

UPOWER INSTRUCTION MANUAL MOTOR HANDPIECE UG 33

- We thank you for your purchasing our products.
- Please read this instruction before practical operation.
- Please keep this instruction close to the people who are going to use the Appliance.
- Please use UG33 with the Upower dental controller.

[APPLICATIONS] Dental Laboratory

1. PRECAUTIONS

- * The following precautionary articles advise you how operate our products safely and correctly, which prevents you from any danger or damage before happens.

*** Never fail obeying to any article, in which crucial and important matters are shown concerning safety.**

• WARNING	This symbol advises the risk of death or serious injury if the Appliance is operated incorrectly regardless of this instruction.
• CAUTION	This symbol advises the risk of injury or damage of the material if the Appliance is operated incorrectly regardless of this instruction

1.1 Clothes while at work

- * **• WARNING**
Please wear the suitable clothes. Knitted gloves, clothes with open cuffs and long hair is danger of being caught in the Appliance.

- * **• CAUTION**
Please put the goggles on, not to enter dusts and grits into eyes.
Please also put the protection mask on, not to absorb dusts and grits.

1.2 Safety Operation

- * **• WARNING**
Please use Appliances in a place where the temperature is from 0 to 40°C and the relative humidity is from 20 to 80% (no dew condensation)
Please never use them, either in humid, wet places and outdoors in the rain. It may invite electric shock or fire, weaken insulation and rust or bad operation.
- * Do not use absolutely in any place where there are flammable or explosive materials such as lacquer, paints, thinner, gasoline, gas and adhesives. Also, ensure that there is no corrosive gas areas.
- * Please do not damage Motor unit cord to prevent electric leakage and shock or fire.
- * Please use tools such as bur and point with specified standard within the permitted range of rotation.
- * Please use the Appliance in a room where well-lighted and clean, and enough space is provided.
And please be careful not to stumble over the cords or not to be caught by cords.

• CAUTION

- * Please do not cover the ventilation slits of Appliance with cloth or anything else. Also, please do not use the Appliance if dusts or anything else is accumulated around the ventilation slits.
- * Please be careful not to allow any alien substances such as water, oil, and dust into Appliances.
- * Please do not blow something like compressed air into ventilation slits of Appliance.
- * Do not leave the equipment rotating on table or floor.
- * Please keep Appliances in well dried areas.
- * Please keep Appliances away from children.
- * Please never make any modification, which may damage original performance and safety.

- * Please do not disassemble or adjust the Appliance by yourselves.
- * Please do not use the Appliance for the other applications not appointed.

1.3 Precautions while at work

- * **• WARNING**
While the handpiece is operating, keep hands, eyes and face away from all the rotating parts.

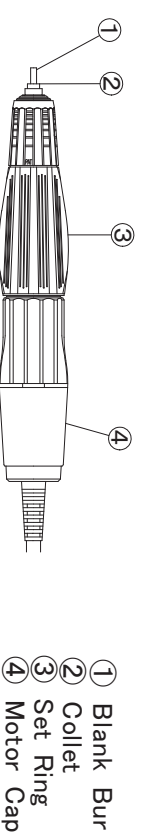
• CAUTION

- * Please stop the operation if any bad rotation or other abnormal movement is found out while at work.
- * When changing tools, make sure that Handpiece is stopped.
- * Please ensure that any tool should be well chucked by the collet.
- * Please make sure that the tool has not been bent, cracked or broken. Also, please make sure that the shank size of tool is correct.
Please do not use the defective tool.
- * Do not operate the Handpiece if the Set Ring is at [R] side.
Do not turn the Set Ring when the Handpiece is rotating.
The Appliance will be defective.
- * When the operation is over, please insert the Blank Bur into the Collet, and turn the Set Ring back to [S] direction and please keep it.
- * Please do not turn the Set Ring back to [S] direction without the Blank Bur.
- * When the Handpiece is rotating, please do not press the tool too much.
- * It is not only the inefficient working but also, the Appliance may be damaged.
- * Please be careful not to drop the Handpiece. If dropped, make sure that the tool is all right, and start to operate the Handpiece from the MIN Jspeed position and increase gradually.

1.4 Maintenance and Inspection

- * When the operation is over, please remove the dust or other debris by a brush or soft cloth. If something is inside of the Collet referring to the Article 3.2 and clean the Collet.
- * If the Appliance is dirty, remove it with a cloth dipped in dilute detergent with water and well wrung. Finally, wipe with a dry cloth completely.
- * When the operation is over, make sure that there is nothing unusual upon the Appliance for providing the next use.
If something unusual is found, do not leave the Appliance as it is, and please contact with the supplier.
- * Periodical inspection is recommended every 1 or 2 years to use the Appliance safely and efficiently. Please consult your supplier for the service.

2. PARTS IDENTIFICATION



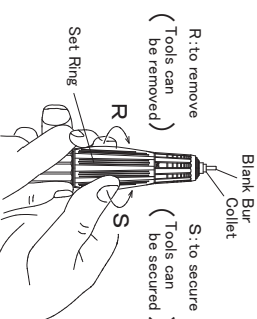
- ① Blank Bur
- ② Collet
- ③ Set Ring
- ④ Motor Cap

3. HOW TO CHANGE

3.1 Tool Changing

Originally, $\phi 2.34\text{mm}$ Blank Bur is mounted.
Please use only the tools with $\phi 2.34\text{mm}$ shank which have been authorized.

- (1) Holding the Handpiece in hand, turn the Set Ring fully toward [R] direction.
Take out the Blank Bur and put the tool into the bottom of Collet.
- (2) Turn the Set Ring to [S] direction, to secure your tool.
- (3) Spin the tool by fingers to confirm that the tool is securely fixed.
Then, be careful with the blade (edge) of tool not to hurt fingers.



3.2 Collet Changing

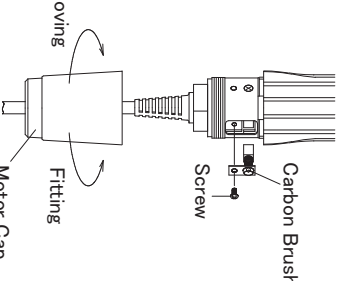
Originally, $\phi 2.34\text{mm}$ Collet is mounted. It is possible to replace with the other size of Collet according to the demand.
When replacing the Collet, insert the Blank Bur (or tool) and loosen or tighten the Collet using the Wrench which has been supplied.

- (1) Holding the Handpiece in hand, turn the Set Ring fully toward [R] direction.
Be sure that the Blank Bur (or tool) is inside of Collet.
Place the Wrench on the Collet, and turn it toward the direction of "loosen". If the Collet slips and impossible to loosen, try to hit the Wrench by Hammer at an instance, and remove the Collet. Please be careful not to hit your fingers by error.
- (2) Place the other Collet and turn the Collet toward the direction of "tighten".
Make sure to secure the Collet firmly.
- (3) Take the Wrench out and turn the Set Ring back toward [S] direction as it was.
- (4) Spin the tool by fingers to confirm that the tool is securely fixed.
Then, be careful with the blade (edge) of tool not to hurt fingers.

3.3 Replacement of Carbon Brushes

When the Carbon Brush is worn out, the Handpiece rotates unstably or stops.
Then, please replace the Carbon Brush.
We recommend to replace the both sides of the Carbon Brush at the same time.

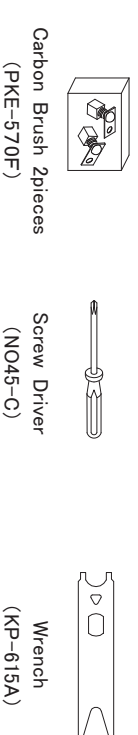
- (1) Turn the Motor Cap to the left and remove it.
- (2) Using a Phillips Type Screw Driver, remove the Screw that is securing the Carbon Brush. Then, please be careful not to loose the screw.
- (3) Take the worn out Carbon Brush out, and replace with a new one and secure it by the Screw.
- (4) Turn the Motor cap to the right to fit onto the Handpiece.



4. SPECIFICATIONS

r.p.m	MAX. 35,000rpm / DC30V	MOUNTED	$\phi 2.34\text{mm}$ (KP-036B)
Dimensions	28mm(MAX.) x L163mm	OPTION	$\phi 3.0\text{mm}$ (KP-032B) $\phi 3.175\text{mm}$ (KP-033B)
Weight	210g(not including Cord)		

Standard Accessories



* The specifications and designs in this Instruction manual are subject to change without notice.

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