

PIPE(TUBE) CUTTER Of Best Technology

 -Cutter

# Manual

( - TGR     - TGF)



## 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.

WE BUILD TOMORROW  
**DCS ENG**



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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 Check if the dust extraction system works.**  
If the dust extraction or collection system can be assembled, check if it is connected and functions normally. The use of such dust extractor can reduce the risk of an accident.
- 04 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.
- 05 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.
- 06 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.
- 07 Do NOT attempt to change the charger and battery.**  
Using the charger and battery other than the specified ones may result in fire.
- 08 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.
- 09 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.



**10 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.

**11 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.

**12 Use the battery with Bosch power tools.**

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

**13 Keep the battery safe from sharp objects or external shock.**

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

**14 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.

**15 Keep yourself safe from electric shock.**

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

**16 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.

**17 Check the plug adapter.**

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

**18 Do NOT operate at overload.**

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

**19 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.

**20 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.



- 21 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.
- 22 Pay attention to your work.**  
The electrode can be broken through excessive use.
- 23 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.
- 24 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.
- 25 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.
- 26 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.
- 27 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.
- 28 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.
- 29 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
	WARNING	※ There is a high possibility of serious injury or death when the instructions are violated.
	CAUTION	※ There is a possibility of serious injury or death when the instructions are violated. ※ There is a possibility of device failure or degradation when the instructions are violated.

- ➔ 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.



## WARNING

- **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.



## 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.



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





## High-quality, Ultra-light Electrode rod Tungsten Grinder!

Essential tool for welders

Double-sided, economically upgraded diamond wheel

Included angle: 15 ° , 22.5 ° , 30 ° , 36 ° , 45 ° , 60 ° , 90 ° , 120 ° , 180 °





# How to Use S-TGF

## How to Use S-TGF

### 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.

When chaining the grinding wheel, you must lock the spindle lock.

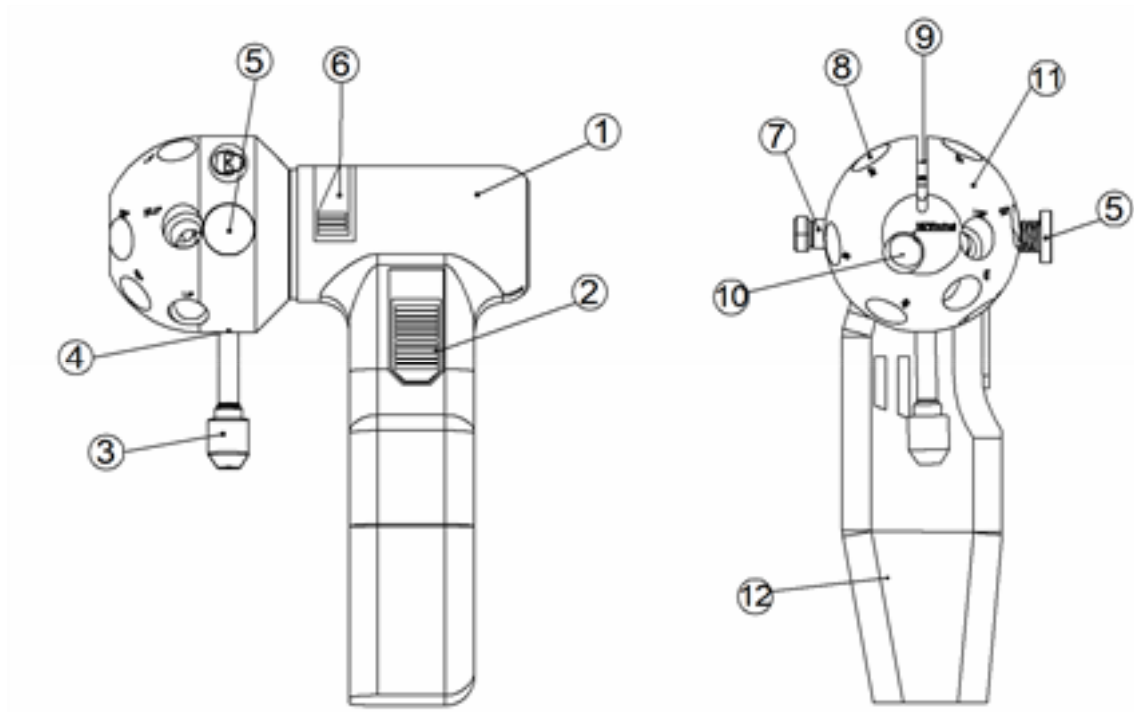
Check the voltage and install an electric leakage breaker (ELB) with rated capacity.

Put on protective gear such as goggles before operation.

## INDEX

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

## 1. Name of the parts and controls



NO	Component	Description
1	Motor(BOSCH)	Driving Unit
2	Power switch	ON/OFF
3	Collet	Electrode rod clamping collet
4	Collet storage holes	Collet storage holes
5	Lock(clamping) bolt	Motor and body clamping bolt
6	Spindle lock	Locks the spindle motor
7	Setting bar	Electrode rod tip processing depth control
8	Collet-clamping hole	Collet-mounting hole(angle marked)
9	Electrode rod cutting groove	Electrode rod cutting(length)
10	Facing hole	Tip processing
11	Head	Machine head processing the electrode rod
12	Battery	Motor battery



## 2. Accessories



- **Standard accessories**

Charger: AL1130CV 10.8V

Battery: GBA 10.8V 2.0Ah

T-hex wrench: 3mm-130mm(L)

Wheel case

- **Optional accessories**

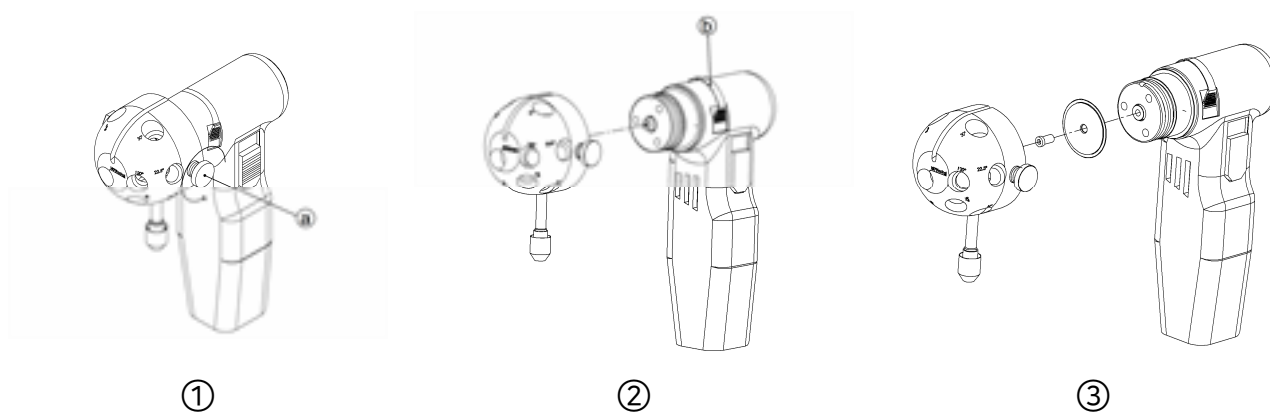
Diamond wheel: S-TG\_40\_FG( $\varnothing$ 0.5- $\varnothing$ 1.6)

S-TG\_40\_SG( $\varnothing$ 1.0- $\varnothing$ 2.4)

S-TG\_40\_RG( $\varnothing$ 2.0- $\varnothing$ 3.2)

### 3. How to use S-TGF

#### 3-1. Mounting of the diamond wheel

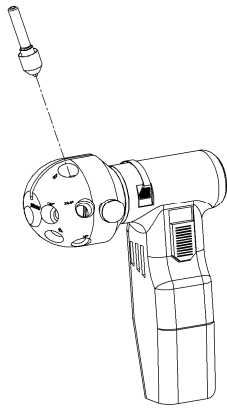


- ① To remove the head attached to a motor, unscrew the bolt (a) and pull off the head.
  - ② Pull up the lock (b) to prevent the motor from spinning.
  - ③ Unscrew the wheel-fixing bolt using the T-hex wrench. Mount the grinding wheel, and tightly fasten it with the wheel-fixing bolt.
  - ④ Place the head and turn it to an easy-to-work position. Then, fix it with the fixing bolt (a) and press the lock (b).
- \* Replace the wheel or convert its direction (front or back) following the same procedures above.

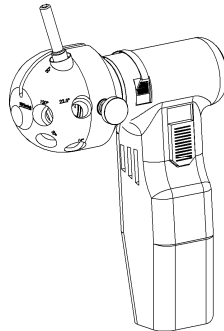


### 3-2. Processing methods and procedures

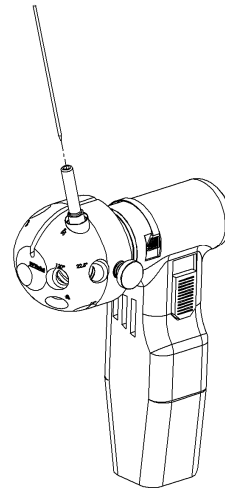
#### (1) Collet and electrode rod assembly



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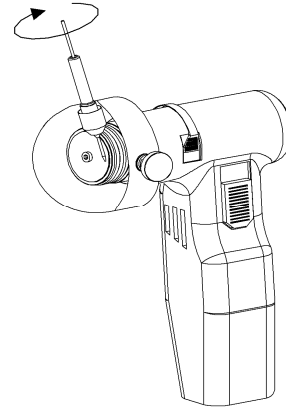
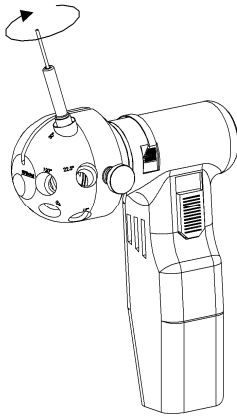


③

- ① Open a collet (slightly loose) according to the electrode rod specifications.
- ② Insert the collet into the collet groove and switch on the power. Turn and grind the electrode rod.
- ③ For short electrode rod, fix with a collet and grind by spinning the collet.

\* Tip: Select a grinding angle and turn the head to an easy-to-work position.

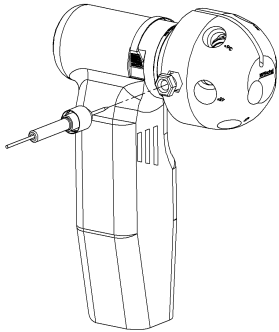
## (2) Electrode rod processing



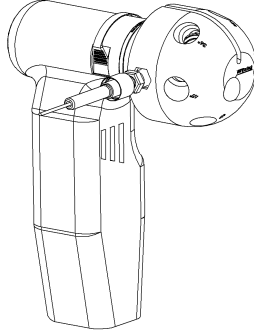
- ① Long electrode rod: Unscrew a collet slightly looser than electrode rod and insert it into the groove according to grinding angle. Turn and grind the electrode rod.
- ② Short electrode rod: Fix electrode rod to a collet and insert it into the groove according to grinding angle. Grind the electrode rod by turning the collet.



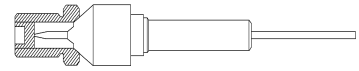
(3) Electrode rod tip-processing length control (setting bar)



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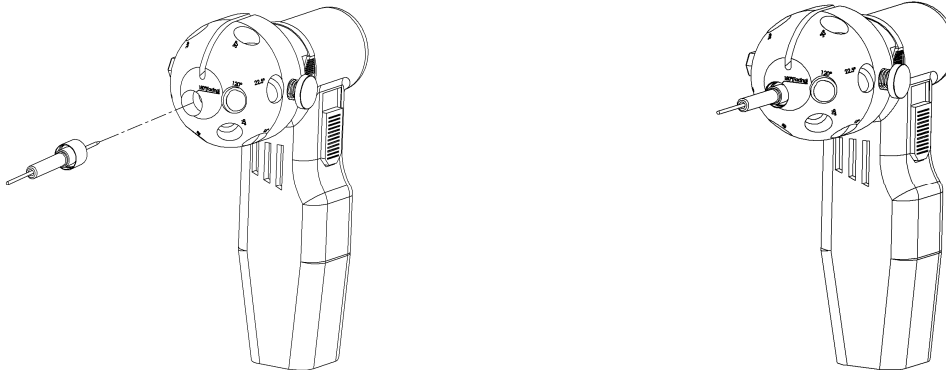


③

- ① Plug the grinded tungsten electrode rod into a collet loosely and put it into the setting bar.
- ② Have the electrode rod touch the flat surface of the inner bolt and fasten the collet, fixing the electrode rod.

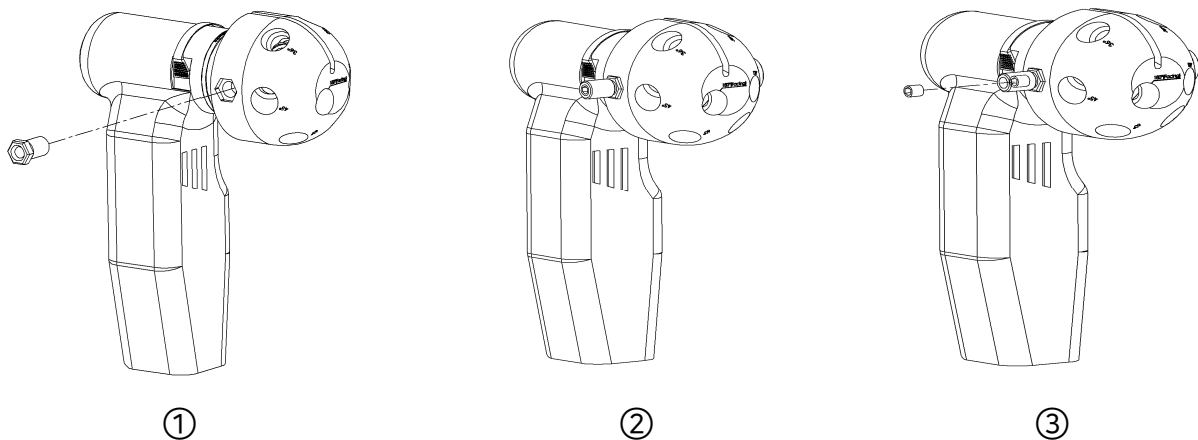


#### (4) Electrode rod tip processing



- ① Switch on the power and insert the electrode rod tip into the facing hole at front. Begin processing.
- ② To alter processing depth, readjust the setting bar.

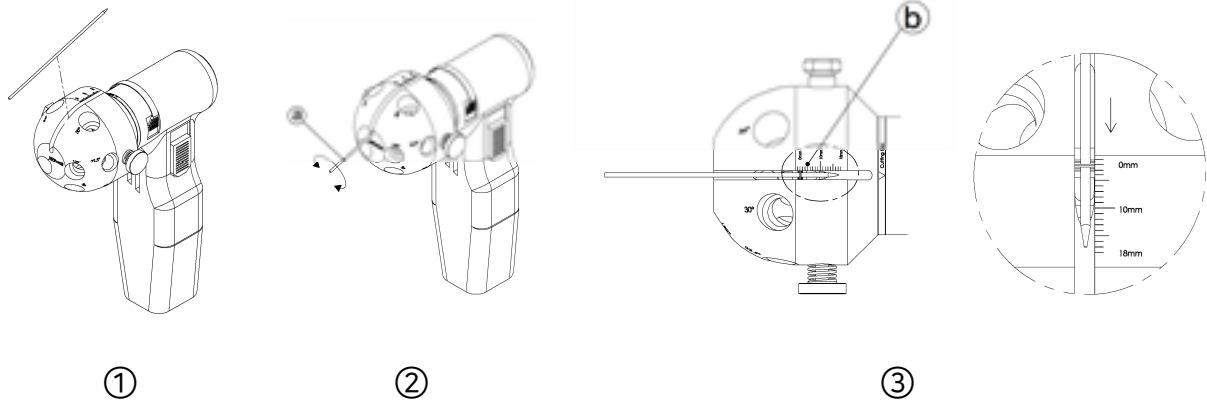
#### (5) Setting bar adjustment



- ① Remove the setting bar from the head and mount it to the hex hole.
- ② Adjust depth by fastening or loosening the setting-bar inner bolt, using T-hex wrench.
- ③ Fix it to the setting bar-fixing hole.
  - \* Loosening the bolt: Greater grinding amount
  - \* Tightening the bolt: Smaller grinding amount



(6) Electrode rod cutting (length)



- ① Make the grinded electrode rod (a) face towards the scale.
- ② Adjust the length with the scale (b) marked on the cutting groove.
- ③ Slowly insert the electrode rod (a).  
As shown in drawing ②, slowly turn and cut it.

## 4. Product specifications

### ● Machine specifications

Capacity	Processing Type	angle	15 ° ,22.5 ° ,30 ° ,36 ° ,45 ° ,60 ° , 90, ° 120 ° ,180 °
	Workpiece	Tungsten(W)	
	Electrode rod	Ø0.25-Ø3.2	
Machine specifications	Weight	0.99kg(battery included)	
	Output	10.8V, 2Ah	
	Speed	0 – 19500RPM	
	Size	Hard case(430*290*130)	

- 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.



## - TGR

### High-quality, Ultra-light Electrode rod Tungsten Grinder!

Essential tool for welders

Double-sided, economically upgraded diamond wheel

Included angle: 15 ° -120 ° , 180 °



# How to Use S-TGR

## How to Use S-TGR

### 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.

When replacing a diamond wheel, please make sure that the spindle lock device has to be locked.

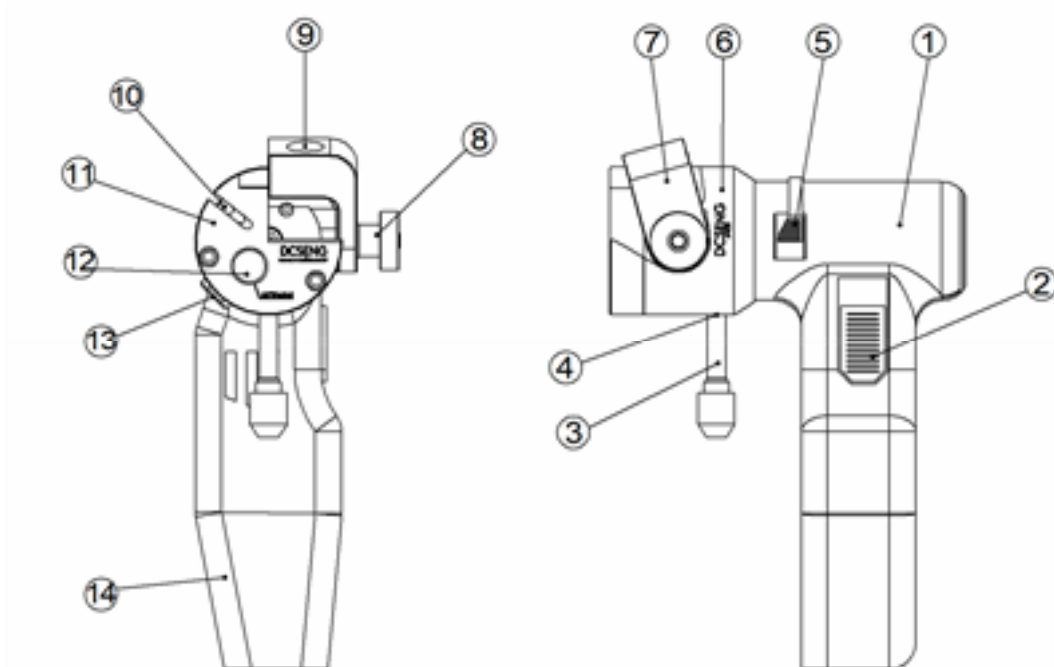
Check the voltage and install an electric leakage breaker (ELB) with rated capacity.  
Put on protective gear such as goggles before operation.

## INDEX

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



## 1. Name of the parts and controls



NO	Component	Description
1	Motor(BOSCH)	Driving Unit
2	Power switch	ON/OFF
3	Collet	Electrode rod clamping collet
4	Collet storage holes	Collet storage holes
5	Spindle lock	Locks the spindle motor
6	Head	Machine head processing the electrode rod
7	Electrode rod processing part	Electrode rod processing part(angle marked)
8	Locating bolt	Locks the electrode rod-processing part according to the angle
9	Collet-clamping hole	Collet-mounting hole
10	Electrode rod cutting groove	Electrode rod cutting (length)
11	Head cover	Head cover
12	Facing hole	Tip processing
13	Setting bar	Electrode rod tip processing depth control
14	Battery	Motor battery

## 2. Accessories



- **Standard accessories**

Charger: AL1130CV 10.8V

Battery: GBA 10.8V 2.0Ah

T-hex wrench: 3mm-130mm(L)

Wheel case

- **Optional accessories**

Diamond wheel: S-TG\_40\_FG( $\varnothing$  0.5- $\varnothing$  1.6)

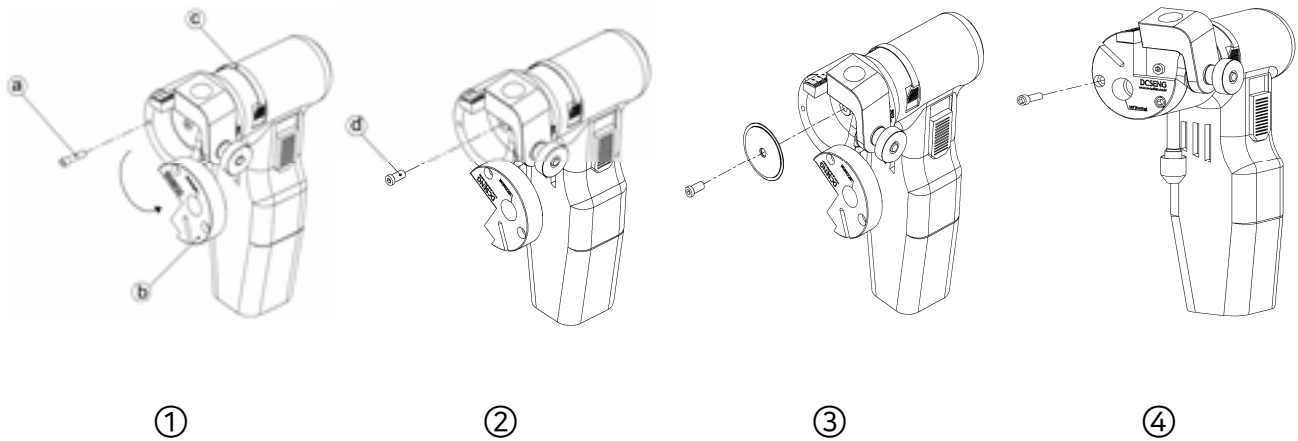
S-TG\_40\_SG( $\varnothing$  1.0- $\varnothing$  2.4)

S-TG\_40\_RG( $\varnothing$  2.0- $\varnothing$  3.2)



### 3. How to use S-TGR

#### 3-1. Mounting of the diamond wheel



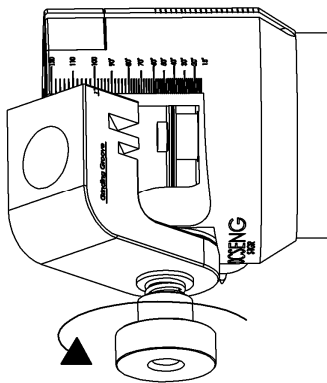
- ① Pull up the motor lock (b) and fix it.  
Then, unscrew the cover with a T-hex wrench.
- ② Unscrew the wheel-fixing bolt (d) using a T-hex wrench.
- ③ Mount the grinding wheel, and tightly fasten it with the wheel-fixing bolt.
- ④ Press and unlock the motor lock (c).

\* Replace the wheel or convert its direction (front or back), following the same procedures above.

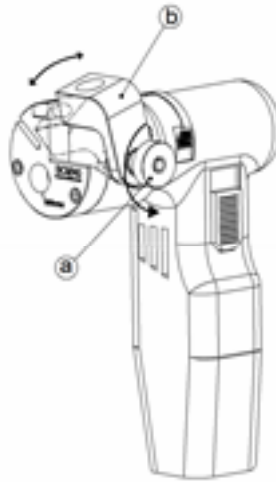


### 3-2. Processing methods and procedures

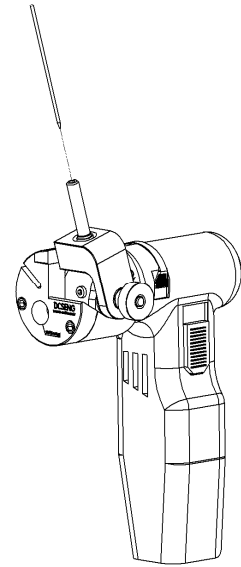
#### (1) Collet and electrode rod assembly



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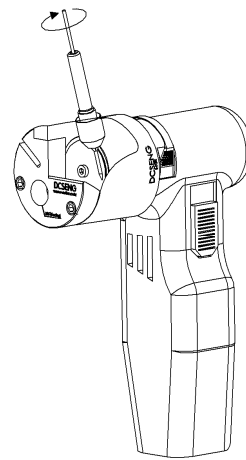
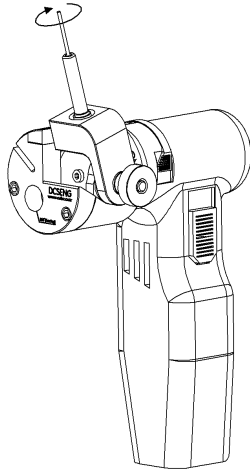


③

- ① Using the locating bolt (a) set the grinding angle.
- ② Open a collet (slightly loose) according to the electrode rod specifications.
- ③ Insert the collet into the collet groove and switch on the power. Turn and grind the electrode rod.
- ④ For short electrode rod, fix it with a collet and grind by spinning the collet.

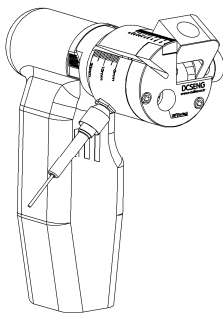


(2) Electrode rod processing

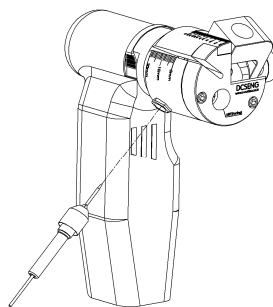


- ① Long electrode rod: Unscrew a collet slightly looser than the electrode rod and insert it into the groove. Turn and grind the electrode rod.
- ② Short electrode rod: Fix electrode rod to a collet and insert it into the groove. Grind the electrode rod by turning the collet.

(3) Electrode rod tip-processing length control



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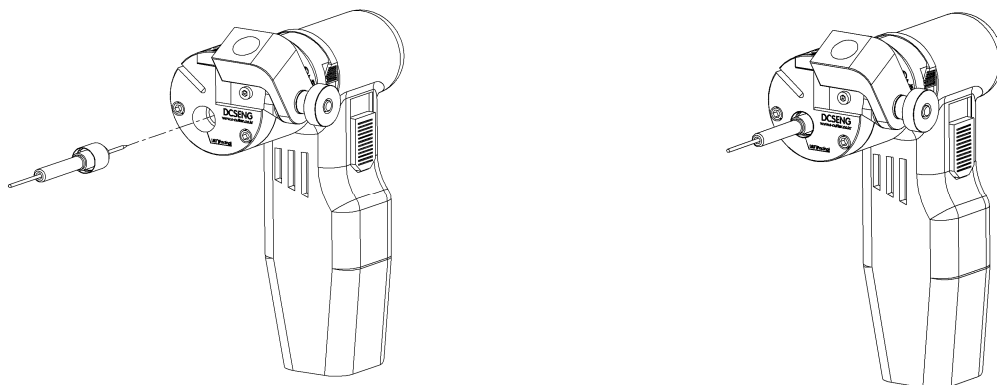
②



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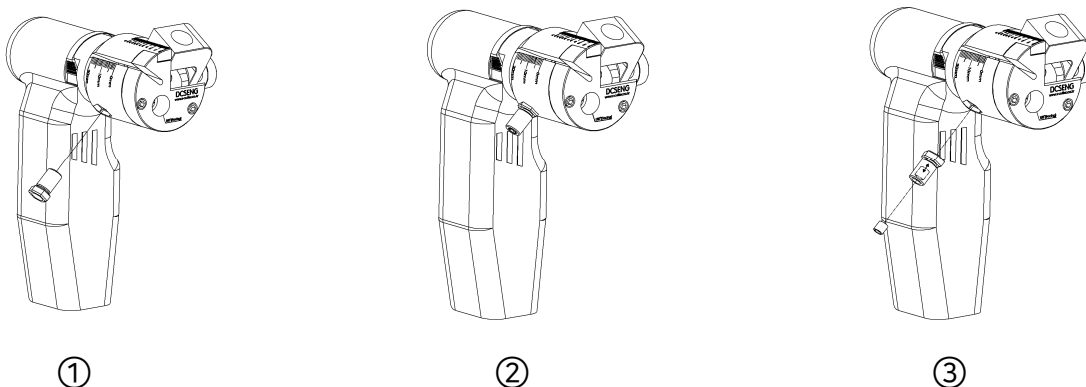
- ① Plug the ground tungsten electrode rod into a collet loosely and put it into the setting bar.
- ② Have the electrode rod touch the flat surface of the inner bolt and fasten the collet and electrode rod.

#### (4) Electrode rod tip-processing (setting bar)



- ① Switch on the power and insert the electrode rod tip into the facing hole at front. Begin processing.
- ② To alter processing depth, readjust the setting bar.

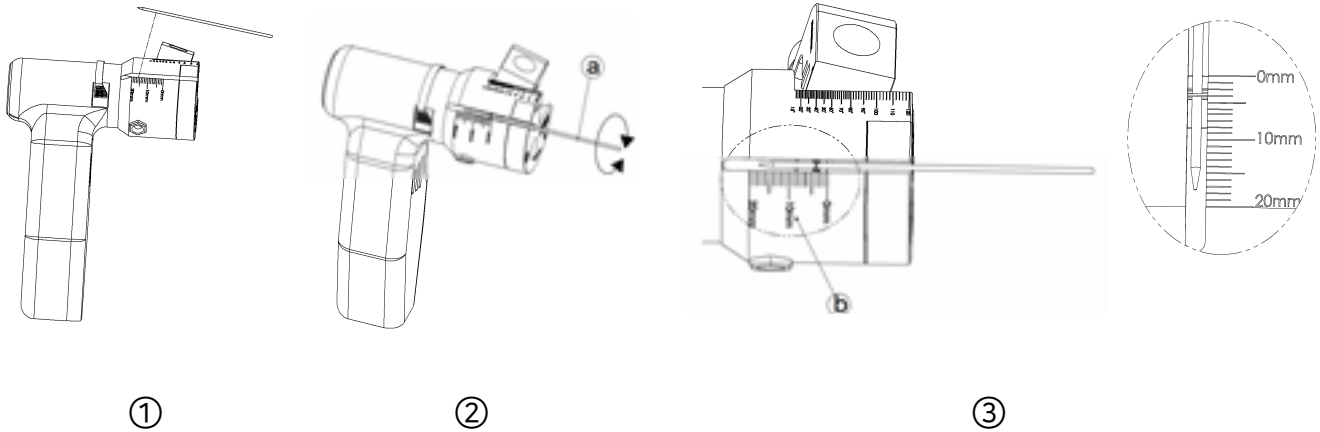
#### (5) Setting bar adjustment



- ① Remove the setting bar from the head and mount it to the hex hole.
- ② Adjust depth by fastening or loosening the setting-bar inner bolt using a T-hex wrench.
- ③ Fix it to the setting bar-fixing hole.
  - \* Loosening the bolt: Greater grinding amount
  - \* Tightening the bolt: Smaller grinding amount

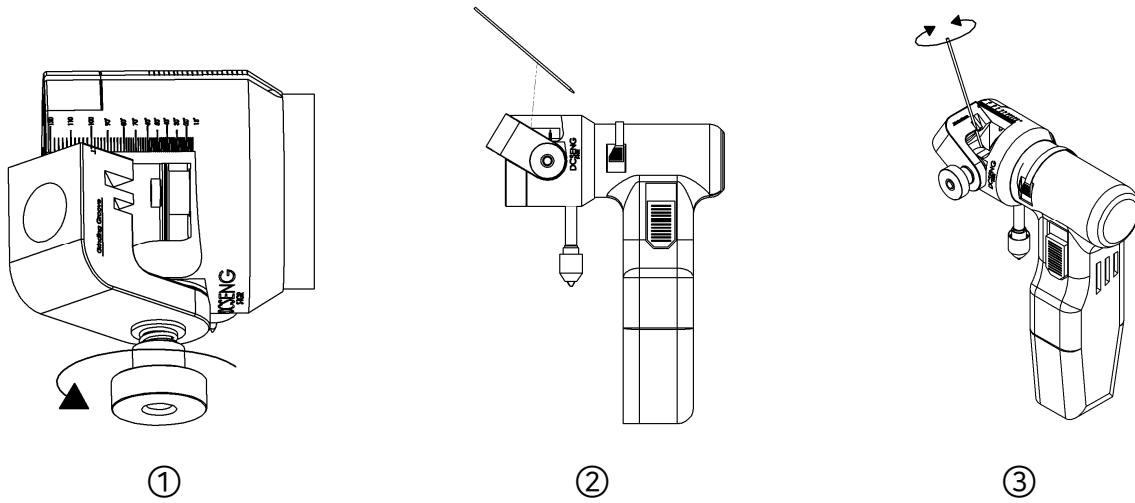


(6) Electrode rod cutting (length)



- ① Have the ground electrode rod (a) face towards the scale.
- ② Adjust the length with the scale (b) marked on the cutting groove.
- ③ Slowly insert the electrode rod (a). As shown in drawing ②, slowly turn and cut it.

## (7) Grinding sub-groove



- ① Two grinding grooves are positioned in the back of the electrode rod processing part.
- ② The goal is to make best use of the grinding wheel area. Select a grinding groove according to electrode rod thickness and turn and grind the electrode rod.
  - \* Wide groove:  $\varnothing 2.4$ - $\varnothing 3.2$
  - \* Narrow groove:  $\varnothing 1$ - $\varnothing 2.4$



## 4. Product specifications

### ● Machine specifications

Capacity	Processing Type	angle	15 ° -120 ° ,180 °
	Workpiece	Tungsten(W)	
	Electrode rod specifications	Ø0.25-Ø3.2	
Machine specifications	Weight	0.89kg(battery included)	
	Output	10.8V, 2Ah	
	Speed	0 - 19500RPM	
	Size	Hard case(430*290*130)	

- 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).
- C. 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.
- E. 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>-Cutter</b>	Warranty Period	1 year from purchase date
Model No.	<input type="checkbox"/> S-TGF <input type="checkbox"/> S-TGR	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.

**DCSENG** DCSENG CO., LTD.  
<http://www.dcseng.co.kr>

Address : 23-22, Jukjeon-3gil, Hyeondo-myeon, Cheongju-si,  
Chungcheongbuk-do, 28214, Republic of Korea  
TEL : +82-43-256-0945 / Fax : +82-43-256-0946  
E-mail : sales@dcseng.co.kr



PIPE(TUBE) CUTTER Of Best Technology



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