

4. STERILIZATION

The use of the custom designed Autoclave Case (Cat. No. 8801-03), correctly loaded, will help prevent damage to the dermatome during sterilization.

In a normal gravity displacement steam autoclave, we recommend the following:

- 35 minutes at 270°F
- OR
- 60 minutes at 250°F
- Drying time of 8 minutes.

We do not recommend flash sterilization (i.e., sterilization for less than the specified times) because complete sterility cannot be guaranteed.

In a pre-vacuum steam autoclave, which has pre-fixed cycles, use the hard goods cycle. If it does not have a pre-fixed cycle, we recommend the following:

- Set temperature at 270°-272°F.
- Set exposure time for 4 minutes.
- Set drying time for 8 minutes.

If motor is not given sufficient time to dry after steam sterilization, the moisture can trap minute particles of dust which will eventually clog the mechanism.

We do not recommend gas (ETO) sterilization because of the lengthy aeration time required to clear the mechanism of ethylene oxide gas.

5. MAINTENANCE

The ZIMMER Air Dermatome has a lubeless motor. Any attempt to lubricate it could cause permanent damage. The instrument should be returned to Zimmer Patient Care Division once every year for preventive maintenance and calibration.

The hose should be inspected regularly for signs of wear and should be repaired or replaced if damaged. As a precaution, we recommend that the hose be returned to us every six months for preventive maintenance.

The customer should not attempt to check or alter the calibration of the instrument. The instrument should not be disassembled for cleaning, repair, etc. It should be returned to Zimmer Patient Care Division for all maintenance.

For any additional information on the ZIMMER Air Dermatome, contact the Zimmer Patient Care Division at 800-321-5533.

**THIS INFORMATION IS FOR USE BY
THE ZIMMER SALES FORCE ONLY
AND SHOULD NOT BE GIVEN OR
SHOWN TO CUSTOMERS.**

INSERVICE GUIDE

for the NEW

ZIMMER™ Air Dermatome



The purpose of this guide is to emphasize those points which should be covered when inservicing the ZIMMER Air Dermatome. It also provides some background information not covered in the instruction manual.

Before attempting to inservice the ZIMMER Air Dermatome, please read the instruction manual and become familiar with its contents. The manual is a comprehensive guide to the use of the dermatome and covers most of the questions which are likely to arise concerning the setup, operation, cleaning, sterilization, and maintenance of this unit. The following points should be emphasized during the inservice.

1. SETUP

Operating Pressure: 100 PSI running.

Using lower pressure will slow the motor. Higher pressures will accelerate wear and tear on the motor. The pressure must be established with the instrument running.* Wall sources of nitrogen, if plumbed with pipes of insufficient diameter, can cause a power instrument to run at less than the optimum RPM. Extension hoses of insufficient diameter can also reduce pressure and running speed. If there is doubt about the running speed, a nitrogen tank should be substituted and the instrument run directly from the tank. When using an extension hose, the Hall extension hoses (Cat. No. 5052-18, -30, -31) should be used and 1 PSI per foot of extension hose should be added to the running pressure.

Nitrogen Source

Never start a procedure if there is less than 500 PSI of nitrogen remaining in the tank. This may not be sufficient to complete the procedure. Output pressure will not be maintained if the pressure in the tank falls below 200 PSI.

Blade Placement

Use only Zimmer Dermatome Blades. One of the main concerns in using a dermatome is the precise thickness of the cut; using an incompatible blade can potentially be disastrous. We currently know of no other blade which can be used safely with the ZIMMER Air Dermatome. It is important, therefore, to stress that only the Zimmer Blade (Cat. No. 8800-000-10) be used.

* NOTE: Make sure the width plate is fastened properly. Overtightening the screws may restrict movement of the blade, resulting in a lower PSI reading.

Widthplates

The screws which secure the widthplates are angled so that they will tighten with vibration rather than backing out. It is not necessary to overtighten these screws. *In extreme cases, overtightening could interfere with the movement of the blade and cause the unit to slow down.* Padgett users may be accustomed to tightening these screws with extreme torque because there have been reports of the screws loosening during use. *Please spend extra time emphasizing this point with your Padgett conversions,* as overtightening may impair the performance of this unit. Use only the screwdriver supplied with the unit (Cat. No. 8803). This screwdriver has been designed to properly fit the recesses in the screws. Other Phillips screwdrivers may strip the recesses on the head of the screw.

Blade Insertion

Use CAUTION when opening the cardboard blade wrappers.

The blades* carry an instruction to "Insert With This Side Up." After the blade is placed onto the drive pin, this instruction should still be visible. The four small studs on the reverse side of the blade will fit into the groove in the instrument head. This is designed to avoid any back-and-forth or pivoting movement during operation. Lubrication of the blade is *not* necessary because the backing of the blade (Cat. No. 8800-000-10) is a self-lubricating plastic.

Feeler gauges, scalpel blades, etc., should never be used to check the thickness setting because they may nick or dull the blade edge.

2. OPERATION

On/Off Switch

Please advise your doctors to use the instrument with the switch in the "FULL" position. Operation in the "ON" position will run the motor at full speed, but moving the switch all the way back to the "FULL" position will help prevent accidental deactivation of the instrument during the procedure.

Prepping the Skin

The skin should be prepared in the routine manner. Lubrication of the donor site with sterile mineral oil may ease the travel of the dermatome.

Thickness Setting

The thickness gauge has been designed to be extremely accurate. However, excessive downward pressure can result in a thicker

* U.S. Patent Pending

graft than desired. Surgeons should be advised that a moderate amount of pressure will generally give more consistent results.

Angle of Operation

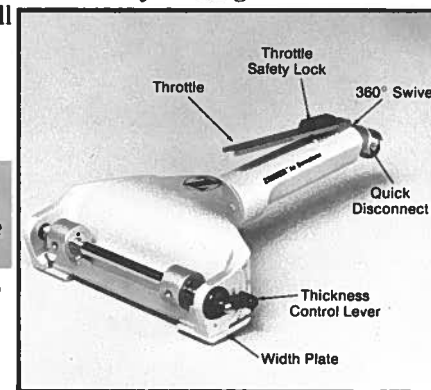
The dermatome should be held 30° to 45° from the skin surface when taking the graft. A lower angle will increase the danger of the blade skipping across the donor site. A higher angle may result in the blade tending to plunge or gouge. In both cases, the graft will be less uniform, and the donor site scarring may be more severe than normal.

Use for Debridement or Excision of Burned Skin

The ZIMMER Air Dermatome was designed primarily for harvesting grafts; however, it can be used to excise soft tissue. If the instrument is used for this purpose, it is recommended that the blade be replaced before harvesting skin for grafting.

Blade Removal

To remove the blade after surgery, the widthplate screws should be loosened three or four complete turns to allow the widthplate to move freely. *Do not remove the screws.* The widthplate should be lifted by holding it on both sides (it will not slide). The widthplate should never be lifted from the front because *this will bring the fingers into contact with the exposed blade edge.* The blade, too, should be lifted from the side to avoid possible injury.



3. CLEANING

The dermatome should be cleaned using a mild detergent and water, *with the hose attached. Please emphasize the importance of never immersing the dermatome in any solution; this will damage the motor.* The thickness control lever should be moved during cleaning to release any debris which may be trapped under the lever or in the notches. The cavity which houses the oscillating drive pin should be rinsed clean and the water shaken out. This will prevent the accumulation of deposits in this cavity.