

Tornado

Handpiece Collection

1:5 Handpiece Attachment

Operation Manual & Maintenance Guide
English



TPC



Thank you for purchasing TPC Tornado Handpieces



CAUTION

- Please consider the safety of the patient when using the handpiece.
- Please remember when the burr is rotating, pressing the chuck push button that will result in overheating of the handpiece. When pressing the chuck push button, please keep the handpiece away from the face of the patient.
- Please use carefully and do not drop the handpiece.
- Never try to take the handpiece apart or tamper with mechanism.
- If the handpiece operate irregular, stop using immediately and give back to your dealer for service.
- When you want to remove the bur, please wait to the handpiece completely stop rotating.
- Please use burs no longer than 26mm. Do not use no-dental burs.
- Please look over the overheating, vibration and noise outside the patient's mouth. If you find any unusual situation, please contact with the dealer for service.

1. Performance Specifications

Model	Internal			
	EMA 150 FG			
Gear ratio	1:5			
Allowable Max. Speed	200,000 rpm			
Chuck Type	Push Type			
Bur Size	Size: ISO1797-1 Type3 Ø1.59~1.60mm			
Fiber Optics	Yes			
Weight	57.8 g			

2. Insert & Remove the bur for Contra Angle Handpieces

To insert the bur (FIG. 1)

Please press the push button and insert the burr into the spindle. Make sure it is secure and then, you could release the button.

To remove the Burr (FIG. 2)

Please make sure the handpiece is completely stopped rotating and then press the push button securely and remove the burr.

CAUTION

- You can pull and push the burr without press the push button for testing the bur is secure.

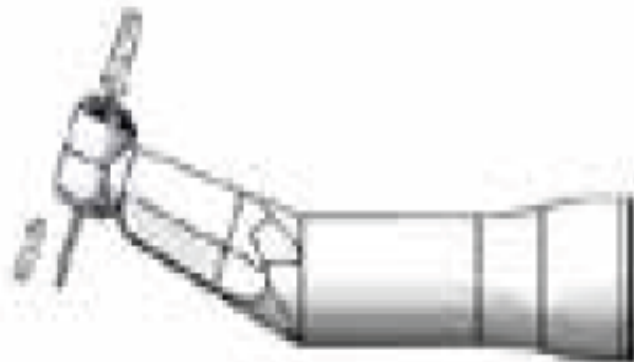


FIG.1

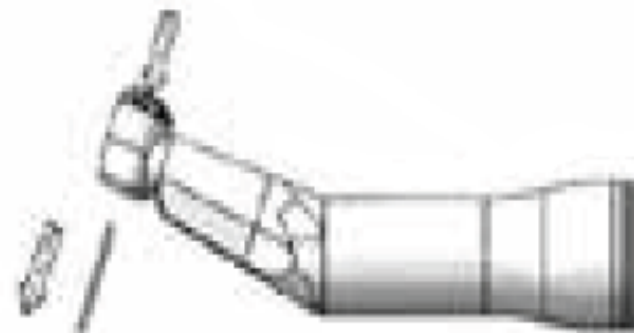


FIG.2

3.Insert & Remove the bur for Straight Handpiece

To insert the bur (FIG. 3)

Please switch the Tension ring to counter clockwise direction till the sound of “click” and then insert bur into the spindle. Make sure you hear the sound of “click”.

To remove the Bur (FIG. 4)

Please switch the Tension Ring to the counter clockwise direction till the sound of “click” and then pull out the bur.

CAUTION

- You can pull and push the bur for testing the burr is secure.

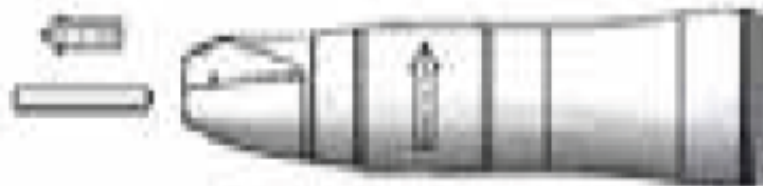


FIG.3



FIG.4

4. Connect to Air Motor and Disconnect from Air motor

A. Mount the handpiece to the air motor.(FIG.5)

B. Connect the tube of dental unit to the bottom of air motor.

C. Adjust the air pressure under 0.25 Mpa,

D. There is an air controller on the air motor; you can adjust the water volume by air controller.(FIG.6)

CAUTION

- Please make sure there is no dirt and debris in the tube of dental unit.
- Please make sure the handpiece and the air motor connect tightly.



5. Lubricate

Lubricate handpiece by using spray nozzle for Internal, External handpiece and Air Motor

- (1). Put on or screw nozzle and then shake the spray can 3-5 times. (FIG.7)
- (2). Insert the spray nozzle into the air tube of the handpiece and then spray for 4-5 seconds until the oil comes out from the handpiece head. (FIG.8)
- (3). Connect the tube of dental unit to the bottom of air motor and then rotate the Air Motor for lubrication the interior Air Motor. (FIG.9)

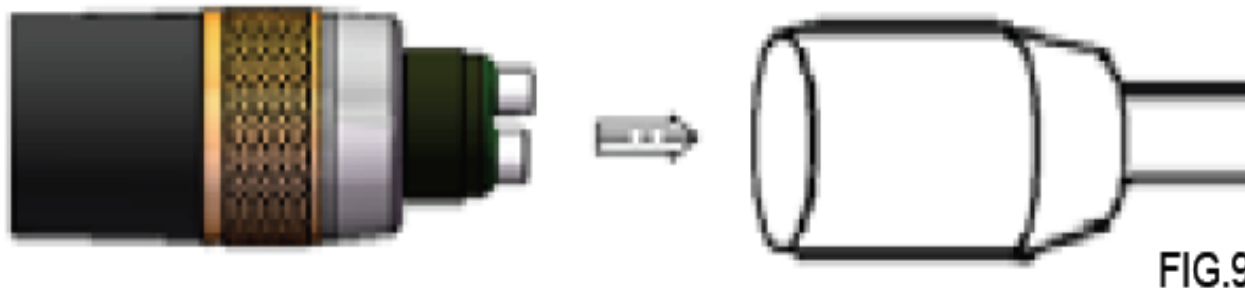


Strongly recommend please lubricate and clean Air Motor after every use,

- **Use clean cotton with alcohol to clean the outside of Air Motor**
- **Do not immerse Air Motor in disinfectant solution.**

⚠ CAUTION

- Be sure to grasp the handpiece securely to prevent sliding from doing spray.
- Please keep the spray can top side up.



6. Clean and Sterilize

Autoclave sterilization is strongly recommended.

First time you use and after each patient, please sterilize the handpiece.

- **Autoclave procedure :**

- (1). Use cleaning wire to clean the water spray hole of EMA-150 FG. (FIG. 10)
- (2). Insert into an autoclave pouch and Close the pouch.
- (3). Autoclavable up to max. 135°C.ex.) Autoclave for 20 min. at 120°C, or 15 min. at 130°C.
- (4). Put the handpiece in the autoclave pouch to protect the handpiece and keep it clean.

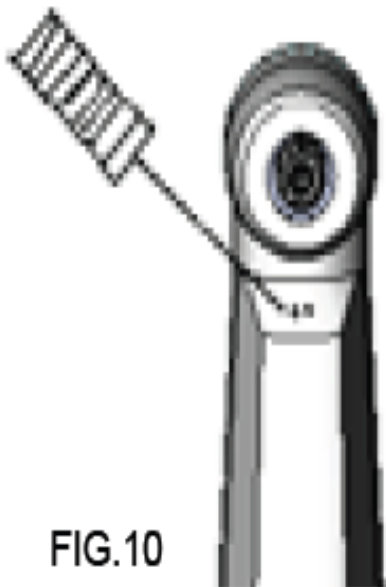


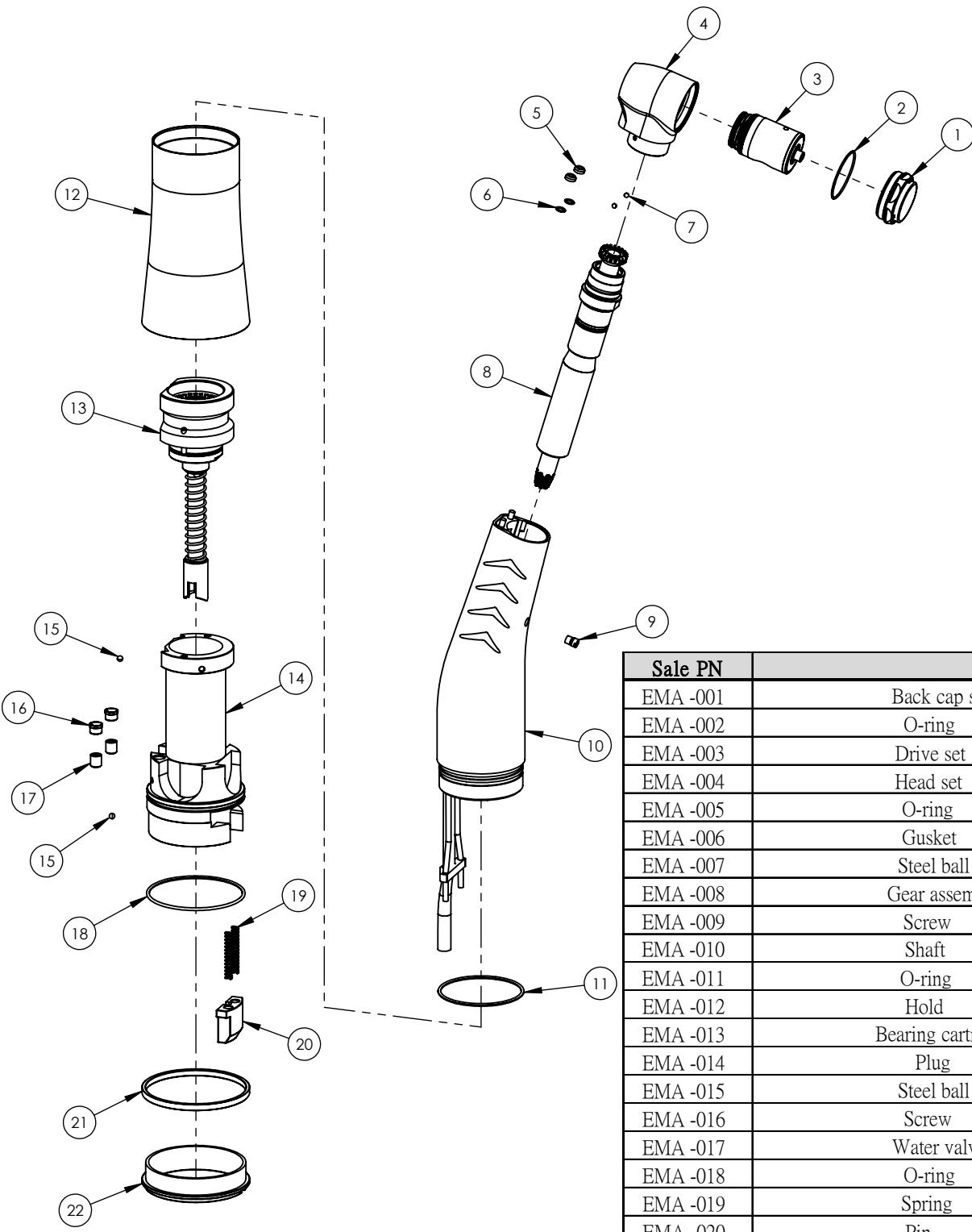
FIG.10

- **Sterilization at 121 °C for more than 15 minutes is recommended.**

 **CAUTION**

- Press the foot pedal for 20 seconds and check if there is any dirt on the gauze.
- Do not immerse Air Motor in disinfectant solution or water.

EMA-150



Sale PN	Item	Q'ty
EMA -001	Back cap set	1
EMA -002	O-ring	1
EMA -003	Drive set	1
EMA -004	Head set	1
EMA -005	O-ring	2
EMA -006	Gusket	2
EMA -007	Steel ball	2
EMA -008	Gear assembly	1
EMA -009	Screw	1
EMA -010	Shaft	1
EMA -011	O-ring	1
EMA -012	Hold	1
EMA -013	Bearing cartridge set	1
EMA -014	Plug	1
EMA -015	Steel ball	2
EMA -016	Screw	2
EMA -017	Water valve	2
EMA -018	O-ring	1
EMA -019	Spring	2
EMA -020	Pin	1
EMA -021	Color ring	1
EMA -022	Threaded screw	1