

RhinoChill[®]

Saving brain. Preserving life.

PRINCESS²

ULTRAFAST HYPOTHERMIA IN CARDIAC ARREST

Operating the RhinoChill

A guide for Cascade Trainers



RhinoChill[®]
Saving brain. Preserving life.



Preparation for use

Preparation for use

- Check integrity of nasal cannula packaging
- Check for expiry date
- Remove Catheter from package without using sharp objects



Preparation for use

- Check there is no obvious damage to the nasal cannula.
- Inspect the tips of the cannula to ensure they are smooth, round and not damaged



Preparation for use

- Inspect the coolant bottle for intact cap seal
- Check for expiry date



Preparation for use

- If not already done, connect the RhinoChill device to the air / O₂ supply (either portable or wall supply, depending on area of use)



Preparation for use

- Turn the control knob to the check position
- Check the battery light is green
- If battery light is illuminating yellow, place the device onto charge

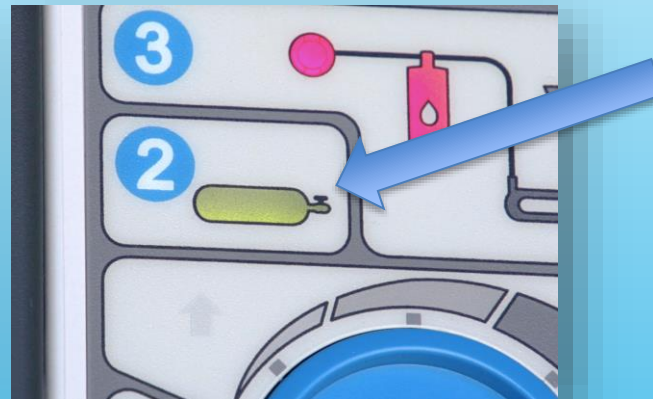


Preparation for use

- Open the gas supply valve



- Check that the gas supply light turns green



Preparation for use

- Remove the cap from the coolant bottle and retain for later disposal of the bottle
- Remove the seal over the bottle top



Preparation for use



- Place the coolant bottle in the bottle holder on the device
- Ensure it is seated firmly and a click is heard when the bottle is inserted

Preparation for use



- Check that the coolant bottle light has turned green.
- Ensure that the coolant bottle holder latch has engaged over the top of the bottle and the bottle is secure in place.

Preparation for use

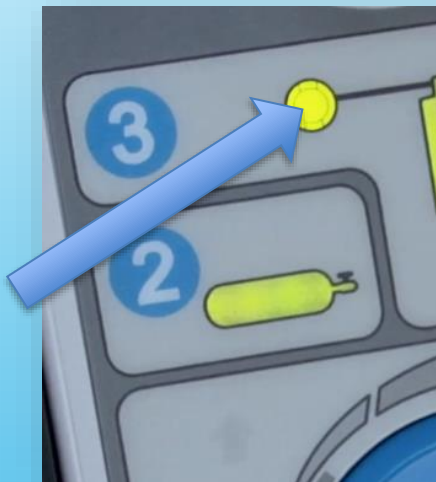


- Attach the nasal catheter bottle interface over the coolant bottle top and screw tight
- hand tight only
- no tools are required

Preparation for use

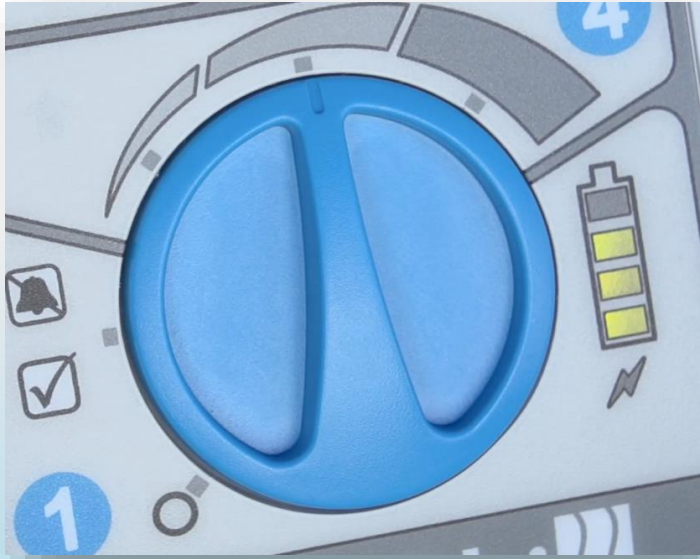


- Insert the nasal catheter connector hub into the catheter port on the RhinoChill Device



- Check the catheter connector light illuminates green

Preparation for use



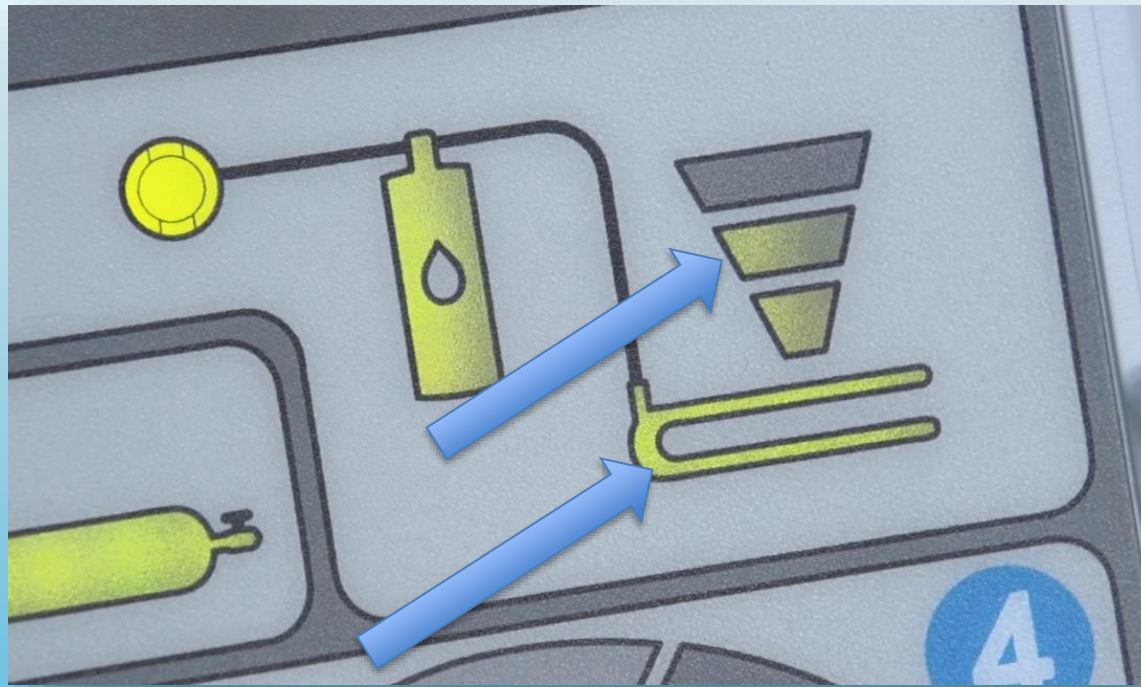
- Move the control knob to the medium setting



- Check for spray from all ports on both nasal catheters.

Preparation for use

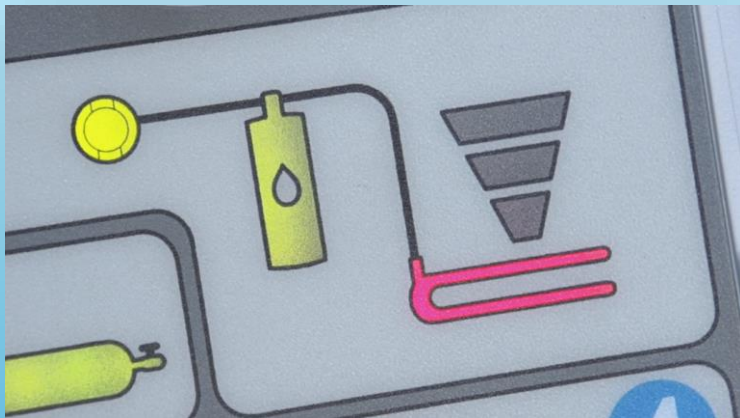
- Check that the nasal catheter light and the flow light is illuminated green



Preparation for use



- Kink one of the nasal catheters near the hub to check the over pressure alarm.

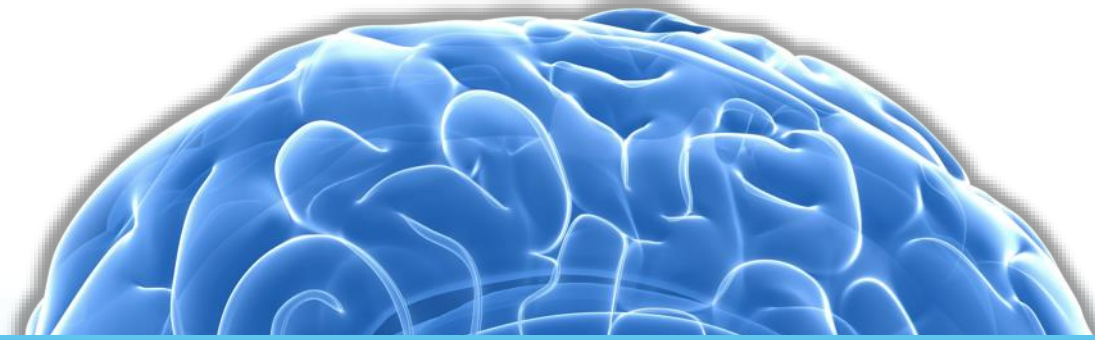


- Check that the flow stops, the nasal catheter light turns red and the audible alarm sounds

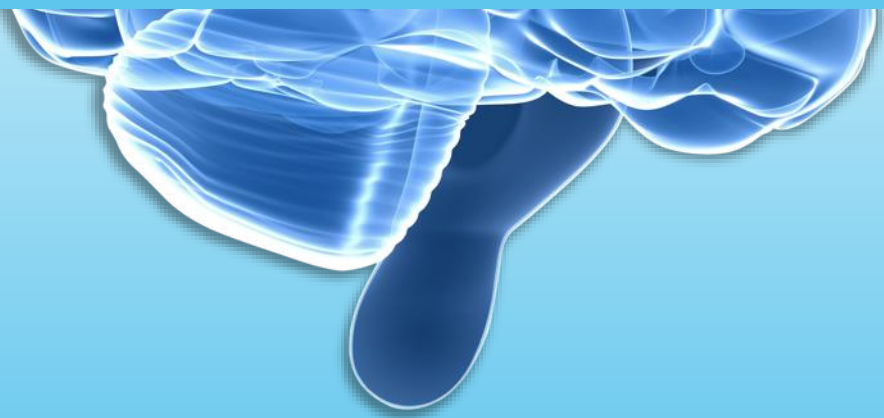
Preparation for use

- Move the control knob to the check position to reset the over pressure alarm





Patient application



Patient Application

- Ensure the patient has a protected airway (either Endo Tracheal Tube or Supraglottic Airway)
- Keep the mouth open to vent vapour



Patient Application

Do not position the RhinoChill device above the level of the head of the patient as coolant may siphon down the nasal tubing and into the patient

Patient Application



- Insert the nasal catheter into the patients nostrils
- Insert the catheter directly backwards towards the patients ears rather than up the nostrils towards the forehead.

Patient Application



- The hub of the catheter should lie above the patients top lip and the tubing lies across the patients right cheek.
- This ensures the spray ports are in the correct orientation

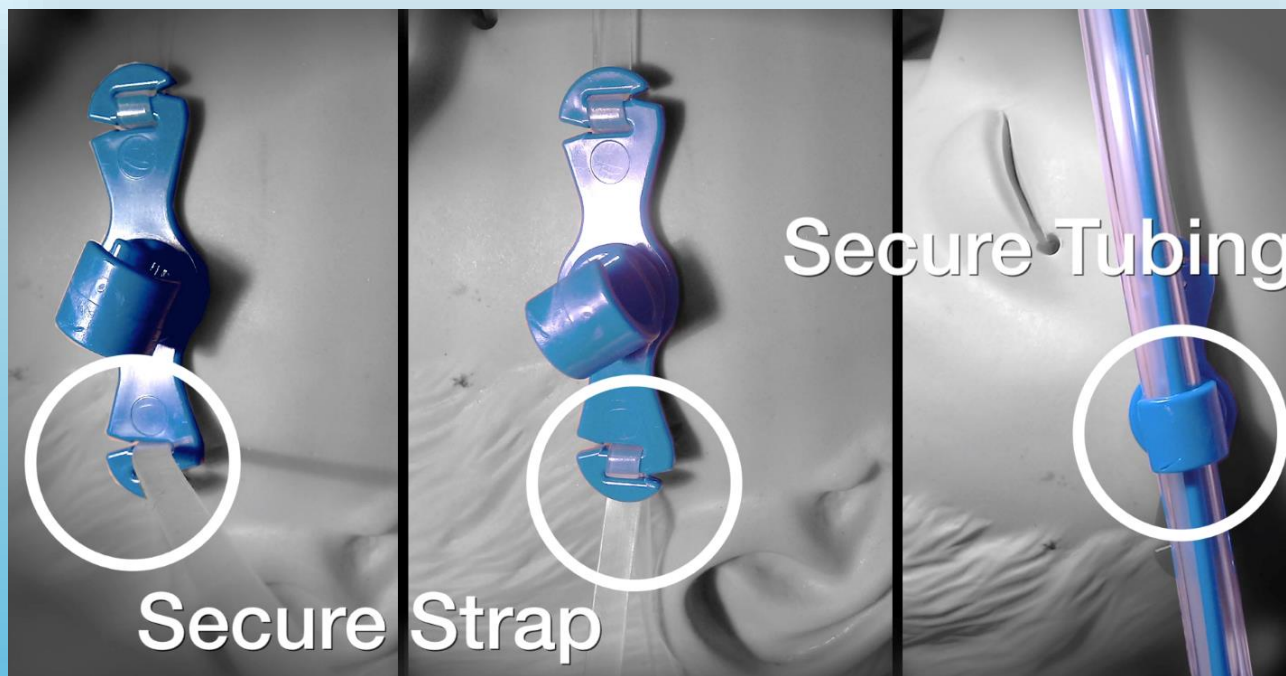
Patient Application



- Top of the nasal hub faces upwards.
- Convex surface and embossed logo should sit directly under the nose
- The 'R' and 'L' correspond to the patient's right and left.

Patient Application

- Secure the catheter around the patients head using the supplied strap and place the tubing through the clamp on the patients right cheek



Patient Application



- Start the cooling process by moving the control knob to the high flow setting for 30 seconds or until the flow indicator starts turning briskly.



Patient Application



- Turn the control knob to the desired cooling rate and check that the nasal catheter flow rate light is illuminated green .

Patient Application

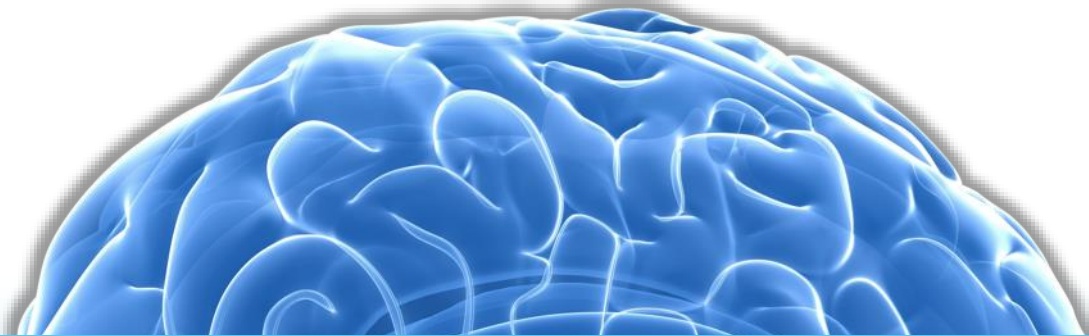
- When the coolant is down to the last 200ml of liquid the bottle light will change to orange and an audible warning alarm will sound
- The coolant will run out between 4 – 8 minutes after



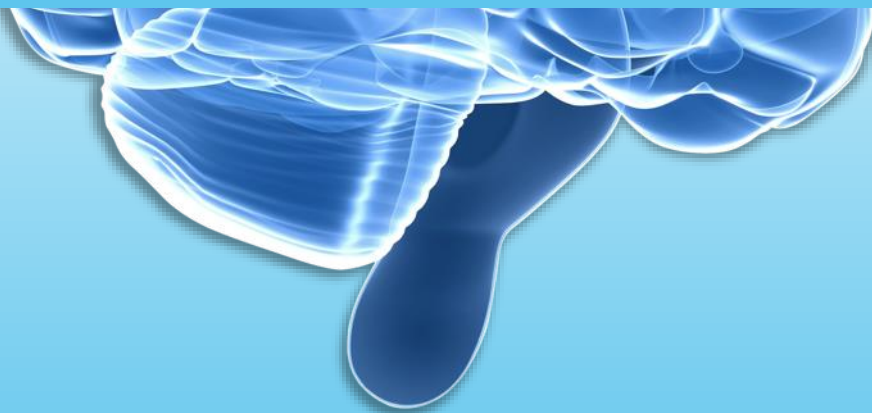
Patient Application



- If the coolant runs out, the flow will stop, the bottle light will illuminate red and an audible alarm will sound until the device is reset and the coolant bottle is replaced



Changing the Coolant Bottle



Changing the coolant bottle



- Ensure the control knob is placed into the check position

Changing the coolant bottle



- Remove the nasal connector hub from the device.
- Unscrew the catheter bottle top interface from the empty coolant bottle and remove the bottle from the device

Changing the coolant bottle

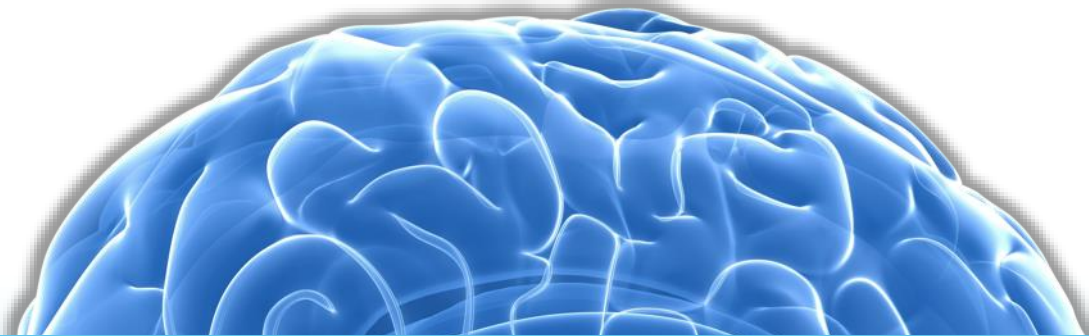
Place the bottle cap onto the empty bottle and dispose of according to local disposal guidelines

Do not dispose of any remaining coolant liquid down the sink or drain

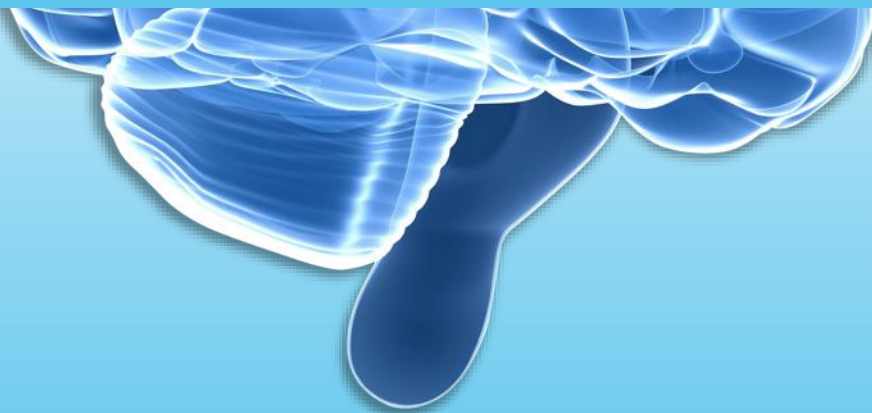
Changing the coolant bottle



- Insert a new bottle into the device as previously shown and recommence cooling at desired flow rate



Discontinuing RhinoChill Cooling



Discontinuing RhinoChill Cooling



- Turn the control knob to the off position



- Close the gas supply valve

Discontinuing RhinoChill Cooling



- Remove the nasal catheter and dispose of in clinical waste

Discontinuing RhinoChill Cooling



- Disconnect the nasal catheter assembly from the control unit and the coolant bottle and dispose of in clinical waste

Discontinuing RhinoChill Cooling



- Remove the coolant bottle, replace the cap, and dispose of as per local guidelines

Discontinuing RhinoChill Cooling

- Attach the control unit to an external power supply at the earliest opportunity

