





( **\$\sigma\_{\text{-}} \text{ EM} 0.5** / **\$\sqrt{\sigma\_{\text{-}}} \text{ EM} 1.0** )





### SAFETY PRECAUTIONS

Thanks for choosing the S-Cutter.

Make sure that you carefully read and fully understand the Manual to use the device correctly and keep yourself and your properties safe.







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# **SAFETY PRECAUTIONS**



\* In this Manual, 'Power Tool' refers to both corded power tools and cordless battery-powered tools.

#### 01 Keep the workplace clean and well-lit at all times.

An untidy or dark workplace may result in an accident.

### 02 Always be vigilant and stay aware of your surroundings.

Avoid an unstable stance and stay poised always before operation. Stable posture and a poised state can ensure safety in diverse situations.

#### 03 Do NOT use a tool with a broken power switch.

A tool with a broken power switch can be dangerous. Have it fixed before use.

### Be cautious in using the power tool.

Keep the tools out of children's reach. If you are not familiar with power tools or didn't read the Manual, do NOT use them. They can be dangerous for inexperienced users.

### 05 Keep work conditions and details in mind.

Observe the instructions and usage when using power tools and accessories. Using such power tool in non-permitted operations can result in dangerous situations.

#### 06 Do NOT attempt to change the charger and battery.

Using the charger and battery other than the specified ones may result in fire.

#### 07 Keep the tool away from metals during storage.

Since a bridging state can occur between electrodes, keep the tool away from metals as failure to do so may result in fire.

# Be careful with any battery leak.

Do NOT touch battery acid spills. If touched, rinse off with water immediately. If acid gets into the eyes, immediately visit your health care professional. Acid spills may cause skin irritations or burns.

#### 09 Do NOT disassemble the battery.

There is a possibility of a short circuit. Do NOT leave the battery at a high temperature for too long. Keep it away from water and wet places as these conditions may result in explosion.



### PIPE(TUBE) CUTTER Of Best Technology

### 10 Check if the battery is damaged.

If the battery is damaged or incorrectly used, vapor can form. Ventilate the workplace as this can irritate respiratory passages.

### 11 Use the battery with Bosch power tools.

The use of genuine products can protect the battery from overload.

### 12 Keep the battery safe from sharp objects or external shock.

These conditions can cause the battery to burn, produce smoke or explode.

### 13 Consider your surroundings.

Do NOT use power tools in explosion-prone environments with flammable fluids, gas or dust. They may create a spark which can ignite dust or vapor.

### 14 Keep yourself safe from electric shock.

Do NOT touch the grounded parts (e.g., water pipe, heater, refrigerator, etc.).

#### 15 Keep out any unauthorized persons.

Keep children and other unauthorized persons away from the workplace before using power tools as other individuals may cause distraction and loss of control of the tools.

# <sup>16</sup> Check the plug adapter.

Check if the charger adapter is well plugged into the outlet. NEVER attempt to modify the adapter.

#### 17 Do NOT operate at overload.

More efficient and safe operations are enabled within a permitted power range.

#### Use the specified tools.

Use the standard parts and components provided by the head office. Do NOT use the tool for purposes other than their intended use or in places away from the working range.

#### 19 Always wear eye protection and gloves.

Wearing safety gear such as goggles and gloves can reduce the risk of bodily injury. Flying chips can do serious damage to the eyes or cause a burn.

#### 20 Do NOT use electric wires for purposes other than original intent.

Do NOT drag the tool by pulling the electric cord. Do NOT unplug the cable by pulling the cord itself.

Keep the cord safe from heat, oil and sharp edges.



#### 21 Remove from power source.

In the case that the tool is left unused for a long period of time, unplug the power cable and remove the battery. Remove power at replacement of parts or when the tool is inspected or left unused.

### 22 Be careful not to operate the tool by accident.

Use the authorized extension power cord with a qualifying mark. Do NOT work outdoors on a rainy or humid day.

#### 23 Electrical cable for connection outdoors.

Use the authorized extension power cord with a qualifying mark. Do NOT work outdoors on a rainy or humid day.

#### 24 Stay alert at all times.

Observe work processes and handle things rationally. Stop using the tool when you lose concentration. Do NOT operate the tool in an unreasonable manner.

### 25 Check if the Product is free from damage.

Check the safety device and examine thoroughly that the mildly damaged parts now function normally before resuming the use of the tool.

### 26 Check the product.

Check if the Product got stuck, or the parts are damaged.

The complete operation of the tool is not guaranteed unless all parts are normally assembled, and all requirements are met.

Unless otherwise stated in the Manual, the damaged safety device or parts are repaired or replaced at the customer service center.

### 27 CAUTION!

For your safety, use the tools and accessories specified in the Manual or recommended by the distributor. The use of other tools and accessories not mentioned in the Manual or catalogue may result in bodily injury.

#### 28 Request for repair by an expert.

The Product meets the related safety regulations. For repair, contact an expert. Failure to do so may result in an accident.



# Must-Follow Rules



- The instructions in this user manual contains information that is important to the safe use of this product.

  Not following these instructions can cause death, serious injury, and massive property damage.
- For safety, the instructions are divided into 'WARNING' and 'CAUTION' depending on degree of risk, and the details are as follows:

Symbol		Description			
lack	WARNING	* There is a high possibility of serious injury or death when the instructions are violated.			
⚠	CAUTION	<ul><li>** There is a possibility of serious injury or death when the instructions are violated.</li><li>** There is a possibility of device failure or degradation when the instructions are violated.</li></ul>			

Precautions were recorded to prevent an accident that might easily occur while using or handling the Product and execute operations safely.

The safety warnings and cautions cannot cover all conditions or situations that can take place during operation. Therefore, remain focused during operation or storing. Read and fully understand the Manual to prevent an accident.

## Special safety precautions

'WARNING' or 'CAUTION' mark makes a user stay alert because there is a possibility of hazards under particular conditions.





Do NOT pour cutting fluid or water.

The penetration of water or other liquids into an electric motor may result in electric shock or death.

- Do NOT work outdoors on a rainy or humid day.

  An electric shock may result in serious bodily injury or death.
- Keep your finger, hand, any part of your body or sleeve away from the rotating device.
   If your finger, hand or any part of your body is caught in the tool, serious bodily injury may occur.
- Remove the battery at replacement of the tool. Failure to do so may result in serious injury.
- Keep any part of your body away from the pressing or rotating unit. Failure to do so may result in serious injury.
- Wear eye protection.
   Flying debris can do serious damage to the eyes.
- Do NOT remove or alter the safety ring.

  Your hand or gloves can be caught in the rotating part, causing serious injury.

# **A** CAUTION

- Use the tools and parts provided by the Company for the originally intended purposes. In the case it is unavoidable to use the products provided by those other than the Company, use a qualified one (nationally certified or higher).

  Any violation of this provision may result in serious injury or product degradation.
- Do NOT leave the tool running.

  Doing so may harm workers nearby.
- Adjust the direction of flying chips for safety.
   If chips land on a flammable material, a fire can break out. If it touches human skin, it may result in a burn.
- Wear gloves and long-sleeve clothes. They can prevent burns.
- Test run the tool prior to operation.

  This ensures safer operations by checking if the tool functions normally without problems.



# Instruction Before Use



### 1. Check the electric leakage breaker

Make sure the system is powered on the circuit breaker is installed. Check if an electric leakage breaker (ELB) with rated capacity is installed in all electric units.

Make sure that the ground wire is connected to the powered system.

### 2. Extension power cord

If an electrical outlet is not nearby, use an extension power cord. Choose a proper one in terms of length and thickness, considering the flow of electricity. If it is too long or thin, voltage increases, causing overload. Use a short power cord as much as possible.



If an electric power cord is damaged, it must be repaired or replaced with a new one immediately.

# 3. Check the power supply.

Check the power supply stated on the nameplate and use the proper power source.

# 4. Tool replacement

Make sure that the battery is removed before replacing the tool.

### 5. Do NOT disassemble or remodel the safety ring.

Do NOT disassemble or remodel the safety ring attached to the tool.



In the event of tool replacement without removing the battery, the power can be switched on accidentally, causing an unexpected accident.





# Hight-quality, Ultra-light Squaring Facing Machine!

Essential tool in UHP tube construction Very durable, high-strength insert tip(4sides used)

Capacity: 1/4 - 1/2inch









# How to Use S-EM0.5

# How to Use S-EM0.5

### Instructions before Use

Fully understand how to use the tool as instructed by the Company or distributor. If you did not receive the required training, ask for training from those who already completed the training.

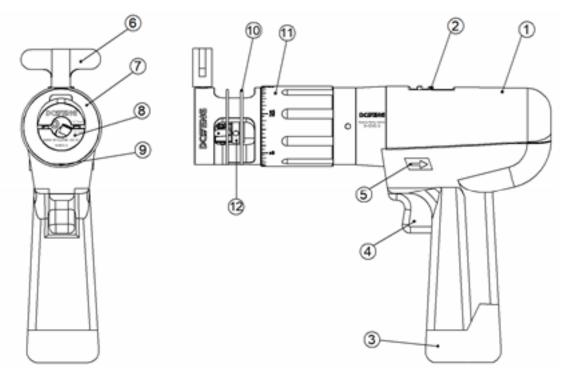
Make sure that the battery is removed before replacing the insert tip. Check the voltage and install an electric leakage breaker (ELB) with rated capacity. Put on protective gear such as goggles before operation.

# **INDEX**

- 01. Name of the parts and controls
- 02. Accessories
- 03. How to use S-EM0.5
- 04. Product specifications



# 1. Name of the parts and controls



NO	Component	Description		
1	Motor(BOSCH)	Driving Unit		
2	Speed setting switch	Speed setting( $1^{st}$ gear recommended)		
3	Battery	Motor battery		
4	Power and speed control switch	ON/OFF, speed adjustment		
5	Forward/reverse switch	Changes direction to forward / reverse (default setting: Forward)		
6	Collet clamping bolt	Clamps tube attached to the collet		
7	Head	Tube-facing machine		
8	Collet	Tube-clamping collet		
9	Collet-locating pin	Locates collet		
10	Safety ring	Ring designed for finger protection		
11	Processing control handle	Cutting volume control handle		
12	Insert tip holder	Insert tip-clamping holder		

#### \* CAUTION) Do NOT disassemble or remodel the safety ring.

<sup>-</sup> If the safety ring is damaged, stop operations immediately.

Contact an engineer for help and have it repaired before use.



### 2. Accessories



### Standard Accessories

Charger: AL1130CV 10.8V Battery: GBA 10.8V 2.0Ah

Collet: 1/4, 3/8, 1/2inch(6.35, 9.53, 12.7mm)

T-wrench: T15-133mm(L)

T-hex wrench: 3mm-133mm(L)

### Optional Accessories

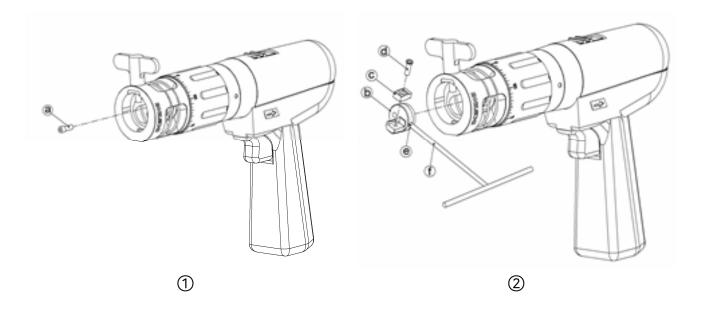
Insert Tip: Tip box included, 10EA/BOX

Collet: 1/8inch (3.18mm)



### 3. How to use S-EM0.5

### 3-1. Mounting of the insert tip

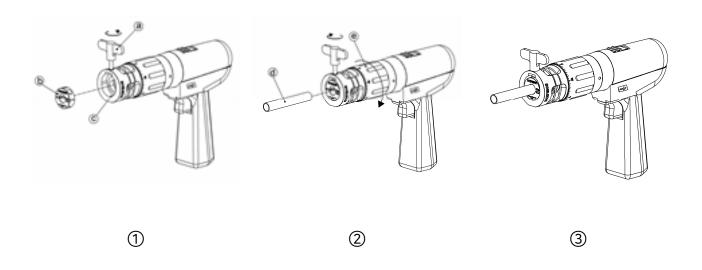


- ① Unscrew the tip holder bolt (a) using a T-hex wrench.
  - \* CAUTION: Remove the battery prior to this task.
- ② Pull off the insert tip holder (b) and hold it to the clamping hole (e) using a T-hex wrench (f). Then, unscrew the insert tip bolt (d) using a T-wrench.
- 3 Mount and clamp the insert tip (c) using the insert tip bolt (d). Then, assemble it to the body in reverse order.
- \* Replace the insert tip or convert its direction, following the same procedures above.



### 3-2. Processing methods and procedures

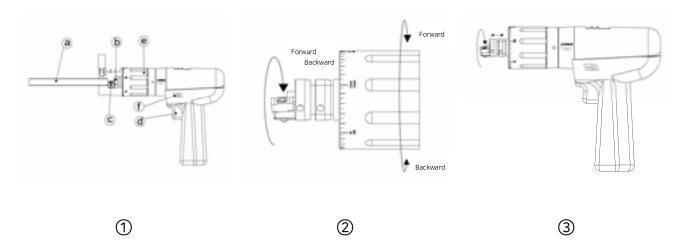
### (1) Collet and tube assembly



- ① Select a proper size collet for the tube (d) and slightly tilt and insert the collet (b) into the collet-locating pin (c) from the bottom.
- ② Turn the collet fastener (a) in the direction of the arrow to prevent the collet (b) from falling off and plug it into the groove in the upper collet.
- 3 Turn the processing-control handle (e) in the direction of the arrow and position the insert tip in the back.
- 4 Insert the tube (d) between collets and fix with the collect-clamping bolt (a).
- ⑤ Check if the tube (d) and collet (b) are tightly fastened.
- \* CAUTION: Do NOT fasten while the tube is on the insert tip (a risk of tip damage).



## (2) Tube-processing volume control

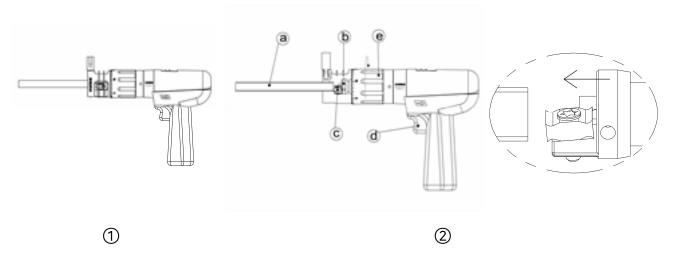


- Press the power switch (d) and allow the insert tip holder (b) to rotate in the direction of the arrow.
   (Reverse processing NOT permitted, the default setting for the forward/reverse switch (f): fixed)
- ② Use the processing-control handle as shown in Figure ② above.
- \* CAUTION: Do NOT remove the safety ring. Doing so may result in an accident. If the safety ring is absent, contact the Company or distributor and get a new one before using the tool.



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### (3) Tube processing



- 1 Insert the tube (a) into the collet and fix it (make sure that it does not touch the insert tip).
- Press the power switch (d) slowly and start processing, using the processing-control handle.
  - Processing-control handle scale (0.05mm)
  - Control speed by adjusting force applied to the press switch.
- 3 After processing, unscrew the collet fastener and pull off the tube.
- ④ If there is a machined chip, remove it using forceps or another proper tool.
- \* Tip: Using the processing-control handle (e), repeat the movement back and forth.

  Then, the cutting chips are broken off and discharged.
- \* CAUTION: For motor speed,  $1^{st}$  gear is recommended. An excessive advance may result in tip damage.



# 4. Product specifications

### Machine specifications

Capacity	Processing Type	1/4, 3/8, 1/2inch Tube (6.35, 9.53, 12.7mm) *Able to manufacture non-standard collets		
	Processing Volume Control	Slide-bar scale is 0.05mm		
	Weight	1.25Kg(battery included)		
Machine	Output	10.8V, 2Ah		
Specifications	Speed	0 - 400RPM		
	Size	Hard case(470*320*140)		

- The design and specifications of the Product are dated February 2019.
- They are subject to change without notice for the purpose of product improvement.
- Make sure that you carefully read and fully understand the Manual and safety instructions before use.





# Hight-quality, Ultra-light Squaring Facing Machine!

Essential tool in UHP tube construction

Very durable, high-strength insert tip(4sides used)

Capacity: 1/4 - 1inch







# How to Use S-EM1.0

# How to Use S-EM1.0

# Instructions Before Use

Fully understand how to use the tool as instructed by the Company or distributor. If you did not receive the required training, ask for training from those who already completed the training.

Make sure that the battery is removed before replacing the insert tip.

Check the voltage and install an electric leakage breaker (ELB) with rated capacity.

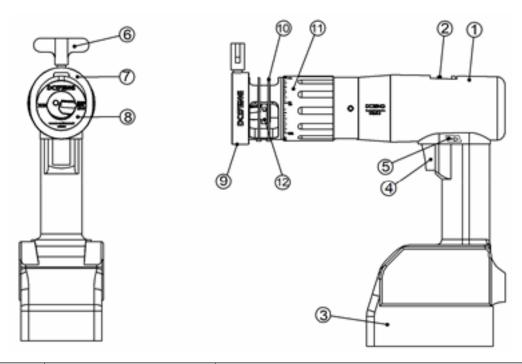
Put on protective gear such as goggles before operation.

# **INDEX**

- 01. Name of the parts and controls
- 02. Accessories
- 03. How to use S-EM1.0
- 04. Product specifications
- 05. Maintenance and inspection



# 1. Name of the parts and controls



NO	Component	Description		
1	Motor(BOSCH)	Driving Unit		
2	Speed setting switch	Speed setting( $1^{st}$ gear recommended)		
3	Battery	Motor battery		
4	Power and speed control switch	ON/OFF, speed adjustment		
5	Forward/reverse switch	Changes direction to forward / reverse (default setting: Forward)		
6	Collet clamping bolt	Clamps tube attached to the collet		
7	Head	Tube-facing machine		
8	Collet	Tube-clamping collet		
9	Collet-locating pin	Locates collets		
10	Safety ring	Ring designed for finger protection		
11	Processing control handle	Cutting volume control handle		
12	Insert tip holder	Insert tip-clamping holder		

<sup>\*</sup> CAUTION) Do NOT disassemble or remodel the safety ring.

<sup>-</sup> If the safety ring is damaged, stop operations immediately.

Contact an engineer for help and have it repaired before use.



### 2. Accessories



### Standard accessories

Charger: AL 1860 CV

Battery: GBA 18V 5.0Ah

Collet: 1/4, 3/8, 1/2, 3/4, 1inch(6.35, 9.53, 12.7, 19.05, 25.4mm)

T-wrench: T15-133mm(L)

T-hex wrench: 3mm-133mm(L)

### Optional accessories

Insert Tip: Tip box included, 10EA/BOX

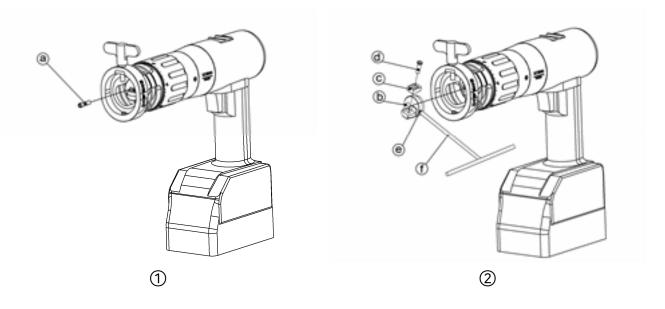
Collet: 1/8inch (3.18mm, 15.88mm)

8A, 10A, 15A, 20A (13.8, 17.3, 21.7, 27.2mm)



### 3. How to use S-EM1.0

### 3-1. Mounting of the insert tip

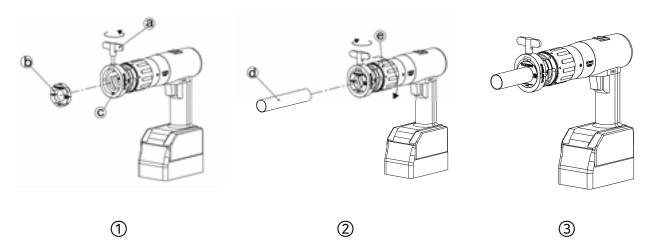


- ① Unscrew the tip holder bolt (a) using a T-hex wrench.
  - \* CAUTION: Remove the battery prior to this work.
- ② Pull off the insert tip holder (b) and hold it to the clamping hole (e) using the T-hex wrench (f). Then, unscrew the insert tip bolt (d) using a T-wrench.
- 3 Mount and clamp the insert tip (c) using the insert tip bolt (d). Then, assemble it to the body in reverse order.
- \* Replace the insert tip or convert its direction, following the same procedures above.



### 3-2. Processing methods and procedures

### (1) Collet and tube assembly

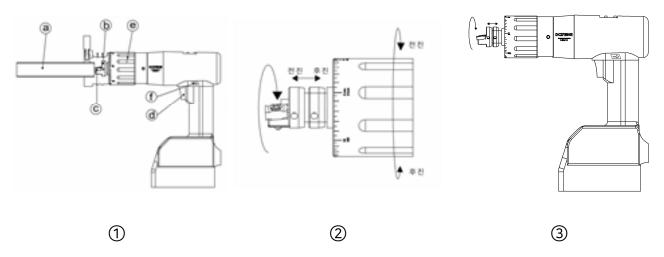


- ① Select a proper size collet for the tube (d) and slightly tilt and insert the collet (b) into the collet-locating pin (c) from the bottom.
- ② Turn the collet fastener (a) in the direction of the arrow to prevent the collet (b) from falling off and plug it into the groove in the upper collet.
- 3 Turn the processing-control handle (e) in the direction of the arrow and position the insert tip in the back.
- 4 Insert the tube (d) between collets and fix it with the collet-clamping bolt (a).
- ⑤ Check if the tube (d) and collet (b) are tightly fastened.
- \* CAUTION: Do NOT fasten while the tube is on the insert tip (a risk of tip damage).



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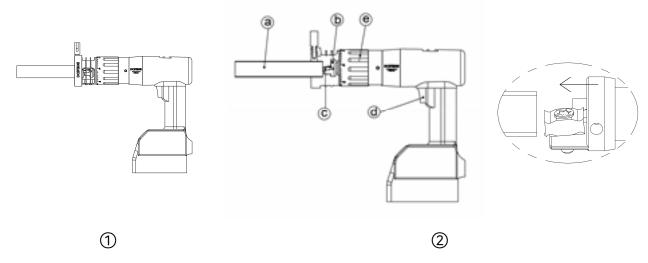
(2) Tube-processing volume control



- Turn on the power switch (d) and allow the insert tip holder (b) to rotate in the direction of the arrow.
   (Reverse processing NOT permitted, the default setting for the forward/reverse switch (f): fixed)
- ② Use the processing-control handle as shown in Figure ② above.
- \* CAUTION: Do NOT remove the safety ring. Doing so may result in an accident. If the safety ring is absent, contact the Company or distributor and get a new one before using the tool.



(3) Processing procedures (tube processing)



- 1 Insert the tube (a) into the collet and fix it (make sure that it does not touch the insert tip).
- Press the power switch (d) slowly and start processing, using the processing-control handle.
  - Processing-control handle scale (0.05mm)
  - Control speed by adjusting force applied to the press switch.
- 3 After processing, unscrew the collet fastener and pull off the tube.
- ④ If there is a machined chip, remove it using forceps or another proper tool.
- \* Tip: Using the processing-control handle (e) repeat the movement back and forth.

  Then, the cutting chips are broken off and discharged.
- \* CAUTION: For motor speed,  $\mathbf{1}^{st}$  gear is recommended. An excessive advance may result in tip damage.



# 4. Product specifications

### Machine specifications

Capacity	Processing Type	1/4, 3/8, 1/2, 3/4, 1inch Tube (6.35, 9.53, 12.7, 19.05, 25.4mm) * Able to manufacture non-standard colle		
	Processing Volume Control	Scale on the processing control handle is 0.05mm		
Machine Specifications	Weight	2.3Kg(battery included)		
	Output	18V, 5Ah		
	Speed	0 - 500RPM		
	Size	Hard case(500*360*150)		

- The design and specifications of the Product are dated February 2019.
- They are subject to change without notice for the purpose of product improvement.
- Make sure that you carefully read and fully understand the Manual and safety instructions before use.



# 5. Maintenance and inspection

- Make sure that the power cord is unplugged, or battery is removed before repair or maintenance.
- A. Regularly check for loose screws.
  - Fasten any loose screws tightly.
  - It is very dangerous to use the tool with loose screws.
- B. Do NOT keep the tool in a wet place(risk of a short circuit).
- Any drop or large shock may result in malfunction.
  - Be cautious in handling the tool.
- D. Shut off the power during inspection or while the tool is unused.
- The Product meets the related safety regulations.
  - For repair, contact a qualified engineer.
  - Failure to do so may result in an accident.



# Quality Warranty



### It guarantees as below.

- 1. This product have passed the thorough quality inspection of DCSENG CO.,LTD.
- 2. When the product is damaged in a normal operation, the product will be repaired free of charge for one year in the purchasing place or service center in accordance with the contents of this certificate.
- 3. But. the return delivery fee will be charged. Malfunction of the product after the warranty period completed or occurred by customer's carelessness, can be repaired or replaced at a minimum cost.
- 4. However, malfunction due to change of use, abnormal wear, using parts from other companies, or repair in other A/S center may not be covered by the warranty certificate.
- 5. Repair cost will be charged in these cases;
- · Damage caused by the negligence of the user
- · Failure caused by not following precautions outlined in this product
- · Failure due to unreasonable repair and renovation.
- 6. The warranty certificate must be accompanies when repairing.
- 7. This certificate is not reissued.

Product Name	<b>5</b> -Cutter		Warranty Period	1 year from purchase date
Model No.	□ S-EM0.5	□ S-EM1.0	Purchase Date	20 / / /
Serial No.			Date of Manufacture	20 / / /
Customer Address			Name	
			Tel.	
Dealer Address (Shop Name)			Name	

※ Fill out the blank when selling products.



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