

SiroSonic/L/TL PerioSonic



English

Instructions for Use

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1 Before you begin ...

SiroSonic/L/TL, PerioSonic complies with the regulations taking into account the state of the art.

1. Read the operating instructions prior to using SiroSonic/L/TL, PerioSonic.
2. Use SiroSonic/L/TL, PerioSonic only for the applications described in the operating instructions.
3. Observe the hygiene standards, occupational safety regulations, and accident prevention measures applicable to the SiroSonic/L/TL, PerioSonic in your country.

SiroSonic/L/TL, PerioSonic is used to treat dental disease. The treatment is for the following uses:

- Supragingival removal of plaque and tartar (scaling)
- Subgingival removal of plaque and calculus (periodontology)

Intended use

- Cleaning implants as well as metallic or ceramic restorations (implant cleaning tip)
- Irrigation of prepared root canals (endo),
- liquefying of thixotropic composites (CEM),
- Micropreparation
- Retrograde root treatment (endo)

PerioSonic is also used to generate a voltage signal for analysis in PerioScan.

none

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

Contraindications

Target group

Warnings


Instructions for use


1.1 Structure of the document


1.1.1 Labeling of information

- 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.

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

Instructions for use are labeled as follows:

NOTE! 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:

<ul style="list-style-type: none"> ✓ 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 [→ 10].	Identifies a reference to another text passage and specifies its page number.
<ul style="list-style-type: none"> • List 	Identifies a list.

Obligations of the user

2 Safety instructions

- Use only fault-free materials that do **not** deviate from the specified data [→ 17].
- Protect yourself, patients, and others from danger. To do this, observe the safety information.
- Comply with the Intended use of the equipment.
- You should always keep these operating instructions within reach for further reference.
- Use SiroSonic/L/TL, PerioSonic only with Dentsply Sirona devices.
- Use only the torque wrench included with each tip.
- Dispose of the torque wrench with the tip after using them for 12 months.

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.

Prevention of eye damage

The LED is in risk class 2 according to the IEC 62471:2006 standard. The LED emits optical radiation that is potentially hazardous and may be harmful to the eyes! Potential damage to the retina from the blue light emission. Do not stare at the LED for longer periods of time while in operation.

Improper use

Improper use may cause damage to the surface of the patient's teeth.

Malfunction or damage

Discontinue use immediately in case of malfunction, unusual or different sounds or damage. Damaged ultrasonic handpieces and tips may cause injury. Notify the dental depot or the manufacturer.

Potential explosion hazard

Do **not** use this product in areas subject to explosion hazards.

Repair

Ultrasonic tips, spare parts, and accessories

Do **not** repair the ultrasonic handpieces and tips on your own.

Use only original Dentsply Sirona parts or parts/tips approved by Dentsply Sirona. Safe operation is **not** guaranteed for parts/tips that have not been approved by Dentsply Sirona and the handpiece may be damaged.

Endontic work

Use a cofferdam in patients for endodontic work.

Cardiac pacemakers and implanted defibrillators

Dentsply Sirona recommends that ultrasonic handpieces are not to be used if the patient or user has a cardiac pacemaker and/or implanted defibrillator.

Combination with treatment centers

Use the Dentsply Sirona ultrasonic handpieces only in combination with a Dentsply Sirona treatment center. There is a risk of injury when used in combination with treatment centers from other manufacturers.

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

3 Technical description

3.1 Task

The ultrasonic handpiece converts electrical energy into a translational movement and transfers it to the ultrasonic tip, thus oscillating the distal end of the ultrasonic tip.

3.2 Calculus detection - functioning

Calculus can be detected only with the SiroPerio 4PS ultrasonic tip in combination with the PerioSonic handpiece on the Dentsply Sirona PerioScan.

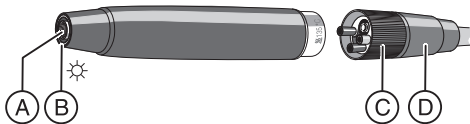
Detection: The physical vibration patterns of the ultrasonic tip are analyzed and the contacted tooth surface is thus detected. The substance or material of the tooth being examined, not the surface structure, is detected here.

The detection mode is automatically activated when the PerioSonic handpiece is removed from its holder on the PerioScan.

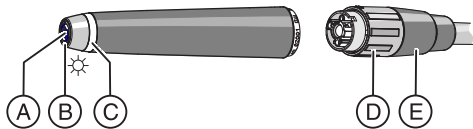
When the software detects root surfaces, the signal ring lights up green – if calculus is detected, the signal ring lights up blue. Observe the notes in the operating instructions for PerioScan.

3.3 Ultrasonic handpiece design

SiroSonic/L/TL design



A	Tip mount
B	Light aperture (only for SiroSonic L/TL)
C	Control ring
D	Hose nut

**PerioSonic design**

A	Tip mount
B	Light aperture
C	Signal ring
D	Control ring
E	Hose nut

3.4 Technical Data

Ultrasonic handpiece

	SiroSonic	SiroSonic L	SiroSonic TL	PerioSonic
Oscillation frequency in kHz	25 - 32	25 - 32	25 - 32	25 - 32
Spray function	x	x	x	x
Spray water regulation at the coupling	x	x	x	x
Light function	-	x	x	x
Amplitude of the instrument tip in μm ($100\mu\text{m} = 0.10\text{mm}$)	~ 180 (with tip 4L)	~ 180 (with tip 4L)	~ 180 (with tip 4L)	~ 200 (with tip 4 PS)

Dental treatment center

		SiroSonic	SiroSonic L¹	SiroSonic TL
Lamp voltage in V, at the lamp		-	3.6 ±0.1	-
Lamp current in A				
	Halogen lamp	-	-	-
	LED	-	0.03	0.03
Spray water flow in ml/min (with fully-opened water regulator)		60	60	60
Spray water pressure in bar (without tip)		2 ±0.2	2 ±0.2	2 ±0.2
Recommended water content in spray in ml/min		> 30 ml/min	> 30 ml/min	> 30 ml/min

¹ Depending on the treatment center and its accessories

PerioScan

		PerioSonic
Lamp voltage in V, at the lamp		-
Lamp current in A		
	Halogen lamp	-
	LED	0.03
Spray water flow in ml/min (with fully-opened water regulator)		60
Spray water pressure in bar (without tip)		1 - 1.5
Recommended water content in spray in ml/min		> 30 ml/min

Operating conditions

Ambient temperature	10 °C - 40 °C (50 °F - 104 °F)
Relative humidity	30 % - 95 %
Air pressure	700 hPa - 1060 hPa

3.5 Power settings for ultrasonic tips

The tips can be used at the following maximum power:

	SiroSonic	SiroSonic L	SiroSonic TL	PerioSonic
Tip no. 1L	100%	100%	100%	100%
Tip no. 2L	100%	100%	100%	100%
Tip no. 3L	≤ 80%	≤ 80%	≤ 80%	≤ 80%
Tip no. 4L	≤ 70%	≤ 70%	≤ 70%	≤ 70%
SiroPerio PE 1	≤ 70%	≤ 70%	≤ 70%	≤ 70%
SiroPerio PE 2	100%	100%	100%	100%
SiroPerio PE 3	100%	100%	100%	100%
SiroPerio 4 PS	≤ 80%	≤ 80%	≤ 80%	≤ 80%

	SiroSonic	SiroSonic L	SiroSonic TL	PerioSonic
SiroPerio PE 5	100%	100%	100%	100%
SiroPerio PE 6	100%	100%	100%	100%
SiroPrep tips	100%	100%	100%	100%
SiroRetro tips	100%	100%	100%	100%
CEM tip	≤ 10%	≤ 10%	≤ 10%	≤ 30%
SiroImplant IP 1	≤ 70%	≤ 70%	≤ 70%	≤ 70%
Endo tip no. 5	≤ 4%	≤ 4% or Endo function 1e - 5e ^I	Endo function 1e - 5e ^{II}	≤ 4%

^I in combination with the Intego/Intego Pro treatment center

^{II} in combination with the Teneo/Sinius treatment center

4 Preparation

4.1 Initial start-up and longer breaks in use

- An adequate normalization phase must be maintained following transport before initial operation.
- Sterilize the ultrasonic handpiece and accessories prior to startup [→ 77].
- Clean and maintain the ultrasonic handpiece after longer breaks in use.

4.2 Prior to starting the work day

- Flush the water paths for 2 minutes.

4.3 Before each patient

1. Flush the water paths for 30 seconds.
2. Attach the ultrasonic handpiece [→ 27].

3. Insert the ultrasonic tip [→ 31].
4. Check the ultrasonic tip for usability [→ 33].
5. Set a sufficient amount of cooling water (> 30 ml/min) [→ 36].
6. Use filtered water only (< 80 µm).
7. Check the nozzles for blockages and lime deposits, for example, and clean the nozzles if necessary.
8. Make sure the ultrasonic tip fits tightly.
9. Perform an axial load test of the ultrasonic tip.

Tip: Use a cofferdam in patients for endodontic work.

5 Operation

NOTE! Tips wear out and can bend resulting in a performance loss and risk of breakage. Use only ultrasonic tips that are **not** worn or bent. Do **not** reshape bent tips.

⚠ CAUTION! A loose ultrasonic tip can come loose from the thread or break off. This may cause injury! Use the ultrasonic handpiece only if the ultrasonic tip is firmly clamped in place.

⚠ CAUTION! Insufficient cooling leads to overheating of the preparation site, the tip, and the handpiece. Ensure that the water flow rate is > 30 ml/min.

Exception: The water flow is blocked in tip no. 6L (CEM). When using tip no. 6L (CEM), the scaler can be operated only intermittently.

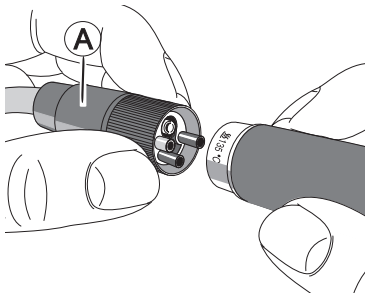
⚠ CAUTION! You can puncture your hand with an ultrasonic handpiece when the tip is inserted. This may cause injury! When the ultrasonic handpiece is not in use, remove the tip or attach the torque wrench for protection.

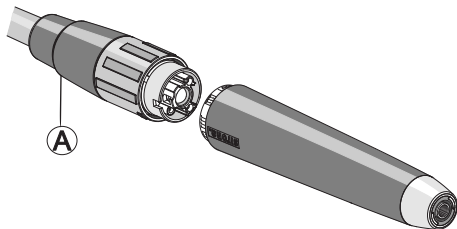
⚠ CAUTION! Potentially hazardous optical radiation may cause harm to the eyes. Do **not** stare at the LED for longer periods of time while in operation.

5.1 Connecting the ultrasonic handpiece to the supply hose

Connecting SiroSonic/L

1. Compare the hole pattern in the handpiece with the small tubes in the hose coupling.
2. Hold the hose nut (A) firmly and insert the ultrasonic handpiece until it clicks audibly into place.





Connecting SiroSonic TL and PerioSonic

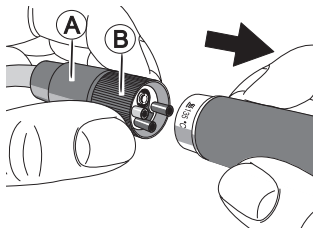
1. Align the Dentsply Sirona logo with the recess on the hose coupling.
2. Hold the hose nut (A) firmly and insert the ultrasonic handpiece until it clicks audibly into place.

5.2 Detaching the ultrasonic handpiece from the supply hose

⚠ CAUTION! Do **not** detach the ultrasonic handpiece from the supply hose while it is in operation. This may cause injury!

Detaching SiroSonic/L

- ✓ The ultrasonic handpiece is **not** in operation.
- 1. Hold the supply hose by the control ring (B) and **not** by the hose nut (A)!
- 2. Detach the ultrasonic handpiece from the supply hose. Do **not** pull on or hold the supply hose.



Detaching SiroSonic TL/PerioSonic

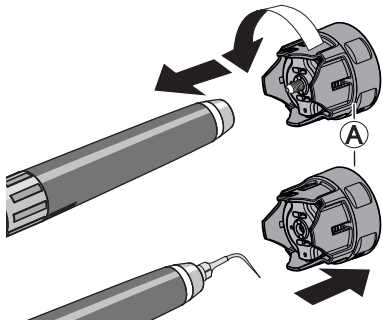
- ✓ The ultrasonic handpiece is **not** in operation.
- Detach the ultrasonic handpiece from the supply hose. Do **not** pull on or hold the supply hose.

5.3 Inserting and removing the ultrasonic tip

Inserting the ultrasonic tip

- ✓ The ultrasonic handpiece is **not** in operation.
- 1. Insert the ultrasonic tip into the torque wrench (A).
- 2. Slowly screw the ultrasonic tip into the torque wrench counterclockwise. Turn a quarter revolution past the resistance.
- 3. Detach the torque wrench.
- 4. Check the ultrasonic tip [→ 33].

⚠ CAUTION! A loose ultrasonic tip can come loose from the thread or break off. This may cause injury! Use the ultrasonic handpiece only if the ultrasonic tip is firmly clamped in place.



Removing the ultrasonic tip

- ✓ The ultrasonic handpiece is **not** in operation.
- 1. Attach the torque wrench to the ultrasonic tip.
- 2. Unscrew the ultrasonic tip by turning it clockwise.

5.4 Checking the ultrasonic tip for usability

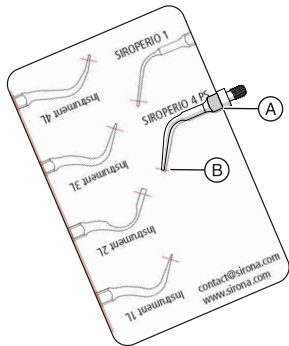
- ✓ The included checkcard for tips is available.
- 1. Place the ultrasonic tip against the tip gauge with the edge (A) of the wrench surface positioned as shown in the corresponding illustration.
- 2. Check the ultrasonic tip based on the checkcard. The marking lines (B) show the maximum permissible wear.

Does the ultrasonic tip deviate from the contour of the illustration on the checkcard or is the ultrasonic tip shorter than the marking line?

1. Adjust the usage of the ultrasonic tip.
2. Dispose of the ultrasonic tip and associated torque wrench.

The illustrations on the checkcard show the correct tip shapes and lengths.

Any deviation from the contour shown on the figure represents an unacceptable distortion of the shape.



5.5 Adjusting the power for the ultrasonic tips

⚠ CAUTION! Wear and bending of the tips lead to loss of performance and hazards. Tips may **not** be reshaped. There is a risk of breakage during operation and performance may be lost or reduced.

The output power of the scaler tips is approx. 10 W; that of the CEM tip is approx. 1 W.

IMPORTANT: The user is responsible for setting the appropriate power level according to the medical indication.

➤ Adjust the power of the ultrasonic tip on the treatment center or PerioScan. Observe the power settings [→ 21].

⚠ CAUTION! Endodontic tip no. 5 may be operated only at a power level of max. 4%! (SiroSonic/L, PerioSonic)

⚠ CAUTION! Endodontic tip no. 5 may be operated only after activating the Endo function (Endo key on the touchscreen of the treatment center)! The options 1e to 5e can be preset. Please note

that these values do **not** coincide with the values 1 to 5 in ultrasonic operation (SiroSonic TL with Teneo and Sinius, SiroSonic L with Intego / Intego Pro).

5.6 Adjusting the cooling spray

- Adjust the flow rate of the cooling water using the control ring (A) (> 30 ml/min).

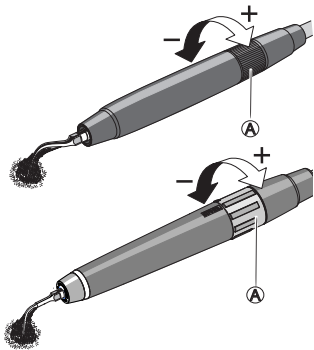
Use the control ring (A) to regulate the water quantity in the SiroSonic/L/TL. Turn the ring toward the + sign until perceptible resistance indicates maximum water flow is set. Turning to the - sign reduces the water flow until it is completely shut off.

Tip: You can measure the amount of cooling water with a measuring cup and watch.

Exception: The water flow of the CEM tip no. 6L is blocked. When using CEM tip no. 6L, the ultrasonic handpiece can be operated only intermittently.

Water flow rate

... for SiroSonic and SiroSonic L:



The water flow is **reduced** and lastly **shut off** when the control ring is turned in a clockwise direction.

The **maximum water flow** is set when the control ring is rotated left until perceptible resistance. If the control ring is turned beyond the resistance, the water flow is reduced until it shuts off.

... for SiroSonic TL and PerioSonic:

The Dentsply Sirona logo is used as a marking for the SiroSonic TL and PerioSonic.

The **minimum water flow** is set when the control ring is turned in a clockwise direction until it reaches the stop.

The **maximum water flow** is set when the control ring is rotated left to the stop.

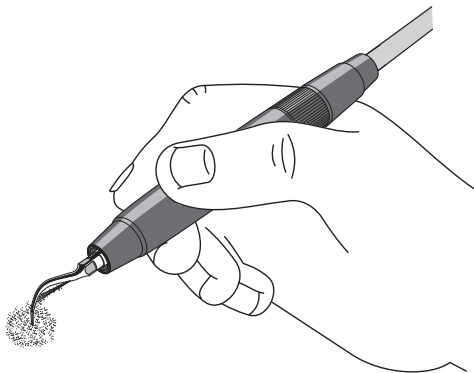
5.7 Treatment

⚠ CAUTION! Always check for proper fit and condition of the sealing ring before using the SiroSonic TL and PerioSonic. If the sealing ring of SiroSonic TL or PerioSonic is defective, damaged or worn, this can lead to false detection results!

⚠ CAUTION! When the ultrasonic handpiece is not in use, detach the ultrasonic tip and attach the torque wrench to protect the tip. Make sure to keep the instrument away from soft tissues such as cheeks, lips, tongue, etc. during treatment. Contact causes friction that can lead to burns!

Select the most suitable instrument tip for each treatment.

The optical and acoustic display of calculus removal in connection with the PerioScan equipment is possible only with instrument tip SiroPerio 4 PS (PS 4). For this, the distal end of the tip must always touch the root surface and may not be too worn.

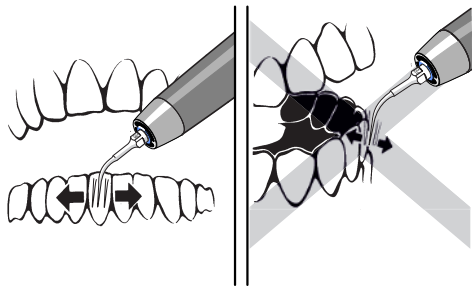


IMPORTANT: Change tips only when the device is switched off.
[→ 31]

The illustration to the left shows how the handpiece should be held during treatment.

Always keep the instrument in motion, either up and down the tooth or across the proximal surface in lingual or buccal direction away from the tooth.

⚠ CAUTION! Always hold the instrument so that the motion of the tip is parallel to the tooth surface. Only slight pressure should be applied.



NOTE! During treatment, do not allow the device to come into contact with metal/ceramic restoration (except when using a CEM tip). Prostheses may otherwise become loose due to the high-frequency ultrasonic vibrations.

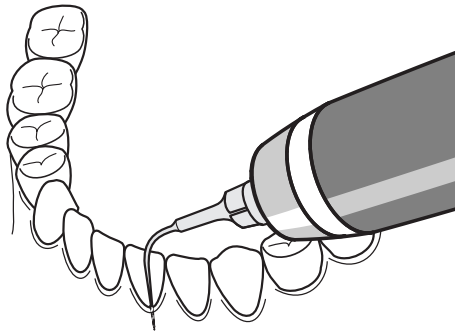
Since the instrument causes only slight pain, it is also ideal for the treatment of acute, painful periodontitis.

Use effective suction to ensure good visibility of the treatment area.

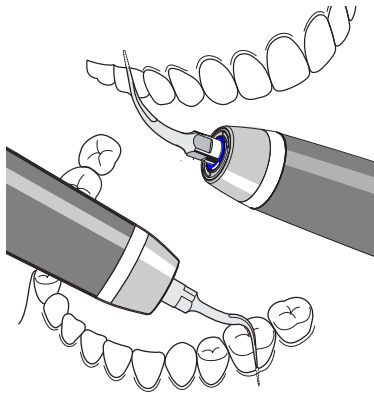
5.7.1 Use of SiroPerio tips

For removing calculus in subgingival operation, even in deep gingival pockets. SiroPerio tips allow optimal access to all regions, so that you can efficiently remove calculi while at the same time preserving healthy tooth substance.

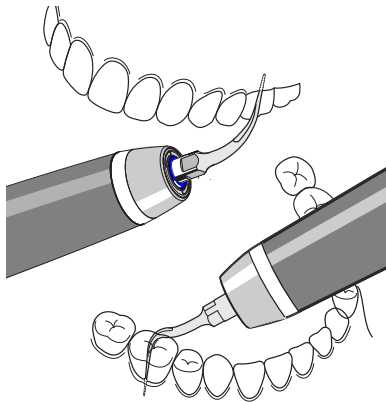
The following tips are used for rinsing and scaling roots in deep gingival pockets:



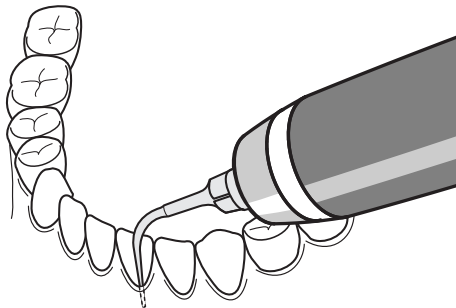
SiroPerio PE 1 - straight, narrow



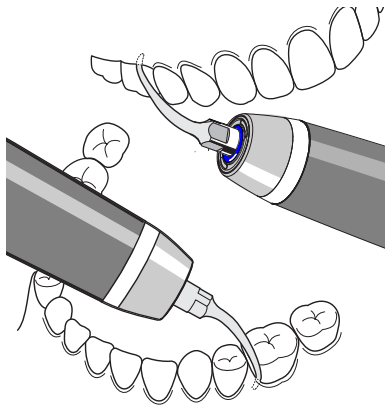
SiroPerio PE 2 - bent to the right, for posterior teeth



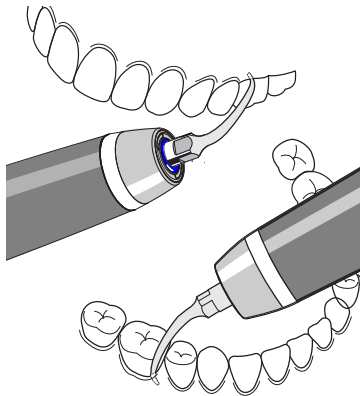
SiroPerio PE 3 - bent to the left, for posterior teeth



SiroPerio 4 PS - straight,
also especially for use with PerioScan for detection.



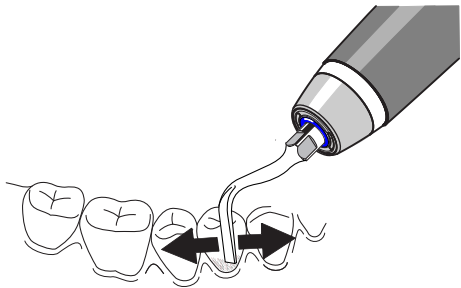
SiroPerio PE 5 - bent to the right, for posterior teeth

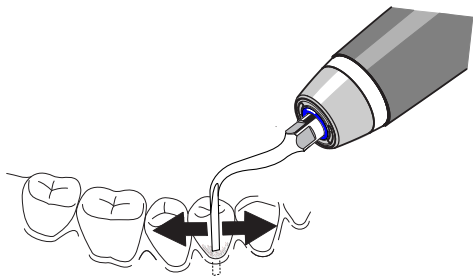


SiroPerio PE 6 - bent to the left, for posterior teeth

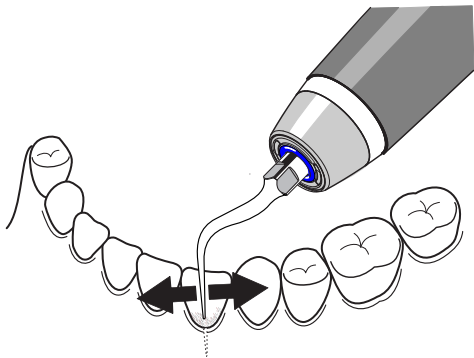
5.7.2 Using scaling tips

Scaling tip no. 1L - for course cleaning, lingual, buccal
IMPORTANT: Do not use proximally!



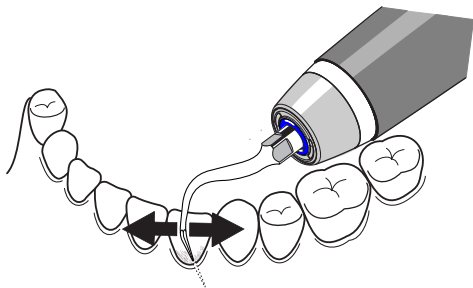


Scaling tip no. 2L - versatile for, lingual, buccal, proximal use



Scaling tip no. 3L - for universal use on either side

Tip: The tip is especially suitable for removing supragingival plaque and for the interdental space.

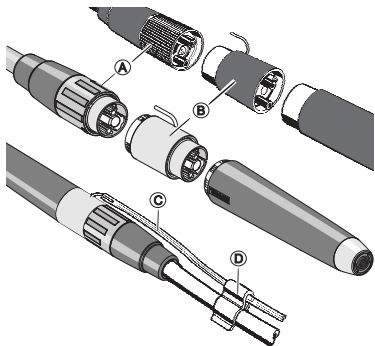


Scaling tip no. 4L

Tip: The tip is particularly suitable for supragingival and subgingival tooth surfaces, dental necks and for the interdental space. The rear molars are more accessible with this tip.

5.7.3 Use of SiroRetro tips

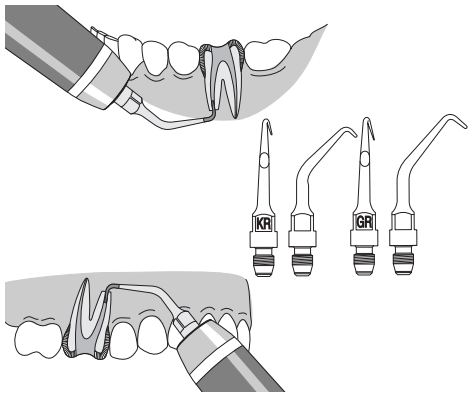
SiroRetro tips are intended for use in retrograde root treatment (invasive procedure). Before treatment, the spray adapter must be inserted for supplying external irrigation fluids (e.g. NaCl).



Inserting the spray adapter

- ✓ Cooling water flow is cut off using control ring (A).
- 1. Detach the handpiece from the hose.
- 2. Insert the spray adapter (B) between the hose coupling and the handpiece. Note the connector and hole pattern.
- 3. Attach the NaCl hose (C) and fasten it to the supply hose with the hose clamps (D).

SiroRetro tips are selective diamond-coated tips for retrograde apicoectomy. To simplify access to the preparation site, the tips are angled approx. 20° (to the right or to the left).

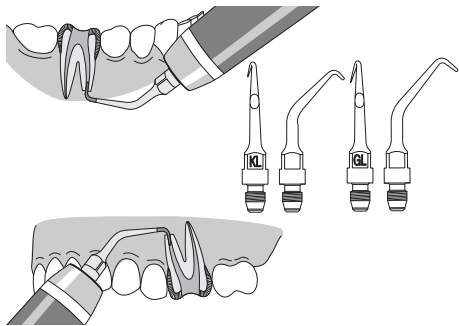


SiroRetro KR

Short, angled to the right for treatment of the left lower jaw or right upper jaw.

SiroRetro GR

Long, angled to the right for treatment of the left lower jaw or right upper jaw.



SiroRetro KL

Short, angled to the left for treatment of the right lower jaw or left upper jaw.

SiroRetro GL

Long, angled to the left for treatment of the right lower jaw or left upper jaw.

Wear:

To ensure successful treatment, make sure that the tip is sufficiently coated with diamonds prior to use.

5.7.4 Use of SiroPrep tips

SiroPrep tips are equipped with grinding blocks to remove proximal caries in distal and mesial areas.

D1 – Small tip for removing distal caries

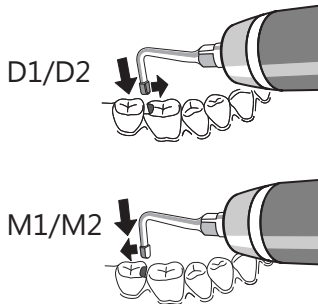
D2 – Large tip for removing distal caries

M1 – small tip for removing mesial caries

M2 – Large tip for removing mesial caries

Wear:

To ensure successful treatment, make sure that the ultrasonic tip has a sufficient diamond coating prior to use.



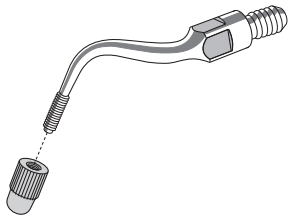
5.7.5 Using CEM set no. 6L

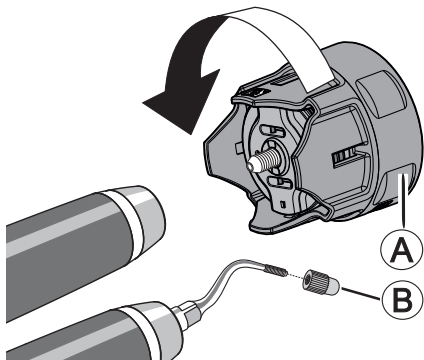
The CEM tip is used to insert inlays (e.g. CEREC) using hardening composites with thixotropic properties.

⚠ CAUTION! The CEM tip should be used only at max. 30% (PerioSonic) or max. 10% (SiroSonic/L/TL) capacity, followed by a cool-down period. Make sure the handpiece does not overheat.

⚠ CAUTION! Too high a power rating can cause the attachment to come loose. A loose attachment can overheat. Ensure that the CEM cap is tightly screwed and does not come loose during treatment. Be sure to observe the maximum permissible capacity (see above).

⚠ CAUTION! The water flow is blocked when the CEM tip is used. Operate the handpiece only intermittently for a few seconds.





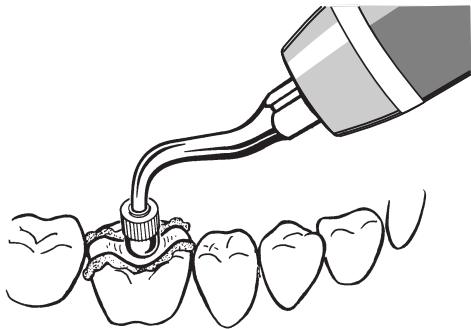
Inserting the ultrasonic tip

- ✓ The ultrasonic handpiece is not in operation.
- 1. Rotate the ultrasonic tip slowly using the torque wrench (A) up to a quarter revolution past the resistance. The water flow is shut off automatically.
- 2. Screw cap (B) manually firmly onto the ultrasonic tip.

If the cap shows signs of wear, replace it with a new one. The cap can be used and sterilized repeatedly.

⚠ CAUTION! Make sure the cap is in perfect condition and fits tightly prior to every use.

⚠ CAUTION! The ultrasonic handpiece can overheat. Operate the ultrasonic handpiece only intermittently.

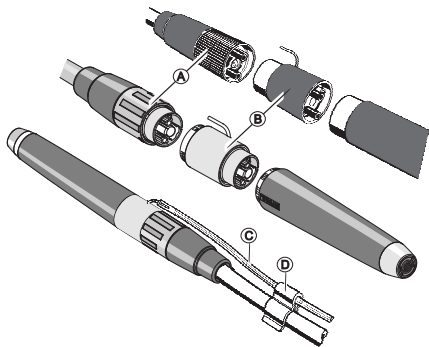


Use

1. Place the tip on the inlay without applying any pressure.
2. Switch the handpiece on for a few seconds to greatly reduce the viscosity of the hardening composite (thixotropy) and insert the inlay almost without using pressure.
 - ↳ After the handpiece is switched off, the hardening composite immediately returns to its normal consistency, i.e. excess material does not flow away and can be easily removed.
3. Repeat the process to check whether any surplus composite material can be expelled.
 - ↳ Curing takes place according to the composite manufacturer's specifications.

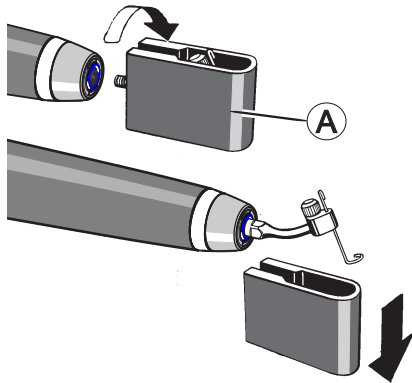
5.7.6 Using the endo tip no. 5

This ultrasonic tip is intended for flushing the prepared root canals (invasive procedure). Before treatment, the spray adapter must be inserted for supplying external irrigation fluids (e.g. NaCl).



Inserting the spray adapter

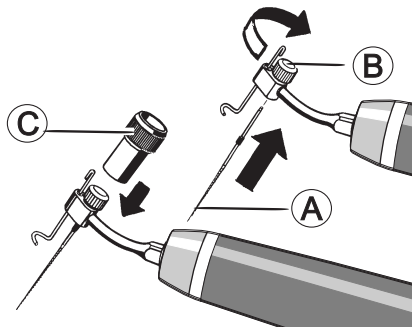
- ✓ Cooling water flow is cut off using control ring (A).
- 1. Detach the ultrasonic handpiece from the supply hose.
- 2. Insert the spray adapter (B) between the hose coupling and the handpiece. Note the connector and hole pattern.
- 3. Attach the NaCl hose (C) and fasten it to the supply hose with the hose clamps (D).



The **endo tip no. 5** is used for flushing the prepared root canals.

1. Screw the ultrasonic tip in manually using the endo key (A).
2. Then remove the endo key.

⚠ CAUTION! Screw and unscrew the endo tip no. 5 using only the endo key (A) and only at the square. Never screw or unscrew at the head.



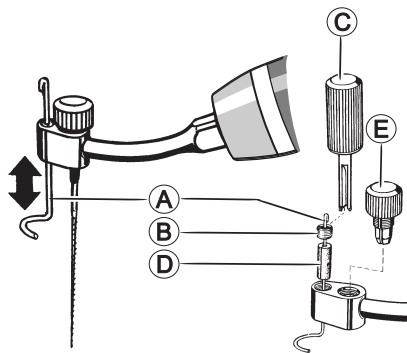
Seating the root canal instrument

1. Insert the root canal instrument (A) into the chuck (B) up to the stop and tighten the knurled screw manually.
2. Tighten the knurled screw using the knurled bushing (C).

⚠ CAUTION! Make sure the file is in perfect condition and fits tightly prior to every use.

⚠ CAUTION! The endo tip no. 5 may be operated only with a power level of maximum 4% (SiroSonic/L and PerioSonic).

IMPORTANT: Endo tip no. 5 may be operated only after activating the Endo function (Endo button on the touchscreen of the treatment center)! The options 1e to 5e can be preset. Please note that these values do not coincide with values 1 to 5 in ultrasonic operation. (SiroSonic TL with Teneo and Sinius, SiroSonic L with Intego / Intego Pro).

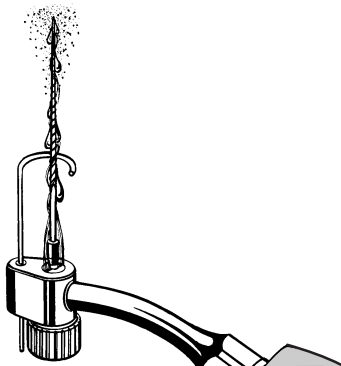


Setting the depth stop

1. Set the depth stop (A), e.g. after an intraoral X-ray, by pulling out or pushing in the depth stop up to the required depth manually.
2. Turn screw (B) with the wrench (C) to set the displacement force of the depth stop.

Tip: If the slotted hose piece (D) is worn, you can unscrew the screw (B) and insert a new hose piece.

Tip: A defective chuck (E) can also be unscrewed and replaced.



Adjusting the rinsing medium

1. Set the NaCl pump.
2. Hold the ultrasonic handpiece with the instrument pointing up.
3. Adjust the flow of the rinsing medium so that it rises **up to the tip of the instrument**.

⚠ CAUTION! Risk of injury! When the ultrasonic handpiece is not in use, detach the root canal instrument and ultrasonic tip no. 5.

Tip: For optimal spray quality, make sure that the color marking of the ultrasonic tip is not fastened directly to the chuck.

5.7.7 Use of the SiroImplant tip

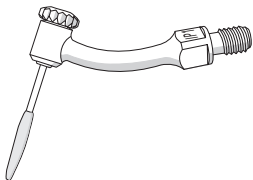
⚠ CAUTION! SiroImplant IP 1 may be used only on SiroSonic/L/TL and PerioSonic.

This tip is used for biofilm management and for cleaning implants as well as metallic and ceramic restorations.

Prior to every use of the tip:

- Check to make sure that no metal is visible underneath the coating. If this is the case, replace the cleaning insert.
- Tighten the holder of the cleaning insert with the knurled bushing and check the cleaning insert to make sure that it is firmly attached.

We recommend placing a cofferdam to prevent swallowing or inhalation of a detached or broken-off fragment. If it is not possible to place a cofferdam, the patient should breathe through his or her nose.



Work with a maximum rinsing medium flow rate in order to ensure sufficient cooling of the plastic sheathed cleaning pin.

Insert IP 1 can be used and sterilized repeatedly.

6 Postprocessing

6.1 After each treatment session

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

⚠ CAUTION! You can puncture your hand with an ultrasonic handpiece when the tip is inserted. This may cause injury! When the ultrasonic handpiece is not in use, remove the tip or attach the torque wrench for protection.

- ✓ The ultrasonic handpiece is not in operation.
- ✓ Wear appropriate protective clothing.
- 1. Purge the water paths directly at the treatment unit for 30 seconds.
- 2. Predisinfect directly at the treatment center [→ 70].
- 3. Unscrew the ultrasonic tip using the torque wrench.

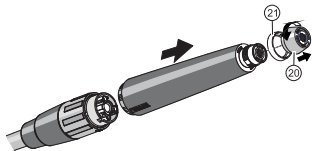
4. Detach the ultrasonic handpiece.
5. Transport the ultrasonic handpiece, ultrasonic tip and torque wrench to the hygiene room in a suitable transport container.
6. Conduct automatic conditioning [→ 71]. Manual conditioning [→ 75] is possible in exceptional cases if the national/local regulations are followed.
7. Sterilize the ultrasonic handpiece and accessories [→ 77].

7 Reprocessing

7.1 Conduct pre-disinfection

NOTE! Do not use any strong acidic or alkaline solutions ($5 < \text{pH} < 9$) or solutions containing chlorine.

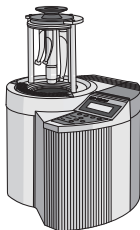
- ✓ Wear appropriate protective clothing.
 - ✓ All disinfectants must be approved in your country and have proven bactericidal, fungicidal and virucidal properties. Use only disinfectants with **no** protein-fixing properties.
1. Unscrew the screw-on cap (20) or signal ring (21) of the SiroSonic TL or PerioSonic.
 2. Spray the surface with disinfectant.
 3. Wipe the disinfectant off with a cloth.
- ➔ For further processing, the instruments should be dry and free of residue.



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

7.2 Automated cleaning and disinfection ...

7.2.1 ... with a DAC Universal



We recommend using the **Dentsply Sirona DAC UNIVERSAL** for automated cleaning and disinfection (inside and outside).

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

IMPORTANT: Unscrew instrument tips and screw-on cap with sealing ring and signal ring, and blow the remaining water out the handpiece and tip.

- ✓ The instruments are reprocessed using the DAC UNIVERSAL.

1. Check whether the instruments are clean after conditioning under good lighting (min. 500 lux) and color rendering index (min. 80 Ra).
2. If they are still dirty, repeat the process.
 - ↳ For further conditioning, the instruments should be dry and free of residue.
3. Pack the instruments in packaging material suitable for sterilization and storage. e.g. paper/plastic composite packaging.
4. Conduct sterilization [→ 77].

7.2.2 ... with cleaning and disinfection equipment

NOTE! Do not use any strong acidic or alkaline solutions ($5 < \text{pH} < 9$) or solutions containing chlorine.

IMPORTANT: Unscrew instrument tips and screw-on cap with sealing ring and signal ring, and blow the remaining water out the handpiece and tip.



The SiroSonic/L/TL, PerioSonic, torque wrench and ultrasonic tips can also be cleaned and disinfected in suitable cleaning and disinfection equipment.

NOTE! The ultrasonic tips can be cleaned and disinfected on the outside **only after removing them** from the torque wrench.

The cleaning and disinfection equipment used must be approved by its manufacturer for the cleaning and disinfection of dental instruments and comply with ISO 15883-1/-2 (e.g., 95°C (203°F) and 10 min. holding time).

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

- ✓ The instrument is conditioned with a cleaning and disinfection device.
- 1. Check whether the instrument is clean after reprocessing under good lighting (min. 500 lux) and color rendering index (min. 80 Ra).

2. If they are still dirty, repeat the process.
 - ↳ For further reprocessing, the instrument should be dry and free of residue.
3. Blow the instrument out with max. 3 bar.
4. Pack the instrument in packaging material suitable for sterilization and storage. e.g. paper/plastic composite packaging.
5. Conduct sterilization [→ 77].

7.3 Manual cleaning and disinfection

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

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

NOTE! Never clean in an ultrasonic bath!

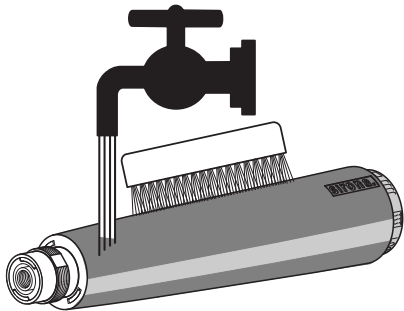
NOTE! Never immerse in disinfectants!

NOTE! Do not use any strong acidic or alkaline solutions ($5 < \text{pH} < 9$) or solutions containing chlorine.

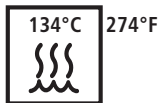
IMPORTANT: Unscrew instrument tips and screw-on cap with sealing ring and signal ring, and blow the remaining water out the handpiece and tip.

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. Use only disinfectants with **no** protein-fixing properties.
- 1. Brush the ultrasonic handpiece, the screw-on cap with sealing ring and signal ring, the detached tip, and the torque wrench under running water ($< 38\text{ }^{\circ}\text{C}$, $< 100\text{ }^{\circ}\text{F}$, 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. Blow spray channels with 2.5 - 3 bar until no more moisture exits, but at least 10 seconds.
- 3. Conduct thermal disinfection or unwrapped steam sterilization [→ 71].
- 4. Pack the instruments in packaging material suitable for sterilization and storage. e.g. paper/plastic composite packaging.
- 5. Conduct sterilization [→ 77].



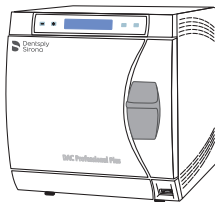
7.4 Sterilizing

- ✓ The instruments are cleaned and disinfected.
- ✓ The screw-on cap with the sealing ring and signal ring are reattached to the handpiece.
- ✓ If necessary, the ultrasonic handpiece and accessories can be sterilized in packaging suitable for sterilization and storage, e.g. paper/plastic composite packaging or container.
- Sterilize the ultrasonic handpiece and accessories in the steam sterilizer with saturated water vapor.

Overpressure: 2.04 bar (29.59 psi)

Temperature: 134 °C (274 °F)

Holding time: 3 min.



Steam sterilizers that comply with the requirements of either EN 13060, class B (for example, DAC Premium / DAC Professional) or EN 13060, class S and are also suitable for the sterilization of ultrasonic handpieces and ultrasonic tips are approved.

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

After sterilizing

1. Remove the instruments from the steam sterilizer immediately.
⚠ CAUTION! The instruments are hot. Risk of burns!
NOTE! Do **not** accelerate the cooling process by immersing the instruments in cold water. This can damage the instruments!
2. Store all instruments so that they are protected from contamination.

-
-
- 3.** Sterilize the instruments again once the storage period has elapsed.

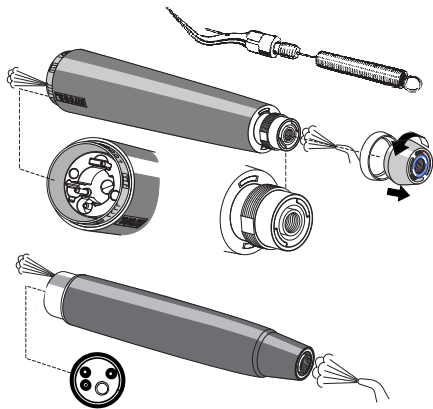
8 Maintenance

NOTE! Never oil the ultrasonic handpiece!

8.1 Maintaining the water channel

⚠ CAUTION! Insufficient cooling leads to overheating of the preparation site, the tip, and the handpiece. Ensure that the water flow rate is > 30 ml/min.

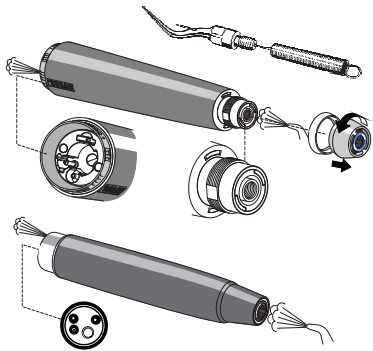
Exception: The water flow is blocked in tip no. 6L (CEM). When using tip no. 6L (CEM), the scaler can be operated only intermittently.



1. Use the cleaning wire to carefully clear the water channel of the tip regularly.
2. Blow the water channel out with max. 3 bar.

8.2 Cleaning the light guide surfaces

1. Unscrew the screw-on cap with the sealing ring or signal ring.
2. In order to avoid scratching the surfaces, blow off any dirt particles with air from a dry syringe.
3. Wipe the surfaces with a Q-tip or a soft cloth and alcohol.
4. Replace the sealing ring or signal ring when it becomes discolored.

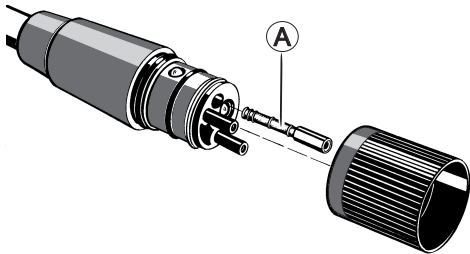


8.3 Replacing the spray water cartridge

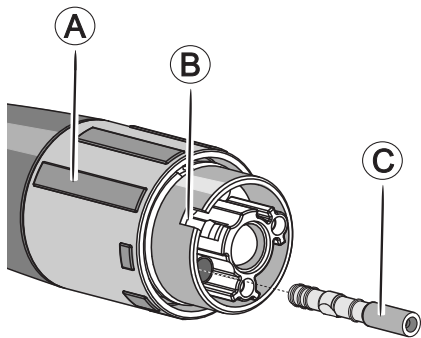
Required accessories

- Spray water cartridge
- Dentsply Sirona T1 Spray

If the spray water cartridge leaks or is clogged.

**... for SiroSonic/L**

1. Detach the ultrasonic handpiece from the supply hose.
2. Detach the control ring from the hose coupling.
3. Remove the spray water cartridge (A).
4. Spray oil lightly onto the new spray water cartridge.
5. Insert the new spray water cartridge up to the stop.
6. Attach the control ring with the smooth ring side first onto the supply hose.

**... for SiroSonic TL or PerioSonic**

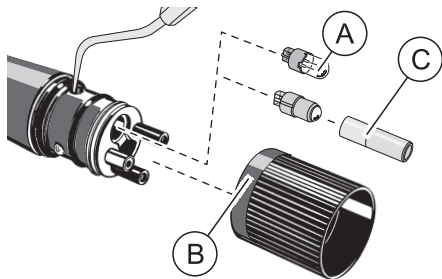
1. Detach the ultrasonic handpiece from the supply hose.
2. Position the longest partial marking of the control ring (A) opposite the recess (B). The spray water cartridge can be replaced only in this position.
3. Remove the spray water cartridge (C) with a tweezers.
4. Spray oil lightly onto the new spray water cartridge.
5. Screw the new spray water cartridge in up to the stop.

8.4 Replacing the halogen lamp/LED

...for SiroSonic L

⚠ CAUTION! The lamp can be hot. Risk of burns! Allow the lamp to cool down.

NOTE! The LED in supply hose E of **SiroSonic L** cannot be replaced. Contact your service technician.



1. Detach the ultrasonic handpiece.
2. Detach the control ring (B).
3. Insert a probe into the hole behind the lamp socket and push the defective halogen/LED lamp (A) out of the socket.
4. Insert the new halogen lamp (dark brown base/LED). Ensure the proper position of the contact surfaces.
NOTE! Pressing on the lens can destroy the LED. Use the assembly tool (C) to insert the LED.
5. Wipe the bulb of the halogen lamp with a clean cloth.
6. Attach the control ring with the smooth ring side first onto the supply hose.

If the LED does not light up:

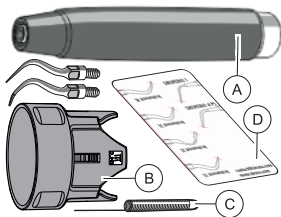
- Remove the LED and re-insert it rotated 180° around the same axis.

9 Spare parts and consumables

Use only original Dentsply Sirona parts or parts approved by Dentsply Sirona.

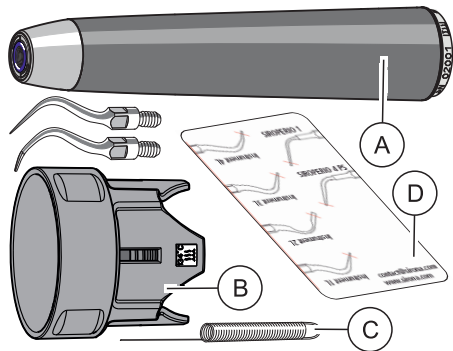
Basic version

SiroSonic/L



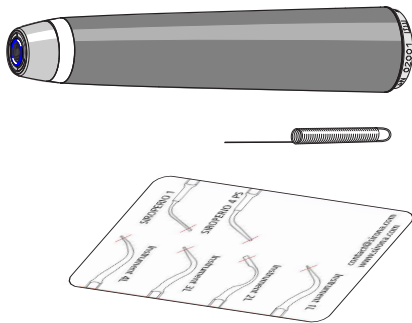
		REF
	Scaling tip no. 3L	18 94 455
	Scaling tip no. 4L	18 94 463
A	SiroSonic L handpiece	59 13 509
B	Torque wrench	60 06 196

		REF
C	Cleaning wire	24 00 232
D	Tip gauge	54 55 667



SiroSonic TL

		REF
	Scaling tip no. 3L	18 94 455
	Scaling tip no. 4L	18 94 463
A	SiroSonic TL handpiece	62 12 216
B	Torque wrench	60 06 196
C	Cleaning wire	24 00 232
D	Tip gauge	54 55 667



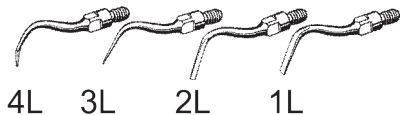
PerioSonic

Basic equipment when purchased individually

	REF
PerioSonic handpiece	60 30 410
Cleaning wire	24 00 232
Tip gauge	54 55 667

Ultrasonic handpiece sets without tips

	REF
SiroSonic L (2 pcs)	65 62 834
SiroSonic TL (2 pcs)	65 62 842

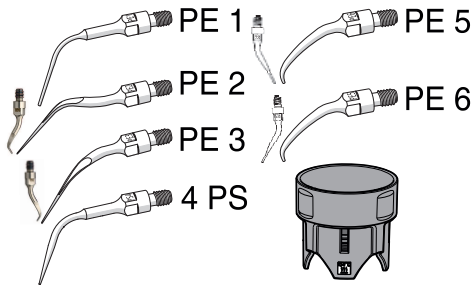


Special accessories

Scaling tips

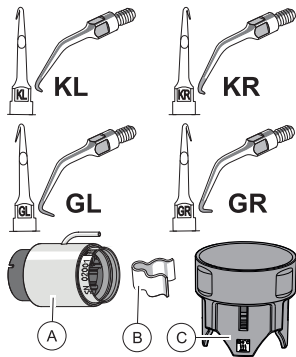
	REF
Tip no. 1L	89 24 250
Tip no. 2L	89 24 268
Tip no. 3L	18 94 455
Tip no. 4L	18 94 463
Tip set no. 3L (2 pcs.)	64 12 451
Tip set no. 3L (6 pcs.)	65 41 044
Tip set no. 4L (2 pcs.)	64 12 469

	REF
Tip set no. 4L (6 pcs.)	65 41 051
Torque wrench	60 06 196



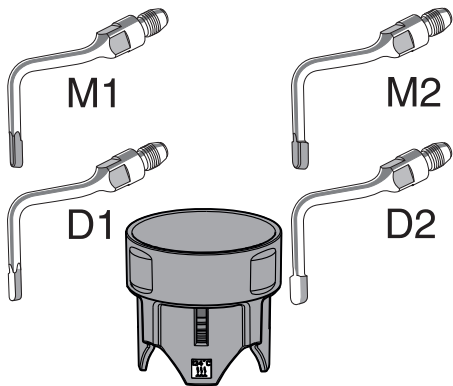
SiroPerio tips

	REF
SiroPerio PE 1	60 44 825
SiroPerio PE 2	60 44 833
SiroPerio PE 3	60 44 841
SiroPerio 4 PS	61 77 005
SiroPerio PE 5	63 43 078
SiroPerio PE 6	63 43 086
Torque wrench	60 06 196



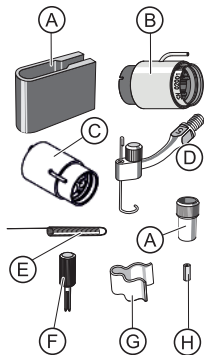
SiroRetro tips

		REF
	SiroRetro KL	54 57 887
	SiroRetro KR	54 57 895
	SiroRetro GL	54 57 903
	SiroRetro GR	54 57 911
	Spray adapter L	60 02 286
A	PerioSonic spray adapter	61 41 852
B	Hose clamp for saline hose (recommended quantity: 5)	89 28 392
C	Torque wrench	60 06 196



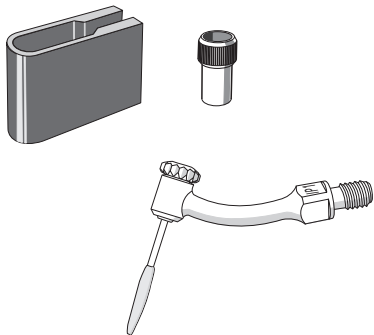
SiroPrep tips

	REF
SiroPrep M1, small, mesial	59 04 276
SiroPrep M2, large, mesial	59 47 358
SiroPrep D1, small, distal	59 47 309
SiroPrep D2, large, distal	59 47 366
Torque wrench	60 06 196

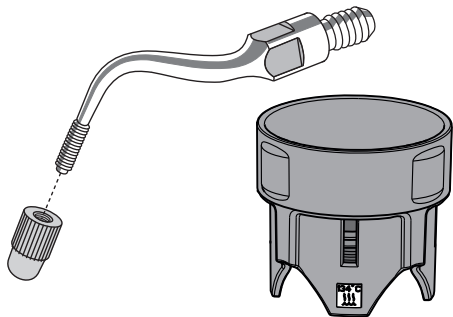
Endo tip no. 5 and accessories

Item	Designation	REF
A	Endo key, knurled bushing	18 95 080
B	PerioSonic spray adapter (for SiroSonic TL and PerioSonic)	61 41 852
C	Spray adapter L (for SiroSonic and SiroSonic L)	60 02 286
D	Endo tip no. 5	60 02 310
E	Cleaning wire	24 00 232
F	Clamping key for depth stop	18 95 106

Item	Designation	REF
G	Hose clamp for saline hose (recommended quantity: 5)	89 28 392
H	Slit hose piece for depth stop (recommended quantity: 5)	18 94 786

**Sirolmplant tips**

	REF
Sirolmplant IP 1, incl. IP 1 insert (5 pcs.)	63 43 052
Insert IP 1, 5 pcs.	63 43 094
Knurled bushing, endo key	18 95 080



CEM set

comprising:

CEM set no. 6 L	18 94 307
CEM tip no. 6L	
Contact caps for inlays (2 pcs.)	
Torque wrench	
Contact cap (10 pcs.)	18 94 372

10 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.

D3275.201.04.12.02 02.2020

Ä.-Nr.: 128 606



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