

WALMAY Cryospray OPERATION & MAINTENANCE



1. The WALMAY Cryospray is operated by the Regulator control handle **1**. Grip the Cryospray around the black Cover Skirt **12** 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 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 Spray Tip, 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 will 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.

1. It is recommended that the Walmay Cryospray is cleaned between patients. The Cryospray Tip should not come into direct contact with the patient, so infection risk is low. Wipe the Unit and Tip with hospital grade instrument cleaner. If considered desirable, a solution, such as Milton, may be used in accordance with the manufacturers MSD, eg. Milton2% - For Hospital Use Dilution Chart. The Tips may be autoclaved – refer to the autoclave manufacturers recommendations.

2. Wipe the stainless steel Flask and Turret 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 the 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 "ASSEMBLY" Point 2). This is not covered by warranty.
5. If you have a problem with the Walmay Cryospray, ring Walmay on 1300 393 493 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

Your Walmay Cryospray is delivered in a purpose made carry bag. This bag should be retained for transport of the Cryospray and carried in an upright position.

If transporting the unit charged with Nitrogen, observe the following;

1. Set the Carry Bag on a flat surface in an upright position.
2. Put the Probe and the other accessories in their receptacles.
3. Place the Flask with the Turret firmly attached in its container. The Regulator outlet orifice must be facing you, with the Regulator Handle at 90° to your right, stowed in the protected cut-out.
4. Zip up the carry bag.

If the bag is tipped too far from the vertical (approximately 30°, depending on how full it is), Liquid Nitrogen may flow from the Safety Valve. If kept upright the Safety Valve will perform normally and release vapour when required. This will dissipate through the bag fabric into the atmosphere.



Walmay Holdings Pty Ltd trading as:

WALMAY MEDICAL PRODUCTS

80 Hughes Ave, Ermington NSW 2115

Phone: 1300 393 493 Fax: 1300 393 483

Email: sales@walmay.com.au ABN 96 128 045 849

Supplied by **team** medical supplies

Revision 4

www.teammed.com.au | info@teammed.com.au | phone 1300 22 44 50

WALMAY HOLDINGS PTY LTD
WALMAY
CRYOSPRAY
MODEL WH121

USE AND MAINTENANCE INSTRUCTIONS



Your Walmay Cryospray unit contains:

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

WALMAY Cryospray ASSEMBLY

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



This Instrument 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.

1. Remove the Probe, Tips and Tray from the Carry Bag **13**
2. Screw the Probe **2** into the Regulator outlet orifice **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 **4**, screw it onto the brass outlet thread.
4. The Regulator handle **1** can be positioned either left or right of the Probe according to how it feels best for use of the instrument.

WALMAY Cryospray SPRAY TIPS SET



1. There are five Spray Tips provided with the Cryospray. Four cone shaped 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, eg 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.

WALMAY Cryospray FILLING THE UNIT

CAUTION The temperature of Liquid Nitrogen (LN) is -196°C . Before handling LN obtain a Material Safety Data Sheet from your supplier.

1. Unscrew the Turret **7** from the Flask **8**.

CAUTION Do not use the Probe as a lever to screw / unscrew Turret from the Flask.

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. 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 Always use suitable protective clothing. Do not overfill. Walmay recommend filling to 75% of Flask capacity. See following Note.

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

Note: LN is not under pressure in its natural state. Due to the steep thermal gradient, LN starts to boil when the Flask is filled, and the gas pressurizes the instrument as the Turret is screwed into place. This is why filling to 75% of capacity is recommended. It allows the unit to maintain pressure and is sufficient LN for a surgery session. If the Cryospray does not pressurize within 60 seconds, ensure the Turret is sealed onto the Flask. Keep Flask in upright position.

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

Note: Liquid Nitrogen is colourless and odourless. The Vapour **9** 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 **5** to release the internal pressure, taking care to keep your hand away from the Safety Valve vent **6**. 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. The Gauze Strainer **10** on the bottom of the Siphon Tube **11** will reduce the risk of contamination. 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.

