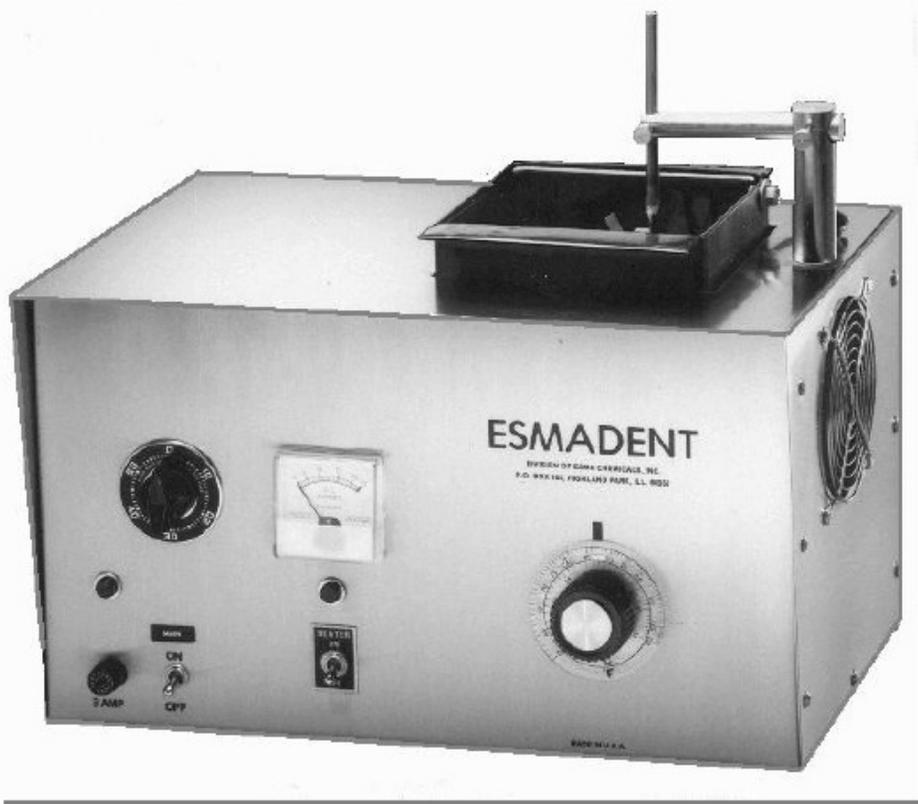


# ***Orthodontic Reducer/ Electropolisher MODEL E1085***



Unit E1085 polishes stainless wires and clasps of retainers, arch wires, loose bands, removes cement and soldering flux

Other Applications include:

Polishing bands with simultaneous cement removal

Reducing arch wires

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## **INSTRUCTIONS FOR AUTOMATED ORTHODONTIC ELECTROPOLISHER E1085**

### Introduction

Unit E1085-1 polishes stainless wires and clasps of retainers, arch wires, loose bands, removes cement and soldering flux-in 10-15 seconds of polishing.

The unit, constructed of stainless steel, is built to give years of reliable, trouble-free operation. The cathodes and holding assemblies are built of non-corroding alloys. Polishing solution temperature is automatically controlled by heater-cooling fan combination. The unit is designed for production.

The stainless steel liquid, E972, used for polishing, is not phosphoric acid, but a mildly acidic proprietary formulation - the result of ESMA research. Problems of water pick up, clouds of corrosive fumes of concentrated phosphoric acid and corrosion of clips, are eliminated in our system.

**PLEASE READ CAREFULLY THE INSTRUCTIONS BEFORE OPERATING**

### Safety Precautions

Although the system is designed with maximum safety features, certain precautions are recommended:

- Wear safety goggles when pouring E972 liquid (into jar and from it); - rinse off with plenty of water; in case of eye contact - rinse off with plenty of water and seek medical attention.
- Solution will damage cloth and carpeting.
- A small amount of solution mist is emitted during polishing; avoid inhaling, install near exhaust or ventilated area.
- Unplug before removing the back panel. Do not operate with panel off.

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## Installation

Unpack, place unit on counter, connect black wire on tank to black binding post of cabinet. Pour E972 liquid into tank to one inch from top of tank (wear goggles). Connect unit to 115VAC outlet(230VAC for 230V units).

Slide horizontal holding arm (8G) into main post (6D) and fasten with knurled screw (13A) of main post. The arm with clip (13C) is attached to horizontal holding arm, with part to be polished suspended into solution (diagram 1).

## Operation

- Set temperature control at 110 degrees F.
- Turn main switch and heater switch on.

In approximately 30 minutes the temperature will be reached and blower will come on. (We recommend turning heater switch off once temperature is reached).

## Polishing

- Suspend part to be polished on clip (13C); immerse end of holder into liquid so treated parts are fully submersed: tighten arm (13C) into horizontal arm with knurled screw (13A).
- Turn automatic timer for desired time: light comes ON when polishing is ended.
- Remove holder with polished parts, rinse in water.
- Neutralize part in baking soda solution (teaspoon of soda per cup of water).
- Rinse under running hot water, then air-dry.

## Attachments

Two arm clip assemblies are enclosed. One of these is specially for Frankel type appliances or other appliances where the metal is not continuously linked throughout the acrylic (diagram 2) .

Clip to one of the wire sections of appliance, and position contact wire (X or Y) of clip (13C) to touch the other wire sections of appliance. This will allow simultaneous polishing of all wire sections of appliance.

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If wire is continuous throughout the appliance, simply clip to any metal section of the appliance.

Stainless steel clasps are usually oxidized and discolored after the curing of an acrylic retainer. Treatment in polishing cell will clean and polish the clasps and wires to a high luster in 5 to 20 seconds.

No manual polishing is required. E972 liquid will not damage the acrylics (nor will it polish or clean the acrylic).

The solder joints, although freed from fluxes, will not polish. Generally, a dark deposit forms on the solder. This deposit is easily removed with a rubber point. Therefore, the general procedure in production is as follows:

- Preparation of retainer
- Electropolishing of all metal (no manual wheeling)
- Shine of solder joints (Final step).

### Other Applications

- Polishing bands with simultaneous cement removal (optional basket attachment (part 14I)).
- Reducing arch wires

### Maintenance

Maintain clean cabinet: wipe off with cloth wetted with mild detergent; polish with a polish for stainless appliances (as Sheila Shine).

Solution should not be spilled on cabinet; shorting of post 6D may take place- wipe off !

Replacement of ESMA E972; during polishing metal and metal oxides are dissolved, some decomposition and drag-out take place. Replace when action gets slow, solution thick, objectionable odor, non-uniform shine and rapid overheating.

#### Cleaning polishing cell:

- shut off unit and unplug power cord from outlet
- disconnect black wire on tank from black binding post on cabinet.
- slowly lift tank out of unit by holding front and back flanges of tank
- dispose of solution (dispose properly according to local regulations ); rinse tank thoroughly with water, remove any film or build-up from inside, wipe tank walls with soft towel or

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sponge. THE TANK IS COATED, SO DO NOT USE ANY ABRASIVE MATERIAL while cleaning inside the tank. Dry tank with towel, do not pour solution into wet tank.

## Trouble Shooting

<u>Problem</u>	<u>Possible Cause</u>	<u>Corrective Measures</u>
Blowing fuse	-Part touching tank cathode	- Re-position part
	-Solution spilled on cabinet and is wetting base of post	- Remove tank, loosen screw under post, remove post, rinse and dry all parts; reassemble making sure insulating washers are in place
	-None of the above	-Contact manufacturer
Odor emitted during heat up	-Solution present on heating plate	-Shut off unit, remove tank and clean up any solution on heating platform
	-Leaking of tank	-If repeated clean-ups do not eliminate odor tank may be leaking
	-Solution needs exchange	-Replace with fresh solution

For technical assistance please call 1-800-276-2466

