## 1. Specifications

<table>
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<tr>
<th>Model</th>
<th>Handpiece Type</th>
<th>Gear Ratio</th>
<th>Allowable Max. Speed</th>
<th>Bur Size</th>
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<tr>
<td>SGA-ES</td>
<td>Angle / Short</td>
<td>1:1 Direct Drive</td>
<td>40,000 min⁻¹</td>
<td>ø2.35 x L70 mm</td>
</tr>
<tr>
<td>SGA-EM</td>
<td>Angle / Medium</td>
<td>1:2 Increasing</td>
<td>80,000 min⁻¹</td>
<td>ø2.35 x L95 mm</td>
</tr>
<tr>
<td>SGA-EL</td>
<td>Angle / Long</td>
<td>1:4 Increasing</td>
<td>80,000 min⁻¹</td>
<td>ø2.35 x L125 mm</td>
</tr>
</tbody>
</table>

### 2. Connecting/Disconnecting the Handpiece and the Motor

#### (1) Connecting

1. Insert the handpiece until it reached the end of the Motor Insert.
2. Screw it until it click.

#### (2) Disconnecting

Hold the Motor and the Handpiece, then pull out.

### 3. Mounting and Removing Bur

#### (1) Mounting

1. Open the chuck to turn the Bur Lock Ring. (Fig.2)
2. Insert the bur into the chuck.
3. Close the chuck to turn the Bur Lock Ring. (Fig.2)

CAUTION

Ensure the position of Black Dots. Improper position may cause heat generation, which results in burns.

#### (2) Removing

1. Open the chuck to turn the Bur Lock Ring. (Fig.2)
2. Pull the bur out from the chuck.

CAUTION for Bur Usage

- Do not use bent, damaged or sub-standard burs. The shank could bend or brake even within the recommended speed.
- Always keep bur shanks clean. Dirt or debris in a chuck could cause poor bur concentricity or low chuck retention force.
- Do not use the bur other than specified in Specification.

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**CAUTION**

- When operating the handpiece always consider the safety of the patient.
- Do not disassemble or alter the handpiece. For service or repair, contact authorized dealer.
- Check for vibration, noise and overheating before use. If any abnormalities are found, stop using the handpiece immediately and contact authorized dealer.
- Should the handpiece function abnormally, cease operation immediately and return the handpiece to an authorized dealer for repair.
- Do not allow any impact on to the sheath. Do not drop the handpiece.
- Ball bearings are articles of consumption. When you leave it broken, it may cause burn injury.
- Do not turn the Bur Lock Ring while the handpiece is rotating.
- Do not connect or disconnect the handpiece until the motor has completely stopped.
- Ensure the bur and motor connection. Improper connection may cause spin the bur out.
- Immediately after use, the handpiece should be cleaned, lubricated and sterilized before blood, etc. dries inside the handpiece. If blood is left on the handpiece, it can become clotted and causing rust.
- Do not wipe nor immerse the handpiece in acidic water or acidic solutions.
- Perform periodical maintenance checks.
- If the handpiece has not been used for a long period, check for noise, vibration, and overheating before use.

**Surgical Handpiece**

**SGS / SGA**

OM-SH0015E

This handpiece is designed for surgical use by qualified personnel.
4. The Bur

Use this handpiece for Implant with straight handpiece bur, mount the Stopper (Option). This may not use for Speed Increase Handpiece. (SGS-EM, SGS-EL, SGS-2EM, SGS-2EL, SGA-EM, SGA-EL, SGA-2EM, SGA-2EL)

6. Maintenance

5. Irrigation Nozzle

Insert the Irrigation Nozzle into the handpiece. And, push the Irrigation Tube into the nozzle until it reaches end.

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**CAUTION**

If the blood is left on the handpiece, it can be clotted causing rusty.

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(1) Cleaning

Clean the Irrigation Nozzle inside with clean water.

(2) Lubrication

Supply lubricate spray after each use and/or before each autoclaving.

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**CAUTION**

- Be sure to hold the handpiece firmly to prevent slipping out of hand by the spray pressure when lubricating.
- Repeat this lubrication until you see no foreign articles such as blood penetrated into the handpiece comes out.
- Hold the Lubricate spray can upright.

(3) Sterilization

Steam autoclave is recommended. Sterilization is required first time you use and after each patient as noted below.

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**Autoclave Procedure**

1) Scrub dirt and debris from the handpiece, and wipe clean with alcohol-immersed cotton swab or cloth. Do not use a wire brush.
2) Lubricate with lubricate spray. Refer to (2) Lubrication.
3) Insert into an autoclave pouch. Seal the pouch.
4) Autoclavable up to max. 130°C.
5) Keep the handpiece in the autoclave pouch to keep it clean until you use it.

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**Sterilization**

At 121°C for more than 15 minutes is recommended by EN13060 or EN ISO 17665-1.