



**BRASELER USA**  
DENTAL INSTRUMENTATION

# Contra Angle Attachments

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**FORZA F5**      **FORZA F5X**  
**FORZA F1**

Please read this Operation Manual carefully  
before use and file for future reference.

## **Caution**

- The handpiece is designed only for clinical dental treatment use by qualified personnel.
- When operating the handpiece always consider the safety of the patient
- Always operate the handpiece with a bur in the handpiece
- Check for vibration, noise and overheating outside the patient's mouth prior to use. If any abnormalities are found, stop using the handpiece and contact Brasseler USA.
- Do not drop the handpiece.
- Do not attempt to disassemble the handpiece or tamper with the mechanism.
- Do not connect or disconnect the bur and/or handpiece until the motor has completely stopped.
- Before use always confirm that the bur is correctly seated and locked into place.
- Do not use bent, damaged or sub-standard burs. This may cause shank bend or break 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 those recommended by Brasseler USA and do not exceed the speed recommended by the bur manufacturers.
- Always operate with water spray. Failure to do so may result in OVERHEATING.
- Perform periodic maintenance checks
- Do not apply excessive load to handpiece when operating

## **Cautions for F5 and F5X - 1:5 Speed Increasing Attachment**

- Heating of handpieces during operation must be avoided, as it could cause injury to the patient. Prior to a day's use, run the handpiece on the motor for one minute and check for heating, vibration or unusual noise. Heating could be caused by debris caught in the bearings in the head, accumulation of debris where the heating occurs, or lack of lubrication. Place a bur in the handpiece and rotate gently with the fingers. If the bur is resistant, feels sandy or grinding, spray oil into the handpiece a few times or until the resistance stops.
- Do not use long surgical bur on speed increasing handpiece. Do not use burs longer than 26 mm. Its shank may warp under load at a high speed and spin-out or lead to premature bearing failure.
- Entering foreign object into gear or inside of handpiece head may cause burn injury.
- Wear protective glasses and mask during use.
- Depressing the push-button while the handpiece bur is in rotation will result in **OVERHEATING** of the handpiece head. Special caution must be exercised during use to keep the cheek tissue **AWAY** from the push-button of the handpiece. Contact with cheek tissue may cause the push-button to depress and an injury to the patient may occur.
- Even with irrigation, if the bearing is worn, the handpiece may overheat or vibrate loudly. If this occurs, contact Brasseler USA for a repair on the handpiece.

# 1. Mounting/Removing the Handpiece and Motor

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## 1) Mounting

Align the handpiece to the motor and push together. For F5 and F1 (optic). Locate the handpiece and alignment pin straight into positioning of the motor.

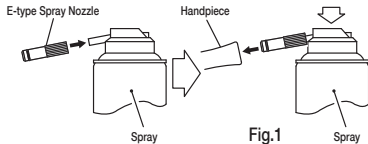
## 2) Removing

Hold the motor and the handpiece and pull off carefully in a straight line.

## 2. Lubrication

Supply spray after each use and/or before autoclaving.

- 1) Mount the E-type spray nozzle over the spray nozzle until it firmly seats.
- 2) Shake the can 3-4 times to well mix lubricant and propellant.
- 3) Insert the E-type spray nozzle in the rear of the handpiece and spray for approximately 2-3 seconds until the oil comes out of the handpiece head.



### **! Cautions on Lubrication**

- Be sure to hold the handpiece firmly to prevent the handpiece from slipping out by the spray pressure when lubricating.
- Supply lubricant until it comes out of the handpiece head (for approx. 2 seconds).
- Keep the Brasseler's spray can upright.
- Use of Lubricants other than Brasseler's Spray can cause excessive heat generation and possible handpiece damage.

### 3. Cleaning and Sterilization

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This product can be washed via Thermo Disinfector.

Brasseler recommends heat sterilization by autoclave.

- Sterilization is required before using for the first time and after each patient as noted below.

#### ■ 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 spray.

- 3) Insert into an autoclave pouch. Seal the pouch.

- 4) Autoclavable up to max. 135°C. ex.) Autoclave for 20 min. at 121°C, or 15 min. at 132°C.

- 5) Keep the handpiece in the autoclave pouch so it remains clean until you use it.

\* Sterilization at 121°C for more than 15 minutes is recommended by EN ISO 17665-1

\*Performing sterilization according to our instructions has minimal effect on the instruments. Life span is generally determined by wear and damage due to use.

 **Caution**

- In case the sterilizer chamber temperature could exceed 135°C during the dry cycle, skip the dry cycle.
- Always place the handpiece in the center or upper shelf of the chamber, as the local temperature at the chamber bottom could rise beyond the set value.
- Do not autoclave the handpiece, even when it is bagged, together with other instruments, from which chemicals are not sufficiently cleaned. This is to avoid discoloration and/or damage to the plating of the handpiece.
- Do not heat or cool the handpiece quickly. Rapid change in temperature could break the glass rod and give abnormal strain to other metals.
- Do not wipe with, or clean or immerse in, high acid water or sterilizing solutions.

## 4. Cleaning the Cellular Glass Optic Rod (F5, F1)

Wipe clean the Cellular Glass Optic Rod entry point and exit point with an alcohol-immersed cotton swab. Remove all debris and oil. (Fig.2)

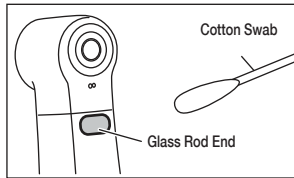


Fig. 2

### **Caution**

Do not use a sharp tool to clean the Cellular Glass Optic Rod. It could damage the glass and reduce the light transmission. If illumination becomes dim, contact Brasseler USA.



5.

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***FORZA F5***

## 5a. Specifications

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|                             |  |
|-----------------------------|--|
| Model                       | Forza F5   |
| Gear Ratio                  | 1:5 Increasing                                   |
| Max. Rotation Speed (Motor) | 40,000 RPM                                       |
| Max. Rotation Speed (Bur)   | 200,000 RPM                                      |
| Spray                       | Four Port Spray                                  |
| Glass Rod Optic             | Glass Rod  |
| Bur Type                    | ISO 1797-1, Type 3 (Ø1.59 - 1.60mm Standard Bur) |

## 5b. Mounting/Removing Bur

### ■ Mounting the Bur

- 1) Depressing the push button
- 2) Insert the bur into the chuck. (Fig.3)
- 3) Make sure it inserted firmly till the end of the head. (Fig.3)

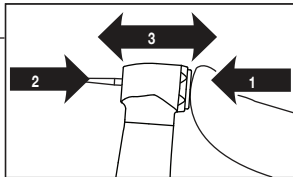


Fig. 3

### ■ Removing the Bur

- 1) Press the button
- 2) Pull the bur from the head. (Fig.4)

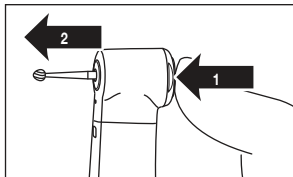


Fig. 4

6.

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**FORZA F5X**

## 6a. Specifications

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|                             |  |
|-----------------------------|--|
| Model                       | Forza F5X  |
| Gear Ratio                  | 1:5 Increasing                                   |
| Max. Rotation Speed (Motor) | 40,000 RPM                                       |
| Max. Rotation Speed (Bur)   | 200,000 RPM                                      |
| Spray                       | Four Port Spray                                  |
| Glass Rod Optic             | Non-Optic  |
| Bur Type                    | ISO 1797-1, Type 3 (Ø1.59 - 1.60mm Standard Bur) |
| Coolant Delivery            | External   |

## 6b. Mounting/Removing Bur

### ■ Mounting the Bur

- 1) Insert the bur into the chuck. (Fig.5)
- 3) Make sure it inserted firmly till the end of the head. (Fig.5)

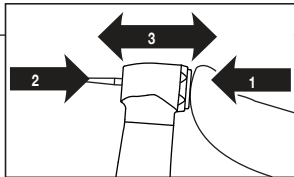


Fig. 5

### ■ Removing the Bur

- 1) Press the button
- 2) Pull the bur from the head. (Fig.6)

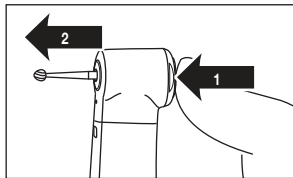


Fig. 6

## 6c. Irrigation Nozzle

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When irrigation is required, please connect the irrigation tube to the irrigation nozzle.

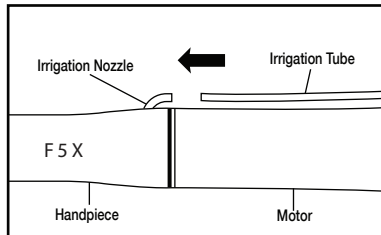


Fig. 7

7.

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**FORZA F1**



## 7a. Specifications

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|                             |                                      |
|-----------------------------|--------------------------------------|
| Model                       | Forza F1                             |
| Gear Ratio                  | 1:1                                  |
| Max. Rotation Speed (Motor) | 40,000 RPM                           |
| Max. Rotation Speed (Bur)   | 40,000 RPM                           |
| Spray                       | One Port Spray                       |
| Glass Rod Optic             | Glass Rod                            |
| Bur Type                    | ISO 1797-1, Type 1 (Ø2.35 Latch Bur) |

## 7b. Mounting/Removing Burs

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### ■ Connecting

- 1) Mount handpiece and Micromotor.
- 2) Insert the bur into the head and turn the bur slightly. (If bur and head are properly positioned, the bur will be seated all the way in the head)
- 3) Insert the bur into the head until it clicks. (Fig.8)

### ■ Removing

- 1) Press the button and pull the bur from the head.

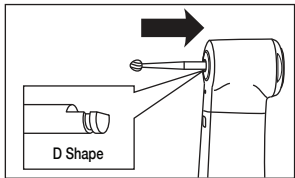


Fig. 8

## **8. Warranty**

Brasseler USA warrants the handpiece against defects in manufacturing, workmanship and materials. Brasseler USA reserves the right to analyze and determine the cause of any problem. Warranty is voided should the handpiece not be used in accordance with this manual.

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in Dentistry



**BRASSELER USA<sup>®</sup>**  
DENTAL INSTRUMENTATION

One Brasseler Boulevard, Savannah, GA 31419

To order call 800.841.4522

or fax 888.610.1937.

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