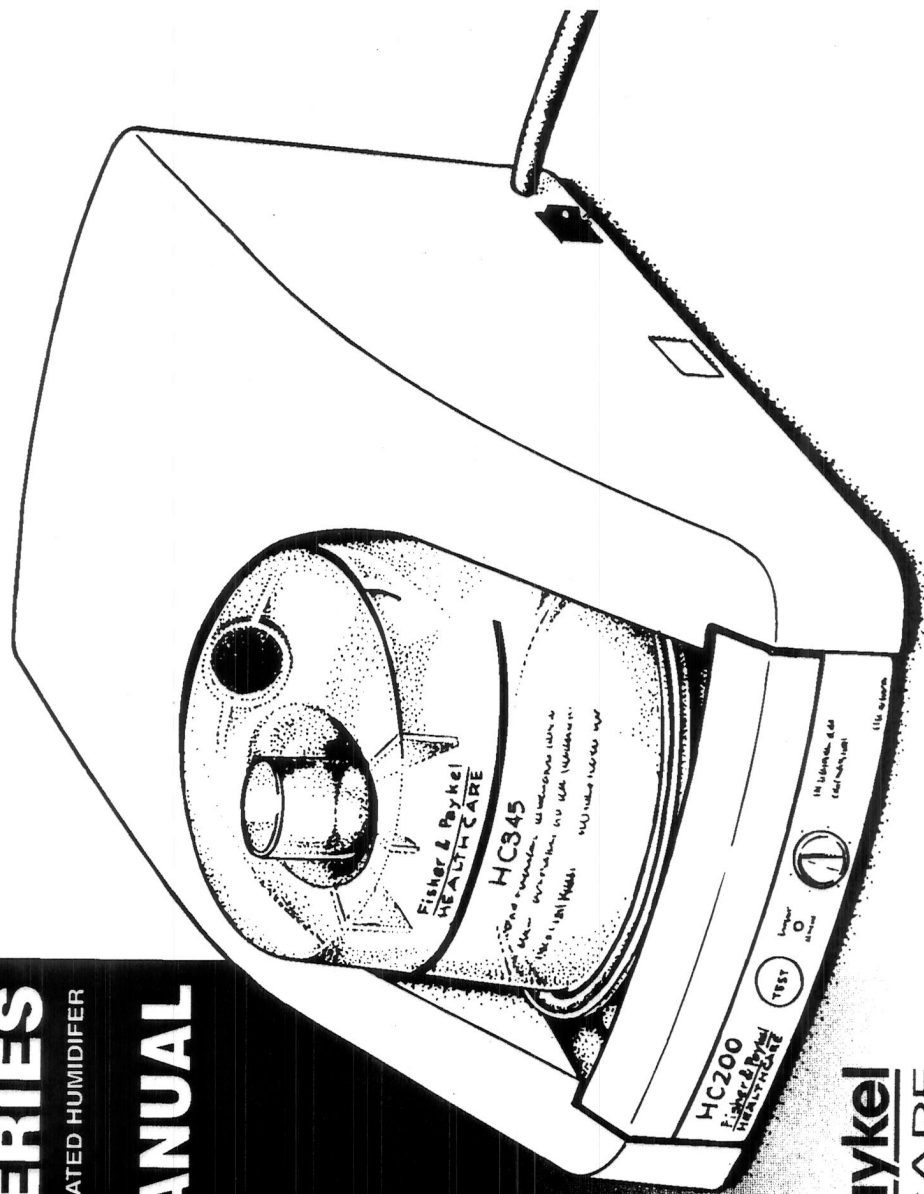


HC200 SERIES

NASAL CPAP BLOWER & HEATED HUMIDIFIER

USER'S MANUAL

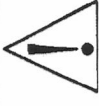


Fisher & Paykel
HEALTHCARE

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Symbols

			
Type B	ATTENTION Consult Accompanying Documents	IPX1 Drip Proof	Alternating Current

Definitions

Notes, Cautions and Warnings	Note: A note provides additional information intended to point out procedures or conditions which may otherwise be misinterpreted or overlooked.	CAUTION A CAUTION statement indicates the possibility of equipment damage, or inefficient operation of the unit. If in doubt, contact your Fisher & Paykel dealer before using the unit.	WARNING A WARNING statement indicates the possibility of personal injury.
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Safeguards

Cautions

CAUTION

- **Never place the HC200 on a soft surface such as a bed or couch, where the openings may be blocked.**
- Never drop or insert any object into any opening or tube.
- Do not use your HC200 in close proximity to high frequency apparatus, shortwave or microwave equipment. Emission from such devices may affect the HC200's operation .
- Do not fill chamber with water while it is on the HC200.
- Do not block air flow from the HC200

Safeguards, continued

Warnings

WARNING

- Use the HC200 only for its intended use as described in this manual.
- Use the HC200 only on prescription from a licensed physician.
- US Federal law restricts this device to sale by or on the order of a physician.

Reduce risk of electrocution by taking the following precautions:

- Always connect the HC200 to a properly grounded power outlet (see "Grounding Instructions").
- Do not use the HC200 whilst bathing.
- Do not store the HC200 where it can fall or be pulled into water.
- Do not place or drop the HC200 into water or other liquid.
- If the HC200 does fall into water, unplug the HC200 immediately.

Reduce the risk of burns, electric shock, fire or injury by taking these precautions:

- Never operate the HC200 if
 - it has a damaged power cord or plug
 - it is not working properly
 - any part of the HC200 has been dropped into water.
- Keep the power cord away from heated surfaces.

Grounding Instructions

All countries

Grounding reduces the risk of electrical shock by providing an escape wire for the electrical current. The HC200 has a cord equipped with a grounding wire and a grounding plug. The plug must be plugged into a properly installed and grounded outlet. Check with a qualified electrician or technician if you do not fully understand the grounding instructions, or if you are not certain that the HC200 is properly grounded.

Extension cords

If it is necessary to use an extension cord, use only a 3-wire extension cord that has a three-blade grounding plug, and a 3-slot receptacle that fits the HC200 plug. Replace or repair a damaged cord.

In USA/ Canada only

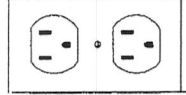
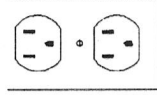
This product is for use on a nominal 115V circuit in the United States and Canada.

The HC200 has a grounding plug that looks like the plug illustrated. A temporary adaptor may be used to connect this plug to a 2-pole receptacle if a properly grounded outlet is not available. The coloured rigid ear and lug extending from the adaptor, must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adaptor is used, it must be held in place by a metal screw. The temporary adaptor should be used only until a properly grounded outlet can be installed by a qualified electrician.

WARNING

Electrical Danger

Improper use of the grounding plug can result in a risk of electrical shock.



Intended Use of the HC200

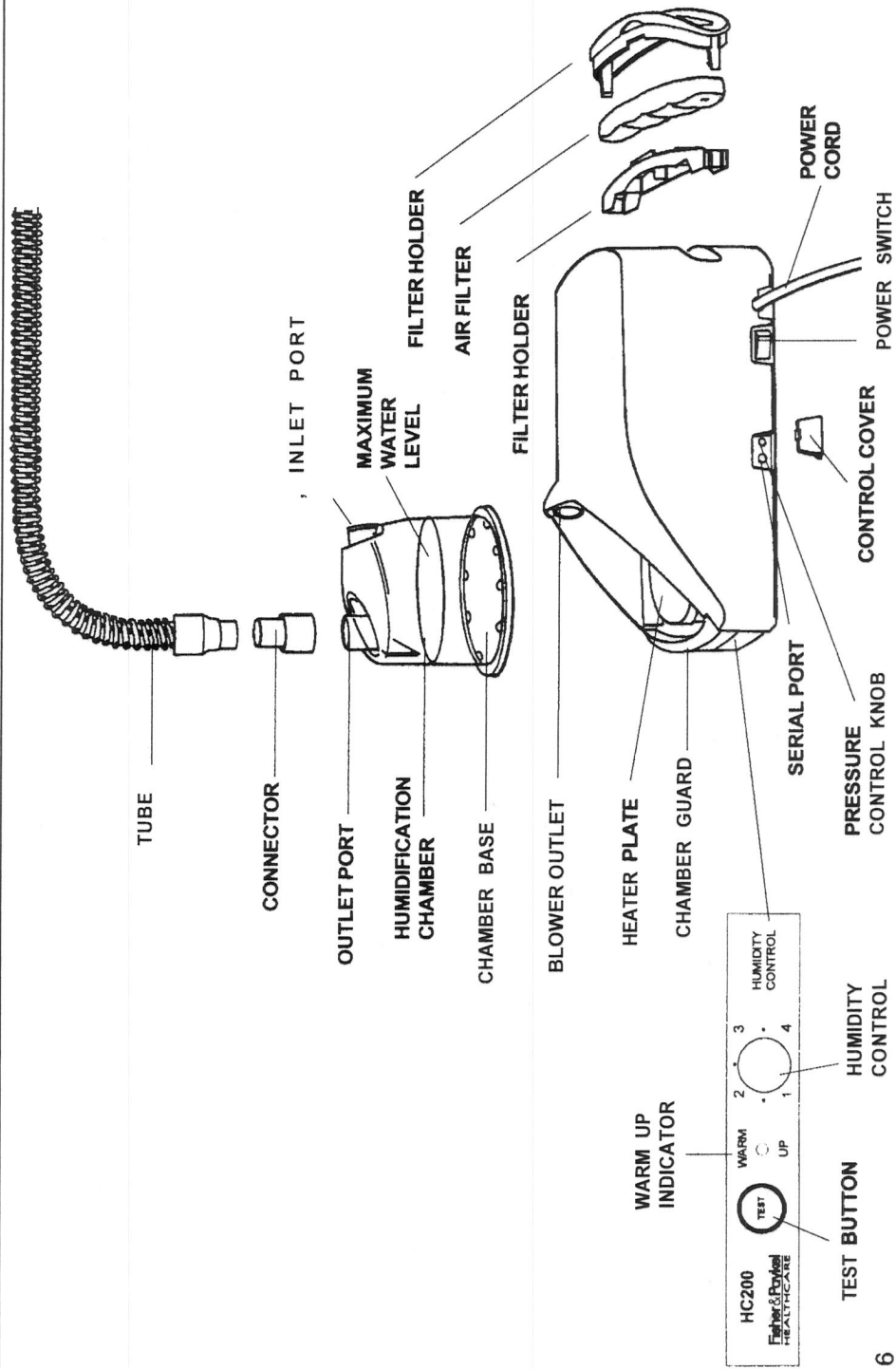
The Fisher & Paykel HC200 Series is an integrated Continuous Positive Airway Pressure generator and Heated Humidifier, designed for the treatment of Obstructive Sleep Apnoea in adult patients.

The HC200 is designed for non-invasive use only, and is not intended for use as a life-supporting device or on patients with bypassed upper airways. It is not designed to be used in conjunction with oxygen, nebulised medications, aromatic oils or any other inhalational substance.

The HC200 is designed to be used with nasal masks which have exhalation holes to allow a continuous flow of air through the mask. Under normal operation this flow flushes exhaled gas from the mask. If the HC200 is turned off there may be insufficient flow to clear all exhaled gases and consequently some rebreathing may occur. It is important that you remove your mask before turning your HC200 off.

The HC200 is to be used only on the instruction of a licensed physician. To ensure correct performance of your HC200, use only Fisher & Paykel approved accessories.

Important Parts of your HC200 System



Setting Up your HC200

Initial set-up

To set up your HC200:

1. Rinse the Humidification Chamber with water.
2. Ensure the HC200's Power Switch is in the OFF position,
3. Plug the power cord into a grounded wall outlet.
4. Place the HC200 on a firm, flat surface at a level lower than your sleeping position.

CAUTION

Remove Humidification Chamber from HC200 before filling with water.

Installing the Humidification Chamber

To install the Humidification Chamber:

1. Fill the clean Humidification Chamber through the Outlet Port to the Maximum Water Level with cold distilled water.
2. Press down the spring loaded Chamber Guard and slide the Humidification Chamber onto the Heater Plate, ensuring that the Inlet Port on the Chamber fits securely over the Blower Outlet. The Chamber Guard should spring back up to completely surround the chamber base.
3. Switch the HC200 on.



Depressing the Chamber Guard

Adjusting the Humidity Control

The ideal humidity setting for your HC200 depends on room temperature and humidity. The aim is to maximise comfort at the mask while preventing excess condensation in the Tube (see diagram). Initially, a setting of 2 is recommended. See "Operating your HC200" for tips on reducing condensation in the tubing.

To adjust the humidity:

Turn the Humidity Control to the desired setting.



Excess condensation

Operating your HC200

Before you begin

Before operating your HC200 each day, ensure that the Humidification Chamber is clean, filled to the Maximum Water Level and installed on the Heater Plate correctly (see "Installing the Humidification Chamber" on the previous page).

Starting operation

To start operating your HC200:

1. Attach one end of the Patient Tube to the Outlet Port of the Humidification Chamber. Attach the other end of the Tube to the Mask.
2. Fit your mask and headgear. See your mask and headgear manufacturer's instructions for details on fitting.
3. Switch the Power Switch to ON position. The HC200 will enter Warm-Up mode.

Note: During Warm-Up mode, air pressure will increase gradually as the humidity increases, reaching the set operating pressure within 15-25 minutes. This will ensure optimum humidity and help you fall asleep more comfortably.

4. Press the Test Button to enter Test Mode and adjust the Mask as required to provide a good seal.

Note: Entering Test mode will immediately bring the air pressure to the prescribed level. The Test Button allows you to switch between the Warm-Up and Test modes.

5. Press Test Button to return to Warm-Up mode.

CAUTION

Avoid moving or tilting the HC200 when the Humidification Chamber is full of water.

WARNING

At low CPAP pressures, the flow through the mask may be insufficient to clear all exhaled gas from the tubing, and consequently some rebreathing may occur.

Operating your HC200, continued

Stopping operation

To stop operating your HC200 switch the Power Switch to the OFF position and remove the Mask. Allow the heater plate to cool for about 15 minutes before removing the chamber.

Note: If you restart the HC200 after it has been off for a short period of time, the Warm Up Mode may be less than the stated 15 to 25 minutes.

Tips for reducing condensation

In cooler weather, you may experience a build-up of condensation in the Tube. The warm air leaving the chamber is saturated with water. Warm air has a higher capacity for carrying water than cold air. As the air in the Tube is cooled by colder room air, its water carrying capacity is reduced, therefore condensation forms on the inside of the Tube.

There are several ways of reducing condensation in the Tube:

- Ensure that your HC200 is not positioned in front of an open window or in a cold draft.
- Warm the air in the room.
- Place Tube under bedclothes if this is practicable.
- Turn the temperature control on your HC200 down slightly.

WARNING

The HC200 should only be used with masks and connectors recommended by Fisher & Paykel, or by your physician or respiratory therapist. A mask should not be used unless the HC200 is switched on, and operating properly. The vent hole(s) associated with the mask should never be blocked.

Cleaning your HC200

Regular cleaning

Your HC200 may be cleaned by wiping with a damp (not wet) cloth. Do not use harsh detergents or abrasive cleaners.

Your Chamber, Tube, and Mask should be cleaned daily. Wash the Chamber and Tube using a solution of warm water and mild dishwashing detergent. Fill the Chamber with solution, shake gently and empty. Rinse the Chamber and Tube thoroughly with clean water and allow to air dry.

For details on cleaning your Mask, refer to the Mask manufacturer's instructions.

Travelling with your HC200 System

Voltage/Power Supply

The HC200 automatically adjusts for different power supply voltages encountered when traveling to different countries. You will, however, have to acquire a plug adaptor to match the power supply socket of the country you are traveling to.

Adjusting the Pressure Control

Adjustments to the Pressure Control may be required if the HC200 is to be used at a different altitude. Consult your clinician to have the Pressure Control adjusted before you travel.

WARNING

Adjusting the pressure control can result in ineffective therapy. The Pressure Control must only be adjusted by the clinician.

Maintaining your HC200

Regular maintenance

In addition to keeping the Humidification Chamber, Tube, and Mask clean on a daily basis, your HC200 requires maintenance on a weekly, monthly and yearly basis as set out below.

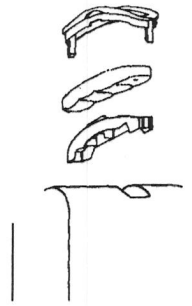
Weekly

- Inspect the Humidification Chamber for cracks in the plastic or dents in the metal base and replace if either occurs. Cracks in the plastic may cause water leaks and dents in the metal base will reduce humidity.
- Inspect and replace the Tube if air leaks occur.

Monthly

- The Air Filter traps particles normally present in the air and will discolour over time, generally to a brown or grey colour. Your HC200 should be inspected monthly and when discolouration occurs the Air Filter should be replaced.

- Remove the Filter Holder from the HC200 and disassemble by pulling the clips on the Filter Holder outwards, and pulling the two halves of the Filter Holder apart (See diagram). Discard the old Filter and replace with the new Filter, ensuring that the side with the circular dot (clean air side) faces toward the inside of the Filter Holder. Reassemble the Filter Holder and place back into the HC200.



Removing the Filter

Yearly

- It is recommended that the pressure and Heater Plate performance be checked. Contact your Clinician or Homecare Dealer for details.

Accessories

Also available for
use with your HC200

HC345	Replenishment Kit - Contains 4 replacement chambers, 4 filters and a replacement tube
900HC221	Tube
900HC222	Filters - pack of 4
900HC223	Carry Bag

Troubleshooting

Symptoms	Possible Cause	What to do
HC200 does not power on.	HC200 is not plugged into power socket. Fuse is defective.	Plug HC200 into power socket. Contact clinician for service.
Air pressure is too low.	Warm-Up mode may be active. Operating altitude is higher than normal. Pressure Control has been adjusted. Filter may be blocked. Possible leak in the system.	Press Test button to deactivate Warm-Up mode. Have your clinician verify the pressure. Have your clinician verify the pressure. Replace Filter. Check for possible leaks, contact clinician for service.
Air pressure is too high.	Operating altitude is lower than normal. Pressure Control has been adjusted.	Have your clinician verify the pressure for the new altitude. Have your clinician verify the pressure.
Leaking air around mask is irritating eyes.	Mask is not fitted correctly.	Re-fit Mask. If leaks recur, contact your clinician.

Troubleshooting continued

Symptoms	Possible Cause	What to do
Nasal, sinus or ear pain occurs.	Sinus or middle ear infection.	Discontinue use and consult your clinician.
Skin becomes red on contact with Mask.	Headgear is too tight.	Re-adjust headgear.
	Mask is wrong size.	Consult your clinician.
	Allergic reaction.	Discontinue use and consult your physician.
Symptoms of sleep apnea reoccur.	Physical condition has changed.	Consult your clinician.

Product Specifications

Size	135mm x 165mm x 295mm	Power I	Heater Plate Power 85W Heater Plate Temperature from: 35°C to 65°C (95°F to 149°F)
Weight	2.5 kg (5 lbs)	Temperature Control	
Electrical Ratings Supply Frequency Voltage and Current: 230 V 115 V 100 V	50-60 Hz 220-240 V, 0.8 A max 115 V, 1.6 A max 100 V, 1.7 A max	Standards Compliance	Designed to conform to requirements of: UL 2601-I CSA C22.2 No.601 .1 IEC 601-I AS 3200.1 .O EN 60601-I
Chamber Water Capacity	400 millilitres recommended fill level.	Operating Pressures	3cm H ₂ O - 18cm H ₂ O
		Performance Specifications	Max. delivered gas temperature: 32°C* Delivered humidity: 17-26mg/L*

* Performance specifications will vary depending on ambient conditions and control settings.

Important Information

Contact Name	Address	Telephone
Clinician		
Physician		
Prescribed Pressure Setting	Checked by:	
No Flow Pressure		

Contact Name	Address	Telephone
Fisher and Paykel Healthcare Ltd.	INTERNATIONAL 25 Carbine Road PO Box 14-348, Panmure Auckland New Zealand	+64-9-574-0100 Fax: +64-9-574-0158
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*EU authorised representative

Detail	Details
Serial Number	
Installation Date	

About This Manual	Details
Part Number	185041244
Revision Date	May 1998
Revision Level	Rev A