Care and Maintenance of the Foredom Percussor
Percussor Maintenance

• This will cover the Foredom models with the speed control on the base or handle.
• For simplicities sake the new model 500 (base mounted speed control) will be shown.
• Percussor maintenance is recommended after every 100 hours of use.
Parts of the Percussor

- Motor
- Shaft (cable) with Sheath (housing)
- Hand piece
- Pad holder and pad
Pad and Pad Holder

- Pad holders and pads are available as replacement parts.
- The pad screws onto the hand piece clockwise.
- Apply no lubricant to these threads.
Pad Holder and Pad

- Shown here disassembled.
Hand Piece Disassembly

- Unscrew the pad holder and pad from the hand piece.
- Firmly grasp the cable sheath and hand piece and pull them apart. (a set screw may need to be loosened on some models).
Hand Piece Disassembly

- Unscrew the handle from the hand piece.
Hand Piece Disassembly

- Remove the handle from the hand piece.
- Remove any excess lubricant from the hand piece shaft and the inside of the handle.
- Set the handle aside.
Hand Piece Disassembly

• Remove the 3 recessed screws from the head of the hand piece using a 3/32” hex (Allen) wrench.
• Remove the cover and set aside.
Hand Piece Disassembly

- Remove any excess lubricant from the head.
- Use a gentle solvent (ex. Orange Clean) and a toothbrush to remove any grit from the moving parts of the head and handle.
Hand Piece Disassembly

• Disassembled hand piece shown here.
• Clean and dry all parts before reassembly.
Lubricant

- Many light weight lubricants will work for reassembly.
- Be certain that the one you choose is a high temperature lubricant or the lubricant will break down during operation and flow onto the pad holder and possibly the patient.
Lubricants - simplified

• Qualities to look for in a lubricant:
  – Heat resistance – look for a heat resistant lubricant. You do not want the heat from the use of the hammer to liquefy the lubricant.
  – Ease of use – look for a spray can or tube for ease of application.
  – Slipperiness - the slicker the better.

• Some suggestions:
  For the cable – graphite or similar dry lube, Duralube
  The Foredom Company also sells lubricant for their flexible shaft devices through their distributors.
Hand Piece Reassembly

- Fill the head 1/2 to 2/3 full of lubricant.
- Reassemble cover and replace screws.
- Do not over tighten screws.
Hand Piece Reassembly

- Lubricate the handle shaft and reassemble the handle onto the head piece.
- Note: A hot handle during use can indicate an excessive amount of friction in the handle. Disassemble and check for the causes of the friction.
Shaft and Sheath Maintenance

- Cables and cable housings come in 39” and 66” lengths.
- Shown here is a 66” neoprene cable housing (sheath) and a 66” cable (shaft).
Sheath Removal

• Remove the hand piece as outlined earlier.

• Use a small screwdriver to loosen the set screw that holds the sheath in place.
Sheath Removal

- Remove the sheath from the shaft.
- Use a cloth covered wrench to gently remove the gray plastic cowling from the motor.
Inspection

- Inspect the sheath for wear and cracks.
- Inspect the shaft for wear or breaks along its length.
- Thoroughly clean all parts in a gentle solvent (ex. Orange Clean).
- The shaft may be removed from the motor using this set screw.
Inspection

• Check for wear at the cable ends.
• The hand piece end has a key that should not be sheared or worn.
Reassembly

• Apply lubricant to the spring surrounding the shaft. It is this spring that allows the shaft to spin inside the sheath. Be certain to inspect it for wear or breaks before reassembly. Replace any worn parts. Reassembly is the reverse of disassembly.

• Be certain that the shaft spins freely within the sheath before reassembly.
Motor Brushes

- Be certain to disconnect the power before working on any electrical part.
- Inspect and replace any worn brushes.
- The brushes are located here.
Motor Brushes

- Use a screwdriver to remove the brush covering.
- Gently remove the motor brush.
- Remove any residue from inside the motor with compressed air.
Motor Brushes

• Replace the brushes if the contact is significantly worn (the block at the end of the spring is no longer a block, but a wafer).

• Brush cap.
Motor Brushes

- The brush must move freely for the motor to work.
- Be meticulous about reassembly.
- Make certain that the brush moves freely before reapplying the cap.
- Do not over tighten the cap.
The other stuff

• The steps outlined here should provide you with years of trouble free use of your percussor.

• Other percussor ailments may require a return to the manufacturer for adjustment or refurbishing. Please contact your vendor for these problems.