

Operator's Manual

Invacare® Pediatric Bear Nebulizer System

**Compressor Nebulizer System
Model IRC 1740**



Dealer: This manual **MUST** be given to the end user.

User: **BEFORE** using this product, read this manual and save for future reference.

**For more information regarding
Invacare products, parts, and
services, please visit
www.invacare.com**



Yes, you can.®

 WARNING

DO NOT use this product or any available optional equipment without first completely reading and understanding these instructions and any additional instructional material such as owner's manuals, service manuals or instruction sheets supplied with this product or optional equipment. If you are unable to understand the warnings, cautions or instructions, contact a healthcare professional, dealer or technical personnel before attempting to use this equipment - otherwise, injury or damage may occur.

Invacare products are specifically designed and manufactured for use in conjunction with Invacare accessories. Accessories designed by other manufacturers have not been tested by Invacare and are not recommended for use with Invacare products.

 WARNING

This is **NOT** a toy. When not administering treatment, keep out of the reach of small children. Some of the parts of the nebulizer are small enough for children to swallow. Small parts may present a choking hazard.

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REGISTER YOUR PRODUCT

The benefits of registering include:

1. Safeguarding your investment.
2. Ensuring long-term maintenance and servicing of your product.
3. Receiving updates with product information, maintenance tips and industry news.

Register ONLINE at warranty.invacare.com

Please have your model number and purchase date available to complete your registration.

Any registration information you submit will only be used by Invacare Corporation and protected as required by applicable laws and regulations.

SPECIAL NOTES

Signal words are used in this manual and apply to hazards or unsafe practices which could result in personal injury or property damage. Refer to the table below for definitions of the signal words.

SIGNAL WORD	MEANING
DANGER	Danger indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	Warning indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	Caution indicates a potentially hazardous situation which, if not avoided, may result in property damage or minor injury, or both.

NOTICE

The information contained in this document is subject to change without notice.

IMPORTANT SAFEGUARDS

WARNING

IMPORTANT SAFEGUARDS contains important information for the safe operation and use of this product.

CAUTION

Federal law restricts this device to sale or rental by or on the order of a physician, or any other practitioner licensed by the law of the State in which he/she practices to use or order the use of this device.

“This appliance has a polarized plug (one blade is wider than the other). As a safety feature, this plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Do not attempt to defeat this safety feature.”

WARNING

When using electrical products, especially when children are present, basic safety precautions should always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING

⚠ DANGER

FIRE RISK - DO NOT use this product in an oxygen enriched environment (i.e – oxygen tent).

Risk of electric shock. DO NOT disassemble. Refer servicing to qualified service personnel.

To Reduce the Risk of Electrocution:

ALWAYS unplug this product IMMEDIATELY after using.

DO NOT use while bathing.

DO NOT place or store product where it can fall or be pulled into a tub or sink.

DO NOT place in or drop into water or other liquid.

DO NOT reach for a product that has fallen into water. Unplug IMMEDIATELY.

⚠ WARNING

**To Reduce the Risk of Burns,
Electrocution, Fire and Injury to Persons:**

This product should NEVER be left unattended when plugged in.

Close supervision is necessary when this product is used by, on, or near children and physically challenged individuals.

Use this product only for its intended use as described in this manual and only with the prescribed medication. Use this product only under physician's direction.

NEVER operate this product with a damaged cord or plug, if it is not working properly, if it was dropped or damaged, or if it was dropped into water. Call qualified service personnel for examination and repair.

⚠ WARNING

Keep the nebulizer tubing, cord, and unit away from heated or hot surfaces, including space heaters, electric blankets, stoves and similar electrical appliances.

NEVER drop or insert objects into any opening or hose.

NEVER use while sleeping or drowsy.

NEVER block the air openings of the product or place it on a soft surface, such as a bed or couch, where the air openings may be blocked. Keep the air openings free from lint, hair and the like. Blocked openings may cause the unit to shut down. Contact dealer immediately.

The compressor nebulizer system uses the surrounding air to effectively administer the prescribed medication through the nebulizer. The user and administrator should be aware of surroundings so as not to have contaminated air filtered through the compressor nebulizer system. (Examples can be air contaminated with paint or cleaning fumes, weed killer, car exhaust, etc.)

DO NOT use the compressor nebulizer system in these environments. Otherwise, serious bodily injury may occur.

This unit is oil-less. DO NOT lubricate.

IMPORTANT SAFEGUARDS

WARNING

This equipment is not suitable for use in the presence of a flammable anesthetic mixture with air or with nitrous oxide.

When not administering treatment, keep out of the reach of small children. Some of the parts of the nebulizer are small enough for children to swallow. The tubing may present a strangulation hazard.

NEVER touch the unit with wet hands.

DO NOT pull on the power cord to unplug the unit from an electrical outlet.

DO NOT overload wall outlets.

Maintenance MUST be performed by a qualified service technician.

SAVE THESE INSTRUCTIONS

INTRODUCTION

The Invacare Pediatric Bear Nebulizer System is a portable medical device designed to efficiently deliver physician-prescribed medication to the bronchial lung passages. The nebulizer system consists of the following components:

- Compressor
- Nebulizer
- Air tubing
- Mouthpiece
- Pediatric Mask

TYPICAL PRODUCT PARAMETERS

TYPICAL PRODUCT PARAMETERS

Electrical Requirements:	120 VAC, 60Hz, Single Phase
Running Current:	1.4 A @ 12.4-15.4 psi @ 120 volts
Sound Level:	58 dBA
Power Wattage:	68 watts @ 18 psig
Electric Motor:	Class B in compliance with UL2111.
Foam Intake Filter:	Polyurethane Sponge
Safety Systems:	High temperature compressor shutdown.
Width:	6.5 inches
Height:	8.2 inches
Depth:	5.5 inches
Weight:	3.4 lbs
Shipping Weight:	3.8 lbs
Regulatory Listing:	In compliance with UL 60601-1.
Typical Operating Pressure:	12.4 to 15.4 psi
Maximum Pressure:	30 to 35 psi
Operating Flow Rate:	4.0 L/min. @ 16 psi operating pressure
Maximum Flow Rate:	5 to 7 L/min.

TYPICAL PRODUCT PARAMETERS

Storage Conditions:	-13°F to 158°F (-25° to 70°C); 10 to 90% RH
Operating Conditions:	50°F to 104°F (10°C to 40°C); 30 to 75% RH
Altitude:	0 to 6000 ft (1825 m) above sea level
Mode of Operation:	Intermittent Use (20 min. ON / 40 min. OFF)

NOTE: Product parameters and appearance are subject to change without notice for purposes of improvement.

NOTE: Nebulization rate and particle size are dependent on the characteristics of the nebulizer chosen.

SUPPLEMENTAL INFORMATION

Compressor

If the unit shuts down frequently, you may have a low voltage situation.

Low voltage can also be suspected when:

- The motor does not get up to full power or speed.
- Home fuses or circuit breakers activate when starting compressor.
- Lights dim or remain dim when compressor is started.
- Other motor operated appliances fail to operate properly or too many motor operated appliances are on same circuit.

Extension Cords

If you must use an extension cord, use only a cord having the same or higher electrical rating as the device being connected. Make certain the extension cord is in good condition without any exposed wires or hazardous contacts, and the extension cord wire is NOT LESS than 18 gauge for 25 feet.

SECTION I—HANDLING

Shipping Instructions

The shipping container has been designed to assure protection of this device.

If this device is to be reshipped by common carrier, it should be packed in the same carton.

Unpacking

1. Check for any obvious damage to the carton or its contents. If damage is evident, **DO NOT** use. Notify carrier/Invacare or your local Invacare dealer.
2. Remove all the loose packing from the carton.
3. Carefully remove all the components from the carton.

NOTE: Retain carton and packing materials for use in shipping or storing the unit until use is required.

Inspection

1. Examine exterior for damage. Inspect all components.

SECTION 2—OPERATING INSTRUCTIONS

⚠ WARNING

DO NOT operate unit without filter.

Avoid operating this product in a dusty environment. Otherwise, premature compressor wear could occur.

NOTE: Clean and disinfect the nebulizer, mouthpiece and mask before using the device for the first time. Refer to Cleaning and Disinfecting on page 21.

Setup

NOTE: For this procedure, refer to FIGURE 2.1 on page 17.

1. Place the unit on a table or other flat, stable surface. Be sure you can easily reach the controls when you are seated.
-

CAUTION

Make sure the power switch is in the off “O” position.

2. Gently twist the nebulizer counterclockwise to separate it into two sections.
-

SECTION 2—OPERATING INSTRUCTIONS

3. Be sure the medication pick-up insert is in place in the bottom section of the nebulizer.

CAUTION

DO NOT add over 6 ml of medication to the medication cup. The maximum capacity of the nebulizer medication cup is 6 ml.

4. Add the prescribed amount of medication to the cup of the nebulizer using an eyedropper, pre-measured dose or ampoule.

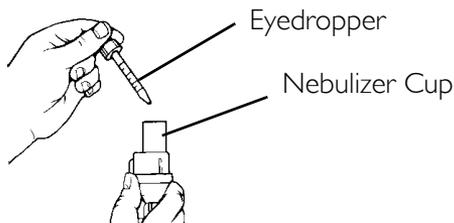


FIGURE 2.1 Adding Medication

5. Gently twist the top and bottom sections together clockwise to assemble the nebulizer. Be sure the two sections fit securely.
6. Attach one end of the air tubing to the air tubing connector located on the back of the compressor.

SECTION 2—OPERATING INSTRUCTIONS

7. Attach the other end of the air tubing to the base of the nebulizer.

NOTE: Ensure nebulizer tubing is firmly attached to compressor before use.

⚠ WARNING

In the case of high humidity, condensation may form inside the tubing. Run the unit for two minutes before connecting the nebulizer to the tubing.

8. Attach the mouthpiece to the top section of the nebulizer. Refer to the nebulizer manual for additional instructions.

NOTE: Before starting a cold unit, let the unit reach room temperature in a heated area.

9. With the power switch off, plug the power cord into an appropriate electrical outlet.

CAUTION

This device is for intermittent use: 20 min. ON / 40 min. OFF. Failure to operate within these limits could damage the device beyond repair.

Treatment Instructions for Nebulizer

NOTE: For this procedure, refer to FIGURE 2.2.

1. Turn the unit on, pressing the ON/OFF switch to the “I” position.
2. Place mouthpiece between your teeth, close your mouth and tilt the nebulizer toward your mouth.



FIGURE 2.2 Using the Nebulizer

3. As aerosol begins to flow, inhale deeply, slowly, and hold breath for ten seconds. Then exhale slowly through the mouthpiece.

NOTE: If you need to rest during a treatment, be sure the nebulizer remains in an upright position; otherwise, the medication may spill.

4. When treatment is complete, turn the unit off by setting the switch to the “O” position and unplug the unit from the electrical outlet.
5. Before storing supplies between treatments, clean and dry the nebulizer and accessories. Refer to Cleaning and Disinfecting on page 21.

SECTION 2—OPERATING INSTRUCTIONS

Treatment Instructions for Mask

1. Attach nebulizer cup to mask.

NOTE: For this procedure, refer to FIGURE 2.3.

2. Place mask on face.
3. Turn the unit on, pressing the ON/OFF switch to the “I” position.
4. As Aerosol begins to flow, inhale deeply, slowly, and hold breath for ten seconds. Then exhale slowly through the mask.



FIGURE 2.3 Using the Mask

NOTE: If you need to rest during a treatment, be sure the mask and nebulizer remain in an upright position; otherwise, the medication may spill.

5. When treatment is complete, turn the unit off by setting the switch to the “O” position and unplug the unit from the electrical outlet.
6. Before storing supplies between treatments, clean and dry the mask and accessories.

SECTION 3—CLEANING AND DISINFECTING

Following the cleaning instructions after each use will prevent any remaining medication in the nebulizer cup from drying and causing the device to nebulize ineffectively.

It is recommended that the nebulizer, mouthpiece and mask be thoroughly rinsed with hot tap water after each use and cleaned with a mild detergent after the last treatment of the day. The same pieces **MUST** also be disinfected daily by soaking in a vinegar/water solution or a commercially available disinfectant. If your physician or respiratory therapist specifies a different cleaning procedure, follow their instructions.

Cleaning the Outer Case

WARNING

Unplug unit before cleaning.

DO NOT submerge in water to clean. Clean outer case with damp cloth.

⚠ DANGER

DO NOT attempt to separate the outer case of this unit. Removing the case creates a serious electrical shock hazard. All disassembly and maintenance of this unit MUST be done by a qualified technician.

Cleaning the Nebulizer and Mask

⚠ WARNING

To prevent possible risk of infection due to contamination, follow these instructions:

- Clean the nebulizer and mask before initial operations.
- Clean the nebulizer and mask after each aerosol treatment.
- ALWAYS use fresh cleaning solution.
- DO NOT towel dry the nebulizer components or mask after cleaning.

DO NOT boil the mask, damage will occur.

NOTE: Your physician and/or an Invacare dealer may specify certain cleaning procedures. If so, follow their recommendations. If not, clean according to the following instructions:

SECTION 3—CLEANING AND DISINFECTING

1. Remove the nebulizer and mouthpiece from the tubing. If using the mask, remove the mask from the nebulizer.
2. Disassemble nebulizer chamber by turning counterclockwise and separating.
3. Fill two plastic containers or bowls:
 - A. Washing: Hot water/detergent solution.
 - B. Soaking: Hot water/vinegar solution (one part vinegar to three parts water).
4. Thoroughly clean the nebulizer, mouthpiece and mask in hot water/detergent solution.
5. Remove from the water/detergent solution and rinse with clear hot tap water.
6. Soak in hot water/vinegar solution for 30 minutes.
7. Rinse with hot tap water again and air dry thoroughly.

NOTE: If using medical disinfectant cleaners, follow manufacturer's instructions carefully.

8. Keep the outer surface of the tubing dust-free by wiping regularly.

NOTE: The nebulizer air tubing does not have to be washed internally because only filtered air passes through the tubing.

Cleaning the Compressor

CAUTION

Unplug unit before cleaning. DO NOT submerge in water to clean.

DO NOT clean using abrasive cleaners.

1. Clean the casing of the main unit daily by using a soft cloth moistened with water or a mild detergent.
2. Wipe the casing and immediately dry using a soft clean cloth.

Cleaning the Mouthpiece

1. Boil the mouthpiece in water for a maximum of five minutes or autoclave at a maximum of 121° C for ten minutes.
2. Allow the mouthpiece to air dry.
3. Once dry, the mouthpiece may be stored inside the nebulizer top.

SECTION 4—MAINTENANCE

DANGER

DO NOT attempt to separate the outer case of this unit. Removing the case creates a serious electrical shock hazard. All disassembly and maintenance of this unit MUST be done by a qualified technician.

Routine Care

To keep your device in the best condition and protect the unit from damage, follow these directions:

- DO NOT subject the device or the parts to any strong shocks such as dropping the device on the floor.
- DO NOT store the device in extreme hot or cold temperatures, high humidity or under direct sunlight.

Storage

Store the repackaged device in a dry and safe area. DO NOT place other objects on top of the repackaged device.

Nebulizer Change

The nebulizer is designed for single patient use. The nebulizer **MUST** be replaced after a long period of inactivity, or when it is obstructed by dry medication, dust, etc. Reusable nebulizers should last from six months to one year with general use. Refer to the nebulizers owner's manual. Disposable nebulizers should last 30 days. For disposable nebulizers, it is recommended that an extra nebulizer be kept at all times. Refer to the disposable nebulizer's owner's manual.

Filter Change

1. The filter **MUST** be replaced after approximately 30 hours of use or when it turns grey.
2. Open the filter holder to replace the filter with a new one.

CAUTION

DO NOT use cotton or any other material.

DO NOT wash or clean the filter.

Use only Invacare filters.

DO NOT operate unit without an air filter.

SECTION 5—TROUBLESHOOTING

PROBLEM	SOLUTION
Device does not switch ON.	<ol style="list-style-type: none">1. Make sure the plug is firmly fitted to the wall socket.2. Try plugging into another wall socket that is known to work.3. Contact your Invacare dealer.
Device does not nebulize, or it nebulizes weakly.	<ol style="list-style-type: none">1. Make sure that the ends of the air tubing are fitted tightly onto the main unit and onto the nebulizer.2. Check whether the nebulizer is empty of medication or has too much medication (MAX 6ml).3. Check whether the nebulizer nozzle is obstructed.4. Check whether the medication pick-up insert is in place. <p>If these possible solutions DO NOT work, contact your Invacare dealer.</p>

NOTES

LIMITED WARRANTY

PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.

This warranty is extended only to the original purchaser who purchases this product when new and unused from Invacare Corporation or a dealer. This warranty is not extended to any other person or entity and is not transferable or assignable to any subsequent purchaser or owner. Coverage under this warranty will end upon any such subsequent sale or other transfer of title to any other person. This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

Invacare warrants this product when purchased new and unused to be free from defects in materials and workmanship for a period of 5 years from date of purchase from Invacare or a dealer, with a copy of the seller's invoice required for coverage under this warranty. If within such warranty period any such product shall be proven to Invacare's satisfaction to be defective, such product shall be repaired or replaced, at Invacare's option. This warranty does not apply to normal wear and tear or failure to adhere to the product instructions, nor does it include shipping charges incurred in replacement part installation or repair of any such product. Invacare's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact the Invacare service department during normal business hours at the toll-free telephone number identified on the back cover of this manual.

LIMITED WARRANTY

Upon receiving notice of an alleged defect in a product, Invacare will issue a serialized return authorization. It shall be the responsibility of the purchaser to pack the product(s) or part(s) in an appropriate manner to avoid shipping damage and return the product(s) or part(s), at the purchaser's expense, to either Invacare's plant or service center as specified by Invacare in advance. The defective product(s) or component part(s) must be returned for warranty inspection using the serial number as identification within 30 days of the return authorization date. **DO NOT** return any product(s) or part(s) to our factory or service center without prior consent. **C.O.D.** shipments will be refused - please pre-pay shipping charges.

LIMITATIONS AND EXCLUSIONS: THE FOREGOING WARRANTY SHALL NOT APPLY TO SERIAL NUMBERED PRODUCTS IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED; PRODUCTS SUBJECTED TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE, OR STORAGE; PRODUCTS MODIFIED WITHOUT INVACARE'S EXPRESS WRITTEN CONSENT (INCLUDING, BUT NOT LIMITED TO, MODIFICATION THROUGH THE USE OF UNAUTHORIZED PARTS OR ATTACHMENTS); PRODUCTS DAMAGED BY REASON OF REPAIRS MADE TO ANY COMPONENT WITHOUT THE SPECIFIC CONSENT OF INVACARE; PRODUCTS DAMAGED BY CIRCUMSTANCES BEYOND INVACARE'S CONTROL; OR PRODUCTS REPAIRED BY ANYONE OTHER THAN INVACARE OR AN AUTHORIZED INVACARE SERVICE CENTER. SUCH EVALUATION SHALL BE SOLELY DETERMINED BY INVACARE.

LIMITED WARRANTY

THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES WHATSOEVER, WHETHER EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND THE SOLE REMEDY FOR VIOLATIONS OF ANY WARRANTY WHATSOEVER, SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. THE APPLICATION OF ANY IMPLIED WARRANTY WHATSOEVER SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESS WARRANTY PROVIDED HEREIN. INVACARE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGE, OR LIMITATION OF HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE EXCLUSION AND LIMITATION MAY NOT BE APPLICABLE.

THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.



Yes, you can.

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