

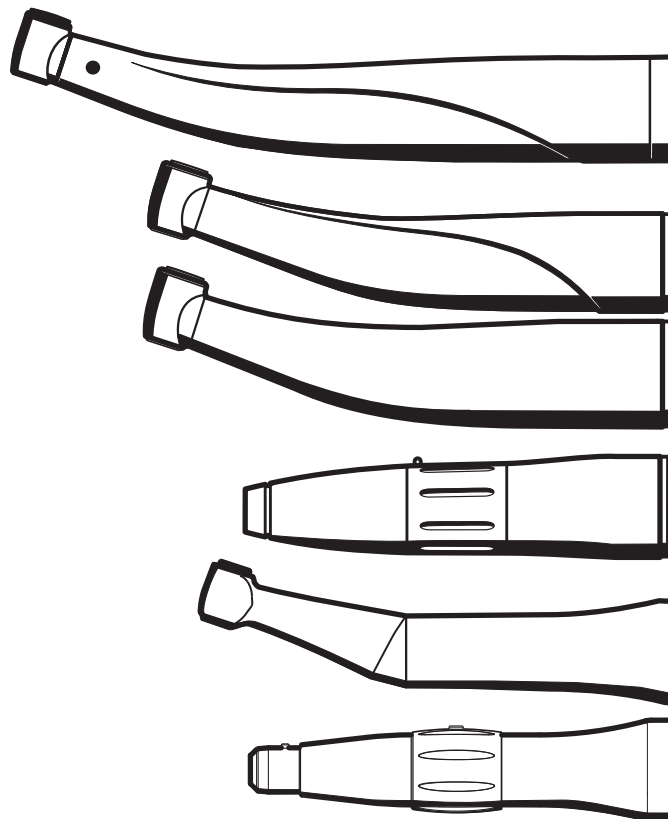
New as of:

07.2017

T1 CLASSIC / T1 LINE/ T2 LINE/ T3 LINE/ T4 LINE

Operating instructions

English (US)



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1 Before you begin ...

T1 Classic / T1 Line / T2 Line / T3 Line / T4 Line complies with state-of-the-art technical regulations. T1 Classic / T1 Line / T2 Line / T3 Line / T4 Line complies with the ISO 14457 standard.

1. Read the operating instructions prior to using T1 Classic / T1 Line / T2 Line / T3 Line / T4 Line.
2. Only use T1 Classic / T1 Line / T2 Line / T3 Line / T4 Line for the applications described in the operating instructions.
3. Observe the applicable hygiene standards, occupational safety regulations and accident prevention measures for T1 Classic / T1 Line / T2 Line / T3 Line / T4 Line.
 - T1 LINE ENDO 6 L is used to hold and drive burs for the purposes of rotary processing. The handpiece is intended for dental applications in endodontics and for root canal measurement and is used by trained dental personnel in dental practices and laboratories. The T1 Spray is intended to be used to clean and lubricate dental handpieces.
 - T1 Classic / T1 Line / T2 Line / T3 Line / T4 Line (**except** T1 LINE ENDO 6 L) are intended for use in dental operator to prepare dental cavities for restorations such as fillings, and for cleaning teeth.

Intended use

Contraindications

None

Target group

This product is intended only for use by trained dental personnel in dental practices and laboratories.

Scope of validity of operating instructions

These Operating Instructions are valid for the following instruments:

- T1 Classic from serial number 30001
- T1 LINE from serial number 65 001
- T2 LineT2 Line
- T3 Line
- T4 LINE

1.1 Structure of the document

1.1.1 Labeling of information

Warnings

- To prevent injuries, please observe the warnings.

Warnings are labeled as follows:

DANGER! indicates a danger **leading** to death or serious injury if not avoided.

WARNING! indicates a danger that **may lead** to death or serious injury if not avoided.

CAUTION! indicates a danger that **may lead** to injury if not avoided.

Instructions for use

- To prevent material damage and additional expenses, please observe all instructions for use.

Instructions for use are labeled as follows:

NOTICE! indicates measures for the prevention of material damage.

IMPORTANT: indicates information on the avoidance of additional expenses and other important information.

Tip: indicates information for facilitating work.

1.1.2 Formats and symbols

The formats and symbols used in this document have the following meaning:

✓ Prerequisite 1. First action step 2. Second action step or > Alternative action ↻ Result ► Individual action step	Requests you to do something.
Use of formats and symbols [→ 5].	Identifies a reference to another text passage and specifies its page number.
• List	Identifies a list.

1.1.3 Abbreviations/codes used

FG	Friction grip bur
CA	Contra-angle handpiece bur
HP	Straight handpiece bur

1.2 Service life of Sirona instruments

When used as intended:

T1 CLASSIC / T1 LINE / T2 LINE / T3 LINE

- Non-moving parts of Sirona instruments have a typical service life of approx. 5 years
- Moving parts of Sirona instruments have a typical service life of approx. 3 years

T4 LINE

- Non-moving parts have a typical service life of 3 years
- Moving parts have a typical service life of 1.5 years

No warranty claim can be inferred here, as wear may occur earlier or later than indicated above depending on use, frequency of sterilization, and frequency of maintenance.

2 Safety information

Obligations of the user

- Use only fault-free materials that do **not** deviate from the specified data [→ 10].
- Protect yourself, patients, and others against any foreseeable dangers. To do this, follow the safety information.
- Comply with the Intended use of the equipment.
- You should always keep these operating instructions within reach for further reference.

Preventing the spread of infections and cross contamination

Prevent the spread of infections and cross contamination between patients, users, and third parties. Sterilize equipment after each patient.

Take the appropriate hygiene measures, e.g. wear protective gloves.

Emitted cooling air

The cooling air emitted by the coupling of the motor must have a flow rate of 1.5 - 10 NI/min.

To keep the cooling air coming out of the instrument away from the cavity, silicone disks are available [→ 24].

Instrument head overheating

If the instrument is defective, the area around the instrument head may heat up, thus creating a risk of burning the patient's oral mucosa.

Malfunction or damage

Discontinue use immediately in case of malfunction, unusual or different sounds or damage. Damaged instruments may cause injury. Notify the dental dealer or the manufacturer.

Repair

Do **not** repair the instrument yourself.

Spare and accessory parts

Use only original Sirona parts or parts approved by Sirona. Safe operation is **not** guaranteed for parts that have not been approved by Sirona.

First aid measures in the case of lubricant accidents

General information:	Immediately remove any clothing soiled by the product.
After inhalation:	Supply fresh air; consult doctor in case of complaints.
After skin contact:	If skin irritation continues, consult a doctor.
After eye contact:	Rinse opened eye for several minutes under running water.
After swallowing:	If symptoms persist consult doctor.

For details download the Sirona T1 Spray Material Safety Data Sheet from the Sirona homepage: www.sirona.com

Operating conditions:

Temperature: +10 °C – +30 °C

If you have any questions, please contact your dental depot or the manufacturer.

3 Technical description

3.1 Task

The instrument transmits the driving power and speed of the electric motor or air motor to the preparation tool.

3.2 Functionality

The transmission ratio of the instrument distorts the operating speed of the preparation tool.

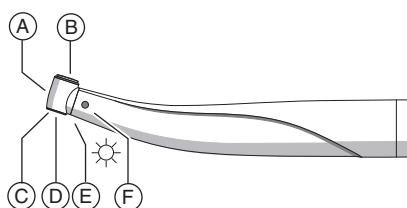
The rotary drive movement is converted into a vibration movement with the CONDENS contra-angle handpiece.

The rotary drive movement is converted into a vertical reciprocating movement of 0.4 or 1.1 mm, respectively, with the EVA contra-angle handpiece.

The rotary drive movement is converted into a clockwise-counterclockwise movement with the ENDO L contra-angle handpiece.

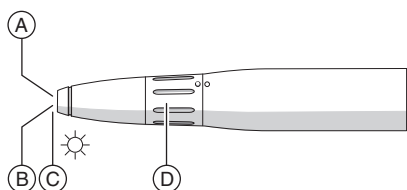
3.3 Structure of T1 CLASSIC

Contra-angle handpiece



A	Instrument head (in this case: standard)
B	Push button
C	Cooling spray outlet
D	Opening of chuck system
E	Light aperture
F	Color coding for gear ratio

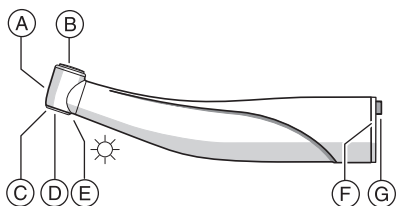
Straight handpiece



A	Opening for the clamping system
B	Cooling spray outlet
C	Light aperture
D	Center part of handpiece

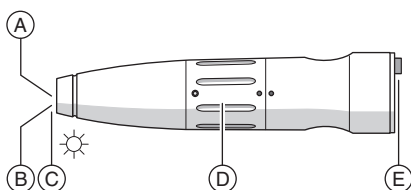
3.4 Structure of T1 LINE

Contra-angle handpiece



A	Instrument head
B	Push button
C	Cooling spray outlet
D	Opening of chuck system
E	Light aperture
F	Color coding for gear ratio
G	ISOslider

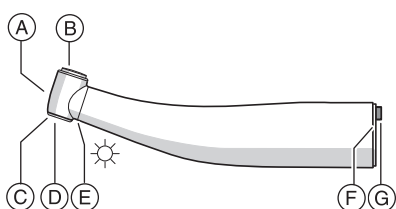
Straight handpiece



A	Opening for the clamping system
B	Cooling spray outlet
C	Light aperture
D	Center part of handpiece
E	ISOslider

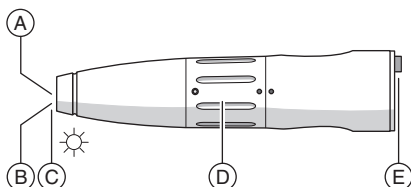
3.5 Structure of T2 LINE

Contra-angle handpiece



A	Instrument head
B	Push button
C	Cooling spray outlet
D	Opening of chuck system
E	Light aperture
F	Color coding for gear ratio
G	ISOslider

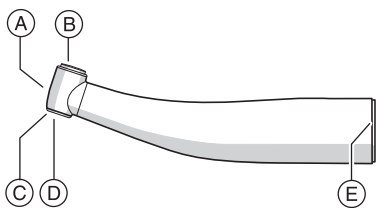
Straight handpiece



A	Opening of chuck system
B	Cooling spray outlet
C	Light aperture
D	Center part of handpiece
E	ISOslider

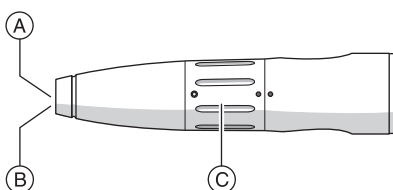
3.6 Structure of T3 LINE

Contra-angle handpiece



A	Instrument head
B	Push button
	Cooling spray outlet
D	Opening of chuck system
E	Color coding for gear ratio

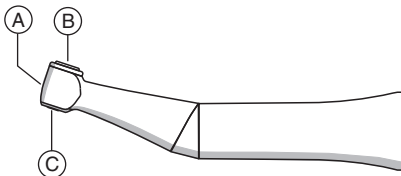
Straight handpiece



A	Opening of chuck system
B	Cooling spray outlet
	Center part of handpiece

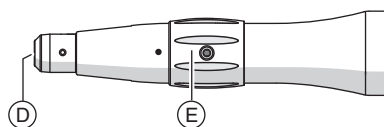
3.7 Assembly of the T4 LINE

Contra-angle handpiece



A	Instrument head
B	Push button
C	Opening for the clamping system

Straight handpiece



D	Opening for the clamping system
E	Center part of handpiece

3.8 Technical data

Contra-angle handpiece

T1 CLASSIC	S 200 L/ S 200 L mini	S 40 L	S 6 L	S 1.6 L
Transmission ratio (approx. specification)	1:5	1:1	6:1	24:1
Color coding for gear ratio	Red		green	green
Maximum motor speed in rpm	40000	40000	40000	40000
Maximum operating speed in rpm	200000	40000	6700	1700
Clamping system	FG	CA	CA	CA
Internal cooling media	x	x	x	x
Back suction stop	-	-	-	-
Light function	x	x	x	x
Apex measurement function	-	-	-	-
Instrument coupling	Sirona	Sirona	Sirona	Sirona

T1 LINE	C 200 L/ C 200 L mini	C 40 L	C 6 L	C 1.6 L
Transmission ratio (approx. specification)	1:5	1:1	6:1	24:1
Color coding for gear ratio	Red		green	green
Maximum motor speed in rpm	40000	40000	40000	40000
Maximum operating speed in rpm	~ 200000	~ 40000	~ 6700	~ 1600
Clamping system	FG	CA	CA	CA
Internal cooling media	x	x	x	x
Back suction stop	x	x	x	x
Light function	x	x	x	x
Apex measurement function	-	-	-	-
Instrument coupling	INTRAmatic LUX®	INTRAmatic LUX®	INTRAmatic LUX®	INTRAmatic LUX®

T2 LINE	A 200 L	A 40 L	A 6 L
Transmission ratio (approx. specification)	1:5	1:1	6:1
Color coding for gear ratio	Red		green
Maximum motor speed in rpm	40000	40000	40000
Maximum operating speed in rpm	~ 200000	~ 40000	~ 6700
Clamping system	FG	CA	CA
Internal cooling media	x	x	x
Back suction stop	x	x	x
Light function	x	x	x

T2 LINE	A 200 L	A 40 L	A 6 L
Apex measurement function	-	-	-
Instrument coupling	INTRAmatic LUX®	INTRAmatic LUX®	INTRAmatic LUX®

T3 LINE	E 200	E 40	E 6
Transmission ratio (approx. specification)	1:5	1:1	6:1
Color coding for gear ratio	Red		green
Maximum motor speed in rpm	40000	40000	40000
Maximum operating speed in rpm	~ 200000	~ 40000	~ 6700
Clamping system	FG	CA	CA
Internal cooling media	x	x	x
Back suction stop	x	x	x
Light function	-	-	-
Apex measurement function	-	-	-
Instrument coupling	INTRAmatic®	INTRAmatic®	INTRAmatic®

T4 LINE	B 40
Transmission ratio (approx. specification)	~ 1:1
Color coding for gear ratio	-
Maximum motor speed in rpm	40000
Maximum operating speed in rpm	~ 40000
Clamping system	CA
Internal cooling media	-
Back suction stop	-
Light function	-
Apex measurement function	-
Instrument coupling	INTRAmatic®

Special contra-angle handpiece

	PROPHY	EVA 04 L/11 L	CONDENS	ENDO L	ENDO 6 L	KM 1.6 L
Available contra-angle handpieces:						
T1 CLASSIC	x	x	-	x	-	x
T1 LINE	x	x	x	x	x	-
T3 LINE	-	x	-	-	-	-
Transmission ratio (approx. specification)	2.4:1	-	-	-	6:1	24:1
Maximum motor speed in rpm	12000	14000	7200	15000	4800	40000
Maximum operating speed in rpm	~ 5000	-	-	-	800	1670
Maximum cycles in rpm	-	~ 6000	~ 12000	~ 1600	-	-
Clamping system	Snap-on & screw-in	-	-	Ø 3.6 - 4.0 shaft / adapter Ø 2.35	CA	CA
Motion	Rotation	Hub 0.4 mm / 1.1 mm	Strokes	±30°	Rotation	-
Internal cooling media	x	x	-	-	-	-
Back suction stop	x	x	-	-	x	-
Light function	x	x	x	x	x	x
Apex measuring function ¹	-	-	-	-	x	-
Instrument coupling	INTRAmatic LUX® Sirona	INTRAmatic LUX® INTRAmatic® Sirona	INTRAmatic LUX®	INTRAmatic LUX® Sirona	INTRAmatic LUX®	Sirona
Available for use in the US	x	x	x	-	x	-

1. Apex measuring function depending on the table top unit

Handpiece

	T1 CLASSIC S H40 L	T1 LINE H 40 L	T2 LINE AH 40 L	T3 LINE EH 40	T4 LINE BH 40
Transmission ratio (approx. specification)	1:1	1:1	1:1	1:1	1:1
Color coding for gear ratio				-	-
Maximum motor speed in rpm	40000	40000	40000	40000	40000
Maximum operating speed in rpm	~ 40000	~ 40000	~ 40000	~ 40000	~ 40000
Clamping system	CA/HP	HP/CA	HP/CA	HP/CA	HP/CA
Internal cooling media	x	x	x	x	-
Back suction stop	-	x	x	x	-
Light function	x	x	x	-	-
Apex measurement function	-	-	-	-	
Instrument coupling	Sirona	INTRAmatic LUX®	INTRAmatic LUX®	INTRAmatic®	INTRAmatic®

Burs

	FG	CA	HP
Shank diameter in mm	1.59 - 1.60	2.334 - 2.35	2.334 - 2.35
Maximum total length in mm	25	34	50
Maximum working diameter in mm	2.1	-	-
Standard	ISO 1797-1, Type 3 ISO 2157	ISO 1797-1, Type 1	ISO 1797-1, Type 2

Treatment center

	T1 Classic / T1 Line / T2 Line / T3 Line / T4 Line
Spray air pressure in bar	2.7
Spray water pressure in bar	2.0
Maximum water temperature in °C	40
Recommended water content in spray in ml/min	> 50

This product bears the CE mark in accordance with the provisions of the Council Directive 93/42/EEC of June 14, 1993 concerning medical devices (MDD).



4 Preparation

4.1 Initial start-up and longer breaks in use

- Sterilize the instrument and accessories prior to startup.
- Clean and maintain the instrument after longer breaks in use.

4.2 Prior to starting the work day

- Purge the water and air channels for 30 seconds.

4.3 Before each patient

1. Purge the water and air channels for 30 seconds.
2. **CAUTION!** Keep the motor running.
Insert the instrument [→ 15].
3. Insert the bur instrument [→ 16].
4. Set a sufficient amount of cooling water (> 50 ml/min).
5. Use filtered water only (< 50 µm).
6. Check the nozzles for blockages and lime deposits, for example, and clean the nozzles if necessary.

CAUTION! Insufficient cooling leads to overheating of the preparation site and damage to the tooth substance. Ensure that the water content is > 50ml/min.

5 Operation

NOTICE! Use only faultless files in order to prevent fatigue fractures of the files as far as possible.

NOTICE! Use only burs and diamond polishers that are sharp and undamaged. Use clean burs and diamond polishers to avoid dirt in the clamping system.

CAUTION! A loose or partially removed bur instrument can come loose from the head or break off. Risk of injury! Therefore the instrument must only be used when the bur instrument is securely clamped at least 10 mm deep.

CAUTION! The handpiece must only be operated with the clamping system closed.

CAUTION! Insufficient cooling leads to overheating of the preparation site and damage to the tooth substance. Ensure that the water content is > 50 ml/min.

CAUTION! Do not pull the patient's cheek back with the contra-angle handpiece while the motor is running. This would actuate the pushbutton, thus creating a risk of burning the patient's oral mucosa.

CAUTION! Always operate the contra-angle handpieces with cooling spray when marked red!

IMPORTANT: For application details and operating data of the different preparation tools, please refer to the information provided by the manufacturer.

IMPORTANT: Let the handpiece idle at least 10 seconds before use.

5.1 Replacing the instrument

CAUTION! The instrument should only be fitted or removed when the motor is at standstill.

NOTICE! Do not use instruments with fiber optics on motors that do not have fiber optics.

Attaching the LINE instrument

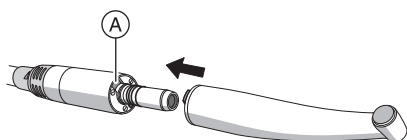
- ✓ The motor is at a standstill.
- 1. Insert the instrument until it snaps into place.
- 2. When using a motor with a light groove (A): turn the instrument until the ISO slider clicks into place.

Attaching the CLASSIC instrument

- ✓ The motor has come to a stop.
- 1. Insert the instrument until it snaps into place.
- 2. Rotate the instrument until it clicks into place.

Removing the instrument

- ✓ The motor is at a standstill.
- Detach the instrument. Do not pull on the supply hose while doing this.



5.2 Inserting and removing burs

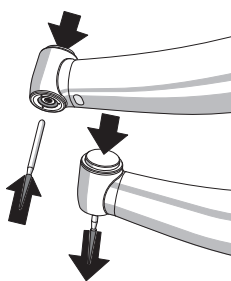
IMPORTANT: Check the push button to make sure it moves freely!

NOTICE! Use only burs and diamond polishers that are sharp and undamaged. Use clean burs and diamond polishers to avoid dirt in the clamping system.

CAUTION! A loose or partially removed bur instrument can come loose from the head or break off. Risk of injury! Therefore the instrument must only be used when the bur instrument is securely clamped at least 10 mm deep.

CAUTION! The handpiece must only be operated with the clamping system closed.

Inserting the friction grip bur



✓ The motor is at a standstill.

1. Press the button and insert the bur up to the stop.
2. Pull on the bur to check that it is firmly attached.

Removing the friction grip bur

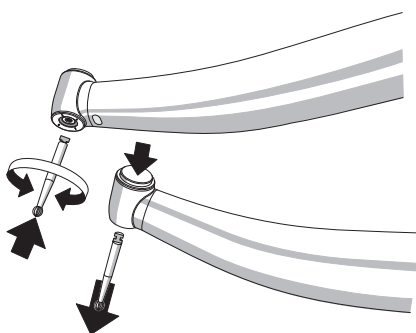
✓ The bur must not be moving.

- Press the button and remove the bur.

Inserting the contra-angle handpiece bur

✓ The motor is at a standstill.

1. Insert the bur without pushing the button.
2. Turn the bur back and forth gently until it snaps into place.
3. Pull and turn the bur to check that it is firmly in place.



Removing the contra-angle handpiece bur

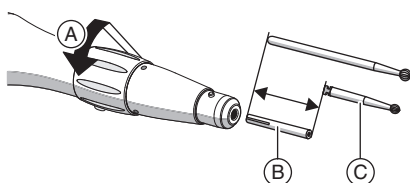
✓ The bur must not be moving.

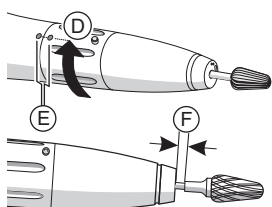
- Press the button and remove the bur.

Inserting the straight handpiece bur

✓ The motor is at a standstill.

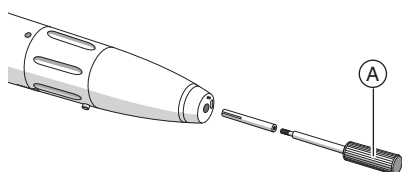
1. Turn the center part of the handpiece in the direction of the arrow (A) up to the stop.
2. If you are using a **contra-angle handpiece bur** (C): insert the mandrel adapter (B) into the handpiece, slit end first. The pin compensates for





the difference in length between straight and contra-angle handpiece burs.

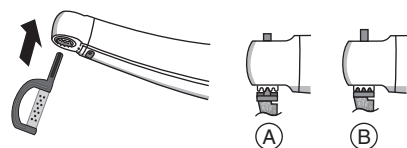
3. Insert the bur until it reaches the stop.
4. Clamp the bur by turning the center part of the handpiece in direction (D) until it reaches the stop.
 - ↳ When the two marks (E) are located opposite each other, the bur is clamped.
 - ↳ When using handpiece burs with a reduced shank: always make sure that the reduced shank does not come into contact with the opening for the chuck (F).
5. Pull and turn the bur to check that it is firmly in place.



Removing the mandrel adapter

1. Screw in the supplied tool (A).
2. Open the clamping system.
3. Pull out the mandrel adapter.

5.3 Inserting and removing an EVA/G5 instrument

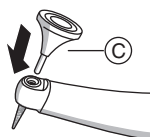


Inserting an EVA/G5 instrument

1. Insert the instrument. In doing so, rotate the instrument from one side to the other.
2. Snap the instrument into the first or second detent position (A/B). The instrument can be freely rotated in the first detent position (A). In the second detent position (B), 10 fixed angle positions can be selected.

Removing an EVA/G5 instrument

- Pull the instrument out by hand. If this proves difficult or the instrument breaks: use the ejector (C) included in the scope of supply.



5.4 Inserting and removing a prophylaxis instrument

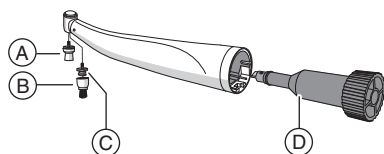
5.4.1 T1 CLASSIC PROPHY

IMPORTANT: Operate the PROPHY contra-angle handpiece only with clockwise rotation.

IMPORTANT: Only use prophylaxis instruments which comply with the ISO 13295 standard.

The PROPHY contra-angle handpiece is protected by a special seal system against penetration of polishing paste.

Inserting a prophylaxis instrument



1. Pull the contra-angle handpiece off of the motor.
2. Insert the PROPHY spray adapter (D) into the contra-angle handpiece until it snaps into place. Hold the driver securely in the contra-angle handpiece with the PROPHY spray adapter.
3. Screw the screw plug (A)/screw-in adapter (C) firmly into the head of the contra-angle handpiece.
4. If you use a screw-in adapter, let the tool (B) snap onto it.
5. Check that the prophylaxis instrument is securely positioned.

Removing a prophylaxis instrument

1. Pull the contra-angle handpiece off of the motor.
2. Insert the PROPHY spray adapter into the contra-angle handpiece until it snaps into place. Hold the driver securely in the contra-angle handpiece with the PROPHY spray adapter.
3. If you use a snap-on cap, pull the tool from the screw-in adapter.
4. Unscrew the screw plug/screw-in adapter.

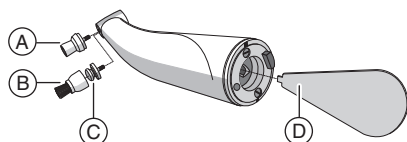
5.4.2 T1 LINE PROPHY

IMPORTANT: Operate the PROPHY contra-angle handpiece only with clockwise rotation.

IMPORTANT: Only use prophylaxis instruments which comply with the ISO 13295 standard.

The PROPHY contra-angle handpiece is protected by a special seal system against penetration of polishing paste.

Inserting a prophylaxis instrument



1. Pull the contra-angle handpiece off of the motor.
2. Hold the driver securely in the contra-angle handpiece with the PROPHY keybar (D).
3. Screw the screw plug (A)/screw-in adapter (C) firmly into the head of the contra-angle handpiece.
4. If you use a screw-in adapter, let the tool (B) snap onto it.
5. Check that the prophylaxis instrument is securely positioned.

Removing a prophylaxis instrument

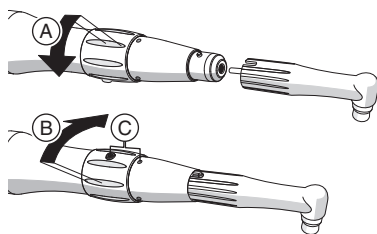
1. Pull the contra-angle handpiece off of the motor.
2. Hold the driver securely in the contra-angle handpiece with the PROPHY keybar.
3. If you use a snap-on cap, pull the tool from the screw-in adapter.
4. Unscrew the screw plug/screw-in adapter.

5.4.3 T4 LINE BH 40

The handpiece fits disposable prophylaxis heads (e.g., Doriot type made of plastic).

CAUTION! The handpiece must only be operated with the clamping system closed.

IMPORTANT: Reduce the maximum operating speed of the handpiece according to the manufacturer's specifications on the dental unit



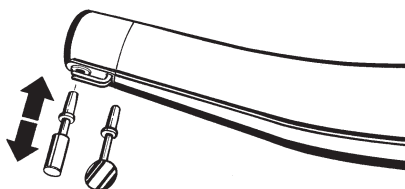
Inserting a prophylaxis instrument

- ✓ The motor is at a standstill.
1. Turn the center part of the handpiece in the direction of the arrow (A) until it reaches the stop.
 2. Insert the drive shaft of the disposable prophylaxis head into the handpiece until it reaches the stop.
 3. Close the clamping system by turning the center part of the handpiece in the direction of the arrow (B) until it reaches the stop.
 - ↳ When the screw and the marking (C) are lined up with one another, the disposable prophylaxis head is clamped.

Removing a prophylaxis instrument

- ✓ The motor is at a standstill.
1. Open the clamping system.
 2. Remove the disposable prophylaxis head.

5.5 Inserting and removing an amalgam condenser instrument



The treatment head has a spring chuck.

Inserting an amalgam condenser instrument

1. Snap the instrument in place behind the retaining clip.
2. Check whether the instrument is firmly seated by pulling it.

Removing an amalgam condenser instrument

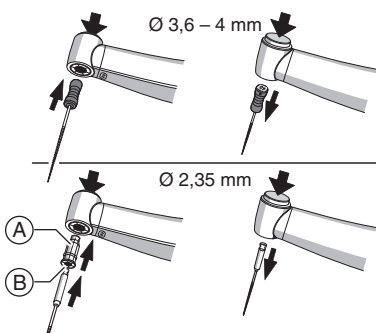
- > Pull out the instrument.

5.6 Inserting and removing ENDO instruments

5.6.1 ENDO L

Inserting ENDO instruments

- ✓ The motor is at a standstill.
1. When using the **contra-angle handpiece instrument**: press the pushbutton and insert the adapter (A) into the head as far as it will go.
 2. While pressing and holding down the pushbutton, insert the ENDO instrument as far as it will go.
 3. Then pull and turn the ENDO instrument to check that it is firmly seated.

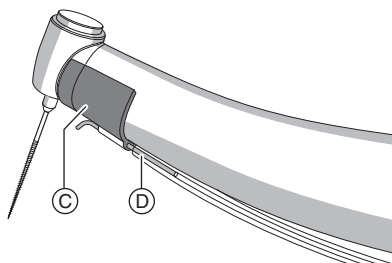


Removing ENDO instruments

- ✓ The motor is at a standstill.
1. Pull the ENDO instrument out while pressing and holding down the pushbutton.
 2. When using the **contra-angle handpiece instrument**: press down the pushbutton and pull out the adapter by its collar (B).

Attaching the spray clip for rinsing and disinfecting

- ✓ The spray water supply at the motor or treatment center is turned off.
1. Attach the silicone hose (D) to the spray clip (C).
 2. Plug the spray clip into the contra-angle handpiece.

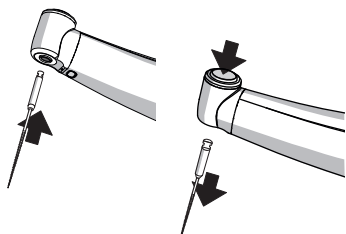


Removing the spray clip for rinsing and disinfecting

- > Remove the spray clip from the contra-angle handpiece.

5.6.2 ENDO 6 L

Inserting ENDO instruments



- ✓ The motor is at a standstill.
- 1. Insert the file by gently rotating it until it snaps into place. In doing so, do **not** press the pushbutton.
- 2. Then pull and turn the file to check that it is firmly seated.

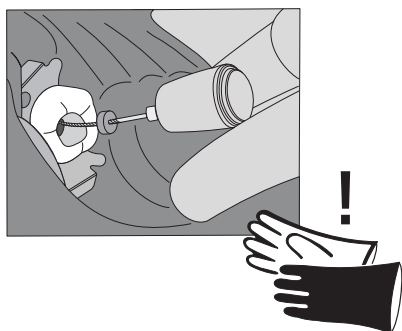
Remove the instrument.

- ✓ The motor is at a standstill.
- > Remove it while pressing and holding down the pushbutton.

5.7 Recommendation for the treatment procedure

NOTICE! Use only faultless files in order to prevent fatigue fractures of the files as far as possible.

- Please observe the operating instructions pertaining to the endometer being used.
- The different file systems require different working techniques. For this reason, please always observe the information provided by the file manufacturer.
- Work without exerting any pressure on the file.
- The ApexLocator function is used to support the root canal preparation process in combination with SIROEndo Pocket. The number of X-rays can be reduced with ENDO 6 L. However, you must always take at least one X-ray to determine the depth for preparatory work. A clinical evaluation including knowledge of the anatomy of root canals is important for interpreting the results.
- If the file seizes in the tooth: remove the file by gently pulling it toward the coronal end. If this is not possible, switch the drive to counterclockwise rotation and pull the file out of the channel.
IMPORTANT: Check the file afterwards for damage or deformation (untwisting) and replace it, where necessary.
- When performing the APEX measurement, wear appropriate insulated gloves. We recommend performing the treatment with a cofferdam, while using an insulating sleeve. This will prevent inaccurate measurements caused by undesired leakage currents. During the measurement, the instrument must not come into contact with the patient's mucosa, metallic tooth restorations, or the mucosal electrode.

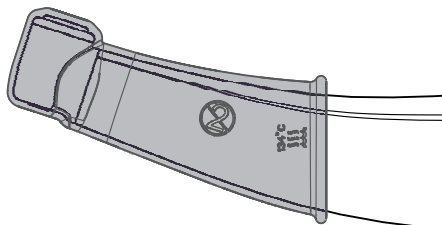


5.8 Mounting and removing the insulating sleeve

NOTICE! Insulating sleeves are only used once. Change the insulating



sleeve after each patient.



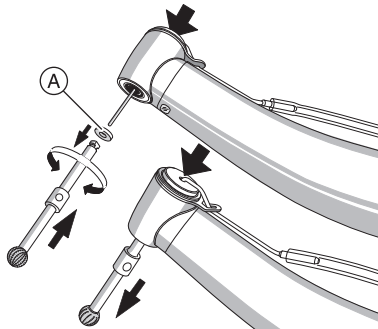
Fitting an insulating sleeve

- ✓ You have sterilized the insulating sleeve.
 - ✓ The motor is at a standstill.
 - ✓ A file is **not** clamped in place.
1. Twist the insulating sleeve carefully this way and that and pull the insulating sleeve fully over the instrument.
 2. Attach the file.

Removing an insulating sleeve

- ✓ The motor is at a standstill.
1. Remove the file.
 2. Remove the insulating sleeve.
 3. Dispose of the insulating sleeve [→ 33].

5.9 Inserting and removing a Kirschner-Meyer instrument

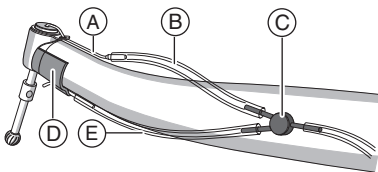


Inserting a Kirschner-Meyer instrument

- ✓ The motor is at a standstill.
- 1. Slide the deflection disk (A) onto the shaft of the burr instrument. The deflection disk prevents the air coming out of the head from entering the open wound.
- 2. Insert the burr instrument without pushing the button.
- 3. Turn the burr instrument back and forth gently until it snaps into place.
- 4. Push the deflection disk up to the head.
- 5. Then pull and turn the burr instrument to check that it is firmly seated.

Removing a Kirschner-Meyer instrument

- ✓ The burr instrument must not be moving.
- Press the button and remove the burr instrument.

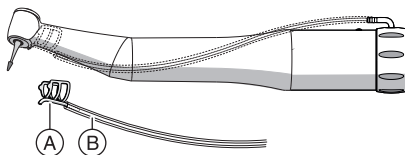


Connecting the hose for the NaCl solution

- Attach the silicone hose (B) to the spray tube (A) for the hollow burr. Additionally, you can cool the burr externally with NaCl solution.
- 1. Plug the spray clip (D) in [→ 24].
- 2. Connect the silicone hoses (B and E) using the distributor (C), as shown in the illustration.

5.10 Connect and remove external spray

Connect external spray



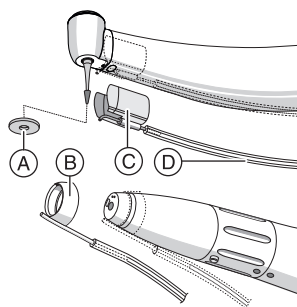
1. Attach the instrument to the motor.
2. Attach the silicone hose (B) to the small tube on the spray clip (A) and motor.
3. Attach the spray clip to the instrument.

Remove external spray

1. Detach the silicone hose from the motor.
2. Remove the spray clip from the instrument.
3. Flush the spray clip and silicone hose with clear water.

5.11 Plugging in and removing the spray clip for NaCl application

Attaching the spray clip



- ✓ The spray water supply at the motor or treatment center is turned off.
1. Plug the silicone hose (D) into the tubule on the spray clip for saline solutions (B/C).
 2. Attach the spray clip to the instrument.

Tip: Use the silicone disks (A), to hold back the cooling air emitted from the instrument from the preparation site and to direct it away laterally.

Detaching the spray clip

1. Remove the spray clip from the instrument.
2. Flush the spray clip and silicone hose with clear water.

6 Follow-up

6.1 After each treatment session

NOTICE! Condition immediately, or at the latest, one hour after treatment.

NOTICE! Only use Sirona T1 Spray.

- ✓ The bur instrument must not be moving.
- ✓ Wear appropriate protective clothing.
- 1. Purge the water and air channels on the treatment center for 30 seconds.
- 2. Remove the bur instrument with tweezers.
- 3. Pre-disinfect directly at the treatment center [→ 26].
- 4. Detach the instrument from the motor.
- 5. Transport the instrument to the hygiene room in a suitable transport container.
- 6. Conduct automatic conditioning. Manual conditioning [→ 27] is possible in exceptional cases if the national/local regulations are followed.
- 7. Apply spray to the instrument [→ 27].
- 8. Sterilize the instrument and accessories [→ 29].

6.2 At the end of the work day

- > Apply spray to the instrument [→ 27].

NOTICE! Do not leave any instruments on the motor overnight, in order to prevent oil from leaking into the electric motor. Never lubricate the electric motor.

7 Conditioning

7.1 Conduct pre-disinfection

- ✓ Wear appropriate protective clothing.
 - ✓ All disinfectants must be approved in your country and have proven bactericidal, fungicidal and virucidal properties. Only use disinfectants with **no** protein-fixing properties.
1. Spray the surface with disinfectant.
 2. Wipe the disinfectant away with a cloth.
- ↳ For further processing, T1 Classic / T1 Line / T2 Line / T3 Line / T4 Line should be dry and free of residue.

In the USA and Canada, for example, you can use:

- CAVICIDE®
- CAVIWIPES™

Please observe the manufacturer's instructions for using instrument disinfectants.

7.2 Automated cleaning and disinfecting

The cleaning and disinfection equipment used must be approved by its manufacturer for the cleaning and disinfection of dental instruments and comply with EN ISO 15883-1 (e.g. 95°C (203°F) and 10 min. holding time).

For further details, refer to the operating instructions supplied with the unit.

- ✓ The instrument is conditioned with a cleaning and disinfection device.
1. Check whether the instrument is clean after conditioning under good lighting (min. 500 lux) and color rendering index (min. 80 Ra).
 2. If it is still dirty, repeat the process.
 - ↳ For further conditioning, the instrument should be dry and free of residue.
 3. Blow the instrument out with max. 3 bar.
 4. Manual care of mechanical parts [→ 27].
 5. Manual care of the push button chuck [→ 28].
 6. Pack the instrument in packaging material suitable for sterilization and storage. e.g. paper/plastic composite packaging.
 7. Sterilize the instrument [→ 29].



7.3 Manual cleaning and disinfection

IMPORTANT: Manual conditioning is possible in exceptional cases if the national/regional regulations are followed. The national/regional regulations are to be checked before.

NOTICE! Condition immediately, or at the latest, one hour after treatment.

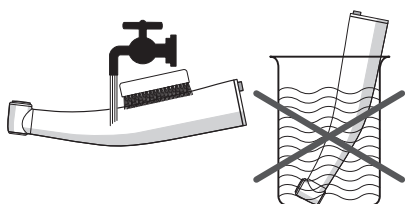
NOTICE! Never clean in an ultrasound bath!

NOTICE! Never immerse in disinfectant solution!

NOTICE! Only use Sirona T1 Spray.

IMPORTANT: Use a soft, clean, and disinfected brush for cleaning.

- ✓ Wear appropriate protective clothing.
- ✓ All disinfectants must be approved in your country and have proven bactericidal, fungicidal and virucidal properties. Only use disinfectants with **no** protein-fixing properties.



1. Brush the instrument under running water (< 38 °C, < 100 °F, at least drinking water quality) and good lighting (min. 500 lux) and color rendering index (min. 80 Ra) until no more dirt can be seen, for at least 10 seconds.
2. Flush the drive channels with spray.
3. Clean and disinfect spray channels with suitable agents and adapters according to manufacturer's instructions.
4. Blow spray channels with suitable adapters out with 2.5 - 3 bar until no more moisture displaces, but at least 10 seconds.
5. Conduct thermal disinfection or unwrapped steam sterilization.
6. Maintain mechanical parts manually [→ 27].
7. Maintain the push button chuck manually [→ 28].
8. Pack the instrument in packaging material suitable for sterilization and storage. e.g. paper/plastic composite packaging.
9. Conduct sterilization [→ 29].

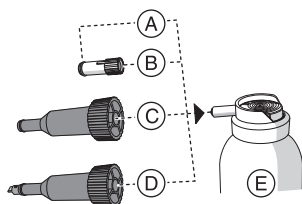
7.4 Manual maintenance

7.4.1 Maintenance of mechanical parts

Intervals

- At least every noon and evening
- Prior to each sterilization
- After every thermal disinfection without integrated maintenance

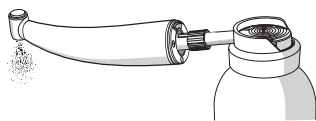
Required accessories



- | | |
|---|--------------------------|
| A | O-ring for spray adapter |
| B | Spray adapter |
| C | Spray adapter, CLASSIC |
| D | Spray adapter, PROPHY |
| E | T1 Spray |

NOTICE! Only use Sirona T1 Spray.

Process



- ✓ The spray adapter is disinfected.
 - ✓ The O-ring on the spray adapter is intact.
1. Fit the spray adapter onto the nozzle of the spray can.
 2. Insert the instrument until it snaps into place and hold it.
 3. Spray the instrument for 1 - 2 seconds.
IMPORTANT: Hold the spray can upright.
 4. Wipe any spray that comes out with a disinfection cloth.
 5. Repeat the process until the spray is clear.

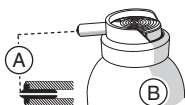
7.4.2 Care of the push button chuck

Use Sirona T1 Spray on the push button chuck to remove deposits and ensure proper functioning of the clamping system.

Interval

- At least once a week

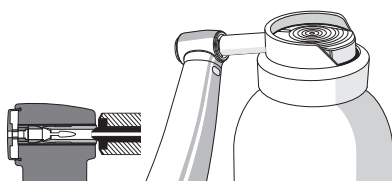
Required accessories



A	Black nozzle insert
B	Sirona T1 Spray

NOTICE! Only use Sirona T1 Spray.

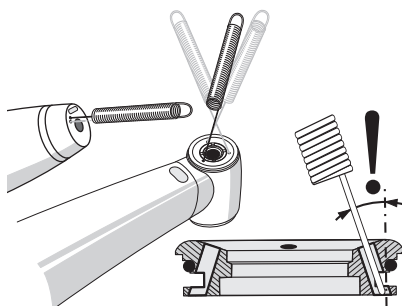
Procedure



- ✓ The instrument is clean and disinfected.
1. Press the contra-angle handpiece head with the chuck firmly against the spray can nozzle.
 2. Spray the chuck for 1 - 2 seconds.
IMPORTANT: Hold the spray can upright.
 3. Wipe any spray that comes out with a disinfection cloth.

7.4.3 Care of cooling-spray nozzle openings

If your tap water is very hard, lime deposits may constrict or completely block the cooling spray nozzles.



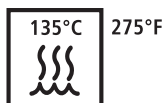
1. Carefully clean the nozzle openings by running a cleaning wire through them.
2. Let the instrument run briefly with cooling spray.

7.5 Sterilizing

Intervals:

- Prior to initial operation
- Prior to each subsequent use

Process



- ✓ The instrument is clean and disinfected.
- ✓ Instrument maintenance is complete.
- ✓ The instrument can be sterilized in packaging suitable for sterilization and storage: paper/plastic composite packaging according to ISO 11607.
- Sterilize the instrument in the steam sterilizer with saturated water vapor.

Temperature: 135° C (275° F)

Overpressure: 2.13 bar (30.89 psi)

Article	Holding time at 135 °C (275° F)	Drying time
Wrapped instruments	10 minutes	30 minutes
Unpackaged instruments	3 minutes	0 - 1 minute

Gravity displacement steam sterilizers are permitted.

NOTICE! Do not exceed 140°C (284°F), even during the drying phase.

After sterilizing

1. Remove the instrument from the steam sterilizer immediately.
CAUTION! The instrument is hot. Risk of burns!
NOTICE! Do **not** attempt to accelerate the cooling process by immersing the instrument in cold water. This can damage your instrument.
2. Store all instruments so that they are protected from contamination.
3. Sterilize again once the storage period has elapsed.

8 Maintenance

Elastomers, e.g. O-rings, must be replaced depending on their degree of wear.

For safety and technical reasons, check the clamping system of the contra-angle and straight handpiece burs on an annual basis.

Check the clamping system of friction grip burs on a monthly basis [→ 30].

8.1 Testing the FG clamping system

Interval

Test the FG clamping system at least once a month.

Required accessories

Chuck tester

Process

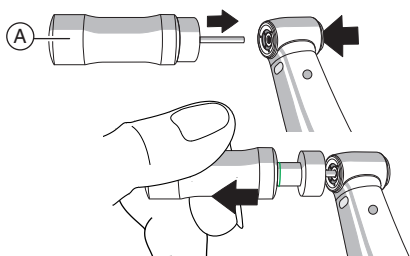
- ✓ The expiry date of the chuck tester (A) has **not** elapsed.
- 1. Insert the chuck tester into the FG clamping system [→ 16].
- 2. Tighten the chuck tester until the marking ring appears (withdrawal force: 22 N)

Does the chuck tester slide out of the chuck before the marking ring appears?

CAUTION! The chuck is defective and the secure fit of the bur is not guaranteed. This may cause injury!

1. Do not use the product.
2. Have the clamping system replaced by a workshop authorized by Sirona.

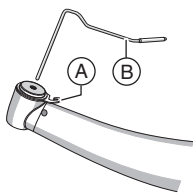
Tip: Record the time and result of the check for your own information.



8.2 Replacing the spray tube on the T1 CLASSIC KM 1.6 L

Removing the spray tube

1. Disengage the spray tube (B) from the bracket (A).
2. Remove the spray tube from the instrument head.



Inserting the spray tube

1. Plug the spray tube into the instrument head.
2. Engage the spray tube in the bracket.

9 Spare parts and consumables

Use only original Sirona parts or parts approved by Sirona.

	REF		REF
T1 spray (6 x 250 ml cans)	59 01 665	Chuck tester	33 27 793
Cleaning wire for spray nozzles	24 00 232	O-ring 8 x 1	70 36 189
Pin for contra-angle handpiece bur	89 17 866	Tool for pin (contra-angle handpiece bur)	89 17 874
Spray adapter	89 17 858	O-ring for spray adapter	70 36 353
Spray adapter, PROPHY	59 10 984	Spray adapter T1 CLASSIC	59 53 930
Ejector for EVA/G5 instrument	41 77 056	ENDO adapter for contra-angle handpiece instruments	58 69 669
Insulating sleeve for Endo 6 L (5 pcs.)	65 39 089	Screw-in adapter, prophylaxis (snap-on)	89 25 679
NaCl coupling for silicone hoses	58 82 618	NaCl silicone hose, thin, 200 mm long, 6 pcs.	59 17 419
NaCl silicone hose, thick, 1.8 m long	89 23 658	Spray clip B for contra-angle handpiece	64 28 374
NaCl spray clip H for straight handpiece	41 74 079	NaCl spray clip C for contra-angle handpiece	41 74 087
Silicone disk for contra-angle handpiece, dia. 2.35 mm	41 76 223		

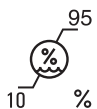
10 Storage and transport conditions



Protect from moisture



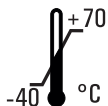
Sensitive contents



Relative humidity



Air pressure



Temperature

After a severe change in temperature, allow sufficient time for acclimation.

11 Disposal

- According to current information, the product does not contain any substances that are hazardous to the environment.
- Disinfect the product prior to disposal.
- Observe the applicable disposal regulations for your area.

We reserve the right to make any alterations which may be required due to technical improvements.

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