

EnDouceur DERMOLISSAGE



OPERATOR'S MANUAL



emed, Incorporated 31340 Via Colinas, Suite 101 Westlake Village, CA 91362 (818) 874-2700

SilkPeel[®] SPA™ Dermalinfusion™ System EnDouceur Dermolissage™ System

Model #A0029

Serial Number SPSxxxx INPUT POWER: 5A 12VDC

STANDARD DUTY CYCLE: 40 minutes on; 20 minutes off

DANGER: Risk of explosion if used in the presence of flammable gases.

CAUTION: To reduce the risk of electrical shock, do not remove the cover. Refer servicing to qualified service personnel.

Use only with MW136RA1203F01 external power supply module.

Manufactured By: emed, Incorporated 31340 Via Colinas Suite 101 Westlake Village, CA 91362 USA



This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

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Disclaimer: This manual is not intended as a comprehensive guide for all aspects of treatment. emed, Inc. highly recommends the operator confer with the Department of Labor, Licensing, and Regulation or other such regulatory body in his/her respective state or country regarding legal use of this system. emed, Inc. declines any responsibility for the direct consequences or side effects experienced by individuals undergoing treatment. Operators must be trained at the initial sale by authorized personnel. Because of our ongoing commitment to product quality and innovation, we reserve the right, at any time, to discontinue or modify specifications, prices, designs, features, models or equipment without incurring obligation. This manual should always accompany the unit and its location must be known to all personnel operating the unit. Additional copies of this manual are available from your local distributor or emed, Inc.

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PREFACE

emed Inc. would like to thank you for your choice of the EnDouceur, the newest breakthrough innovation that combines precision non-invasive exfoliation with Dermolissage to address client-specific skin conditions. This device has been specifically designed for aesthetic applications and represents the best choice for the spa professional.

emed, Inc. strongly advises the operator to read this manual thoroughly. The following chapters provide a description of the system, the technical specifications, and installation, operating, and maintenance instructions.

NOTE

The EnDouceur warranty is void if:

- Anyone other than authorized personnel install and/or service the equipment.
- Solutions other than emed topical solutions are used with the EnDouceur.
- Electrical facilities at the installation site do not comply with all application codes, including IEC and UL requirements.
- The device is not used in accordance with the instructions specified in this manual.

(See Chapter 8 for full Terms of Warranty.)

PATENTS

The EnDouceur System is protected by United States Patent #6,695,853, other United States and International Patent's Pending.

OPERATOR RESPONSIBILITY

Personnel operating the unit must have a thorough understanding of the proper operation of the system. Training sessions may be arranged for a fee by contacting your local distributor or emed, Inc. emed, Inc. is not responsible for injury or damage resulting from improper use of the system. If there is any doubt concerning the use of the EnDouceur or the operator's manual, contact your local distributor or emed, Inc. immediately for assistance.

Chapter 1: General Overview

1.1 SYSTEM FEATURES

The following section identifies the features of the EnDouceur system:

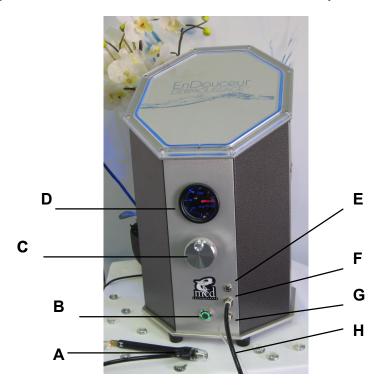


Figure 1: Front Console

1.1.1 Front Console

The front console contains the following:

Α	Handpiece	Instrument used to perform a procedure
В	On/Off Switch	Turns the system on and off; lights up green when power is on
С	Vacuum Knob	Adjusts the vacuum for treatment. Vacuum increases when you turn the knob clockwise
D	Vacuum Display	Measures Vacuum Pressure
Е	Auxilliary Port	Power source for optional upgrades
F	Vacuum Fitting	Large quick disconnect fitting where the black or blue vacuum tubing from the handpiece connects to the unit
G	Supply Fitting	Small quick disconnect fitting where the clear supply tubing from the handpiece connects to the unit

H Handpiece Tubing Transparent colorless and opaque black or transparent blue tubing connecting the handpiece

and the unit

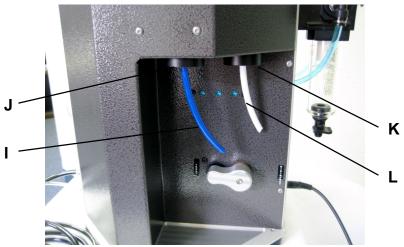


Figure 2: Side Panel



Figure 3: Cleaning Port

1.1.2 Side Panel

I	Topical Uptake Tubing	Intakes topicals from the supply jar into supply tubing
J	Topical Supply Manifold	Threaded cap for attaching a bottle of topical solution
K	Disinfecting Supply Manifold	Threaded cap for attaching a jar of OptiCide3 Disinfecting solution
L	Disinfectant Uptake Tubing	Intakes disinfectant from the supply jar into supply tubing
M	Cleaning Port	Enclosure where handpiece fits, occludes handpiece for cleaning cycle
N	Treat/Disinfect Mode Switch	Activates cleaning cycle

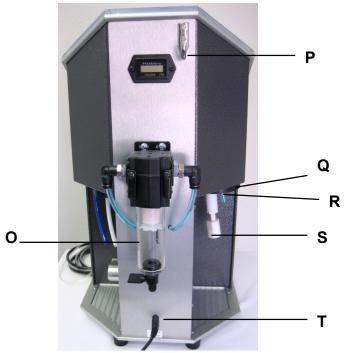


Figure 4: Back Panel

1.1.3 Back Panel

Ο	External Air Filter & Pressure Release	Houses the Filter element
Р	Handpiece Hook	Convenient place to hang the handpiece when not in use
Q Waste Manifold		Threaded cap for attaching a waste jar
R	Residual Waste Tubing	Expels residual solution and waste into waste jar
S	Float Switch	Deactivates the pump if the waste jar is not emptied
Т	DC Jack	Power supply plugs in here
	Waste Jar	Receptacle where waste is collected (not pictured)
1.1.4	Accessories	
	O-Ring Tool	Tool with hooked end to assist installation of a new o-ring.
	Plastic Sterilization Tray	Custom tray for autoclaving a handpiece and seven treatment heads. Extra inserts may be purchased for autoclaving 14 treatment heads.
	Derm-Aid™ Eye Shields	A 10-pack sample of recommended eye shields for use during a procedure.

1.2 SYSTEM DESCRIPTION

The EnDouceur uses a closed loop vacuum system to exfoliate and apply topicals onto the skin. When its handpiece tip is brought in contact with the treatment area, the vacuum source gently pulls the tissue being treated through the hole in the tip and into contact with the abrasive, diamond-encrusted treatment head. As the handpiece is drawn across the skin, this abrasive surface exfoliates the tissue, applies a topical dermaceutical, and vacuums away the residuals into a sealed waste jar.

The main components of the EnDouceur's operation are:

- a) **Vacuum pump**. The vacuum pump is responsible for creating the negative (vacuum) pressure that pulls tissue into contact with the treatment head and simultaneously applies the topical to the skin through the handpiece.
- b) **Handpiece**. The handpiece consists of five components: the handpiece tip, the treatment head, the o-ring, the wand, the quick disconnect fitting, and the vacuum branch tube.

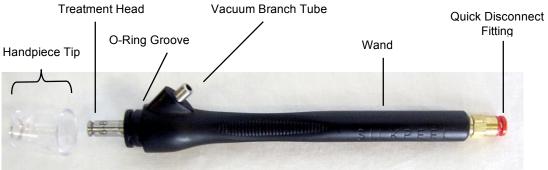


Figure 5: Handpiece

- c) **Treatment Heads**. The EnDouceur system includes one set of nine sterilizable, diamond-encrusted treatment heads in the following grit sizes and diameters:
 - Medium-Coarse (60 grit), 6mm diameter
 - Medium-Coarse (60 grit), 9mm diameter
 - Medium (80 grit), 6mm diameter
 - Medium (80 grit), 9mm diameter
 - Medium-Fine (100 grit), 6mm diameter
 - Fine (120 grit), 6mm diameter
 - Very Fine (140 grit), 6mm diameter
 - Smooth, 6mm diameter
 - Smooth, 9mm diameter

Additional treatment heads are available in the following sizes:

- Coarse (30 grit), 6mm diameter
- Coarse (30 grit), 9mm diameter
- Medium-Fine (100 grit), 9mm diameter
- Fine (120 grit), 9mm diameter
- Very Fine (140 grit), 9mm diameter

Select the grit size based upon the aggressiveness of the procedure to be performed. 9mm tips are recommended for treating larger areas of the face and body, such as the forehead, cheeks, chin and back. The 6mm tip is best for

treating areas requiring greater precision, such as areas around the nose and mouth. **CAUTION: DO NOT TREAT THE EYE AREA**, including the upper eyelid. emed, Inc. recommends using disposable Derm-Aid eye shields during any procedure for maximum client comfort and safety. Treatment heads MUST BE disinfected before use and between clients.

- d) **Handpiece Tips**. The EnDouceur includes two 10-packs of disposable, single-use plastic handpiece tips in two sizes: small and large. The small handpiece tips are for use with the 6mm treatment heads and the large handpiece tips are for use with the 9mm treatment heads.
- e) Vacuum and Topical Flow Adjustments. A gauge is located on the front console with an adjustment knob. The display reads vacuum in inHg. Its corresponding knob below the display can increase or decrease the force with which the treatment area is brought in contact with the treatment head. Turn the knob to the right (clockwise) to increase the vacuum pressure. Turn the knob to the left (counterclockwise) to decrease the vacuum pressure. Higher vacuum pressure will pull the topical solutions through with greater velocity.
- f) **Topical Supply Bottles.** The topicals are supplied in 120 mL plastic bottles and thread into the forward-most (supply) manifold on the right side of the EnDouceur. Select the topical based on the client's specific dermatological condition or skin type. Disinfectant formula is supplied in 60 mL plastic bottles, which thread onto the rear manifold on the right side of the EnDouceur.
- g) **Waste Jar.** Residual solution and exfoliated tissue are deposited in a clear glass waste jar, which threads into the large (waste) manifold on the left side of the unit. When the waste jar is full, remove it from the EnDouceur and dispose of the residual solution in accordance with OSHA standards. Disinfect or autoclave the waste jar before replacing it in the EnDouceur.
- h) **External Air Filter.** The external air filter is located on the rear panel of the unit. It is designed to prevent moisture from reaching the vacuum pump. Under proper operating conditions, liquid should not collect in the filter housing. Should liquid pass into the filter, it will collect in the filter housing. Periodic checks of the filter are important to ensure proper operation. The filter should be changed every six months or 200 hours to ensure proper filtration and equipment protection (see Section 4.1).

CHAPTER 2: INSTALLATION

2.1 INSTALLATION REQUIREMENTS

Before installing the EnDouceur, verify:

- The electrical receptacle is an approved type and complies with UL standards.
- The power input is the same indicated on the power supply for the unit
- The EnDouceur voltage conforms to the electrical voltage of your outlet.
- The device is located on a suitable flat surface (i.e. table or emed-approved stand) with the front console towards the operator.
- The device has 8-10cm of free space all around it to ensure proper cooling.

2.2 UNPACKING AND INSPECTION

The EnDouceur should be unpacked and installed by a trained emed, Inc. representative or distributor.

Instructions for unpacking the EnDouceur are as follows:

- Examine the shipping box for external damage or evidence of mishandling. You
 <u>must immediately</u> notify your representive, your local distributor or emed, Inc. <u>IN</u>
 <u>WRITING</u> if there is any visible damage.
- 2. Open the top cover of the box and carefully remove all the contents. <u>Save all</u> packaging materials in case repacking and shipping is necessary.
- Compare the items in the box with the packing list and be sure that all items on the list are present. You <u>must immediately</u> notify emed, Inc. or the distributor <u>IN</u> <u>WRITING</u> of any discrepancies. Contents may vary according to the model and accessories ordered.

CAUTION

RETAIN FACTORY PACKAGING MATERIALS

Do not ship an EnDouceur without the factory packaging materials. Doing so may result in damage to the components during shipping and void the warranty. Contact your local distributor or emed, Inc. if packaging materials or repackaging instructions are needed.

2.3 <u>INSTALLATION</u>

The EnDouceur is designed for easy installation and is carried out as follows:

- 1. Place the EnDouceur in its designated location.
- 2. Connect the power cord to the equipment at the power cord housing on the back of the unit. Plug the system into a Ground Fault Interrupt (GFI) outlet.

- 3. Test the system for proper operation.
- 4. Connect the handpiece tubing as follows:
 - a. The clear tubing is approximately 12.5cm shorter than the black or blue tubing on one end. Insert the clear supply tube at this end into the quick disconnect fitting on the base of the handpiece. Insert the tube into the fitting until you feel resistance; pause, then push the tube slightly father into the fitting to lock the tube in place (see Figure 6).
 - b. Slide the black or blue vacuum tube over the vacuum branch tube located on the upper side of the handpiece (see Figure 7).
 - c. At the opposite end of the tubing set, insert the clear supply tubing into the bottom gray fitting on the front of the machine. Insert the black or blue vacuum tube into the top gray fitting (see Figure 8).



Figure 6: Connect Supply Tubing to Handpiece



Figure 7: Connect Vacuum Tubing to Handpiece

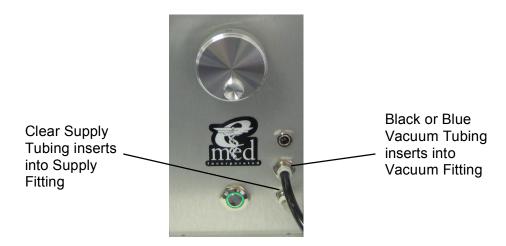


Figure 8: Front Console Tubing Connections

2.4 MOVING THE SYSTEM

Most users of the EnDouceur have more than one operator or utilize multiple treatment rooms. The EnDouceur can easily be moved between them using the custom EnDouceur rolling stand, which is an optional accessory to your EnDouceur. The only disassembly required is disconnection of the power cord to ease maneuvering. Rather than unplugging the power cord from the electrical outlet for each move, it may be easier to install a power cord at each location, leaving them in place. Rest the handpiece in the handpiece hook while moving.

If you operate in multiple offices or will require transporting the EnDouceur over longer distances, you may elect to purchase the EnDouceur's custom rolling case. This travel case features custom-fit foam insulation for your EnDouceur and its accessories, a push-button retractable handle and inline skate wheels to ensure easy and reliable transportation.

CHAPTER 3: OPERATION

3.1 PREPARATION

Before beginning a procedure, the operator must:

- Evaluate the client's skin type and condition.
- Determine the solution, grit, and tip size that would be appropriate for the client.
- Confirm that the treatment head and tubing have been sterilized and the disposable handpiece tip is new.
- Screw the treatment head onto the threading located at the top of the wand.
- Ensure a handpiece tip o-ring is installed in the o-ring groove.
- Attach the appropriate handpiece tip by sliding it over the o-ring using a twisting motion while applying downward pressure.

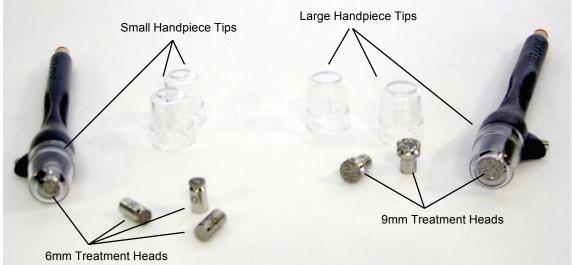


Figure 9: Treatment Head & Handpiece Tip Assembly

- Thread a clean waste jar into the waste manifold.
- Gently shake a jar of the topical solution selected for the client and thread it into the supply manifold.



Figure 10: Supply and Waste Manifolds

3.2 **PROCEDURE**

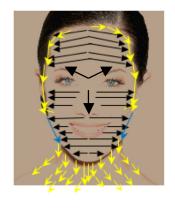
With the handpiece tip unrestricted, turn on the green "On/Off" switch located on the front of the machine, in the center, towards the bottom. When the main power is on, the switch will illuminate and the vacuum gauge will light up. You will also hear the vacuum compressor and cooling fan engage. Follow the instructions in Section 4.1 for Daily Maintenance to prepare the unit for use.

Recommended treatment protocol is as follows:

- Cleanse the client's skin to remove any makeup and/or environmental pollutants.
- You may wish at this time to cover the client's eyes with disposable Derm-Aid eye shields for maximum comfort and safety.
- Occlude the handpiece tip.
- Flush out any remaining disinfectant in the tubing by waiting for the new topical to reach the handpiece before treating the client.
- · Set vacuum to around 6 PSI.
- Start on the neck, at the highest point under the middle of the chin, and make passes in slow deliberate downward strokes. Follow this direction laterally; until the full front of the neck is complete. The last pass should begin directly under the lobe of the ear and end at the top of the decolotte.
- Adjust vacuum during treatment according to skin thickness, the client's comfort, and the
 desired treatment outcomes. Increasing vacuum pressure will produce a deeper
 exfoliation.
- Set the vacuum to between 10 14 PSI, or as appropriate for the treatment to be performed.
- Start at the middle point of the chin, underneath the jaw line, with passes going medial to lateral toward the hairline. Continue in this direction up the face. Each stroke should take about 5 seconds. Watch to make sure that the disposable handpiece tip is nearly full of fluid during each pass.
- Do not make a pass through or above the orbital bone.
- Make each lateral pass until you reach the top crown of the hairline. The last pass should move from the crown downward following the hairline, then hook under the ear, and down the neck. This motion assists in the lymphatic drainage process.
- Mirror the motions above for the second half of the face, beginning each pass near the center of the face, then gliding outward toward the hairline. Once complete, repeat for each side; making 2 full passes over each section of the face.
- Adjust the vacuum as needed (with the handpiece tip occluded), then focus on the nose, and then on any problem areas that may require some extra cross-hatching.
- Apply post-care products according to the physician's or aesthetician's instructions, followed by SPF30 or higher sunscreen.
- Advise the client of a proper at-home, post-care regimen.

Keep a record of the procedure on a Client Log Form (see the Appendix for a sample).

Figure 11: Recommended Passes



CHAPTER 4: MAINTENANCE

The following sections outline routine maintenance protocols. At the end of the chapter, Table 4-1 provides an overview of these recommended procedures.

4.1 **DAILY MAINTENANCE**

Proper cleaning of your EnDouceur is imperative to your client's health and to prolonging the life of your unit. Cleaning must be performed immediately after every EnDouceur treatment and at the end of the day.

To clean the unit **immediately after every** EnDouceur treatment:

- 1. Remove empty solution bottle from topical supply manifold. Remove and dispose of the plastic handpiece tip; remove treatment head and clean in accordance with the instructions listed below (at End of Day)
- 2. Turn the cleaning cycle switch, and place the tip of the handpiece securely in the cleaning port.
- 3. Make sure you have a full bottle of disinfecting solution threaded onto the disinfecting supply manifold. <u>DO NOT USE WATER.</u>
- 4. Adjust the vacuum to maximum.
- 5. Run the Opti-Cide³ solution through the system until it passes through the handpiece and begins draining into the waste jar.
- 6. Once fluid begins draining into jar, turn unit off and loosen waste jar to release vacuum pressure. Leave disinfectant in lines until next use.

Before each use:

- 1. Tighten waste jar and turn machine back on. Allow the machine to run until all disinfectant has cycled through.
- 2. Allow to run for another 30 seconds to completely air out the lines.
- 3. Turn the machine off.
- 4. Empty and reattach the waste jar. You are now ready to perform an EnDouceur procedure.

For end of the day maintenance:

- Check the external air filter for residual liquid accumulation. If liquid is visible, replace the filter according to the steps in Section 4.5. THIS STEP IS CRITICAL FOR PROPER MAINTENANCE OF YOUR UNIT.
- 2. Use water, a mild cleansing solution, or OptiWipes to clean the front of the machine, if necessary.
- 3. Thoroughly disinfect the treatment heads and handpiece (see Section 4.2). Failure to do so may cause damage to parts.
- 4. Reassemble the handpiece and reattach it to the front of the unit (see Figures 10, 11 and 12).

Failure to follow these procedures will VOID your warranty.

4.2 CLEANING THE TREATMENT HEADS AND HANDPIECE

4.2.1 Sterilizing the Treatment Head

The treatment head should be sterilized after each treatment:

- Remove the plastic handpiece tip and discard it with your biohazardous waste. Remove the treatment head and clean by soaking in enzymatic detergent for 15 minutes. The head should then be rinsed in hot running water and the abrasive surface scrubbed with a brush to remove protein material.
- 2. The treatment head can then be placed in a disinfecting solution. Read the label on the solution for the proper soak time
- 3. If the treatment head is to be sterilized in the unwrapped Plastic Sterilization Tray, the "flash" cycle may be used. This is typically five minutes at a minimum temperature of 132°C (270°F) in a steam autoclave. *NOTE: Autoclaves differ by manufacturer and specification; therefore always follow manufacturer instructions in setting temperature and cycle time. Failure to follow manufacturer's instructions may result in damage to your treatment head.

4.2.2 Sterilizing the Handpiece (optional)

- 1. Autoclave the handpiece by:
 - a. Detaching the black or blue vacuum tubing from the vacuum branch.
 - b. Disconnecting the clear supply tubing from the quick disconnect fitting at the base of the handpiece. Press in on the top of the orange fitting and, with the other hand, remove the tubing by pulling straight out (see Figure 16).
 - c. If the handpiece is to be sterilized in the unwrapped Plastic Sterilization Tray, the "flash" cycle may be used. This is typically five minutes at a minimum temperature of 132°C (270°F) in a steam autoclave. *NOTE: Autoclaves differ by manufacturer and specification; therefore always follow manufacturer instructions in setting temperature and cycle time. Failure to follow manufacturer's instructions may result in damage to your handpiece.

4.3 INSTALLING AN O-RING

Place one corner of the o-ring into the o-ring groove on the handpiece. Hook the opposite side of the o-ring with the rounded end of the o-ring tool. Stretch the o-ring over the treatment head post and into the groove. Work into place with fingers, as necessary.

4.4 DISCONNECTING AND REPLACING TUBING

Disconnect tubing from a quick disconnect fitting by pressing in on the top of the fitting (which is either gray or orange) and, with the other hand, remove the tubing by pulling straight out (see Figure 12). To replace the tube, insert it into the fitting until you feel resistance; pause, then push the tube slightly further into the fitting to lock the tube in place. Quick disconnect fittings are called two-stage fittings because of this method of connection.



Figure 12: Removing Tubing from a Quick-Disconnect Fitting

4.5 MAINTAINING THE EXTERNAL AIR FILTER

The external air filter is mounted on the rear of the EnDouceur unit to protect the vacuum pump from overflow from the waste jar. To prevent damage to the pump and to avoid contamination, it is critical to maintain the cleanliness and integrity of the filter and filter housing.

Under proper operating conditions, liquid should not collect in the filter housing. **DAILY** checks of the filter are important to ensure proper operation. Should liquid accumulate in the filter housing, place a receptacle (such as the waste jar) below the filter and drain by depressing the button located at the very bottom of the filter housing. (See Figure 11.)



Figure 13: Draining External Air Filter

The filter should be changed every six months or 200 hours of EnDouceur operation to ensure proper filtration and equipment protection. To replace the filter:

- 1. Unscrew the filter bowl clockwise and pull firmly downward.
- 2. Unscrew the locking disk
- 3. Replace the filter.



Figure 14a: Release External Air Filter



Figure 14b: Pull Down on Filter Bowl

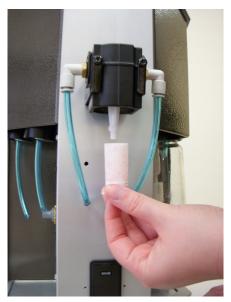


Figure 14c: Unscrew Filter

4. Place the new filter on top of the locking disk. Replace the filter bowl by lining up the threading in the bowl with that of the filter/bowl housing, push up firmly and screw in counter-clockwise until the bowl is secured tightly.

Table 4-1 – Recommended Routine Inspection and Maintenance Schedule

Activity	Ву	Interval	Requirement/Action
Clean exterior surfaces	User	Daily or as needed	
Empty waste jar	User	Before use & immediately after treatments	Discard and clean waste jar regularly to prevent overflow and damage to the unit.
Sterilize treatment heads and handpiece	User	Before use & after treatments	Autoclave or sterilize in ultrasonic cleaner according to section 4.2
Disinfect tubing	User	Before use & after treatments	Disinfect by running one bottle OptiCide3 Disinfecting Solution through unit when changing topicals and at the end of the day.
Check external air filter	User	Daily	Monitor for topical overflow. Empty, clean and replace as needed.
Replace tubing	User	As needed	Replace if discolored or clogged with dry topical due to improper cleaning.
Check uptake tubing	User	Monthly	Ensure a tight connection between the intake tube and the quick disconnect fitting in the supply manifolds
Check residual waste tubing	User	Monthly	Ensure a tight connection between the residual waste tube and the quick disconnect fitting in the waste manifold
Clean float switch	User	Monthly	Clean with a moist cloth. Replace with metal weights at bottom.
Replace handpiece tip o-ring	User	As needed	Follow instructions in section 4.3

CHAPTER 5: TROUBLESHOOTING

Potential problems can be minimized by following the routine schedule described in Table 4-1. Many of the calls received by Technical Support are for operator-related issues and/or improper cleaning and maintenance. Most of these problems can be resolved in the office by the user. This section provides instructions for troubleshooting. Table 5-1 provides an overview of troubleshooting measures.

5.1 NO POWER

If the system does not start, check the following:

- 1. The power cord is properly connected.
- 2. The electrical outlet is "on" and is the correct voltage.
- 3. The "On/Off" switch on the front of the machine is in the "On" position.
- 4. Waste Jar is not full.

5.2 <u>Vacuum Gauge or Side Lights Out / VACUUM PUMP NOT OPERATING</u>

If the vacuum pump stops running during operation or does not engage when the "On/Off" switch is turned on:

- 1. Check the waste jar. The waste manifold (where the jar threads into the machine) is equipped with an automatic shutoff switch. Should the operator neglect to empty the waste jar, a cutoff switch will disengage the vacuum pump and turn off the LED's on the sides of the unit. Should this occur, immediately turn the machine off and remove the waste jar. Empty the contents of the jar as instructed above and replace it into the waste manifold. Check the external air filter for liquid. Drain and/or clean, if necessary (see section 4.5).
- 2. After completing step 1, or if the waste jar was not full, but the pump still fails to engage, call Technical Support (see Ch. 6).

5.3 NO VACUUM

If the pump is on but no vacuum is evident, occlude the handpiece tip and turn the vacuum adjust knob to maximum (though the display readout may not change). Check the following connections, testing for vacuum between each step. **NOTE: Vacuum will not build until the handpiece tip is occluded and the vacuum loop is closed.**

- 1. Ensure that a tight fit is achieved between the handpiece tip and the handpiece tip oring. If the o-ring has broken or lost its seal, replace it with a new one.
- 2. Inspect the vacuum branch tube and its connection to the black or blue vacuum tubing. If the black or blue vacuum tubing does not fit tightly onto the vacuum branch tube, remove it and cut away approximately 1.25cm of the black or blue tube. Reattach the vacuum tubing to the vacuum branch tube.
- 3. Confirm that the vacuum tubing is firmly inserted into the fitting on the front of the EnDouceur unit.
- 4. Verify that the waste jar is threaded into the waste manifold correctly. If the threading on the jar is not properly aligned with the threading on the manifold, vacuum pressure loss may occur.
- 5. If there is still no vacuum pressure evident, contact Technical Support (see Ch. 6).

5.4 NO TOPICAL FLOW

If the pump is on, vacuum is evident when the handpiece tip is occluded, yet no topical solution appears to flow, perform the following steps:

- a) Verify that cleaning switch is set to run position
- b) Rule out vacuum pressure loss by following the steps listed in the preceding section. If the vacuum pressure is compromised, there may be inadequate force to carry the topical through the line. NOTE: Vacuum pressure will not build until the handpiece tip is occluded and the vacuum loop is closed. If vacuum pressure passes all troubleshooting tests and pressure can be felt at the handpiece tip, turn the machine off.
- c) Remove the supply jar from the manifold. Confirm there is solution in the jar.
- d) Remove the topical uptake tubing from the fitting located within the topical supply manifold and rinse it under warm running water. Re-insert the tubing.
- e) Gently shake a full supply jar and thread it into the supply manifold.
- f) Ensure that the clear supply tube is firmly inserted into the fitting on the front of the unit.
- g) Check the fitting at the base of the handpiece to make sure the clear supply tube is securely inserted.
- h) Turn the unit back on. Confirm that vacuum is set to maximum, occlude the handpiece tip and check for flow. **NOTE: Topical solutions will not flow until the handpiece tip is occluded.** Monitor the clear supply line to determine when solution has reached the handpiece.
- i) If topical still does not flow, replace handpiece tubing.

WARNING

The use of any parts, materials or service labor unauthorized by emed, Inc. may seriously damage the unit and will VOID the warranty.

Table 5-1 - Troubleshooting Overview

Symptom	Probable Cause	Action
	The "On/off" switch on the front panel is in the "Off" position	Turn the "On/Off" switch to the "On" position.
The system does not start panel lights are out)	Power disconnected	Turn off the "On/Off" switch and check that the power cord is plugged into the electrical outlet and connected to the unit's power cord housing.
	Waste jar full	Turn off the unit and empty the waste jar. Restart the unit.
Panel lights are out and the vacuum pump does not run	Handpiece tip has lost a tight seal	Replace the handpiece tip o-ring and reattach the handpiece tip.
	Vacuum tube has lost tight seal with vacuum branch tube	Remove the black or blue vacuum tubing from the vacuum branch tube. Cut away approximately 1.25 cm inch of the black or blue tube. Reattach the vacuum tubing to the vacuum branch tube.
No vacuum or	Vacuum tube is not firmly inserted into vacuum fitting	Disconnect and reconnect the black or blue vacuum tubing from the vacuum fitting on the front of the unit.
vacuum loss	Waste jar improperly threaded into waste manifold	Remove the waste jar and re-thread it carefully into the waste manifold.
	Waste jar has lost a good seal in the manifold	Slightly tighten waste jar.
	Vacuum pressure loss	Perform the troubleshooting steps above for "no vacuum."
	No solution in supply jar	Remove the supply jar and check for solution. Replace with a new supply jar if empty.
	Topical uptake tubing clogged	Remove the topical uptake tubing from the supply manifold. Rinse under warm running water. Re-insert the tubing.
No topical flow or	Supply tubing not firmly inserted into supply fitting	Disconnect and reconnect the clear supply tubing from the supply fitting on the front of the unit.
flow loss	Supply tubing not firmly inserted into handpiece quick disconnect fitting	Disconnect and reconnect the clear supply tubing from the quick disconnect fitting at the base of the handpiece.
	Clog in tubing	Replace handpiece tubing
	Tubing not inserted correctly	Quick disconnect fittings are two-stage fittings. Insert tubing into the fitting until you feel resistance; pause, then push the tube slightly farther into the fitting to lock the tube in place.
Tubing not inserting into fitting	External air filter has overflowed into vacuum pump	Cease use of unit immediately. Call Technical Support (see Ch. 6).
Unit is leaking	External air filter has overflowed into vacuum pump	Cease use of unit immediately. Call Technical Support (see Ch. 6).

See Chapter 6 for Technical Support contact information.

International customers (outside U.S.):

Selection of topical solutions differs by country. Please contact your local distributor for more details about availability and purchase of topicals.

CHAPTER 6: CONTACT INFORMATION

For any problems, contact your local distributor: **Distributor Contact Information:**

Technical Support:

Parts Ordering Department

US Corporate Offices 1-818-874-2700 1-818-874-1195 fax info@4emed.com

CHAPTER 7: DISCLAIMER

This manual is not intended as a comprehensive guide for all aspects of treatment. emed, Inc. highly recommends the operator confer with the Department of Labor, Licensing, and Regulation or other such regulatory body in his/her respective state or country regarding legal use of this system. Operators must be trained at the initial sale by authorized personnel. emed, Inc. declines any responsibility for the direct consequences or side effects experienced by individuals undergoing treatment.

The EnDouceur warranty is void if:

- Anyone other than authorized personnel install and/or service the equipment.
- Solutions other than emed topical solutions are used with the EnDouceur.
- Electrical facilities at the installation site do not comply with all application codes, including IEC and UL requirements.
- The device is not used in accordance with the instructions specified in this manual.

Because of our ongoing commitment to product quality and innovation, we reserve the right, at any time, to discontinue or modify specifications, prices, designs, features, models or equipment without incurring obligation.

This manual should always accompany the unit and its location must be known to all personnel operating the unit. Additional copies of this manual are available from your local distributor or emed, Inc. (see Chapter 6 for contact information).

CHAPTER 8: TERMS OF WARRANTY

The EnDouceur warranty covers parts and labor for those items found to be defective due to material or workmanship for one (1) year from the date of purchase. Any repairs resulting from natural disasters, accidents, electrical system faults, negligence, improper use of the device, improper cleaning of the device, improper maintenance of the device, installations, servicing, repairs, or alterations to the unit carried out by personnel other than persons authorized by emed, Inc. are NOT covered by this warranty.

Exclusions: Any item that comes in direct contact with solution or that should be replaced on a semi-regular basis is considered a disposable item and is not covered under this warranty. Such items include, but are not limited to: solutions, tubing sets, o-rings, filters, fittings and handpiece tips. The use of any parts or materials including solutions, filters, tubing, etc. that are not authorized by emed, Inc. will VOID this warranty. Removing or tampering with the internals of the unit will also VOID this warranty, unless specifically authorized by an emed representative. Preventative maintenances are not included in the warranty; failure to perform preventative maintenances (based on usage) will VOID this warranty.

emed, Inc. and its Distributors shall not be held responsible for any failure in servicing derived from circumstances beyond its control. In no case will a customer be entitled to claim compensation for any damages incurred as a result of the device being out of service.

This warranty is non-transferable. All sales are final.

Appendix

• Patient Treatment Log

EnDouceur Dermolissage System Patient Treatment Log

Patient Name:	Date:

Treatment # _____ of ____

