

krafit 2017/18

THE BEST CREATION OF MICRO MOTOR



saeyang



Welcome to SAEYANG

Thank you for your interest and support for our products.

We, Saeyang Microtech, has continued to grow since its foundation in 1976 specialized in manufacturing micro-handpieces for laboratory and dental field with enjoying a good reputation from overseas more than 100 countries as well as Korea.

The most important thing is superior quality of our products and through this, we always do our best for customer satisfaction as our top priority. Also we focus on developing new products by advanced technical innovation in R&D center and launching at least more than two models in the market with ongoing investments for new facilities each year.

We exhibit at overseas famous exhibitions more than 15 times in the United States, Germany, France, Spain, UK, Italy, H.K and China. During those exhibitions, we have a good opportunity to establish mutual trust and confidence with our buyers over 100 countries.

Saeyang will always do our best to listen to any needs and requirements of the customer.

Thank you for your continued support.

President & CEO
Jung Pil Shin





SAEYANG History

Oct.	1976	Company Established
Dec.	1977	Registered manufacturing of medical equipment.
Sep.	1987	Registered trading business
Apr.	1989	Registered Korea medical equipment cooperative association
May.	1971	Registered of designs for engine for dental laboratory
Apr.	1998	Certified ISO 9001 from TUV (Germany)
Feb.	1999	Certified CE Mark from TUV (Germany)
May.	2000	Certified Venture enterprise for high technology
Nov.	2001	Awarded official Superior Exporting Firm
Nov.	2001	Awarded Leading Enterprise
Apr.	2002	Certified CE Mark of New item "Escort"
Jan.	2003	Registered manufacturing Brushless motor
Jun.	2003	Certified CE Mark of "Marathon Multi 600" Brushless motor
Jun.	2004	Established R&D center
Jul.	2004	Certified CE Mark of New item "Marathon N7&N2"
Mar.	2005	Certified CE Mark of New item "Marathon HANDY700 Series" Brush/Brushless motor
Dec.	2005	Awarded official best Exporting Firm
Apr.	2006	Moved into a new factory
Jul.	2006	Certified PSE from TUV
Oct.	2006	Opening Ceremony of a new factory as well as the 30th anniversary
Feb.	2008	Certified ISO 9001 : 2000 from SGS (U.K) Certified ISO 13485 : 2003 from SGS (U.K) Certified Directive 93/42/EEC from SGS (U.K)
Aug.	2010	Certified CE Mark of New item "Endo e class"
Mar.	2011	Development of Endo a class
Mar.	2012	Dental contra angle
Mar.	2013	Developed Implant Motor
Aug.	2013	Certified FDA (Endo Motor)
Jun.	2014	60,000RPM Handpiece Developed
Sep.	2014	20:1 Optic Handpiede Developed
Mar.	2015	Certified FDA CFDA(Implant Motor)
Oct.	2015	Awarded Grand Prize for 2015 Best Company in Daegu City
Dec.	2016	Awarded for Exporting US\$ 20 million

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Krafit Products Line-up

Air turbines

Oct. 2017 open



Contra Angles & Straight



Surgical & Saw Handpieces



Implantology



Endodontics



Others



Cordless Portable-K38



SD-T Driver



Contra Angles & Straight



General application Handpiece



Washable in the
thermodisinfector



Autoclavable
up to 135°C



ES-6L

1:1

Optic

Water spray

LED Type



Water spray Type



- Dimensions : L84 x Ø20 (mm)
- Weight : 87g
- Speed : Max 40,000 rpm

ES-6

1:1

NON-Optic

<ES-6 Handle>

metal ring



plastic handle



- Easy to open & close collect chuck
- Long durability



- Dimensions : L85 x Ø20 (mm)
- Weight : 71g
- Speed : Max 40,000 rpm

ES-04

4:1



- Dimensions : L99 x Ø20 (mm)
- Weight : 86g
- Speed : Max 10,000 rpm

SP-CE(Ø2.35)

1:1

Push Type



- Dimensions : L81 x Ø20 (mm)
- Weight : 58g
- Speed : Max. 40,000 rpm

Endodontic Handpiece



Washable in the
thermodisinfectant



Autoclavable
up to 135°C



PM(mini) Head ass'y

1:1

Contra Head



- Dimensions : L41 x Ø8 (mm)
- Weight : 11.5g
- Speed : Max. 20,000 rpm

SP-RA16N

1:1



- Dimensions : L86 x Ø16 (mm)
- Weight : 34.5g
- **For Endo a class(LED)**

SP-RA16

16:1



- Dimensions : L76 x Ø18 (mm)
- Weight : 56g
- **For Endo a class**

SP-RE16

16:1



- Dimensions : L95 x Ø20 (mm)
- Weight : 62g
- **For Endo e class**

Implant Handpiece



Washable in the
thermodisinfectors



Autoclavable
up to 135°C



Ki-AG32L

32 : 1

Optic



- Dimensions : L100 x Ø20 (mm)
- Weight : 87g
- Speed : Max. 1,200 rpm
- Torque : 90Ncm

Ki-AG20L

20 : 1

Optic



Dust shield



- Dimensions : L100 x Ø20 (mm)
- Weight : 87g
- Speed : Max. 2,000 rpm
- Torque : 70Ncm

Ki-AG20

20 : 1

NON-Optic



- Dimensions : L95 x Ø20 (mm)
- Weight : 85g
- Speed : Max. 2,000 rpm
- Torque : 70Ncm

Implant Handpiece 2017



Washable in the
thermodisinfecter



Autoclavable
up to 135°C



Ki-AG20L New 20 : 1 Optic Detachable Type



- Dimensions : L100 x Ø20 (mm)
- Weight : 87g
- Speed : Max. 1,200 rpm
- Torque : 70Ncm

Ki-AG20L New 20 : 1 Optic Solid Type



Dust shield

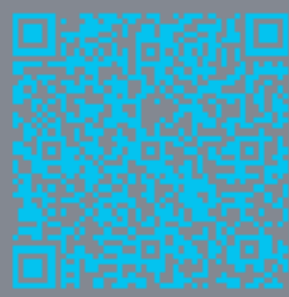


- Dimensions : L100 x Ø20 (mm)
- Weight : 87g
- Speed : Max. 2,000 rpm
- Torque : 70Ncm

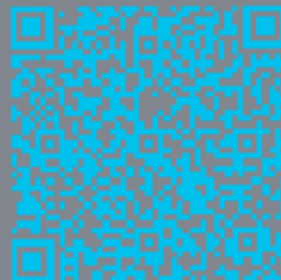
Ki-AG20 New 20 : 1 NON-Optic Solid Type



- Dimensions : L95 x Ø20 (mm)
- Weight : 85g
- Speed : Max. 2,000 rpm
- Torque : 70Ncm



SURGICAL & SAW HANDPIECES



<http://Shetaktak.com>



Straight & Contra Type



Washable in the
thermodisinfectors

SGC-S101

1 : 1

Straight Type



- Dimensions : L110 x Ø20 (mm)
- Weight : 74g
- Speed : Max 40,000 rpm

SGC-S102

1 : 2

Straight Type



- Dimensions : L127 x Ø20 (mm)
- Weight : 94g
- Speed : Max 80,000 rpm

SGC-A101

1 : 1

Contra type



- Dimensions : L120 x Ø20 (mm)
- Weight : 94g
- Speed : Max 40,000 rpm

SGC-A102

1 : 2

Contra type



- Dimensions : L124 x Ø20 (mm)
- Weight : 105g
- Speed : Max 80,000 rpm

Saw Handpiece

Reciprocating & Oscilating & Sagittal



Washable in the
thermodisinfecteur



Autoclavable
up to 135°C



SGS-R

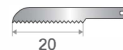
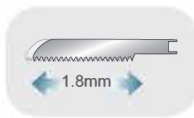
3 : 1

Reciprocating



- Dimensions : L110 x Ø20 (mm)
- Weight : 94.5g
- Strokes : Max 12,600 strokes/min

Blades for SGS-R



SGS-O

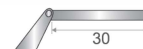
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Oscilating



- Dimensions : L107 x Ø20 (mm)
- Weight : 89.5g
- Strokes : Max 12,800 strokes/min

Blades for SGS-O



SGS-S

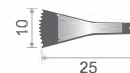
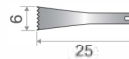
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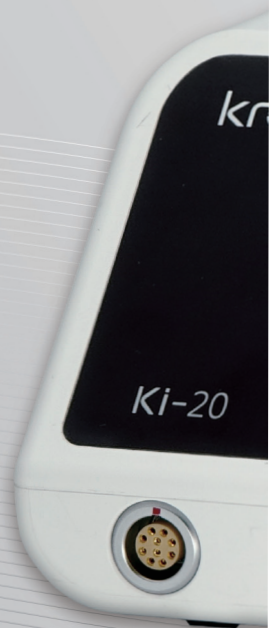
Sagittal



- Dimensions : L109 x Ø20 (mm)
- Weight : 92g
- Strokes : Max 12,600 strokes/min

Blades for SGS-S







<http://Shetaktak.com>

Implantology





New Ki-20 **Advance**

Features

- Optic LED Control
- Compact Micro motor 40,000 rpm(1:1)
- 9 memory programs can be stored on single motor
- Record medical records on USB
- Displaying the torque graph in real time
- Large LCD display
- Torque Calibration
- **Dual** irrigation pumps





Torque calibration

Calibrates the micromotor & the handpiece to the rotational resistance of each individual handpiece. During the operation, high torque accuracy offered.



Data management

Treatment data can be easily accessed and downloaded using a USB stick. Files can be transferred and added to patient records. *USB memory stick not included



Advanced irrigation pump

The pump allows easy set-up of irrigation tubes and is extremely quiet during operation.



▲ Open

▲ Close

Foot Control

- ① Coolant button(4 steps) ③ F/R change button
② Program change button ④ Foot pedal(speed control)



Complete sets



MODEL New Ki-20 Advance (Single)

Specifications control box only

- Power supply : AC100-120 or AC220-240V 50/60 Hz
- Speed : 10-2,000 (20:1), 7-1,200 (32:1)
- Torque : 70Ncm (20:1), 90Ncm (32:1)
- Weight : 3.53 kg
- Dimensions : W260 x D230 x H104(mm)
- Contents : Control unit, Handpiece, Foot control, Handpiece stand



MODEL New Ki-20 Advance (Dual)

Specifications control box only

- Power supply : AC100-120 or AC220-240V 50/60 Hz
- Speed : 10-2,000 (20:1), 7-1,200 (32:1)
- Torque : 70Ncm (20:1), 90Ncm (32:1)
- Weight : 3.893 kg
- Dimensions : W260 x D230 x H104(mm)
- Contents : Control unit, Handpiece, Foot control, Handpiece stand



Ki-20 **single**

Features

- Optic LED Control
- Compact Micro motor 40,000 rpm (1:1)
- 9 Memory programs - Optic(on/off), Speed, Gear ratio, Coolant, Forward/Reverse, Torque
- Light & compact optic motor for speedy and accurate surgery.



E-type Motor

Optic



Non-optic



Advanced irrigation pump

The pump allows easy set-up of irrigation tubes and is extremely quiet during operation



Foot Control

- ① Coolant button(4 steps) ③ F/R change button
- ② Program change button ④ Foot pedal(speed control)



Complete sets



MODEL Ki-20(Optic)

Specifications control box only

- Power supply : AC100-120 or AC220-240V 50/60 Hz
- Speed : 20-2,000 (20:1), 13-1,200 (32:1)
- Torque : 70Ncm (20:1), 90Ncm (32:1)
- Weight : 2.6 kg
- Dimensions : W240 x D225 x H108(mm)
- Contents : Control unit, Handpiece, Foot control, Handpiece stand



MODEL Ki-20(Non-optic)

Specifications control box only

- Power supply : AC100-120 or AC220-240V 50/60 Hz
- Speed : 20-2,000 (20:1), 13-1,200 (32:1)
- Torque : 70Ncm (20:1), 90Ncm (32:1)
- Weight : 2.6 kg
- Dimensions : W240 x D225 x H108(mm)
- Contents : Control unit, Handpiece, Foot control, Handpiece stand



<http://Shiv-tak.com>



Endodontic



<http://Shaktak.com>



Endo A LED **Apex**

Features

- **Apex Locator**
- Suitable for endodontic procedures with LED light
- Wider LCD display - Torque level is displayed at real time.
- Reciprocating system - When the motor is overloaded, it stops running
- Auto stop reverse feature
- Push type miniature head
- 9 Memory programs
- Li-ion battery
- Operatable for 90 min.



Specifications

- Power supply : AC100-240V 50/60 Hz
- Speed : 200 - 600 rpm
- Weight : 310g
- Dimensions : W100 x D100 x H228(mm)
- Contents : Endo Motor, PM mini head, Charger



Replaceable LED



| Short Type |

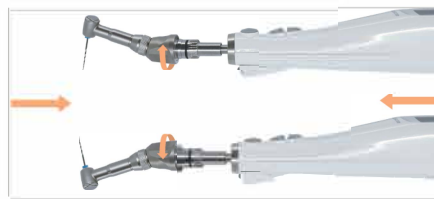


| Long Type |

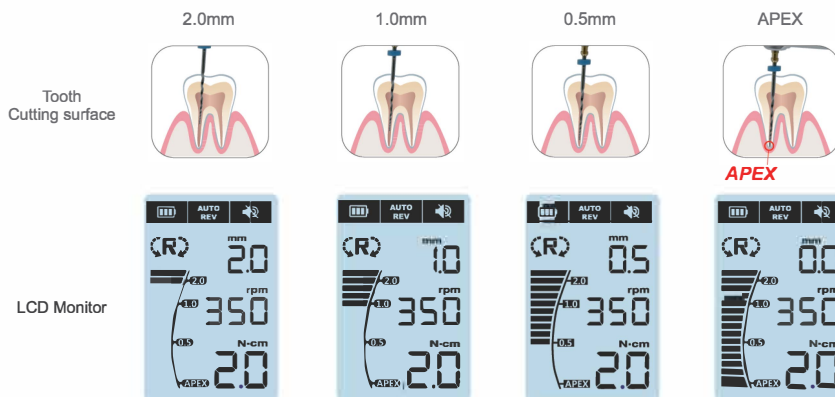
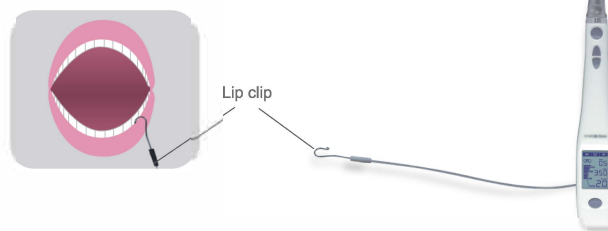


| New Long Type |

360 degree connectable contra angel



Apex Locator

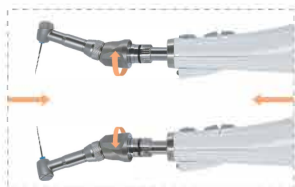




Endo A LED

Features

- Suitable for endodontic procedures with LED light
- Wider LCD display - Torque level is displayed at real time.
- Reciprocating system - When the motor is overloaded, it stops running
- Auto stop reverse feature
- Push type miniature head
- 9 Memory programs
- Li-ion battery
- Operatable for 90 min.



▲ 360 degree connectable contra angel



Specifications

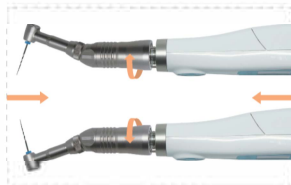
- Power supply : AC100-240V 50/60 Hz
- Speed : 200 - 600 rpm
- Weight : 310g
- Dimensions : W100 x D100 x H228(mm)
- Contents : Endo Motor, PM mini head, Charger



Endo A class

Features

- Suitable for endodontic procedures
- Reciprocating system - When the motor is overloaded, it stops running
- Auto stop reverse feature
- Push type miniature head
- 6 Memory programs
- Ni-MH battery
- Operatable for 90 min.



▲ 360 degree connectable contra angel



Specifications

- Power supply : AC100-240V 50/60 Hz
- Speed : 140 - 500 rpm (16:1)
- Weight : 366g
- Dimensions : W112 x D147 x H77(mm)
- Contents : Endo Motor, SP-RA16 Angle, Charger



Endo E class Apex

Features

- Apex Locator
- Suitable for endodontic procedures with LED light
- Reciprocating system - When the motor is overloaded, it stops running
- Auto stop reverse feature
- Push type miniature head
- Automatic power saving
- Calibration feature
- Li-ion battery
- 9 Memory programs
- LED Light



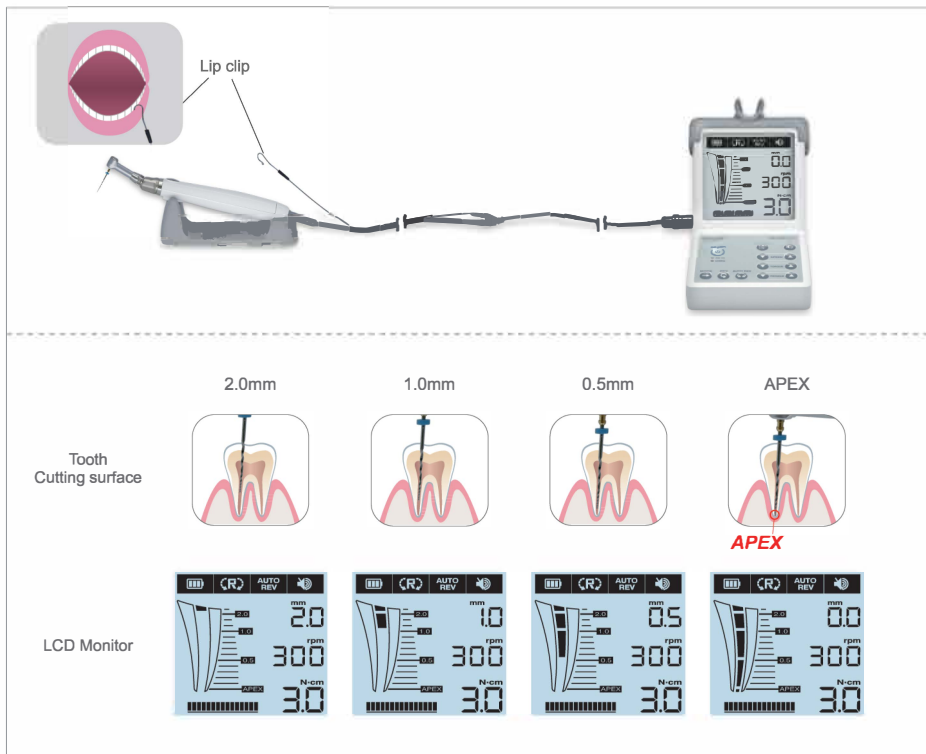
LED Light



360 degree connectable contra angel



Apex Locator



Specifications control box only

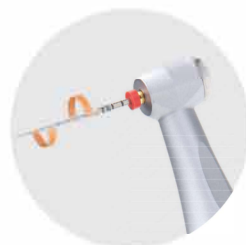
- Power supply : AC100-240V 50/60 Hz
- Speed : 200 - 600 rpm
- Torque : 0.5 - 4.0 Ncm
- Weight : 507 g
- Dimensions : W105 x D179 x H110(mm)
- Contents : Endo Control Unit, Handpiece, Handpiece Stand
Lip clip, Apex cable



Endo E class

Features

- Suitable for endodontic procedures
- Push type miniature head
- Auto stop reverse feature
- 15 Memory programs - Mode, Gear ratio, Torque, Speed
- E-Type(SDE-EM24E) Endo Handpiece
- On/off foot switch



Auto Stop Reverse



SDE-EM24E for Endo E Class is the E-Type Motor that can be widely compatible with other contra angles.



Specifications control box only

- Power supply : AC100-120 or 220-240V 50/60 Hz
- Speed : 70 - 1,100 rpm (16:1)
- Torque : 0.5 - 9.9 Ncm (16:1)
- Weight : 910 g
- Dimensions : W175 x D125 x H90(mm)
- Contents : Endo Control Unit, Handpiece, Foot control, Handpiece

memo



<http://Shet-tak.com>





Others





K38 standard / clip

Features

- MAX 30,000 RPM
- MAX 8hours
- LI-ION battery(rechargeable)
- Digital speed display window
- LED display for battery charging level
- Automatic System
 - power save / FWD-REV
 - overload protection, warning LED
- On/Off Foot Switch



Specifications

- Power supply : AC100-240V 50/60 Hz
- Speed : MAX 30,000 RPM
- Weight : 277 g
- Dimensions : W67 x D128 x H30(mm)
- Contents : Control unit, Handpiece, Foot control, Handpiece stand



▲ ES-06



▲ SP-CE



▲ MH20E



▲ M300Es

SD-T Driver Implant Screw Driver



Features

- Universal manual screw driver
- Contra angle type (easy to access in mouth)
- 2 torque values (0 or 35Ncm)
- Good to use Maxilla, mandible jaw surgery



Adaptor



SDA



SDA-35

Specifications

- Weight : 57g
- Dimensions : L118.95 x Ø10.9
- Contents : SD-T Driver, Adaptor, Spray nozzle

Complete set



Spare parts



Lubricant Oil

- Lubricant oil is a specially formulated, highly effective general handpiece lubricant. Frequent application of Lubricant Oil will assure handpiece performance and durability. Apply Lubricant Oil every time before autoclaving any handpiece.



Specifications

- For Dental Handpiece
- Alcohol-contained lubricant
- Volume : 480ml

Endo A LED Angle(SP-RA16N) spray nozzle



Contra Angle spray nozzle



Spare parts



Implant Engine

Implant motor
Foot control



Implant handpiece
Nozzle clamp (non-optic)



Implant motor
Power cord



Implant handpiece
Internal spray nozzle (non-optic)



Implant motor
E-Type motor



Implant handpiece
Wrench (optic)



Implant motor
Handpiece stand



Implant handpiece
Nozzle pin (optic)



Implant motor
Irrigation tube



Implant handpiece
Spanner (non-optic)



Implant motor
Coolant hanger



Implant handpiece
Spray nozzle





Endo Motor

Endo e class
Foot switch



Endo a class
Charger cord



Endo e class
Power cord



Endo a class
Spray nozzle

a) Endo a class



b) Endo a LED



Endo e class
E-Type motor



Endo e class (apex)
Handpiece motor



Endo e class
Handpiece stand



Endo e class Handpiece
Spray nozzle



User guide

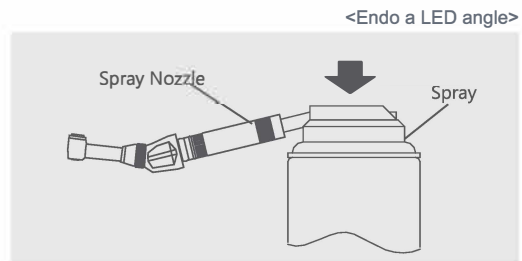
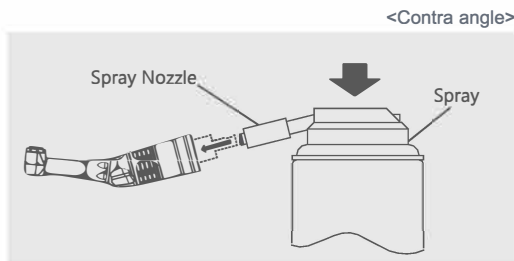
(For safety & efficiency)



Lubrication I Oil

- ※ After each use, please lubricate the contra angle handpiece and keep it under normal condition.
- ※ The contra angle handpiece detached from air motor or micromotor should be lubricated as following order.

- 1) Shake the oil spray about 10 times to mix the contents enough, and install the enclosed spray nozzle on the spray.
- 2) Clean the entrance of spray nozzle.
- 3) Insert the spray nozzle into the inserting part of the contra angle handpiece.
- 4) Spray for 2~3 seconds.

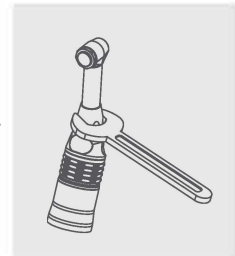


- 5) If the contra angle handpiece is contaminated by blood or etc., please unscrew the nut and disassemble the contra head by using a spanner
- 6) Clean the detached contra head with flowing water or ultrasonic cleaner.
- 7) After cleaning the contra head, dry it out completely and lubricate enough to remove the water inside of it.

Autoclave I Dry

- ※ Autoclaving is recommended.
- ※ The contra angle handpiece should be sterilized after each use.
- ※ Autoclaving sequence

- 1) Clean the dust using the brush, and wipe off the contra angle with the soft cloths wet by alcohol.
- 2) After detaching the contra angle from micromotor, and lubricate it.
- 3) Put the contra angle handpiece without a micromotor into the autoclave.
- 4) Set the temperature of the autoclave. (e.g. about 4 minutes at 132℃)
- 5) Keep the contra angle handpiece under normal condition after autoclaving and drying it out. (drying 30 minutes)



Caution

- 1) Place the contra angle handpiece on the upper or middle tray of the autoclave. If there is the heat generator at the bottom of it, placing the contra angle handpiece at the bottom could cause the possibility that the temperature exceeds a set point.
- 2) Do not place the contra angle handpiece into the autoclave with other contaminated instruments by chemical substances to prevent discoloration or corrosion of its plating.
- 3) It is necessary for the users to operate our products by following the maintenance requirements in this manual. The manufacturer is not responsible for any accident or problem caused by not following the manual.
- 4) The device consists the durability of at least 250 sterilization cycles.
- 5) In case of anything wrong with products, please stop using the products and contact your local dealer.
- 6) Do not try to disassemble or convert the contra angle handpiece except for instructions mentioned on the manual.
- 7) Be careful not to drop the contra angle handpiece and be away from any impact.
- 8) Please pay attention to the condition of a contra angle handpiece such as vibration, heat generation and instability of the file.
- 9) Do not push the button while the file is rotating.
- 10) The contra angle handpiece should be disconnected from micromotor after rotation of a file completely stops.
- 11) If the head part inside is contaminated, please detach the gear-shift and do the cleaning inside of it, and then lubricate the contra angle handpiece and try to reassemble carefully.



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