Maintenance Instructions

Read this maintenance instruction thoroughly before doing any maintenance.

MANUFACTURER will provide circuit diagrams, component part lists, descriptions, calibration instructions to assist to SERVICE PERSONNEL in parts repair.

To preserve product warranty, functionality and product safety we recommend using only original spare parts.

Maintenance of Handpiece

To maximize the efficiency of shock wave handpiece, regular maintenance is necessary.

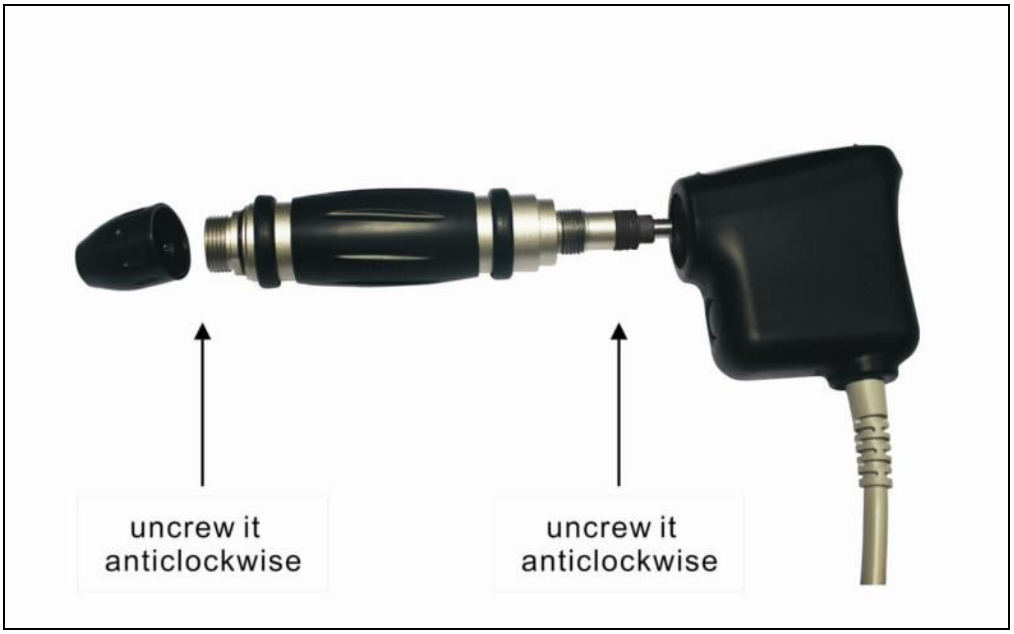
Maintenance of the handpiece can be done by operator of the device. Follow the instructions strictly. Incorrect operation may cause damage to the patient or machine.

Type one: Maintenance of the metal pipe and bullet

Cycle: *Recommended cycle is one time every 100,000 shocks. You can look up the amount of history shocks in the system setup interface.*

NOTE: *After the first time maintenance, the cycle can be adjusted according to practical situation.*

Step 1: Disassemble metal pipe and bullet.



1. *Turn off and unplug the device first, and then unplug the handpiece from the main unit.*
2. *Unscrew the transmitter and the other end of metal pipe from the handpiece body.*
3. *Use a small screwdriver to put through the 2 holes on the metal pipe and then pull the metal pipe out of the shaft gently.*
4. *Take out of the bullet from metal pipe, and then clean the metal pipe and the bullet.*

Step 2: Clean the metal pipe.

We suggest use the WD-40 multifunctional product to clean the metal pipe. Use the nozzle of WD-40 to spray the inside of the metal pipe, use a cleaning brush to brush it back and forth, and finally dry it out with a clean, soft cloth.

Step 3: Clean the bullet

Use the nozzle of WD-40 to spray the bullet adequately and then dry it out with a clean, soft cloth, then daub a bit of the OW-20 full synthetic motor oil on the surface of the bullet.

Step 4: Keep the bullet falling down from one end of the metal pipe to the other end of it. Repeat this several times.

Step 5: Test the performance.

Reload metal pipe and bullet to the handpiece, and test performance. Methods: adjust parameters when the machine is working, and listen to the sound of the handpiece. The sound should be smooth and regular.

NOTE:

1. *When reloading, pay attention to the spacer in the handpiece and make sure it is not dropping or deflection.*
2. *Please adjust the pressure to 1 bar, and frequency to 1 Hz, and then start the machine, and then listen to the sound of the handpiece; Secondly, adjust the pressure to 2.5 bar, frequency to 10 Hz, and start the machine, and then listen. Try this 2 to 3 times. The sound should be smooth and regular and not any pause.*

When you are reloading the metal pipe and bullet, make sure the transmitter is in good condition and without any damage, and make sure the transmitter is well installed in the handpiece. Falling off of the transmitter from handpiece may make harm to the patient during the treatment. Damage of the transmitter may make harm to the patient during the treatment.

Check the shaft (a part of the handpiece, see the structure of handpiece) before starting the treatment. Make sure the shaft is well screwed down in the main part of the handpiece. If not, the handpiece will not work normally and will not generate shock waves; also this could make damage to the handpiece (mainly bullet and metal pipe).

Type two: Replacement of the spacer

Method: *Observe the spacer when you are doing maintenance to the metal pipe and bullet. If the spacer is worn badly, then you need to replace it with a new one. Usually this will happen between 500,000 to 1 million times of total shocks.*

Step 1: Turn off and unplug the device first, and then unplug the handpiece from the main unit. Dismantle the tail end of the handpiece anticlockwise.

Step 2: Take out of the old spacer with a tweezers.

Step 3: Put a new spacer into the handpiece and make some adjustment with a tweezers. Make sure the spacer is settled firmly.

Step 4: Reinstall the handpiece and test the performance (start the machine and listening to the sound of the handpiece)

WARNING

When you are testing the performance, make sure the transmitter is in good condition and without any damage, and make sure the transmitter is well installed in the handpiece. Falling off of the transmitter from handpiece may make harm to the patient during the treatment. Damage of the transmitter may make harm to the patient during the treatment.

Make sure all these steps are OK, and then the maintenance procedure is fully finished.

Maintenance Period

Number of Shocks	Metal Pipe	Bullet	Transmitter	Yellow Spacer	Rubber Seal	O-ring (Seal Ring)
100,000	●	●	●			
200,000	●	●	●			
300,000	●	●	●			
400,000	●	●	●			
500,000	●	●	●	▲	▲	▲
600,000	●	●	●			
700,000	●	●	●			
800,000	●	●	●			
900,000	●	●	●			
1,000,000	▲	▲	▲	▲	▲	▲

● Cleaning ▲ Replacement

Metal Pipe

Bullet

Transmitter

Yellow Spacer

Rubber Seal

O-ring (Seal Ring)

Suggestion: *Some gel may remain inside the transmitter after treatment, which will cause mildew if without cleaning for a long time. We recommend cleaning after every treatment and every one hundred thousand pulses.*

Trouble Shooting

Troubles	*Possible causes*	*Solutions*
1. No response after starting the machine.	*1. Lack of power;* *2. Fuse might be burned out.*	*1. Check whether the power plug and socket of the instrument are plugged or not;* *2. Replace the burned fuse with a new one (Specifications: F3.15AL250V)*
2. Leaking of air	*Gas tightness of the solenoid valve and the air pipe is not very well.*	*Check the solenoid valve and air pipe.*
3. Trigger failed	*1. Trigger button might be damaged;* *2. Incorrect installation on applicators.*	*1.Check if the triggers are right installed;* *2. Replace the old one with a new trigger.*
4. No response after press the trigger	*1. Connection hoses might be not contact well;* *2. Connection hose might be damaged.*	*1. Check the connection hose and contact distributors;* *2. Replace a new connection hose.*
5. Unusual noise on applicators	*1. Sound eliminator might be not well installed;* *2. Bullet and pipe might be worn down*	*Re-install the applicator or contact with your local distributor to replace a new applicator kit.*