
88234016	42	Needle Bearing HK081410	2	88261010	107	Cord Clip	1
88264086	43	O Ring 59×2	1	88264161	108	Cord Armor	1
88210067	44	47 Retaining Ring	1	88250000	109	Cord	1
88233007	45	Oiliness Bearing	1	88224120	110	Side Handle Ass'y Steel Tie	1
88290091	46	Decelerate Box	1	88210170	111	Spring Column Pin 5×23	1
88264122	47	O Ring 57×1.5	1	88210171	112	Abnormity Bolt	1
88223055	48	Oil Tank Cover	1	88210070	113	Nut M6	1
88275046	49	Clutch Compages	1	88264137	114	Side Handle Ass'y Base	1
88264128	50	Shell cover	1	88301023	115	Orientation Staff Guage	1
88210133	51	Machine Screw ST5.0×25	4	88264139	116	Papilionaceous Bolt	1
88210119	51A	Machine Screw ST5.5×25	2	88264171	117	Side Handle	1
88224124	52	Crank Shaft	1	88264172	118	Side Handle Cover	1
88210168	53	Palt Key 4×12	1	88210035	119	Tapping Screw ST4.2×10	1
88264088	54	Oil Seal Ring 20×28×4.5	2	88224132	120	Ratchet Ring Spring Seat55x40x1.5	1
88239005	55	Ball Bearing 6202 RS	1	88224131	121	Ratchet Ring Spring 2x45.5x30	1
88224089	56	Bearings Cover	1	88264119	122	Ratchet Ring	1
88210188	56A	Hex.Socket Bolt M4x12(12.9)	2	88263126	123	Rubber Washer 31×25×1.2	1

