



Power
Equipment



Magneto Inserts & Piezo Tips

PERFORMANCE ASSESSMENT GUIDE

Use this assessment guide weekly to ensure top clinical efficiency of your magneto inserts and piezo tips.

Evaluate Your Inserts/Tips Each Week

Your patients' oral health is your top priority. Keeping your magneto inserts and piezo tips healthy is just as important. Inserts and tips in poor condition compromise patient comfort and safety. Plus, you have to work harder to achieve optimal clinical outcomes.

Use this guide for regular evaluation of your inserts/tips — and advance the effectiveness of your power scaling.

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Insert/Tip Cost Per Use Calculator

We've provided a calculator to help you estimate your insert/tip cost per procedure. Use this calculator and guide to see how HuFriedyGroup inserts/tips along with educational support from a world-renowned company can be yours ... all at an attractive per procedure cost.

You can also visit our online tool at [HuFriedyGroup.com/CostCalculator](https://www.hufriedygroup.com/CostCalculator) to estimate your insert/tip cost per procedure.

Calculate the Number of Times an Insert/Tip is Used per Year*

EXAMPLE

$$\begin{array}{ccccccc} 50 & \times & 3 & = & 150 & \times & 2 & = & 300 \\ \text{work weeks} & & \text{work days} & & \text{work days} & & \text{times per day} & & \text{number of} \\ \text{per year} & & \text{per week} & & \text{per year} & & \text{single insert/} & & \text{procedures per year} \\ & & & & & & \text{tip is used} & & \text{per insert/tip} \end{array}$$

YOUR OFFICE

$$\begin{array}{ccccccc} \square & \times & \square & = & \square & \times & \square & = & \square \\ \text{work weeks} & & \text{work days} & & \text{work days} & & \text{times per day} & & \text{number of} \\ \text{per year} & & \text{per week} & & \text{per year} & & \text{single insert/} & & \text{procedures per year} \\ & & & & & & \text{tip is used} & & \text{per insert/tip} \end{array}$$

Calculate the Insert/Tip Cost per Procedure*

EXAMPLE

$$\begin{array}{ccccccc} \$200 & \div & 300 & = & 67\text{¢} \\ \text{retail price} & & \text{number of procedures} & & \text{insert/tip cost} \\ \text{per insert/tip} & & \text{per year per insert/tip} & & \text{per procedure} \end{array}$$

YOUR OFFICE

$$\begin{array}{ccccccc} \square & \div & \square & = & \square \\ \text{retail price} & & \text{number of procedures} & & \text{insert/tip cost} \\ \text{per insert/tip} & & \text{per year per insert/tip} & & \text{per procedure} \end{array}$$

*Note: Many factors affect insert/tip wear including number of inserts/tips per operatory, number of inserts/tips used per procedure, patient load, periodontal type, and sterilization processes. Your usage/costs may be higher or lower due to these or other factors.

Magneto Inserts

INSERT STACKS

What should the stack look like?

The leaves of the stack should uniformly nest together. Check to make sure stack leaves are not:

- Splayed
- Bent
- Fractured
- Detached

In these cases you may experience inadequate power — or possibly the tip will not vibrate at all.



How do I keep the stack in good condition?

- Handle the insert by the grip rather than the stack
- Use cassettes during cleaning and sterilization as these protect the insert from the weight of instruments that may be stacked on top

What should I do if my insert stacks are bent, broken or detached?

Inserts with compromised stacks should be taken out of use and replaced.

O-RINGS

What are signs of o-ring wear?



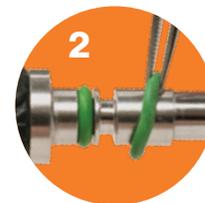
- Dry, brittle or cracked appearance
- Leaking at the junction of the handpiece and insert
- Insert doesn't seem secure in the handpiece

Can I use oil, petroleum jelly or other lubricants on the o-ring?

Lubricate the o-ring with water only. Oil based products such as petroleum jelly can cause drying/cracking of the o-ring and result in unwanted foreign matter within the water channel.

How do I change the o-ring?

1. Using a pair of dressing pliers, grasp worn o-ring.
2. Pull the worn o-ring off over the metal stack.
3. Replace the o-ring by sliding a wide drinking straw over the metal stack. Apply a new o-ring to the bottom of the straw and roll the o-ring up until it reaches the o-ring slot.

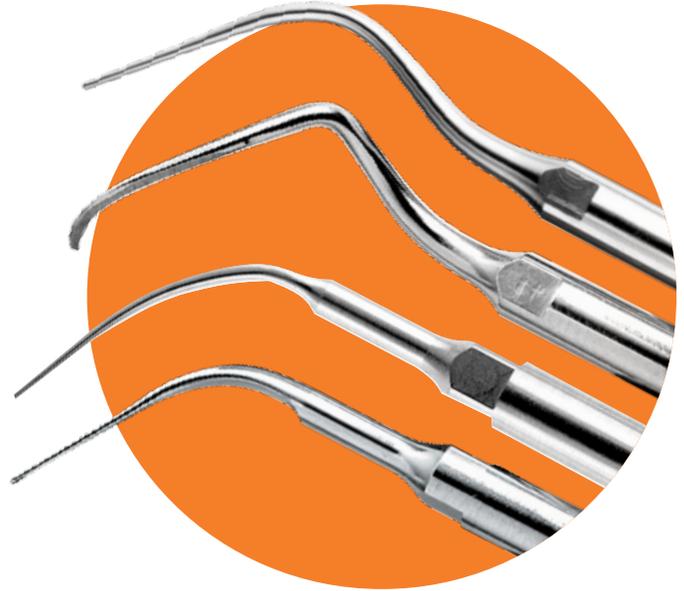


Piezo Tips

THREAD PATTERN STYLES

Piezo Tips are available in our S-Series pattern styles.

S-Series tips are compatible with Symmetry IQ, Acteon and NSK devices.*



WRENCHES

Each Piezo Tip comes with a torque wrench which:

- Houses the tip during cleaning, sterilization and storage
- Protects you by preventing you from having to touch the tip

Wrenches should be inspected regularly for cracks, wear, and to ensure the tips stay securely within. Worn or cracked wrenches should be replaced in order to protect the Piezo Tip.



*Acteon and NSK are trademarks of Acteon® Group and Nakanishi, Inc., respectively.

Cleaning & Care

All Magneto Inserts and Piezo Tips should be cleaned and sterilized before each use.

BEST PRACTICES

Optimal infection control and prevention will be facilitated by using tools that allow for improved efficiency and safety. Instrument cassettes will allow you to move inserts/tips from chairside through cleaning without touching or damaging the instruments. The inserts/tips also receive superior protection from the weight of other instruments while in the protective cassette. Piezo tips should remain within the wrench during the cleaning and care cycle.

If cassettes are not used, carefully place the insert/tip in the ultrasonic cleaner either alone or in a location where it will not be subject to the weight of other dental instruments.

1. Cleaning

To clean, rinse thoroughly or fully immerse in a mild ultrasonic cleaning solution (pH 7–10.5) like our Enzymax™ or Enzymax Earth™ cleaning solutions. When using the Instrument Management System (IMS™), the ultrasonic cleaning time has to be at least 16 minutes, unless a longer exposure time is required by the manufacturer of the detergent. Thoroughly rinse the insert with tap water and dry completely prior to sterilization.

2. Rinsing

Thoroughly rinse with tap water and dry completely prior to sterilization.

3. Sterilization

Sterilize inserts in an instrument cassette or paper pouch in a steam autoclave. Steam sterilize for at least 4 minutes at 270°F/132°C or 30 minutes at 250°F/121°C. Do not heat above 275°F/135°C.

4. Drying

Thirty minutes of drying time is recommended after steam sterilization, prior to use.

FAQs

What effect will repeated instrument processing have on the lifespan of my inserts/tips?

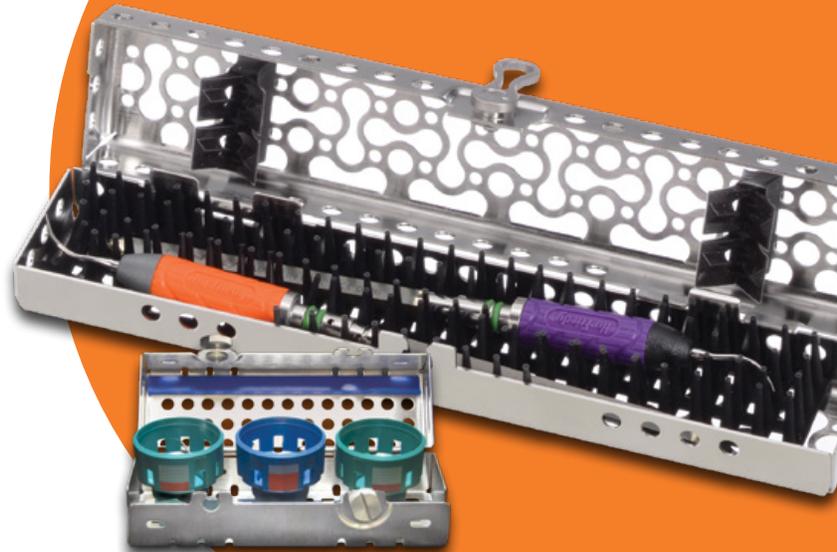
Repeated instrument processing will have little to no effect on the lifespan of inserts/tips. The lifespan of insert/tips is primarily determined by tip wear.

Can I put ultrasonic inserts in an ultrasonic cleaner?

Yes, ultrasonic inserts may be cleaned in an ultrasonic cleaning unit with a mild ultrasonic solution. The mild ultrasonic solution will not harm the insert nor will the cavitation produced by the ultrasonic cleaning unit. Recommended ultrasonic solutions are Enzymax™ Cleaning Solutions and Enzymax Earth™ Detergent and Presoak.

Can I wipe down or spray the inserts/tips with a surface disinfectant?

Do not use chemical or surface disinfectants as deterioration of the material may occur. Avoid contact with corrosive chemicals such as chlorides, sulfates and surface disinfectants. Do not expose inserts to solutions containing phenols. Chemical vapor sterilization, rapid heat transfer sterilization and cold liquid/chemical sterilants are not recommended and may void the warranty.



Can I place inserts/tips in a washer/disinfector?

Please refer to the washer/disinfector instructions and closely follow manufacturer recommendations for magneto inserts and piezo tips.

For more information on Instrument Reprocessing, please visit [HuFriedyGroup.com/Education](https://www.hufriedygroup.com/education)

Troubleshooting

MAGNETO INSERTS

ISSUE	POSSIBLE CAUSE	SOLUTION
Low vibration	Warped, bent, separated or broken stack leaves	Replace insert as stack leaves should be straight and intact for optimal vibration
	Worn tips	Check tips on wear guide, replace when indicated
Water leak at junction of handpiece and insert	Worn o-rings	Weekly check o-rings and replace when cracked/brittle
	Worn handpiece	Replace handpiece
Water flows excessively after releasing foot pedal	Air trapped in water line	Remove insert. Flush line for at least 30 seconds. Hold handpiece vertically and fill to the brim with water when placing insert
	Generator issues	Check generator water line including PSI (refer to generator instruction manual)
Low/no water flow	Water line blocked from sediment or highly mineralized water	Weekly check external water filter for build-up. Replace when discolored or build-up is visible.
	Insert clogged from water sediment	Replace insert
Insert pop-out	Worn o-rings	Weekly check o-rings and replace when cracked/brittle
	Generator water pressure (PSI) too high	Refer to generator manual for optimal PSI water settings
Handpiece: Heat build-up	Generator power setting too high	Refer to insert package instructions for appropriate power setting range
	Air trapped in handpiece	Remove insert. Flush line for at least 30 seconds. Hold handpiece vertically and fill to the brim with water when placing insert
	Clogged generator water line filter	Weekly check external water filter for build-up. Replace when discolored or build-up is visible

PIEZO TIPS

ISSUE	POSSIBLE CAUSE	SOLUTION
Little to no vibration	Tip not firmly attached to handpiece	Use wrench to tighten tip to handpiece
	Worn tips	Check tips on wear guide, replace when indicated
Tip does not stay in wrench	Slot in wrench may be worn	Discard wrench; reorder new wrench
Tip does not stay in handpiece	“Flats” on base of tip may be worn	Replace tips
	Handpiece threads may be worn	Replace handpiece
Tip won't attach to handpiece	Wrong “series” of tip	Use S-Series tips according to generator manufacturer specifications
No/low water flow	Water lines blocked from sediment or highly mineralized water	Weekly check external water filter for build-up. Replace when discolored or build-up is visible
	Tip clogged from water sediment	Replace tip

Insert & Tip Wear

WORN OR BENT TIPS

Worn tips can significantly diminish your scaling efficiency!

- 1 millimeter of tip loss results in a 25% loss of efficiency
- 2 millimeters of tip loss results in a 50% loss of efficiency

What is the clinical result of worn inserts/tips?

- Apply more pressure on the insert, which can dampen the vibration
- Turn up the power on the generator, often to high levels for which the tip may not be designed

Both actions can result in inferior tip performance, more time to remove calculus and stain and more discomfort for you and your patient.

Use a Wear Guide to check your tips weekly!

Maximize the efficiency of your ultrasonic tips by regularly using a wear guide.

- First, evaluate the shape of the tip against the wear guide. If the shape does not match the silhouette, discard the insert.
- Second, match the tip to the corresponding outline to measure its length and discard, reorder or scale away depending on the tip length.



Factors affecting the lifespan of Magneto Inserts and Piezo Tips include usage frequency and amount/type of hard deposit per patient. An insert/tip used once per day on light debris will likely last longer than one used several times per day on heavy debris. In addition, the lifespan of an insert or tip can be shortened by many factors including:

- Incorrect power settings
- Applying too much pressure
- Not matching the tip to the application
- Improper sterilization and maintenance

Check your inserts and tips for wear **EVERY WEEK** and use our Ultrasonic Insert and Tip Trade-In program to help maximize your power scaling efficiency.

Ultrasonic Insert & Tip TRADE-IN PROGRAM

It's easy as
1-2-3!*

Receive **one** ultrasonic insert or tip free when you purchase **two** ultrasonic inserts or tips and trade in any **three!**

For more information about our magneto inserts and the 1-2-3 Insert/Tip Trade-in Program visit **HuFriedyGroup.com/Inserts**



Product Information

MAGNETO INSERTS

Tip Design, 30kHz Inserts	Swivel Direct Flow™ Inserts, 30kHz	Swivel Inserts, 30kHz	Streamline™ Direct Flow Inserts, 30kHz	Streamline™ Inserts, 30kHz	Power Plus Inserts, 30kHz
#10	UI30SD10	UI30SS10	UI30SF10	UI1030K	
#100 Thin	UI30SD100	UI30SS100	UI30SF100 Thin	UI30K100S	
#1000 Triple Bend	UI30SD1000	UI30SS1000	UI30SF1000	UI100030K	
After Five™ Left	UI30SDL		UI30SFL		
After Five™ Straight	UI30SDS		UI30SFS		
After Five™ Right	UI30SDR		UI30SFR		
Thin Triple Bend	UI30SDXTTB		UI30SFXTTB		
XT — Extra Thin		UI30SSXT	UI30SFXT		
25% longer, various tip types					UI30PPSB, UI30PPSC, UI30PPTB, UI30PPTC

For a complete listing of our magneto inserts and piezo tips, go to [HuFriedyGroup.com](https://www.hufriedygroup.com)

For more information on our magneto products, see [HuFriedyGroup.com/Inserts](https://www.hufriedygroup.com/Inserts)

PIEZO TIPS

HuFriedyGroup S-Series Piezo Tips													
100 Thin Tip	100 Thin Modified Tip	P Universal Tip	P3 Universal Tip	S10 Tip	4l Crvd Tip	4r Crvd Tip	After Five™ Left Tip	After Five™ Right Tip	After Five™ Straight Tip	1 Straight Tip — Diamond	2l Crvd Tip — Diamond	2r Crvd Tip — Diamond	
US100	USU	USP10	USP3	USS10	US4L	US4R	USAFL	USAFR	USAFS	US1D	US2LD	US2RD	

For more information on our piezo tips, see [HuFriedyGroup.com/Piezon](https://www.hufriedygroup.com/Piezon)

For more information visit [HuFriedyGroup.com](https://www.hufriedygroup.com)

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