COXO®

Professional Dental Manufacturer

CE 0482

CONTRA ANGLE

Operation Manual

MODEL:CX235

Dentalzone



Please read this operation Manual carefully and file for future reference.

Preface

Thanks for purchasing our dental Contra angle!

In order to fully exert the function of this equipment, safely and effectively use this equipment, please read this instruction carefully before using , and please keep this manual well for reference anytime.

Under regulations' request, we have been committed to the optimization of our product, this may cause some parts of change, when you find the product appears some difference from description in the manual, please contact the dealers or our after-sales center for details .

Technical specifications

- Protection of liquids-normal liquids – protected equipment
- Temperatures range: −40°C−−+135°C
- Relative humidity:10% to 80%,non-condensing
- Noise:≤70dB

⚠ WARNING

Dentalzone

- Please read this operation manual carefully before use and file it for future reference .
- This product is spcialized for stomatology treatment abnormal,don't use it in other ways.
- This product is only for doctors.
- Every time you use it,please check first.If find anything unnormal,stop using immediately,and contact your supplier or our after-sales center for details.
- Before operating low speed handpiece,pull contra angle handpiece with hand to make sure handpiece connect firmly and safely.
- Head can not running without insert bur,otherwise head or motor would be damaged.
- Ensure working pressure before running,Air pressure for four bole air motor is 0.3Mpa,for two hole air motor is 0.25Mpa.
- Don't immerse handpiece in any chemical solvent or solution or by dry-heat disinfection.Sterilization by autoclave at(135±2)°C&0.22MPa is sugguested.

Product Composition

Inner channel1:1

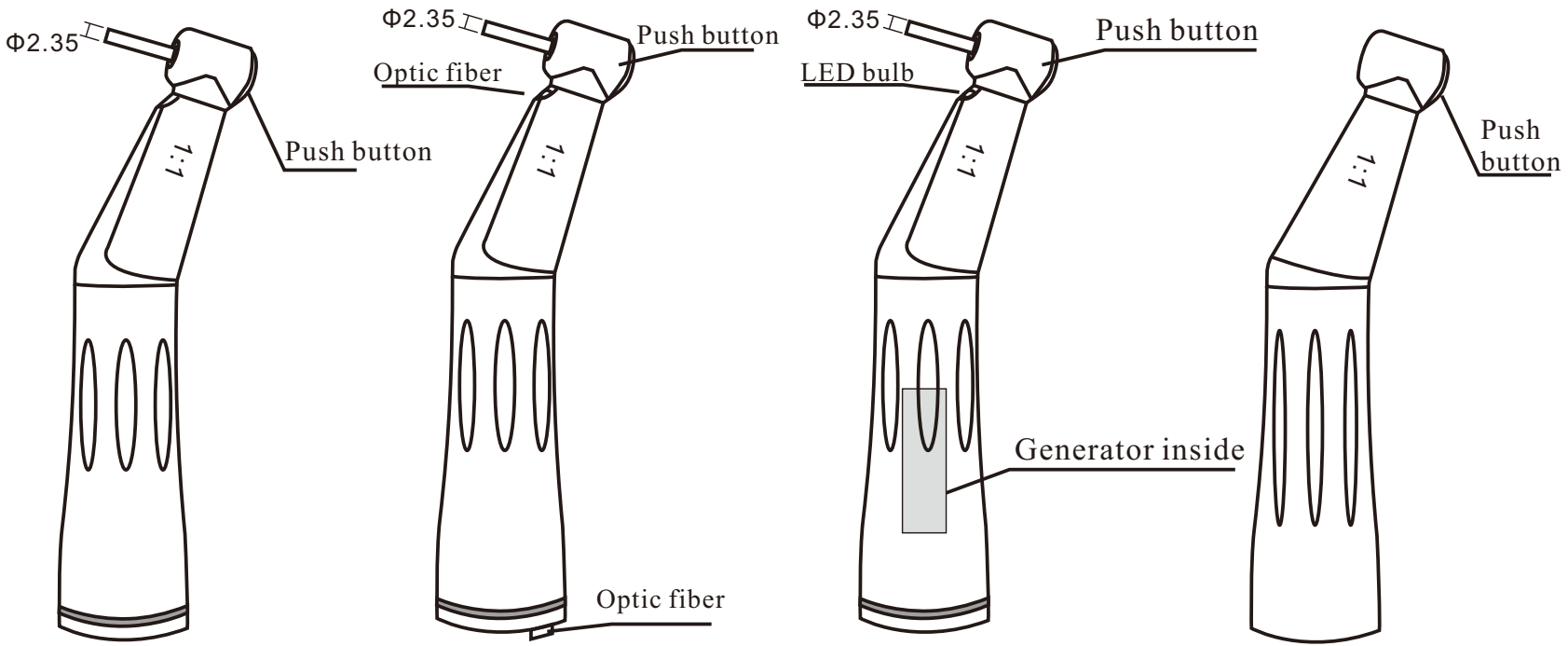


Fig. 1

www.dentalzone.nl

•Inner channel contra angle low speed handpiece ;
•Burs:for CA burs Φ2.35;
•Max.speed of contra angle:40000rpm

Cartridge Replacement

① Loosen the small screw on the curving part ,move the head cover and remove the transmission gear[Fig.2.1].

② Use the attached wrench to remove the cap[Fig.2.2].

③ Use the bur to push out the cartidge.

④ Insert the new cartridge into handpiece head,being sure the small raised part aligns the groove inside the front of the head,to insure proper fit.

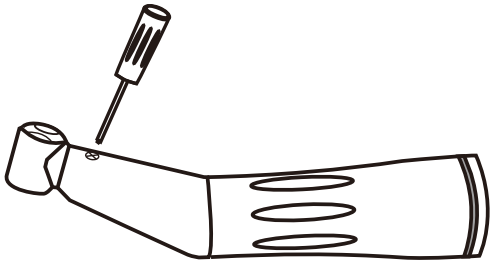


Fig. 2.1

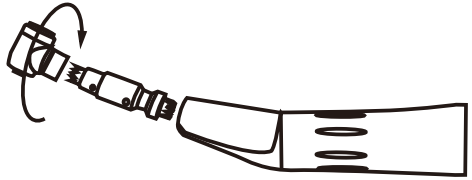


Fig. 2.2

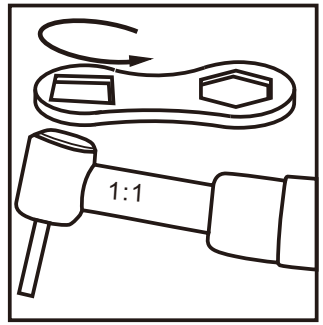


Fig. 2.3

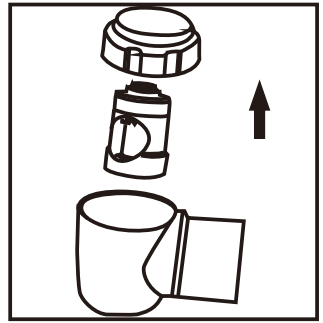
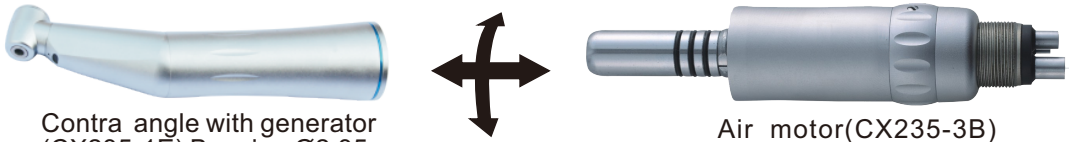


Fig. 2.4

Contra angle and motor connections

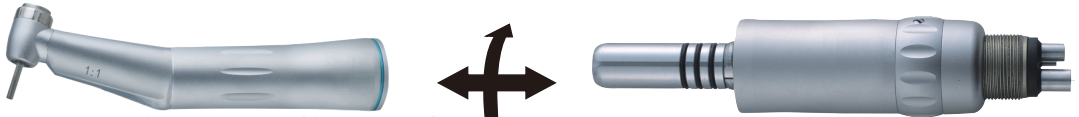
1. Straightly insert the motor into the connection of contra angle, until you hear a “cracking" sound can be.
2. Hold the bending machine and pull out the motor, it will be separated[fig.3.2].
3. Alignment the groove,contra angle can insert into the air motor[fig.3.3].



Contra angle with generator
(CX235-1E) Bur size:Ø2.35

Air motor(CX235-3B)
1:1 drive

Fig. 3.1



Contra angle(CX235-1B)
Bur size:Ø2.35

Air motor(CX235-3B)
1:1 drive

Fig. 3.2



Optic Fiber Contra angle
Bur size:Ø2.35
(CX235-1C)

Optic Fiber/LED Air motor
1:1 drive
(CX235-3C/CX235-3D)

Fig. 3.3

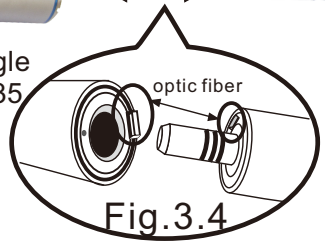


Fig.3.4

2.contra angle head technical parameters

Model	Rotate head	BUR
CX235CH-1 /2	max.40,000rpm	for CA burs Φ2.35
CX235CH-3 /4	max.40,000rpm	for CA burs Φ2.35
CX235CH-6 /7	max.40,000rpm	for use files
CX235CH-13	max.30,000rpm	forCA burs Φ2.35
CX235CH-15/16	max.3,000rpm	forCA burs Φ2.35
CX235CH-17	max.40,000rpm	for CA burs Φ2.35

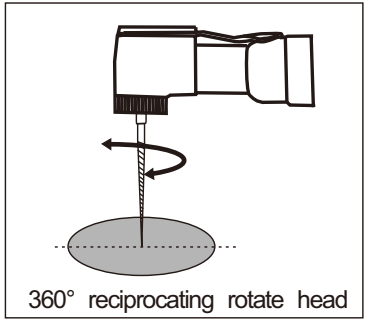


Fig. 1.1

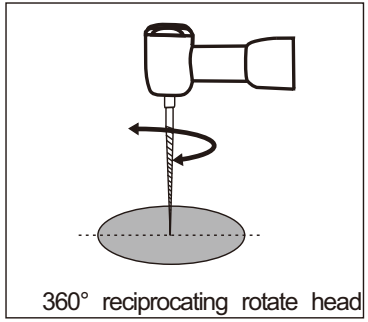


Fig. 1.2

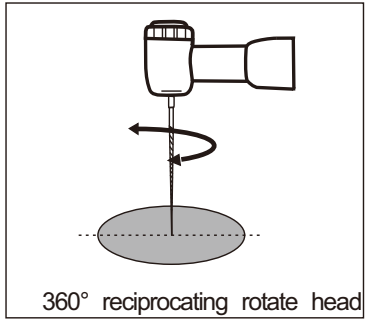


Fig. 1.3

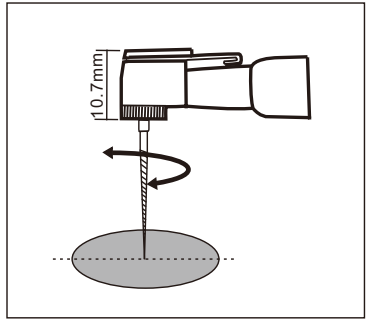


Fig. 1.4

2.Special head movement technical parameters

Model	Rotate head	BUR
CX235CH-10	90° reciprocating	for CA burs Φ2.35/prophylaxis brush
CX235CH-11	Up and down movement	for CA burs Φ2.35/the crevices knife
CX235CH-12	60° reciprocating	for use files
CX235CH-9	360° reciprocating	forCA burs Φ2.35/implant files
CX235CH-14	360° reciprocating	forCA burs Φ2.35/implant files

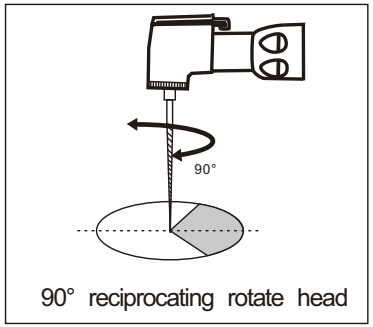


Fig. 1.5

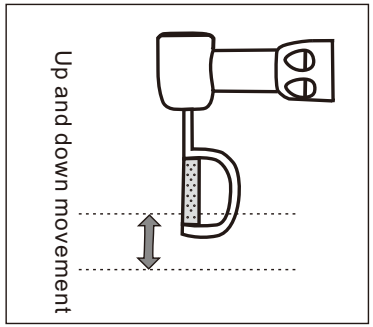


Fig. 1.6

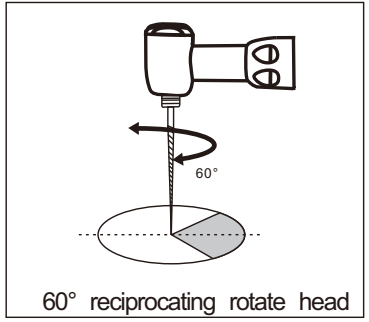


Fig. 1.7

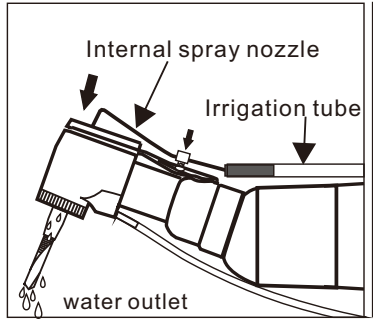


Fig. 1.8

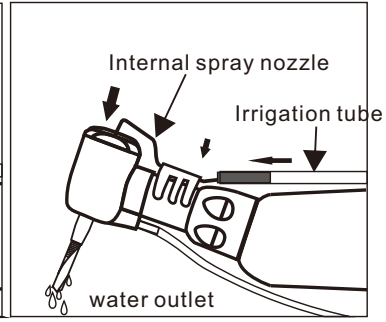
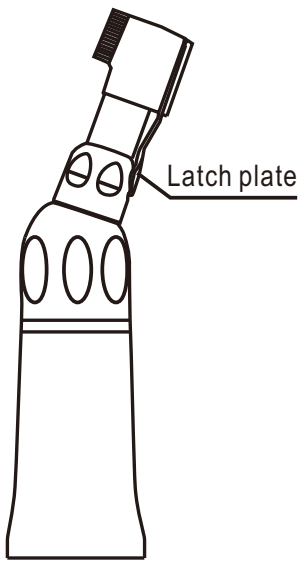


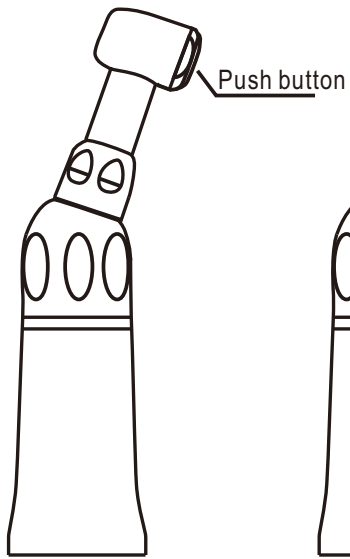
Fig. 1.9

Product Composition

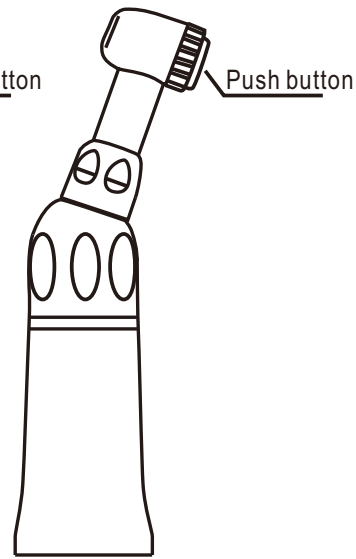
1:1 direct drive



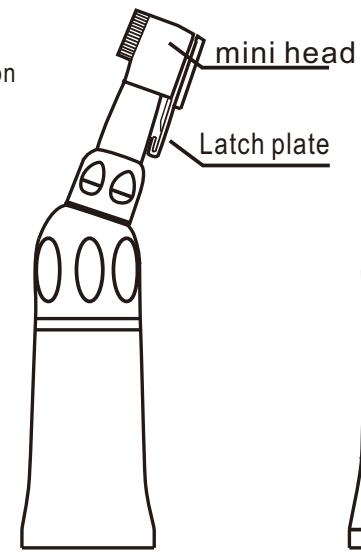
for CA burs Φ2.35
CX235C1-2
Fig. 2.1



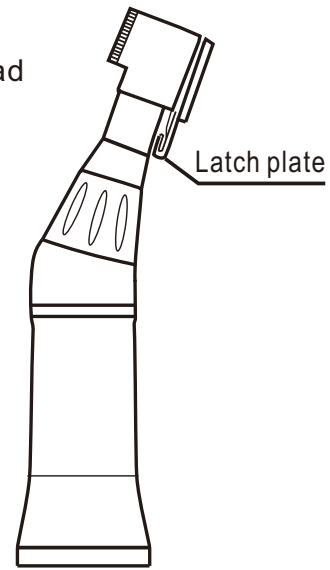
for CA burs Φ2.35
CX235C1-4
Fig. 2.2



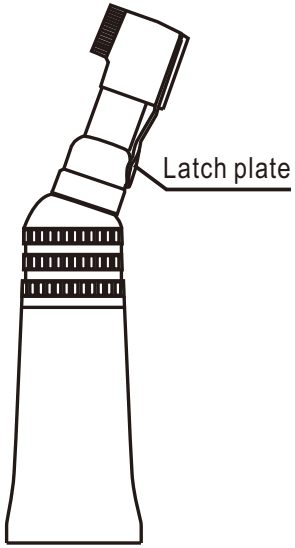
forFGbursΦ1.6.
CX235C1-7
Fig. 2.3



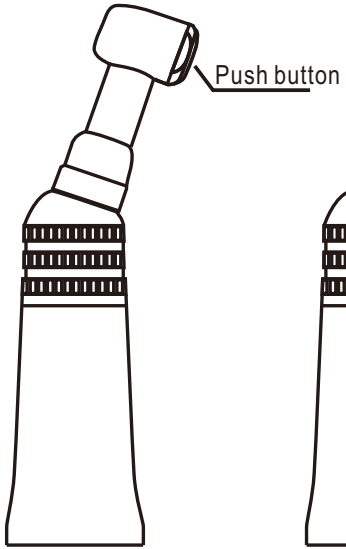
for CA burs Φ2.35
CX235C1-13
Fig. 2.4



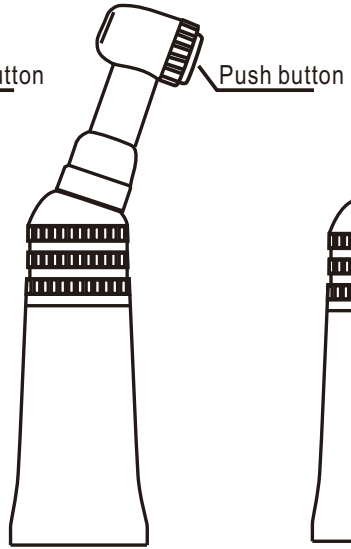
for CA burs Φ2.35
CX235-1F
Fig. 2.5



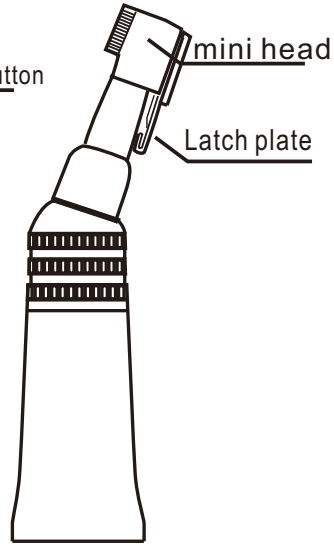
for CA burs Φ2.35
CX235C2-1
Fig. 2.6



for CA burs Φ2.35
CX235C2-3
Fig. 2.7



for FG burs Φ1.6.
CX235C2-6
Fig. 2.8



for CA burs Φ2.35
CX235C2-13
Fig. 2.8

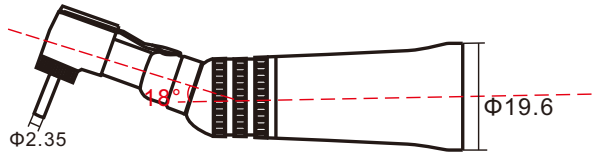


Fig.3.1

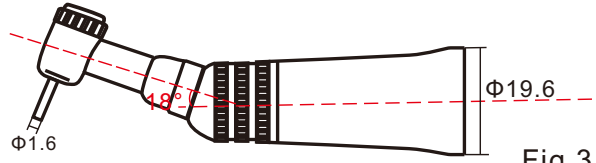


Fig.3.2

- External contra angle low speed handpiece--1:1 Direct Drive
- Burs:for CA burs Φ2.35 ; for FG burs Φ1.6.
- CX235C1 Series; CX235C2 Series.

Mounting of bur

1.Locking pin

Open the latch chuck,insert the bur,be sure the quadrate part of the bur aline the proper part in the cartridge then turn the latch chuck back. When remove the bur,open the latch chuck then take out the bur.

2.Push button

The fixed method of internal contra low speed handpiece is push button, push the button to the end and then the bur can be get out of head.

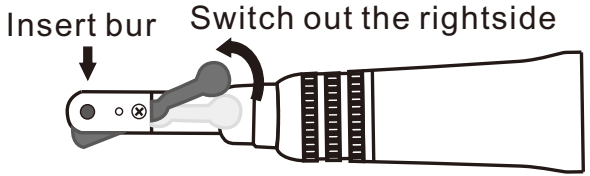


Fig. 3.3

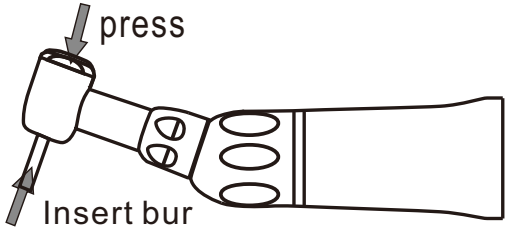


Fig. 3.4

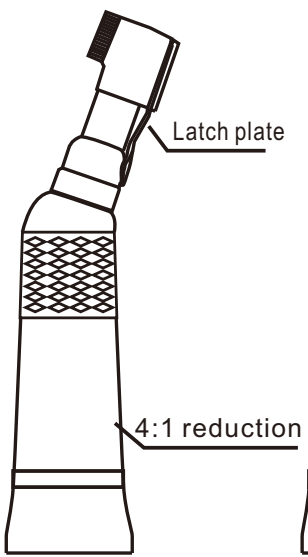
NOTE:

1、Do not use a bending , cracking, deformation and unqualify bur. If using it, may cause a it broken,or a flying off leading injured accident during operation process.

2、make sure the bur lock tightly before operating.

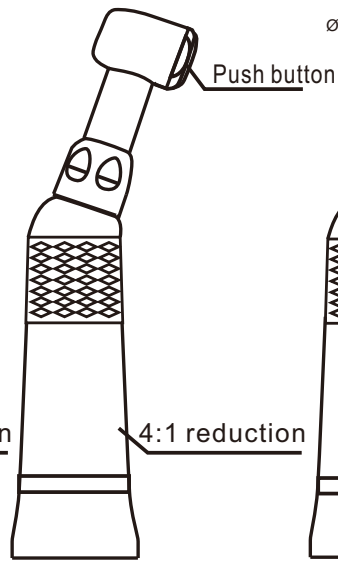
Product Composition

4:1 reduction



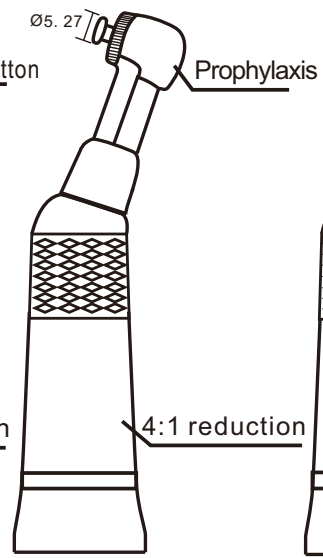
CX235C3-1

Fig. 4.1



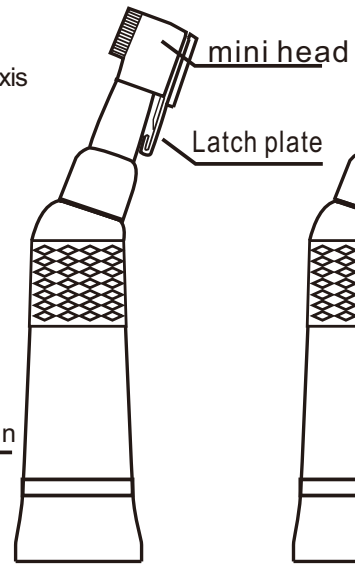
CX235C3-4

Fig. 4.2



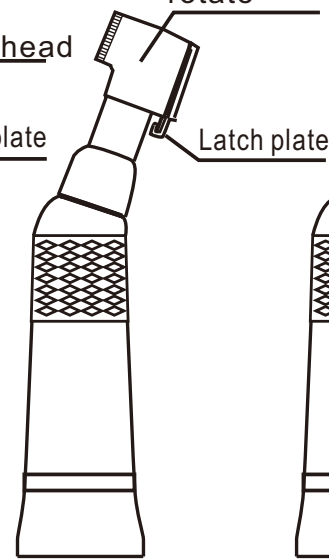
CX235C3-8

Fig. 4.3



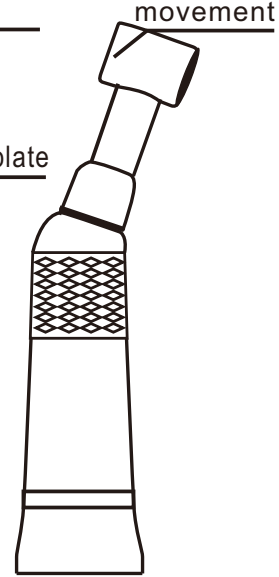
CX235C3-13

Fig. 4.4



CX235C3-10

Fig. 4.5



CX235C3-11

Fig. 4.6

Mounting of bur

1.Locking pin

Open the latch chuck,insert the bur,be sure the quadrate part of the bur aline the proper part in the cartrdge then turn the latch chuck back.
When remove the bur,open the latch chuck then take out the bur.

2.Push button

The fixed method of internal contra low speed handpiece is push button, push the button to the end and then the bur can be get out of head.

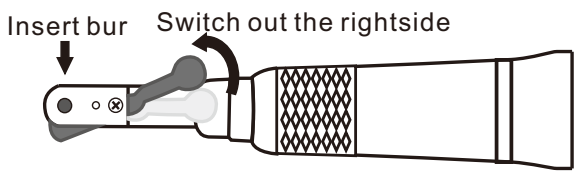


Fig. 5.1

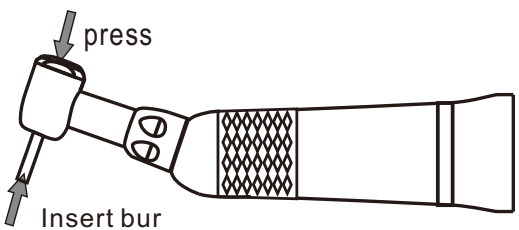


Fig. 5.2

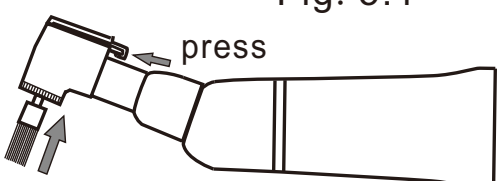


Fig. 5.3

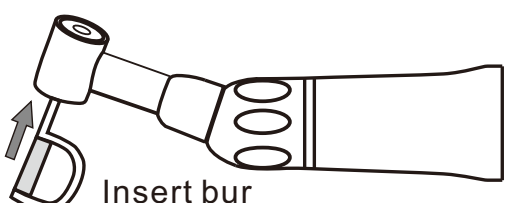


Fig. 5.4

3.Prophylaxis

Mounting and Removing the Rubber Cup/Brush

Mounting

1)Insert the rubber cup/brush into a screw hole of the handpiece head.

2)Turn rubber cup/brush in a colckwise direction to fix the screw shank.

Removing

Perform a reverse procedure of Mounting. Turn the Rubber cup/brush way of “Loosen”dirction.

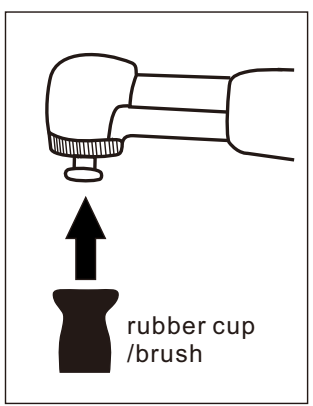


Fig. 6.1

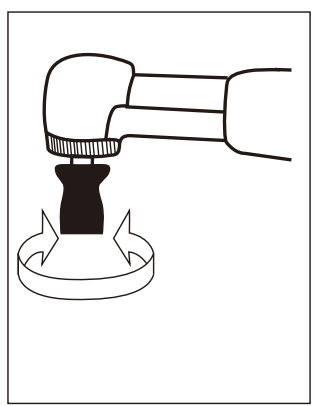
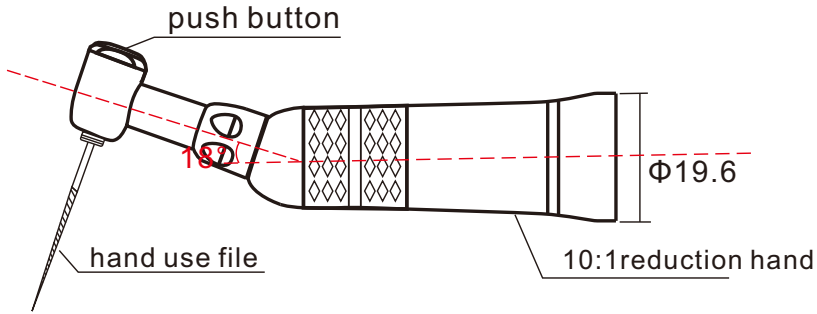


Fig. 6.2

Product Composition

10:1 Reduction



CX235C5-12

Fig. 7

Mounting and Removing File

⚠ NOTE:

1-Do not connect or disconnect the handpiece until the drive motor has completely stopped.
2-After the file is locked in place, lightly pull out the file to make sure the file is locked.

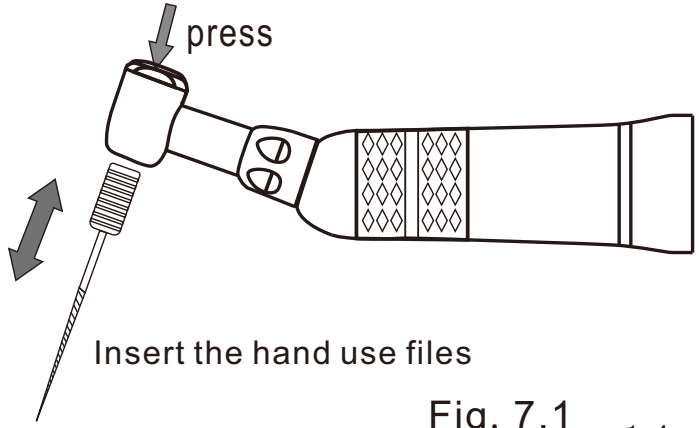
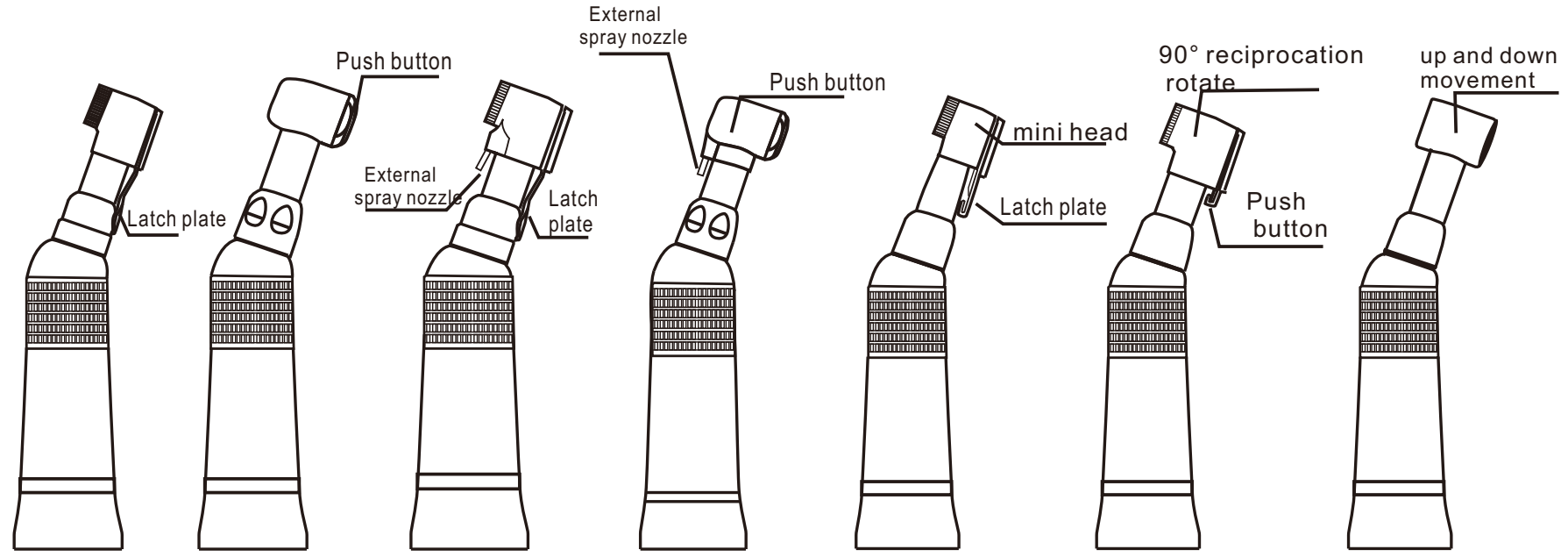


Fig. 7.1

Product Composition

16:1 Reduction



CX235C4-2 Fig. 8.1 | CX235C4-4 Fig. 8.2 | CX235C4-9 Fig. 8.4 | CX235C4-14 Fig. 8.5 | CX235C4-13 Fig. 8.6 | CX235C4-10 Fig. 8.7 | CX235C4-11 Fig. 8.8

Mounting of bur

1.Locking pin

Open the latch chuck,insert the bur,be sure the quadrate part of the bur aline the proper part in the cartrdge then turn the latch chuck back.
When remove the bur,open the latch chuck then take out the bur.

2.Push button

The fixed method of internal contra low speed handpiece is push button, push the button to the end and then the bur can be get out of head.

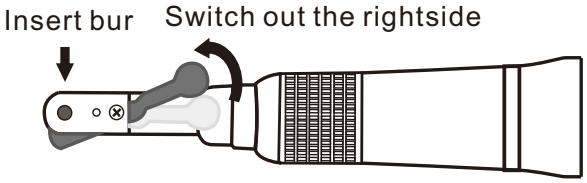


Fig. 9.1

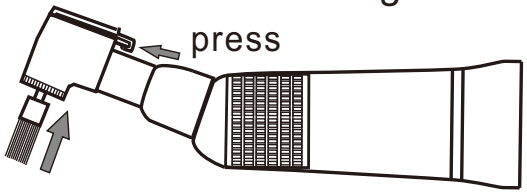


Fig. 9.3

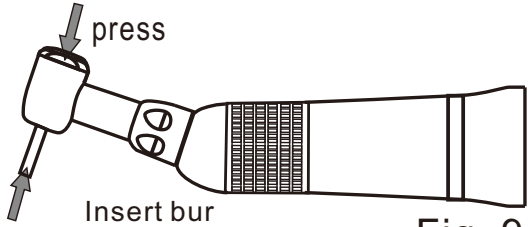


Fig. 9.2

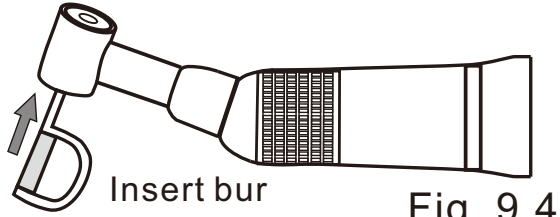


Fig. 9.4

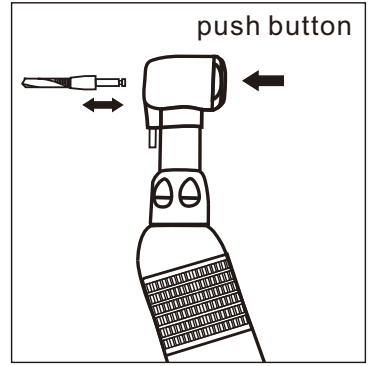
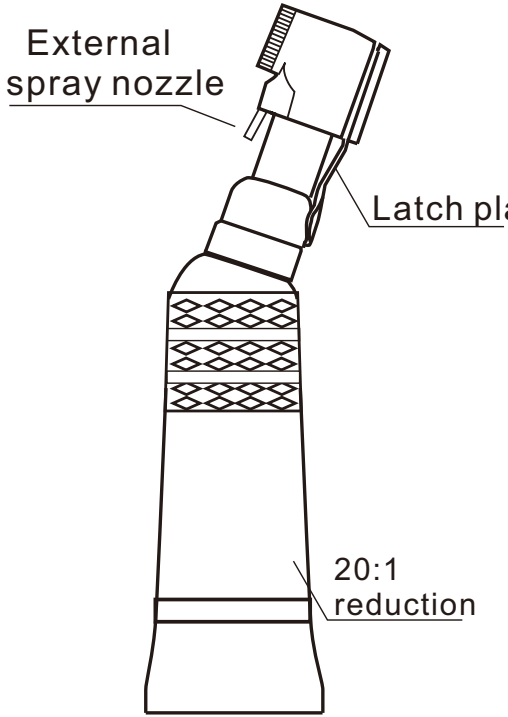


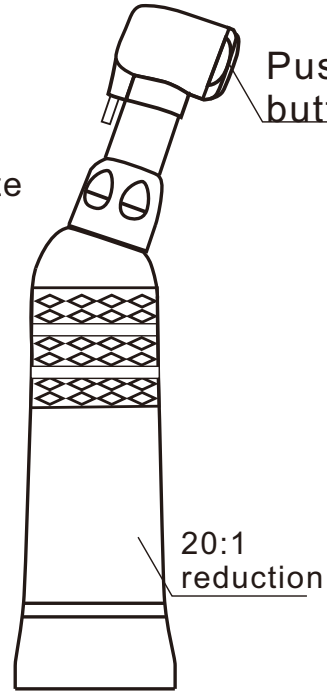
Fig. 9.5

Product Composition

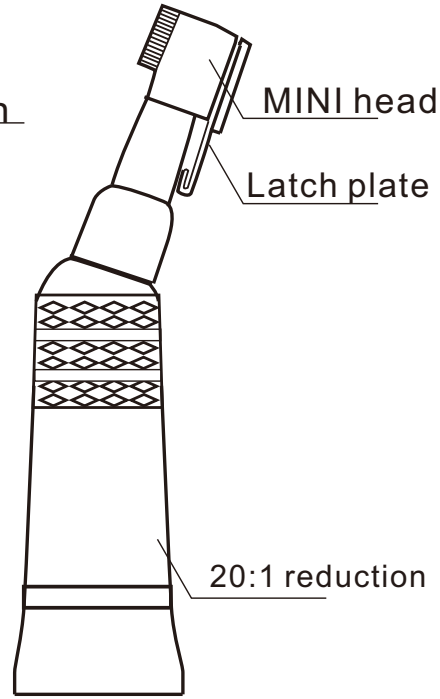
20:1 Reduction



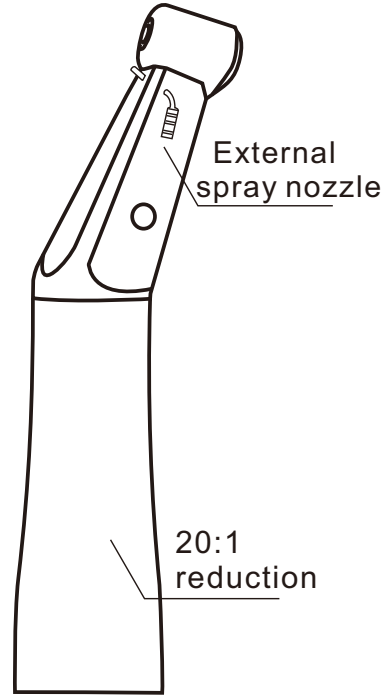
CX235C6-9
Fig.10.1



CX235C6-14
Fig.10.2



CX235C6-13
Fig.10.3



CX235C6-19
Fig.10.4

Mounting and Removing Bur

Locking pin

Open the latch chuck,insert the bur,be sure the quadrate part of the bur aline the proper part in the cartrdge then turn the latch chuck back.

When remove the bur,open the latch chuck then take out the bur.

⚠ NOTE:

1-Do not connect or disconnect the handpiece until the drive motor has completely stopped.

2-After the file is locked in place, lightly pull out the bur to make sure the bur is locked.

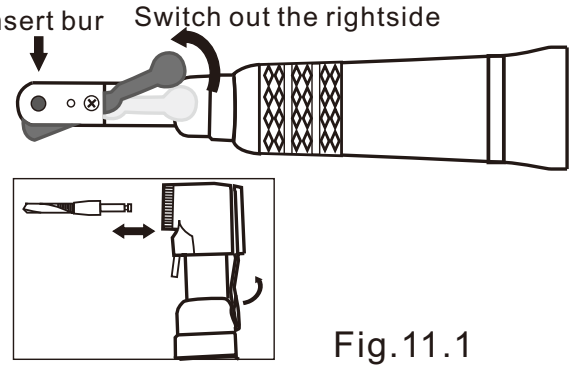


Fig.11.1

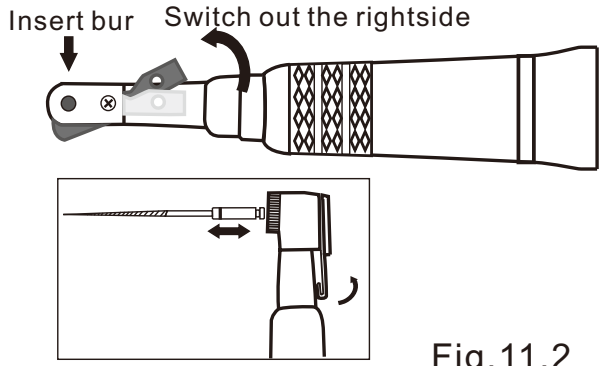


Fig.11.2

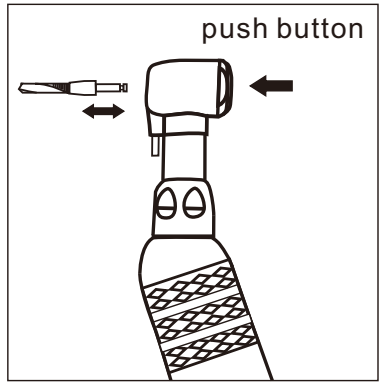


Fig.11.3

Mounting the”Y”type water tube

Three irrigation methods are available; External, Internal or both External and Internal, depending on tool and operation procedure.

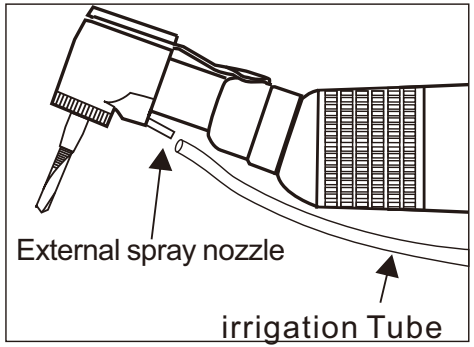


Fig. 12.1

(1) External Spray Nozzle

Connect the Irrigation Tube to the External Spray Nozzle firmly.

(2) Internal Spray Nozzle

Only a drill with internal irrigation is used.

1-Connect the Irrigation Tube to the Internal Spray Nozzle firmly.

2-Put the Internal Spray Nozzle into the slot on the head.

Dentalzone

(3) External and Internal Irrigation together (locking pin)

Only a drill with internal irrigation is used.

1-Connect the ends of the Y-Connector to the External Spray Nozzle and Internal Spray Nozzles refer as detailed in procedures (1) and (2).

2-Connect the Irrigation Tube to the Y-Connector firmly.

www.dentalzone.nl

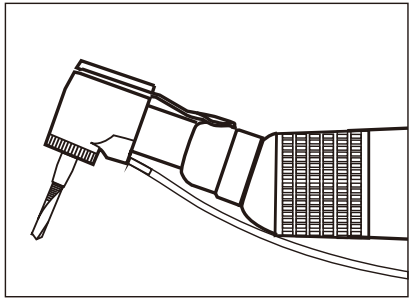


Fig. 12.2

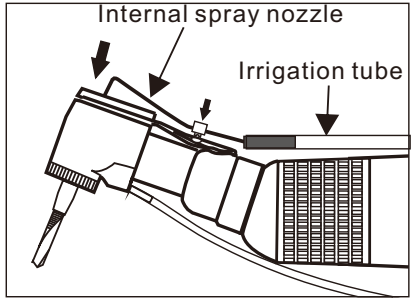


Fig. 12.3

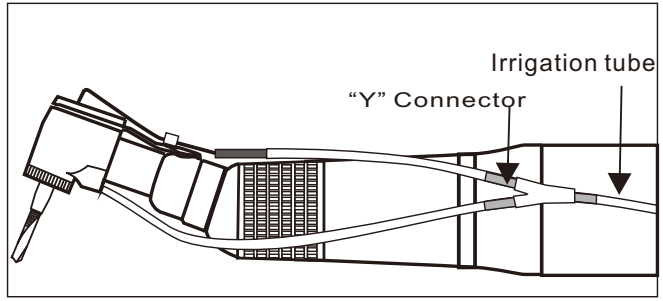


Fig. 12.4

(4) External and Internal Irrigation together (push button)

Only a drill with internal irrigation is used.

1–Connect the ends of the Y-Connector to the External Spray Nozzle and Internal Spray Nozzles refer as detailed in procedures (1) and (2).

2-Connect the Irrigation Tube to the Y-Connector firmly.

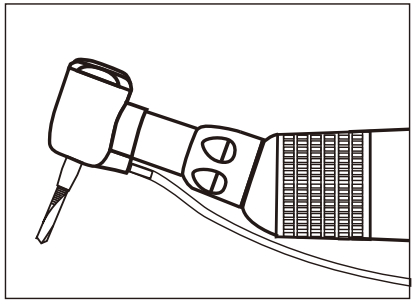


Fig. 12.5

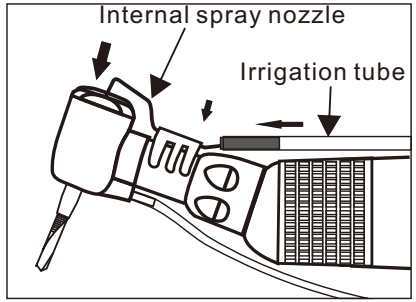


Fig. 12.6

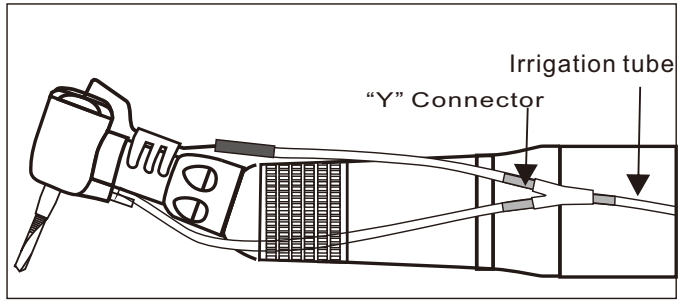


Fig. 12.7

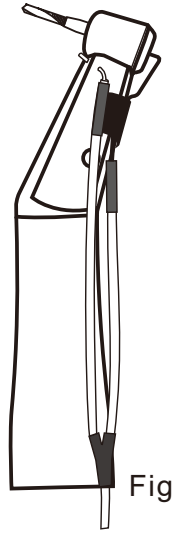


Fig. 12.8

Cartridge Replacement

1.1Locking pin

① Loosen the curving lock section and remove the head from the sheath.
② Pull out the drive gear assembly from the head.[Fig.13.1]
③ Please cap the wrench on the head'screw and turn counter-clockise. Unscrew and separate the cover.[Fig.13.2]
④ Swing the new cartridge,with its pin aligned in the groove of the head.
⑤ Reassemble in the reverse order.

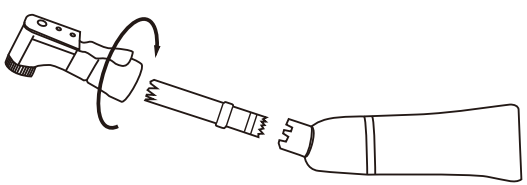


Fig. 13.1

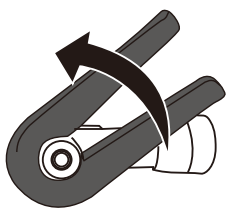


Fig. 13.2

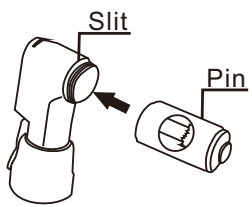


Fig. 13.3

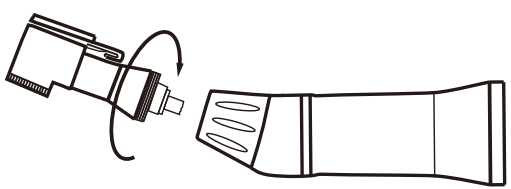


Fig. 13.4

1.2.Removal of the cartridge(CX235CH-11)

① Loosen the curving lock section and remove the head from the sheath.
② Pull out the drive gear assembly from the head.[Fig.14.1]
③ Directly remove the cartridge.[Fig.14.4]

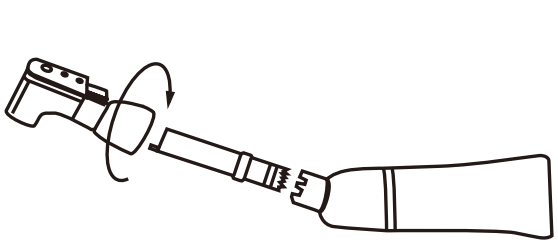


Fig. 14.1
(CX235CH-10)

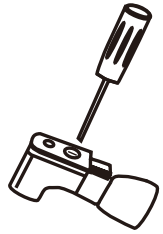


Fig. 14.2

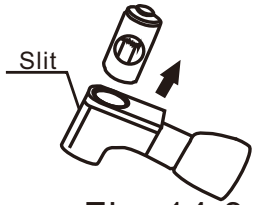


Fig. 14.3

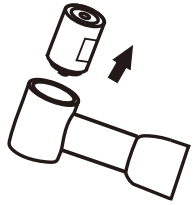


Fig. 14.4

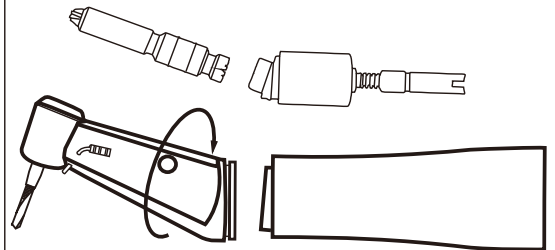


Fig. 14.5
(CX235C6-19)

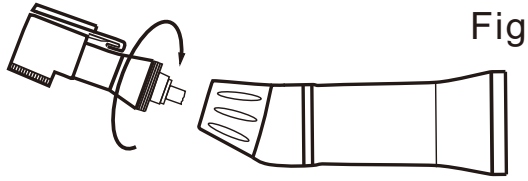


Fig. 14.6
(CX235-1F)

2.Push button

① Loosen the small screw on the curving part ,move the head cover and remove the transmission gear[Fig.15.1].

② Use the attached wrench to remove the cap[Fig.15.2].

③ Use the bur to push out the cartidge.

④ Insert the new cartridge into handpiece head,being sure the small raised part aligns the groove inside the front of the head,to insure proper fit.

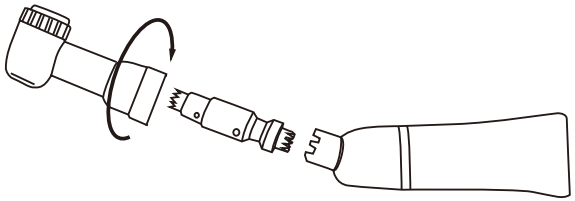


Fig. 15.1

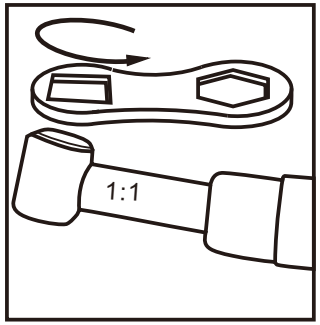


Fig. 15.2

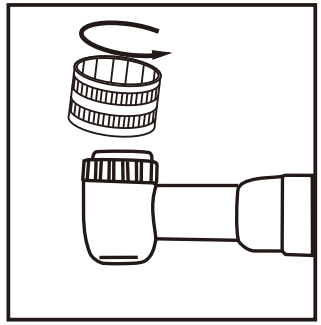


Fig. 15.3

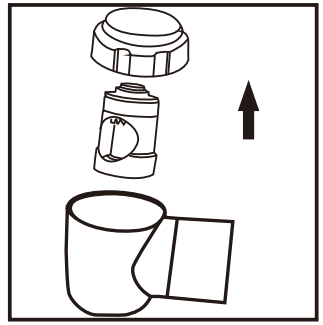


Fig. 15.4

Contra angle and motor connections

1. Straightly insert the motor into the connection of contra angle, until you hear a “cracking" sound can be.
2. Hold the bending machine and pull out the motor, it will be separated.

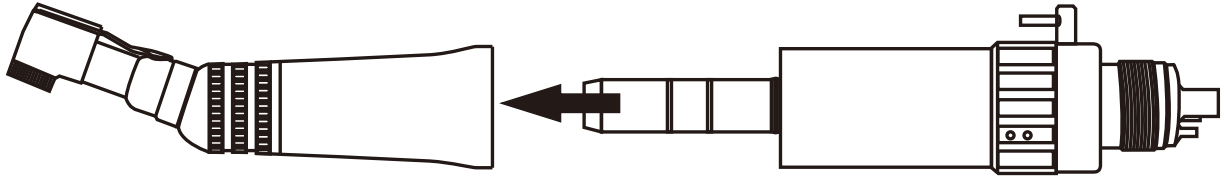


Fig. 16.1

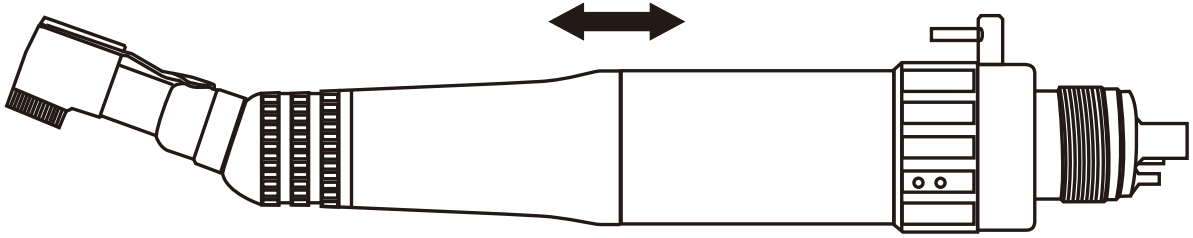


Fig. 16. 2

After daily use,spray lubricant for 1 to 2 seconds by inserting lubricant nozzle all the way into drive air tube.

If work heavyly,lubrication should be implemented at noon and afternoon's after using everyday.

Lubrication

Lubricate the head,gear and inside.[Fig.16]
When lubricate the head,please open the latch chuck.

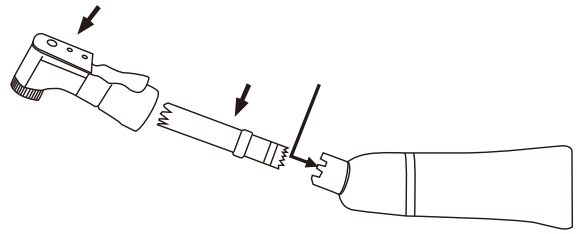


Fig. 16.3

*Dismount contra handpiece from motor.

*Install E spray nozzle on the lubricant.

*Insert E spray nozzle on the back of contra handpiece to spray2-3 seconds till the lubricant through out of head,Stop until clean lubrication comes out.

*Keep contra handpiece standing for a while,and then connect with the motor after the lubricant inside come out.

www.dentalzone.nl

Clean-head system

1-Scrub dirt and debris from the handpiece.

2-Stop the handpiece and wipe it dry.If the dirt could not remove from the hole, remove the cartridge and clean by brush.

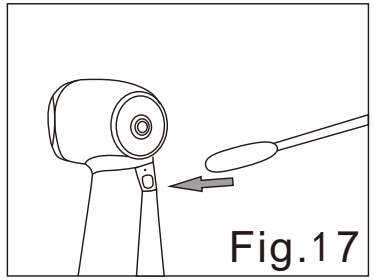


Fig.17

⚠ Notice !

Use only clean water to maintain the clean head system.

Cleaning -bulb

Wipe clean the Cellular optical bulb entry point with an alcohol-immersed cotton swab.Remove all debris and oil.

Dentalzone

⚠ Caution

- 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 nose (for approx 2 seconds).
- Keep the SPRAY can upright

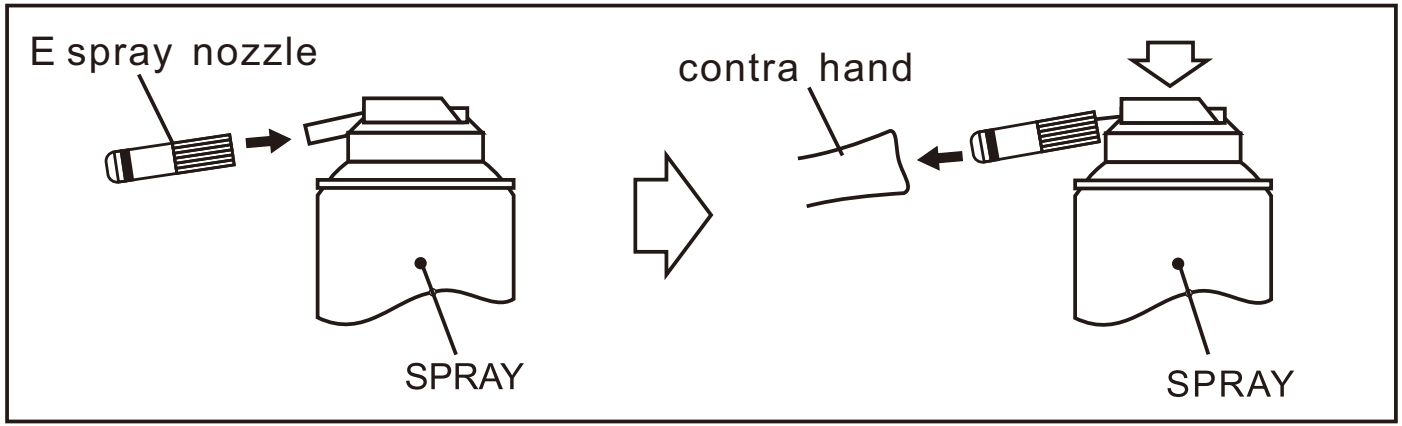


Fig. 18

www.dentalzone.nl

Sterilization and cleaning

-Steam autoclave is recommended.
-Sterilization requirement after using as noted below.
-Autoclave Procedure:
-Scrub dirt and debris from the handpiece,and wipe clean with alcohic cotton.Do not use a wire brush(Fig.18.4)
-Lubricate with SPRAY or Lubricant oil.
-Lubrication.
-Insert into an autoclave pouch.Seal the pouch.
-Autoclavable up to a max.135°C(EX.)Autoclave for 20 min. at 121°C or 15 min.at 132°C(Fig.18.2/18.3).

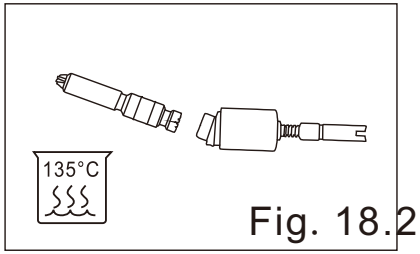


Fig. 18.2

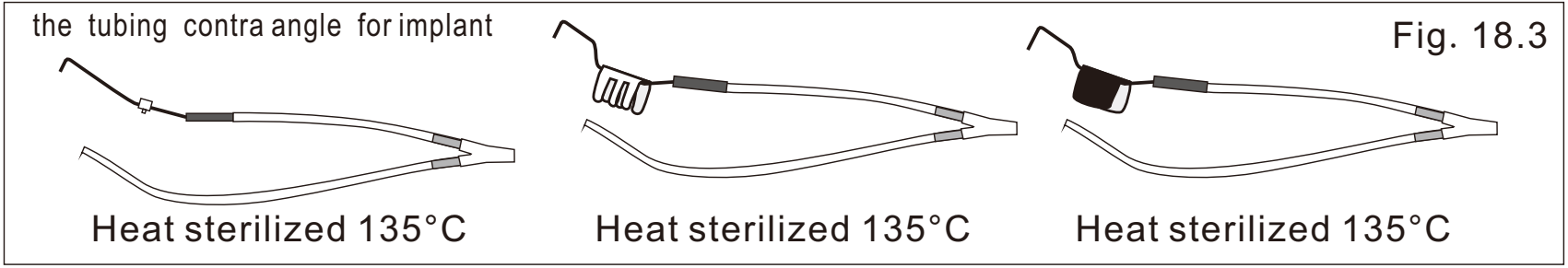


Fig. 18.3

NOTE:After treatment or before autoclave,please do the lubrication.

Dentalzone

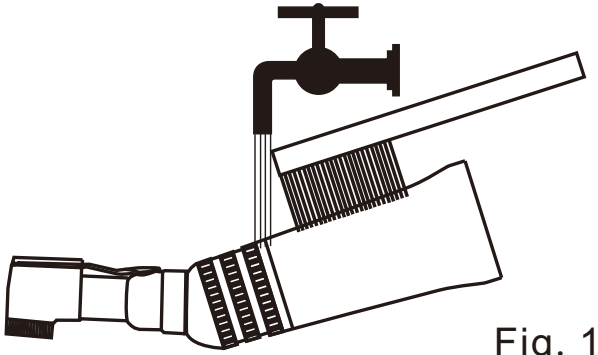


Fig. 18.4

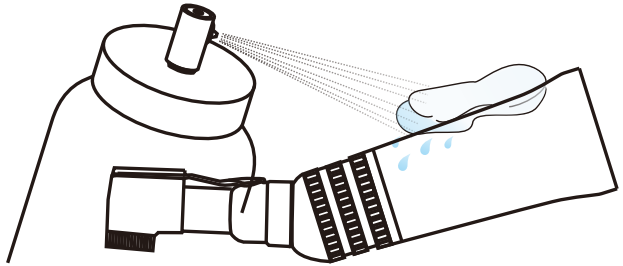


Fig. 18.5



Fig. 18.6

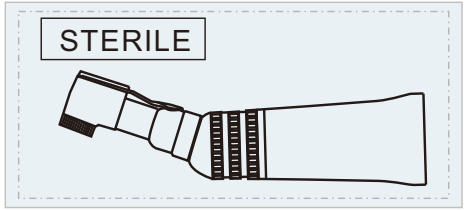


Fig. 18.7

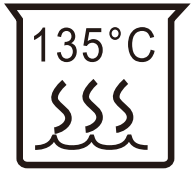


Fig. 18.8

www.dentalzone.nl

Trouble Shooting

Trouble	Possible cause	Solution
Body of straight head or contra angle rotates during motor running	O-ring on the nose of motor wears	Change o-ring
Handpiece fail to rotate	Contra angle chucking with bur but lacth plate fail to be fixed in the proper position. dirt get into the handpiece	Clean and lubricate, move it by hand

Our service center can offer technical assistance to you.

Warranty

COXO grants the user a 12 months guarantee for its complete product range,except ball bearing(3 months guarantee) from the date of invoice issued, Maintenance over the term of guarantee will be at the customer's charge. COXO will not be responsible for damage or injury resulting from:

----excessive use

----improper manipulation of the product, or modification to product carried out by persons not authorizes by COXO.

----fail to follow the instruction to install, operate and maintenance the handpiece.

----damage of chemical, electrical or electrolysis due to improper autoclaving and storing.

----improper working pressure.

The technical specifications and dimension in these instruction are given only as a guide. They may not be subject of any claim.

Dentalzone

On the instrument label appear standard symbols as follows:

Important notice!

135°C Autoclave

Attention, consult accompanying documents

Class II equipment

Type B applied part

Certified t o MDD93/42/EEC

Manufacturer

Transportation and deposited condition

Environmental temperature range: −40°C−−+50°C; Relative humidiy≤80%;
The scope of air pressure: 500hPa—1060hPa.

