

SONIC CUTTER
(FOR MACHINE INSTALLATION)
US-16CB
OPERATION MANUAL

OM-K0156E Rev.A

Before using the Sonic Cutter, please read through this manual thoroughly to understand how it should be used. Always keep this manual where it is easily accessible to the user.

◆ PRECAUTIONS FOR USE

- Read the operation manual of hand grip type Sonic-Cutter in addition to this manual.
- It is recommendable to use this machine installation type Sonic Cutter US-16CB with the enough knowledge of Sonic Cutter US-15CB and the power unit.
- The tip of handpiece gets hot even during a no-load operation. The temperature of tip rises substantially after the cutting work. Therefore, do not touch the tip of horn or the blade immediately after the output is suspended because there are danger of burning and injury.
- Fastening a blade too much or using a cracked blade is dangerous as the blade may break and come off abruptly when the output switch is turned ON.
- If abnormal noise is being generated at the tip of handpiece, the blade may be broken in the groove of horn, or the blade may not be mounted properly. Take the blade out and check it. If it is broken, replace it. If it is not broken, remount it correctly.
- To prevent poor output or heating, clean the groove of horn tip whenever replacing the used blade with care not to damage the groove surface.
- When the handpiece gets hot in a short period of time, change the direction of blade.
- If the blade breaks from the base soon after the use, it may not be mounted correctly. Check the blade if it is free from burrs and replace the vis with new one. Do not use a punctured blade.

◆ SPECIFICATIONS

HANDPIECE

Oscillator	Bolt-fastening PZT type
Dimensions	φ 32X156mm (1.26X6.14")
Cable Length	3M (9.84')
Weight	Aprox. 290g (10.23oz)
Cover Material	Acetale Resin
Cover Color	Black

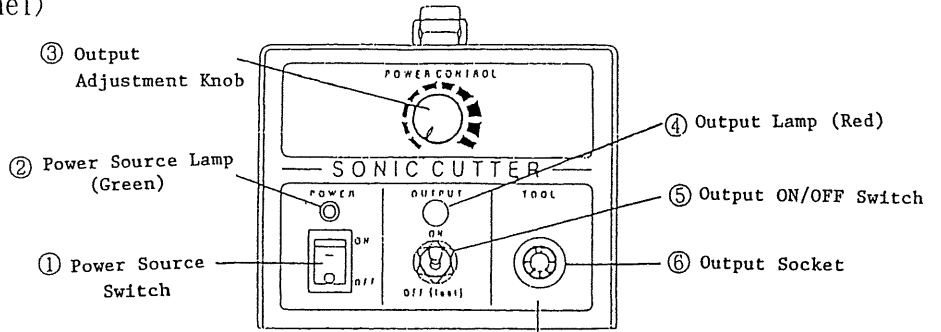
ACCESSORIES

Hexagonal Wrench (1.5mm): 3 pcs.
Spare Set Vis : 5 pcs.
Spare Blade : 40 pcs.
(DC-200 30° by NT Co.)

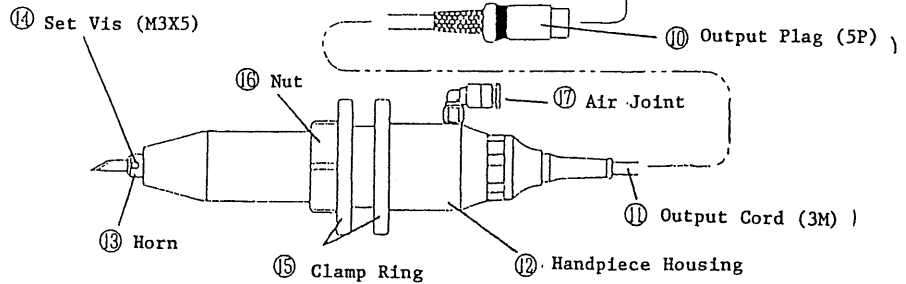
Clamp Ring 2 pcs.
Nut 1 pce.
Air Hose (ϕ 4mm) 4 M
(0.16") (13.12')

◆ NOMENCLATURE

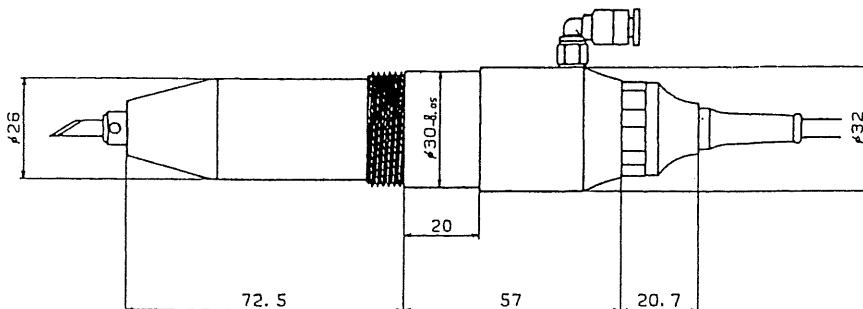
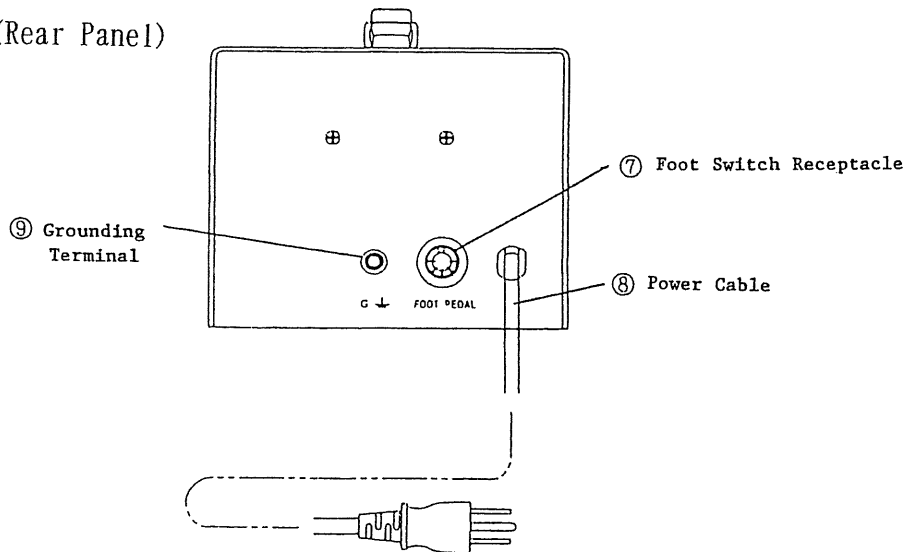
● POWER UNIT (Front Panel)



● HANDPIECE



● POWER UNIT (Rear Panel)



◆ INSTALLATION PROCEDURES

- 1) Mount Handpiece Housing ⑫ on a jig and hold it with 2 pieces of Clamp Ring ⑮ from the both side of jig and fasten Handpiece Case with Nut ⑯.
- 2) Connect Output Plug ⑩ of Handpiece to the Output Receptacle ⑥ on the front panel of the power unit.
- 3) Confirm Power Switch ① is OFF and plug the power cord into the power supply socket.
- 4) Insert the provided air hose to Air Joint ⑰ and supply the compressed air of 2~4kgf/cm² (28~57psi).

● Operation

- 1) Confirm Output ON/OFF Switch ⑤ is in OFF position.
- 2) Turn on Power Switch ① and the green Power Lamp ② lights up.
- 3) Make sure that nothing is contacting to the handpiece tip or blade and turn ON Output ON/OFF Switch ⑤. Then, red Output Lamp ④ lights up for the indication of ready to use.
- 4) Output Adjustment Knob ③ is to control the cutting efficiency. Turn the knob clockwise to increase the efficiency and turn it counter-clockwise to decrease the efficiency. Since the optimum value is vary depending on the materials being cut, adjust the knob appropriately.

● Replacement of Blade

- 1) Loosen Set Vis ⑭ on the top end of the handpiece with provided hexagonal bar wrench (1.5mm) and remove the old blade. (Remove the dusts and dirt from the groove and keep there clean all the time.)
- 2) Insert a new blade all the way in and fasten the blade with Set Vis ⑭. Be careful not to fasten the blade too much because it may break. (Do not use punctured blade)
- 3) Never fasten Set Vis ⑭ without mounting a blade because it may hurt the groove.

◆ MAINTENANCE

- Whenever replacing the blade, be sure to clean the dirt and dust from the groove all the time. (The dirt and dust in the groove may cause noise or damage the blade.) Also, remove the dirt and dust from the horn.

◆ TROUBLE SHOOTING

Problem	Check Points	Probable Cause	Action Taken	
Power does not turn OFF	Power lamp does not light up when Power Switch is Turned ON	Check if power plug is connected properly.	Connect power plug properly	
		Wire is broken. Power switch is defective. Power lamp is defective.	Repair at authorized NAKANISHI repair shop.	
	Power lamp lights up.	Output lamp lights up.	Output plug is not connected to output receptacle perfectly	Connect output plug properly.
			Abnormal noise is generated from the handpiece.	Clean the blade mounting groove, replace the blade.
			Handpiece heats up intermittently while in use.	Repair at authorized NAKANISHI repair shop.
			Output cable is broken.	
			Set-vis is loose.	Fasten the vis
	Power lamp does not light up	Output ON/OFF switch is defective.		Repair at authorized NAKANISHI repair shop.

- Specifications and design may be changed without notice to improve the product.