# OPERATION OF THE WALMAY CRYOSPRAY

- 1. The WALMAY CRYOSPRAY is operated by the regulator control handle (Number •). Grip the cryospray around the black cover skirt over the Flask neck, with the first fingers lightly resting on the handle. Squeezing the handle inwards opens the Regulator and nitrogen begins to flow.
- 2. Using the coned point of the Tip orifice as an accurate aiming device, position the Tip orifice approximately 2mm from the lesion being treated.
- 3.During extensive use of the WALMAY CRYOSPRAY condensation will form on the SprayTip, Probe and possibly the Turret. Continuing use will turn this condensation into ice crystals. This may cause the Regulator to remain slightly open allowing a small trickle of nitrogen to continue flowing.

This may be overcome by:-

- A. Swinging the handle from side to side a couple of times, breaking the ice in the valve.
- B. Depressurise the unit by lifting the Safety Valve and allow the turret to warm at room temperature.
- 4. From time to time you may hear a phzzz from the unit. This is the Safety Valve venting pressure and it is quite normal.
- 5.On completion of treatment for the day allow the remaining nitrogen to evaporate overnight. Do not open the Flask and discard the nitrogen, as this will allow condensation and moisture build up within the mechanism.



## MAINTENANCE OF YOUR WALMAY CRYOSPRAY

- 1. It is recommended that the Cryospray is cleaned between patients. As the Cryospray should not come into direct contact with the patient, the infection risk is low. Therefore, the unit only requires periodic disinfecting by wiping the tips over with a hospital grade or low level instrument cleaner. In the event of contact with a patient's dermis, it is recommended that the contact probe be washed in hot soapy water and then wiped with a hospital grade alcohol wipe.
- 2. Wipe the stainless steel Flask and brass head with a dry soft cloth at the finish of the day's procedures.
- 3. Do not flush the Walmay Cryospray with water.

#### CAUTION - Be careful not to drop cryospray.

- 4. Should the Cryospray fall, on impact the Probe may bend or perhaps break. If this occurs, ring Walmay and a new Probe will be posted to you. Simply unscrew the damaged Probe and screw in the replacement (Refer "Assembling the probe and tip" Point 4). This is **not** covered by warranty.
- 5.If you have a problem with the Cryospray, ring Walmay on (02) 9624 3188 before returning it for service. Most problems can be resolved over the phone. However, we still recommend that the unit be serviced on a 12 monthly basis. Our address for servicing equipment is:

7 Lockyer Street, GOULBURN NSW 2580

# ACCESSORIES FOR USE WITH WALMAY CRYOSPRAY



Your Walmay Cryospray is delivered in a purpose made carry bag.

This bag should be retained for transport of the Cryospray.

Ensure it is in an upright position.

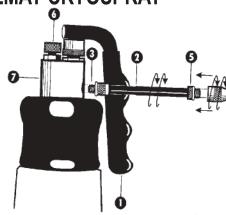


Liquid Nitrogen Extractor-Double insulated handle; adjustable to fit up to 25 litre dewar

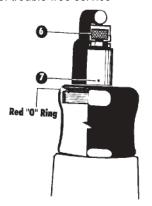


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# USE AND MAINTENANCE INSTRUCTIONS FOR WALMAY CRYOSPRAY



If you follow these directions carefully the Walmay Cryospray will give years of trouble-free service



This product is to be used by Trained and Qualified Health Professionals. The intended use is for dispensing Liquid Nitrogen for the freeze destruction of tissue in cryosurgery applications.

#### WALMAY

9 Artisan Road, Seven Hills NSW 2147 Tel: (02) 9624 3188 Fax: (02) 9624 4387 Rev: 2:0 info@walmay.com.au

## WALMAY CRYOSPRAY UNIT Contains

- 1. 1 only Cryospray Flask with Turret attached
- 2. 1 only Probe
- 3. 5 only Spray Tips (No. 1,2,3,4 & Curved)
- 4. 1 only Tray holder for Spray Tips
- 5. 1 only Carry Bag

#### ASSEMBLING THE PROBE AND TIPS



- 1. Removed the Probe, Tips and Tray from the Carry Bag
- 2. Screw the Probe (Number ②) into the regulator outlet orifice (Number ③).

### CAUTION- Do not overscrew Probe so that the red "O" ring distorts.

- 3. Select a Spray Tip and holding the knurled end of the Probe (Number 9) screw it onto the brass outlet thread.
- 4. The regulator handle (Number ●in the illustration on page one) can be positioned either left or right of the Probe according to how it feels best for your opertion.



#### THE SET OF FIVE SPRAY TIPS

- 1. There are five spray tips provided with the Cryospray, four coned tips and one long curved tip. The cone tips are numbered 1,2,3 and 4 adjacent to the orifice. Number 1 has the smallest orifice and Number 4 has the largest orifice.
- 2. Try all four Spray Tips to experience the volume and spread of liquid nitrogen delivered by each one. This will help you in assessing which tip to use for any particular treatment. Note:- When No.1 Tip is used, Liquid Nitrogen Spray will be intermittent. This tip is for use in delicate areas, eq on the eye lid where over spray could be dangerous.
- 3. The curved spray tip is for treatment of lesions difficult to reach with a straight spray.
- 4. The Spray Tip can be changed at any time during a treatment simply by removing the attached tip and replacing it.

## FILLING THE WALMAY CRYOSPRAY

1. Unscrew the Turret from the Flask.

CAUTION- Do not use the Probe as a lever to screw / unscrew Turret from the Flask as any pressure on the Probe will allow fatigue in the thread and the Probe may break off.

2. Insert the WALMAY LIQUID NITROGEN EXTRACTOR into the Dewar pushing it down until the rubber stopper seals the Dewar opening. Immediately the nitrogen will begin to boil and pressurise the Dewar forcing liquid up the extractor. Hold the open neck of the flask over the exit end of the extractor. You will hear the flask filling. Experience will quickly show the level needed for treatment. When the flask is filled to the desired level, lift the extractor out of the Dewar. This allows the pressure in the Dewar to subside and flow of nitrogen ceases.

## CAUTION- Do not over fill the flask. Always use suitable protective gloves.

- 3. Keep the Flask in an upright position and filmly screw the Turret onto the brass Flask top.
- The Flask will self pressurise and be ready for use in approximately 60 seconds.

**NOTE:** A tip for quickly pressurising the unit. Fill the reservoir with liquid nitrogen, firmly screw the Turret to the Flask, and turn the unit upside down. After approximately 5 /10 seconds the Safety Valve will vent a powerful jet of vapour. Set the instrument upright; it is pressurised. This procedure will also disclose if the Turret is not fully sealed onto the Flask. If you feel cold on your fingers coming up from the black Turret Skirt cover, it indicates the Turret is not firmly screwed to the Flask.

## CAUTION- Ensure good ventilation of the area being used for filling operations.

**NOTE:** Liquid Nitrogen is colourless and odourless. The Vapour produced in the process of filling the Flask is caused by extreme cold condensing humidity in the air.

5. The Flask may be topped up at any time. Raise the Knurled top of the Safety Valve (Number **③**) to release the internal pressure, taking care to keep your hand away from the Safety Valve vent (Number **②**). The Turret may then be unscrewed and the Flask refilled.

CAUTION- Do not return unused nitrogen to the Dewar. Some bacteria spores or viral particles can be preserved in liquid nitrogen and become viable after thawing.

**NOTE:** It is important to keep your storage of liquid nitrogen clean. Over time moisture in the Dewar can turn to slush or ice crystals, and lint etc. will accumulate. Before filling the Dewar every second time, swill the last two litres of nitrogen around the bottom and empty it out of doors. Failure to do this may introduce contaminating matter into the Flask and stop the regulator or safety valve from properly sealing. If this occurs the CRYOSPRAY will have to be returned to WALMAY for service. A charge will apply.

**NOTE 2:** When transporting the WALMAY CRYOSPRAY ensure the Flask is kept upright.

