

ELECTRIC NIBBLER

INSTRUCTION MANUAL



Warning:

Only tools equipped with over load protection, when motor has been cut off due to over load, always switch on machine with no load for at least 3 minutes to reduce temperature before switch on again to avoid burn out to the motor.

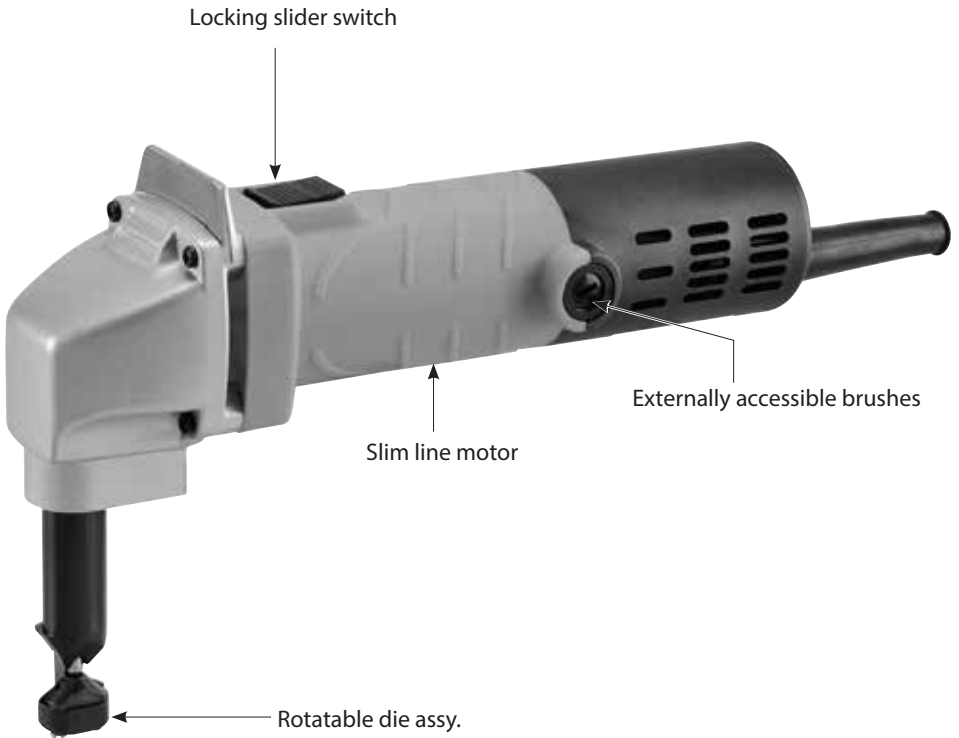


ORIGINAL INSTRUCTIONS

For your personal safety,
READ and UNDERSTAND before using.

**SAVE THESE INSTRUCTIONS
FOR FUTURE REFERENCE.**

Power Input	500W	
Voltage	See machine nameplate	
No Load/min ⁻¹	2300 SPM	
Min. Cut Radius	40mm	
Max. Capacity	Steel	1.6mm (16 ga.)
	Stainless Steel	1.2mm (18 ga.)
Dimensions	790mm x 270mm x 730mm	
Net Weight	1.5kg (3.3Lbs)	



GENERAL SAFETY INSTRUCTIONS



WARNING! Read all safety warnings and all instructions. 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 mainsoperated (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 an earth leakage circuit breaker.** Use of an earth leakage circuit breaker reduces the risk of electric shock.

3) PERSONAL SAFETY

- a. **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. **b) Use personal protective equipment. Always wear eye protection.** Protective equipment such as 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 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 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.

4) POWER TOOL USE AND CARE

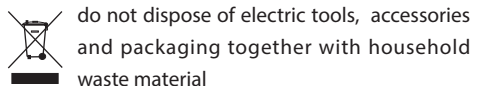
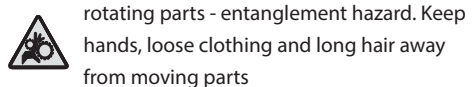
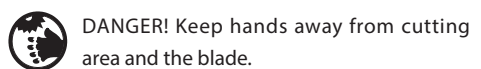
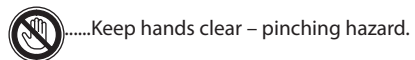
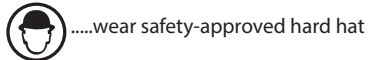
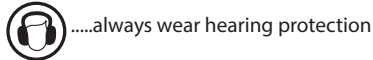
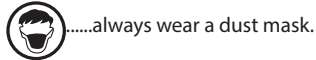
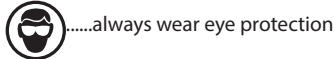
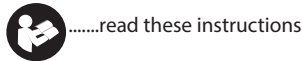
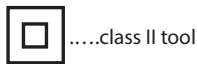
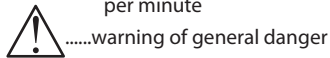
- a. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c. **Disconnect the plug from the power source 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.
- 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.

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.

Symbols used in this manual

- V.....volts
- A.....amperes
- Hz.....hertz
- W.....watt
- ~.....alternating current
- n_0no load speed
- min⁻¹.....revolutions or reciprocation
per minute



SPECIAL PRECAUTIONS:

1. **BEWARE:**The nibbler leaves a very sharp edge on the workpiece.do not handle the edge with your bare hands.
2. Ensure that the power cord is not cut or damaged on the sharp edge.
3. Take care that no metal chips get inside the tool.
4. Never touch the metal chips with your bare hands.They are sharp and extremely hot just after cutting.

APPLICATIONS

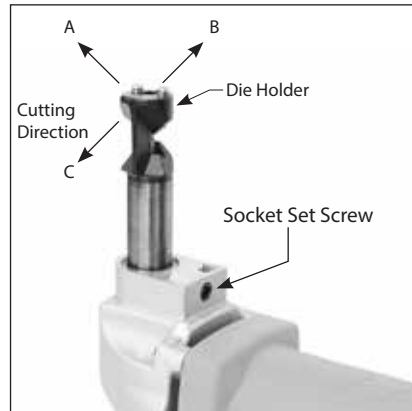
Cutting sheet metal,corrugated sheet metal,and trapezoidal sheet metal made from mild steel,aluminum, stainless steel, or copper.

BEFORE OPERATING

1. Ensure the power source conforms with the tool nameplate.
2. Ensure that the switch is off before plugging in.
3. If you must use an extension cord,ensure that it is of sufficient capacity and thickness. Use the shortest possible extension cord.
4. Periodically inspect all screws for tightness. This is especially important for the punch and die screws . Operating with these screws loose will result in damage to the tool.
5. Make a habit of lubricating the punch and die with machine oil every time you use it.

CUTTING

1. Do not attempt to cut sheet metal that is beyond the maximum rated thickness for this tool.
2. Use cutting oil along the cut to be made.This will ease cutting and increase punch and die service life.However:take care that no oil enters the motor vents.
3. The die holder barrel has 3 detents which allow it to be set in one of three positions: A, B, or C.
4. To change cutting direction ,loosen the socket set screw locking the die holder. Turn die holder to one of the 3 specified positions. Do not attempt to position the punch holder at odd angles.

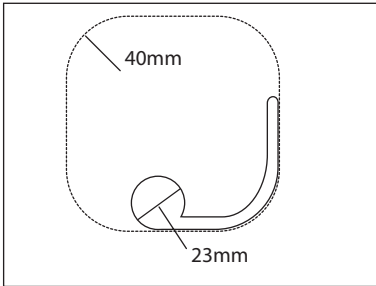


CUTTING SHEET METAL

Holding the machine firmly with the tool parallel to the workpiece, apply light counter pressure and cut.

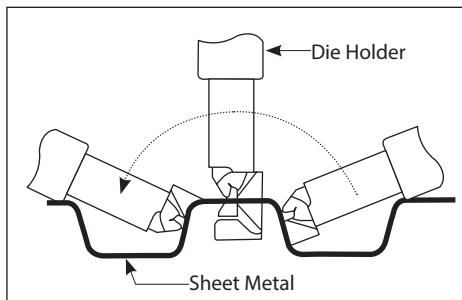
POCKET CUTTING

Before beginning you must drill or punch a hole at least 23mm in diameter. Then proceed to cut pocket.



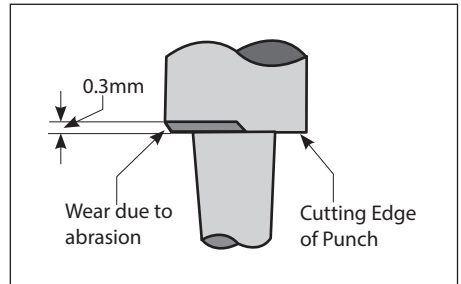
CUTTING CORRUGATED AND TRAPEZOIDAL SHEET METAL

1. Only use the side direction (B or C) when cutting corrugated or trapezoidal sheet metal. Do not attempt to use the forward (A) direction.
2. Holding the tool firmly, cut while keeping the die holder perpendicular to the shape of the metal.



PUNCH AND DIE

The punch and die are wearing parts. Periodically inspect their cutting surfaces. Wear will be especially quick when cutting trapezoidal sheet metal. When the punch's cutting edge becomes rounded off due to abrasion, the punch and die must be replaced. Always replace the punch and die as a matched set. Attempting to use the tool with an excessively worn punch and die will result in inefficient operation and excessive stress on the die holder c-section, causing it to break off.

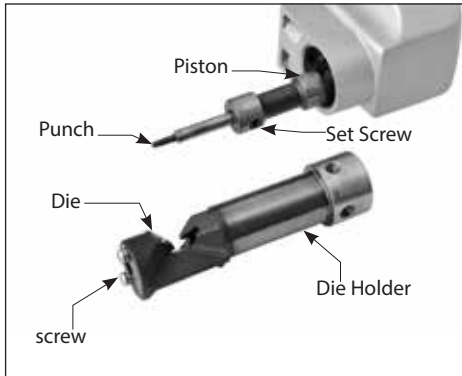


PUNCH REPLACEMENT

CAUTION: Take care to avoid foreign material from entering the gear case when replacing the punch.

1. Loosen the die holder locking screw (no.12) and remove the die holder.
2. Loosen the socket set screw that holds the punch to the piston and remove the punch.
3. Install new punch, making sure the hole in the punch aligns with the piston set screw hole. Tighten screw.
4. Lubricate piston and punch.
5. replace the die holder and tighten locking

screw.



DIE REPLACEMENT

The punch in its raised position, loosen the two screws and replace the die.

SWITCHING THE MACHINE ON AND OFF

To switch on:

While holding with the left hand on the front grip and the right hand on the main handle, slide the switch slider forward until it locks in the "on" position.

To switch off:

Push down on the back of the switch slider, which will release the lock and switch the machine off.



HOW TO USE THE TOOL

Effective control of this machine requires **two-handed** operation for maximum safety and control.

The proper hold is to keep one hand on the main handle and the other hand on the grip. It is vitally important to keep stable footing at all times,

OPERATIONS

Once the machine is set up and all safety measures and equipment are in place, begin by turning on the machine.

Begin working and contact the workpiece. It is not necessary to use excessive down force. Allow the machine to work at the pace it was intended.

MAINTENANCE

Every 50 hours of operation blow compressed air through the motor while running at no load to clean out accumulated dust. (If operating in especially dusty conditions, perform this operation more often.)

KEEP TOOL CLEAN

Periodically blow out all air passages with dry compressed air. All plastic parts should be cleaned with a soft damp cloth. NEVER use solvents to clean plastic parts. They could possibly dissolve or otherwise damage the material.

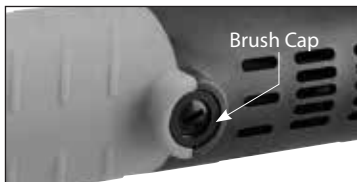
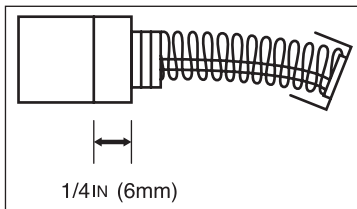
Wear safety glasses while using compressed air.

THE CARBON BRUSHES

The carbon brushes are a normal wearing part and must be replaced when they reach their wear limit.

NOTE: Checking and replacing the carbon brushes should be entrusted to a qualified service center.

The carbon brushes furnished will last approximately 50 hours of running time or 10,000 on/off cycles. Replace both carbon brushes when either has less than 1/4" length of carbon remaining. To inspect or replace brushes, first unplug the machine. Remove the brush caps with a slothead screwdriver and withdraw the old brushes. Replace with new brushes (always replace as a pair) ensuring that they align properly and slide freely. Then replace the brush caps.



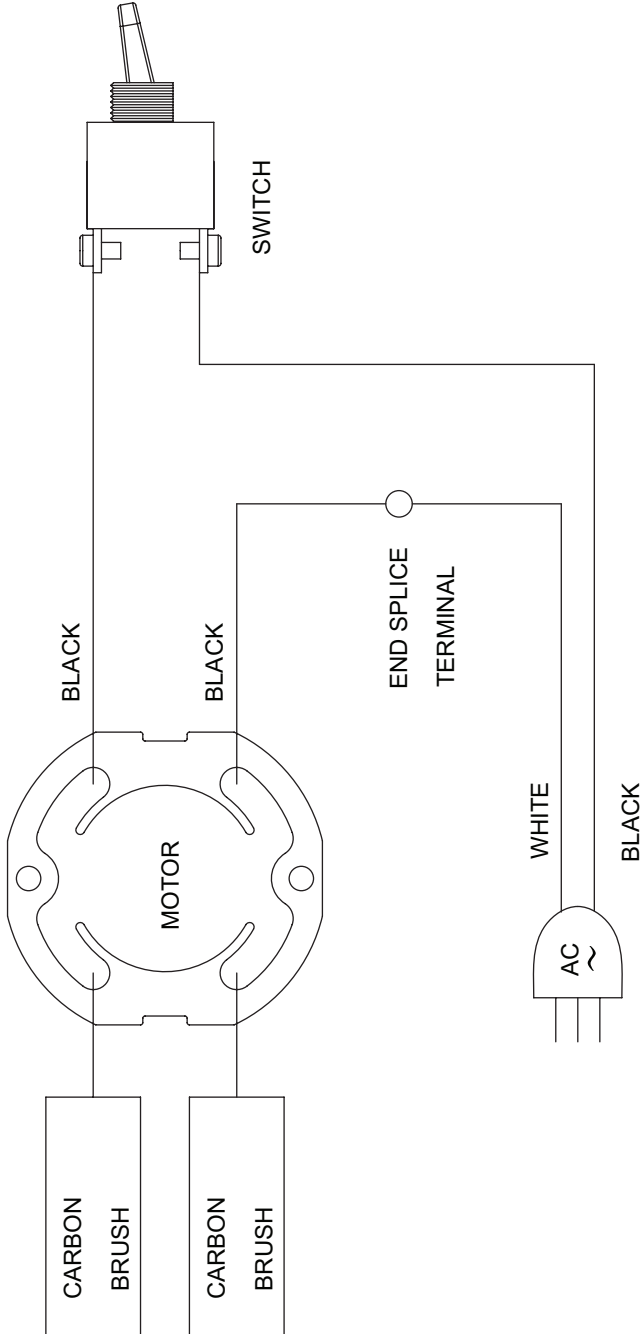
NOTE: To reinstall the same brushes, first make sure the brushes go back in the way they came out. Otherwise a break-in period will occur that will reduce motor performance and increase brush wear.

It is recommended that, at least once a year, you take the tool to an Authorized Service Center for a thorough cleaning and lubrication.

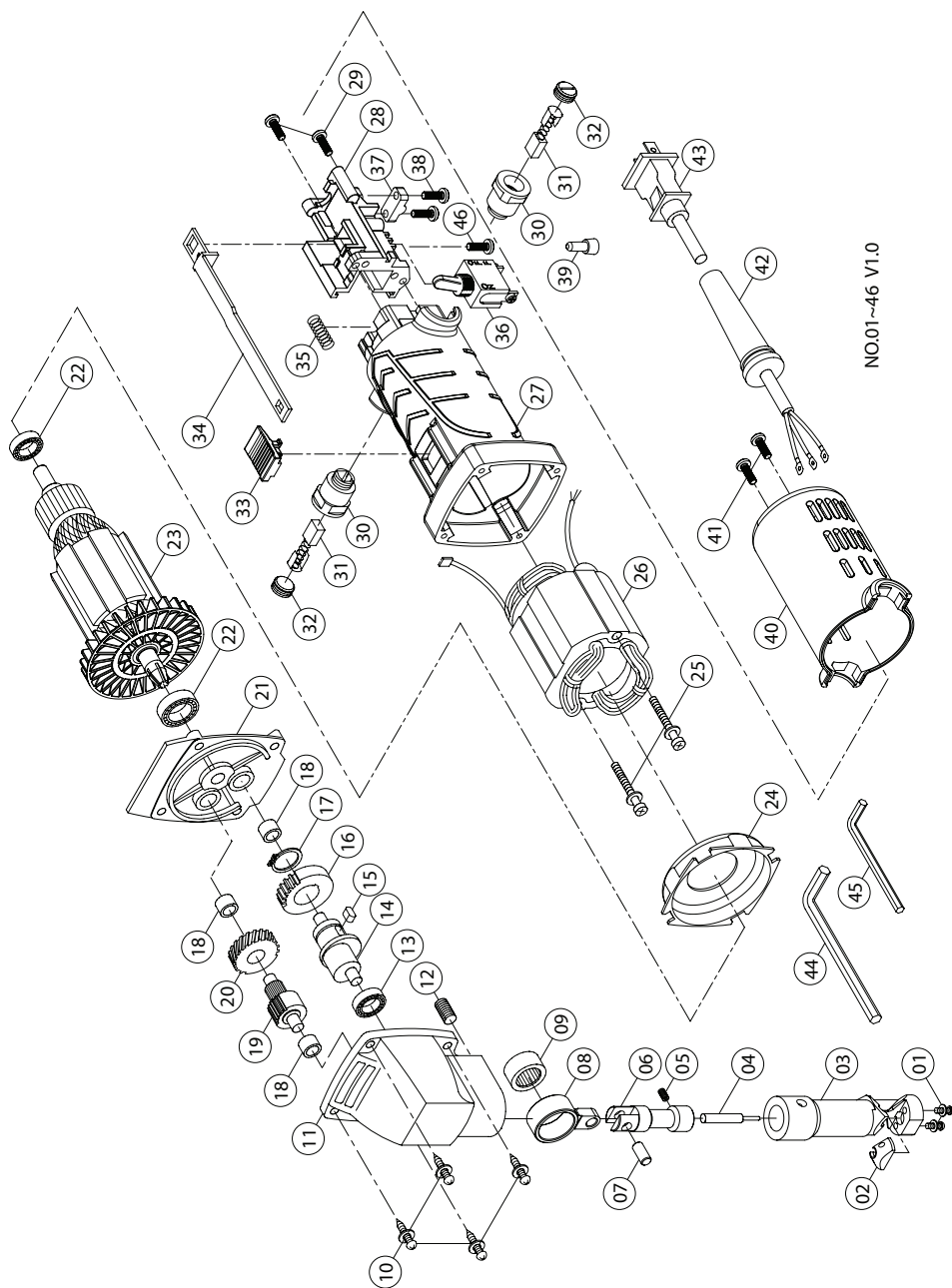
If the replacement of the power supply cord is necessary, this has to be done by the manufacturer or their agent in order to avoid a safety hazard.

WARNING: All repairs must be entrusted to an authorized service center. Incorrectly performed repairs could lead to injury or death.

WIRING



EXPLODED VIEW



NO.01~46 V1.0

PARTS LIST

NO.	Parts Name	Q'TY	NO.	Parts Name	Q'TY
1	SCREW M3 x 15	2	24	FAN BAFFLE	1
2	DIE	1	25	SCREW M4 x 2-1/2"(63.5)	2
3	DIE HOLDER	1	26	STATOR	1
4	PUNCH	1	27	MOTOR HOUSING	1
5	SOCKET SET SCREW M5 x 5	1	28	SWITCH SUPPORT	1
6	PISTON	1	29	SCREW M4 x 12	2
7	WRIST PIN Ø6 x 12.8	1	30	BRUSH HOLDER	2
8	CONNECTING ROD	1	31	CARBON BRUSH 6.5 x 7.5	2
9	NEEDLE BEARING HK1512	1	32	BRUSH CAP	2
10	SCREW M4 x 30	4	33	SWITCH SLIDER	1
11	GEAR CASE	1	34	SWITCH LEVER	1
12	SOCKET SET SCREW M8 x 20	1	35	SPRING Ø0.7 x Ø6.6 x Ø8 x 37L x 13T	1
13	BEARING 608 zz NMB	1	36	TOGGLE SWITCH	1
14	CRANKSHAFT	1	37	CORD CLIP	1
15	PARALLEL KEY 4 x 4 x 8	1	38	SCREW M4 x 14	2
16	CRANK GEAR M1.0 x 33T	1	39	END SPLICE TERMINAL C-4	1
17	EXTERNAL CIRCLIP S-12	1	40	TAIL COVER	1
18	BUSHING Ø6 x Ø10 x 8	3	41	SCREW M4 x 18	2
19	INPUT SPINDLE M1.0 x 16T	1	42	CORD ARMOR	1
20	INPUT GEAR M0.75 x 35T	1	43	POWER SUPPLY CORD	1
21	GEAR PLATE	1	44	HEX WRENCH-M4 M4	1
22	BALL BEARING 608-2RU	2	45	HEX WRENCH-M2.5 M2.5	1
23	ARMATURE M0.75 x 6T	1	46	SCREW M4 x 8	1

