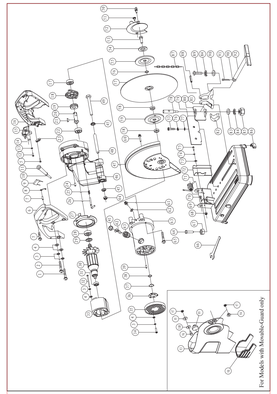


No.	Code	Name	Remark	No.	Code	Name	Remark
46	162069	Gear case		74	241003	Light spring washer	Φ6
47	112029E	Safety guard		75	231043	Screw	M6×12
48	134005	Sleeve		76	241005	Light spring washer	Φ10
49	234025	Screw	M10×130	77	242010A	Washer	Φ10
50	310102	Screw		78	144022	Pin	
51	237005	Screw	M6×10	79	110114	Scale	
52	110084	Guard cover		80	110022	Vice base	
53	234021	Screw	M10×20	81	181003	Mandrel base	
54	139027	Small flange		82	181002	Locking device	
55	139049	Inner flange		83	242009	Big washer	
56	333019	O ring		84	241004	Light spring washer	Φ8
57	611033	Cutting Wheel		85	261007	Nut	M8
58	143021	Sleeve		86	338004	Rubber foot	
59	139049	Inner flange		87	110118	Chain	
60	231010	Screw	M5×25	88	273006	Pin	
61	231016	Screw	M4×10	89	231061	Screw	M8×30
62	242025	Washer	Φ4	90	242007	Washer	Φ8
63	164009	Housing		91	274001	Pin	
64	234037	Hex bolt	M10×30	92	147003	Screw mandrel	
65	231034	Screw	M5×40	93	112035D	Movable guard	
66	623026	Spanner		94	237006	Screw	
67	261023	Nut	M10	95	242005	Washer	Φ6
68	263002	Nut	M6	96	237002	Screw	M6
69	113011	Base		97	263002	Nut	M6
70	232004	Hex screw	M6×12	98	326010	Movable guard cover	
71	154015	Big spring		99	330004	Shock absorber	
72	110023	Deflector		100	342011	Washer	
73	242006	Washer	Φ6				

Original instruction

GENERAL SAFETY INSTRUCTIONS

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 power tool.

SAVE THESE INSTRUCTIONS.

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 plugs in any way. Do not use any adapter plugs with earthed 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 safety equipment. Always wear eye protection. Safety equipment such as dust mask, no-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. 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 energising 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 jeweler. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jeweler 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 hazards.

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 adjustment, 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 particular type of power tool, taking into account the working conditions and the work to be performed. Use the power tool for operations different from those intended could result in a hazardous situation.

h)**Save all warnings and instructions for future reference.**

i) Recommendation: The tool always be supplied via residual current device with a rated residual current of 30 mA or less.

5) SERVICE

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.

IMPORTANT: 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.

Dear Customer,

Thank you for buying a *KEN* power tool. Should you have any questions, vagueness or second thoughts about our products, we recommend you to contact our experts in Sales and Service Departments, who will advise you and help you find the right answers to the set questions. Please contact our local distributors or dealers directly.

PARTS LIST of the Mod.7614NB CUT OFF MACHINE

No.	Code	Name	Remark	No.	Code	Name	Remark
1	231088	Screw	M5×35	23	318001	Cord clamp	
2	231036	Screw	M5×50	24	334002	Rubber	
3	241002	Spring washer	Φ5	25	151013	Spring	
4	242004	Washer	Φ5	26	117006	Shaft	
5	221009	Screw	ST4×16	27	321012	Baffle	
6	314068A	Left handle		28	211049	Bearing	6202-DU
7	275004	Column pin	Φ6×18	29	114021	Washer	
8	110116	Hook		30	442056	Armature	
9	443007	Capacitor		31	211024	Bearing	629-RZ
10	412015	Cable		32	231041	Screw	M5×80
11	332006	Cord protector		33	441054	Field coil	
12	221005	Screw	ST4×8	34	231026	Screw	M5×14
13	241001	Light spring washer	Φ4	35	315006	Back cover	
14	436023	Circle clamp		36	116003	Flange	
15	445009	Switch		37	243003	Spring washer	Φ26
16	314069A	Right handle		38	333002	O ring	
17	211055	Bearing	6203-Z	39	230008	Screw	M5×12
18	161010	Gearcase cover		41	433007	Brush cap	
19	136048	Gear		42	431020	Carbon brush	
20	133040	Spindle		43	724008	Brush holder	
21	276002	Woodruff key	4×13	44	263004	Nut M10	M10
22	211031	Bearing	6000-Z	45	114020	Washer	

■WASTE DISPOSAL AND ENVIRONMENT PROTECTION

The machine, accessories and packing should be sorted for environmental-friendly recycling.

Only for EC countries:

◆ Do not dispose of power tools into household waste!

According the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment and its implementation into national right, power tools that are no longer usable must be collected separately and disposed of in an environmentally correct manner.

■TECHNICAL DATA

Type	J1G-SH01-355 7614NB	
Maximum Diameter of the Cutting Wheel	Φ355mm	
Current Source	AC 220-240V 50/60Hz	
Rated Input Power	2300W	
Idling Rotational Speed	3800r/min	
Weight	16.5kg	
Standard Spare Parts	Wrench	1PC
	Carbon Brush	2PCS
	Operating Handbook	1PC
	Warranty Card	1PC

SAFETY

Read these instructions before operating this power tool. They contain information which will enable you to use the tool safely and help protect those around you. A copy of this instruction leaflet should be kept with the tool so that you can refer to it quickly when undertaking work. Another copy should be made and safely away.

- The cut off machine must be put on the ground to use (Do not equip it on the working table).
- Pay attention to the highest rotational speed limitation indicated on the cutting wheel, do use it according to the stipulations. It's limited to use the glass fiber reinforce cutting wheel with safety linear velocity not less than 80m/s. It's forbidden to use any other grinding cutting disk.
- Do check if there's any fissure or damage situation of the cutting wheels before using the machine every time. If there's such situation, it must be replaced to avoid any accidents
- Do equip the cutting wheel according to the operation explanations, use wrench to fix the cutting wheel carefully, it's possible to occur dangers if equips too loose; and it'll damage the cutting wheel if equips too tight.
- Key factors of inspection in trial operation:

Check the cutting wheel firstly to confirm its model is conforming to the requirements of the machine type; the cutting wheel is in good and complete condition.

At the time of starting up the machine, don't touch the materials, to ensure it's starting up under idling condition.

In trial operation, please keep a little far away from the machine to avoid any possible accidents.

- Please close the current source at once if the cutting wheel stops, gives noises or vibrates.
- The processing project must be clamped tightly, or it's possibly to occur dangers due to the dithering of the project: Make use of the silk rod handle and plier's plate to clamp the object tightly, hinge on the base plate and graduation plate to make processing.
- Please note if the machine is equipped in level, the cushion block can be put under the other end of long project.

Please check the gagant apparatus is normal and effective or not before operating the machine.

- After switching on, please wait for the cutting wheel rotates with full speed, and then begin to cut the project.
- Wear gloves and eye protector to avoid rebound and sustain an injury, don't wear too loose clothes and the clothes which easy to be reeled and tore. Please take notice of bundling your hair if with long hair to avoid the danger that the hair is reeled into the machine.
- Do use the cutting wheel which edge has been grinded very sharp.
- The hands and body can't approach the rotating cutting wheel too near, and of course can't touch the rotating cutting wheel. Do close the current source when disassembling, draw out the plug, and please don't make such operation until the cutting wheel stops completely. If needing to clamp the object or changing the position and angle of the project, please wait for the tool stops and then make above-said operations.
- The temperature is very high of project part that is just cut off, don't touch it to avoid scald.
- It will decrease the hardness of the cutting wheel if storing it in moist place, please store it in drying place when not use it, lay it in level to avoid distortion.
- Don't damage the axel, pressure board and bolts of the machine, or it will damage the cutting wheel during the course of assembling it.
- Don't move the protective shield of cutting wheel because of minding troubles, or lock the safety protective equipments.
- It's limited to use the pressure plate attached in the machine.

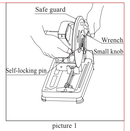
■OPERATION

◆Assemble or Disassemble the Cutting Wheel

Before assemble or disassemble the cutting wheel, please make sure the machine is switched off or unplugged in.

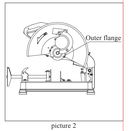
The linear velocity of all the cutting wheels should be no less than 80m/s. The diameter of all cutting wheel should be no less than 355mm.

Wrench put in the base-wrench, can be removed when required.



picture 1

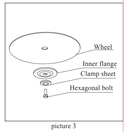
When disassemble the cutting wheel, firstly pull up the movable safety guard and press the self-locking pin to fix the cutting wheel; unscrew the hex bolt counterclockwise with wrench; and then take down the flange and the cutting wheel.



picture 2

When assemble the cutting wheel, the steps are opposite to the above-said steps (Picture one,Picture Two, Picture Three)

Make sure to tighten the hex bolts. If not fully tightened, it would lead to injuries. Please use the supplied wrench to tighten the bolts.



picture 3

■PRACTICAL TIPS

◆ Before assembling or disassembling the cutting wheel, do confirm the machine is under switch off condition, and the plug is drawn out. The maximum circumferential velocity of the cutting wheel shall not less than 4800m/min. The maximum diameter of the cutting wheel shall not more than 355mm (14 inch).

◆ Do confirm the hexagonal bolt is screwed tightly, if it is not screwed tightly enough, it's possible to cause injury accidents. Use the attached wrench to ensure the bolts are screwed tightly.

◆ Use the abovementioned big interspaced settings to cut narrow objects; the safety fixing performance is inferior.

◆ When setting the graduation plate under the cutting condition of 35-205MM (11/8 inch-139/16 inch) or 70-240MM (11/4 inch-151/16 inch), it can't be cut in bevel angle.

◆ At the time of fixing the object, do remember to press the fast nut in right turn enough, if don't make such operation, the object can't be clamped enough, thus the object will be cracked or the cutting wheel will be damaged.

◆ The sparks turns out from cutting decides the pressure applies on the handle is suitable or not, and if it has attained best efficiency of cutting or not. Applied pressure on the handle shall be adjusted to the maximum extend to evolve sparks, don't press the handle overmuch, otherwise, it'll decrease the cutting efficiency, wear the cutting wheel untimely, and it's possible to make the machine, cutting wheel and object damaged.

■MAINTENANCE AND CARE

- Unplug the tool from the socket before performing any works on the tool!
- Tool requires no special maintenance, but after some time you must control the parts that are submitted to wear-and-tear under normal operating conditions. This includes the control and replacement of carbon brushes and grease in reducing gear housing. Take the tool to an authorized service centre.
- Keep the tool and supply cord clean. Keep ventilation slots clean and open. Wipe the surface of the tool with a soft cloth!
- It is not allowed to use household cleaning agents that contain petrol, trichloroethylene, ammonia and chlorides. These substances corrode and damage plastic parts of the tool.
- Excessive sparking generally indicates the presence of dirt in the motor or abnormal wear on the carbons.
- In case of electric or mechanical failure, send the tool to a KEN authorized service centre for repair.

■SERVICING AND REPAIRS

If servicing is required, contact one of our listed service centers. It is not allowed and dangerous to perform any individual work on the tool.

◆ Have the tool repaired by authorized persons.

◆ Any repairs of the tool in unauthorized service centers is performed at own responsibility.

◆ The owner of the tool is responsible for all works on the tool that were not performed in authorized service center, and therefore he loses the claim for guarantee.

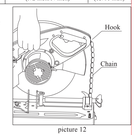
◆ Cutting Ability

The maximum cutting ability is different according to the angles of cutting and the shape of the objects.

Workpiece Shape / Cutting Angle				
90°	115mm (9/2 inch)	119mm (151/32 inch)	115mmX130mm (9/2 inchX163/32 inch) 102mmX194mm (4 inchX61/8 inch) 70mmX233mm (11/4 inchX293/32 inch)	137mm (43/8 inch)
45°	115mm (9/2 inch)	106mm (67/16 inch)	115mmX103mm (9/2 inchX4 inch)	100mm (63/16 inch)

◆Carrying of the Machine

Hang the chain to the hook of the handle (Picture Twelve).

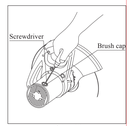


picture 12

◆Replace the Electric Brush

Replace and inspect the carbon brush periodically. When the machine appears big sparks or doesn't rotate, if the carbon brush is worn and less than 5MM, it needs to be replaced. Please keep it clean and make it slides freely in holding brush. Please replace two brushes at the same time, and use the specified "KEN" brand electric brush.

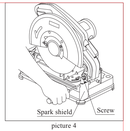
Please use screwdriver to screw the lid of the holding brush, take out the wearing carbon brush and insert the new ones, and then screw the lid of holding brush tightly (Picture Thirteen).



picture 13

◆Spark Shield

The spark shield is equipped on the forepart of base plate. Before operation, please release the screws to adjust the angle of the spark shield according to the operating requirements to avoid spattering the sparks everywhere (Picture Four).



picture 4

When the cutting wheel is wearing out, it can also be used economically and efficiently by adjusting the height of hexagonal bolts to control the cutting angle (Picture Five).

◆The Interspaces between the Pliers Plate and Graduation Plate

The fixed distance is 0-170MM (0-6 11/16 inch) between plier's plate and graduation plate, if needing wider interspaces, please adjust the interspaces according to the under mentioned procedures.

Discharge two hexagonal bolts of the fixed graduation plate, move it like the picture stated, after that, fix the hexagonal bolt. According to the adjusting step, it can attain the under mentioned interspaces setting range (Picture Six).

35-205 MM (11/8 inch-139/16 inch)

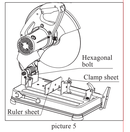
70-240 MM (11/4 inch-151/16 inch)

To cut the narrow work piece with the above 2 clamping measurements, it delivers poorer stationarity.

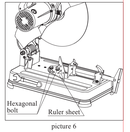
◆ Setting of Cutting Angle

Release the quick-lock device , move the scale plate to the intended cutting angle(0-45°),and screw the quick-lock device tightly. (Picture Five).

※When the scale plate is set between 35-225 mm or 70-260 mm, it cannot perform diagonal cutting work.



picture 5



picture 6

◆Fixing workpiece

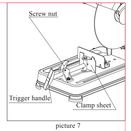
Turn the handle counter clockwise to loose the movable vice jaw, move the fast nut upward so that the handle can be quickly pulled out or pushed forward. When pressing the work piece, firstly push forward the handle until the vice jaw reaches the work piece, then press the fast nut downwards and turn the handle clockwise to fix the work piece(Picture Seven).

※When fixing the work piece, make sure to press the fast nut downwards completely; if not, the work piece can not be fully clamped, and pop out cause damage to the cutting wheel.

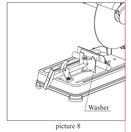
When the cutting wheel is worn out greatly, put a nonflammable hard cushion under the back of the work piece, thus it can use the middle edge of the cutting wheel to cut the object efficiently (Picture Eight).

※Only when cutting small object and the object can be fully clamping may the cushion be used in this manner.

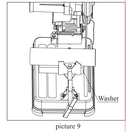
Putting a cushion underneath that is narrower than the object, the cutting wheel will be used more economically and efficiently (Picture Nine).



picture 7

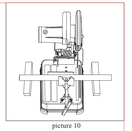


picture 8



picture 9

When cutting long object, put two nonflammable cushions under two ends of it, and make the object to keep in level with the pan base, ensure the supporting plain of the two cushions an the supporting plain of the base plate in a straight line (Picture Ten).

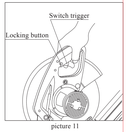


picture 10

Press the switch trigger of the machine, it switches on; loose the trigger completely, the machine is under switch off condition.

The machine switch can be locked if needing to make the machine runs continuously please press the locking button at the time of pressing the switch trigger completely, the machine will be under working condition.

If needing to release the locking, press the switch trigger again is OK (Picture Eleven).



picture 11

◆ Operation:

Hold the handle firmly, start up the machine until the cutting wheels reach enough rotational speed and then press the cutting wheel slowly. When the cutting wheel touches the object, press the handle sustained, apply cutting operation. When the cutting finishes, switch off the machine firstly until the cutting wheel stops rotation completely, and then lift the handle to enough high position.