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1227-3-INS-LAB-RevB23

IMPORTANT SAFETY INFORMATION

⚠ WARNING: Important! Read and understand these instructions before using the GF Health Products, Inc. ("GF") 1227-3 Otoscope Ophthalmoscope Set. If you do not understand any part of these warnings, cautions or instructions, contact a healthcare professional for direction in the use of this product. If the Otoscope Ophthalmoscope Set is not properly used, personal injury and damage to the Otoscope Ophthalmoscope Set could result.

⚠ WARNING: To prevent burns and damage to the device, do not touch the lens directly.

⚠ WARNING: If components are damaged or missing, contact your GF authorized distributor immediately. DO NOT use substitute parts. Unauthorized modification or the use of non-GF replacement parts could void the warranty and result in serious personal injury. Use this device only with replacement parts recommended by GF Health Products, Inc.

⚠ WARNING: Keep this device out of the hands of children.

⚠ WARNING: This device has no serviceable components; do not open it for any other reason than replacing bulbs and batteries.

⚠ WARNING: GF Health Products, Inc. assumes no responsibility for any damage or injury caused by improper application or use of this product.

▲ NOTICE: Protect this device from water, moisture, impact, dropping, direct sunlight, heat, and fire.

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INTENDED USE AND CONTRAINDICATIONS

The Otoscope, an internally powered device, is intended to allow inspection under magnification of the external ear, ear canal, and tympanic membrane; and the Insufflation Bulb is intended to accompany the otoscope to apply positive and negative air pressure to the tympanic membrane and observe its flexibility; by a licensed medical professional.

The Ophthalmoscope, an internally powered device, is intended to allow inspection of the interior structure of the eye, including the dioptic media, retina, and macula lutea, by a licensed medical professional.

⚠ WARNING: Do not use this device where it could be exposed to flammable gas.

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SYMBOLS, OTOSCOPE OPHTHALMOSCOPE SET

	Manufacturer
	Symbol for the marking of electrical and electronics devices according to Directive 2002/96/EC. Dispose of this device, batteries, and packaging in accordance with local laws and regulations
	Type B applied part
	Attention, consult accompanying documents

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1227-3 OTOSCOPE OPHTHALMOSCOPE SET COMPONENTS



fig. 1

The GF Otoscope Ophthalmoscope Set, shown above in fig. 1, comes with Box (not shown), Otoscope, extra Otoscope tips, Ophthalmoscope, Double-Seat Charger Base, 5VDC Power Adapter, USB Cable, Insufflation Bulb, Four Ni-Mh 2.4V 1600mAh rechargeable batteries, and Instructions (not shown).

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OTOSCOPE OPHTHALMOSCOPE SET SETUP

Installing Otoscope and Ophthalmoscope Batteries

1. Ensure the device is OFF.
2. Unscrew the bottom cover from the handle of each device.



fig. 2

3. Insert two Ni-Mh 2.4v 1600mAh rechargeable batteries into each device handle, ensuring both batteries' positive ends point to the head of the device as shown above in fig. 2.
4. Screw the bottom cover back onto the handle of each device.

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Charging Otoscope Ophthalmoscope Set Batteries

▲ NOTICE: Ensure device ON/OFF switches are OFF while charging.

1. Insert Otoscope and Ophthalmoscope handles into the charger as shown at right in fig. 3.
2. Connect the USB cable to the charger base. If charging via USB cable, plug it into a computer, USB plug, or other power source.
3. If charging via wall plug or power strip, plug the USB cable into the power adapter, then plug the Power Adapter into a wall plug or other power source.
4. The charger indicator light will illuminate blue to signal charging mode.
5. When charging is complete, the charger indicator light will change to red.



Charger Indicator Light
fig. 3

Info: A complete battery charge takes about ten hours. Info: Trickle charging will help prolong battery life. The base can be used for storage, even if charging is not required, without damaging Otoscope and Ophthalmoscope, as long as ON/OFF switches are off.

▲ NOTICE: Always remove batteries when device will not be used for an extended period of time.

▲ NOTICE: If Otoscope and Ophthalmoscope have not been used for more than two months, charge the batteries.

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OTOSCOPE DESCRIPTION, ASSEMBLY, OPERATION, AND MAINTENANCE



Otoscope
fig. 4

The Otoscope is shown above in fig. 4 with features labeled.

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Otoscope Assembly



fig. 5



fig. 6

1. Install the head on the handle and screw it on, as shown in fig. 5.
2. Select the appropriate tip for patient's ear canal size; **generally**, the 4 mm tip size fits adults and 2.4 mm fits children.
3. Push the tip onto the head and screw it on until secure, as shown in fig. 6.
4. If batteries have not been installed, see **Changing the batteries** on page 6.

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Otoscope Operation

⚠ WARNING: Use the Otoscope ONLY with a tip attached.

⚠ WARNING: To avoid burns and damage to device, use the Otoscope intermittently.



fig. 7



fig. 8



fig. 9

1. Turn the Otoscope ON by pushing switch upward as shown in fig. 7.
2. Use the switch to adjust the light level as shown in fig. 7: push switch up for brighter, down for dimmer, and all the way down to turn the device OFF. There are six brightness levels.
3. Insert the Otoscope tip **gently** into patient's ear canal as shown in fig. 8 and examine through the viewing window.
4. The LCD, shown in fig. 9, shows working position, battery capacity, and lighting level.
5. Turn the Otoscope OFF by pushing the switch completely downward as shown in fig. 7.

Info: The Otoscope will automatically power off after 3 minutes without use.

6. To remove tip after use, unscrew and remove it.

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Otoscope Maintenance

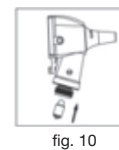


fig. 10

Changing the Otoscope bulb

⚠ WARNING: The Otoscope bulb retains heat! To avoid injury, wait at least five minutes after use before changing the bulb.

1. After Otoscope has been powered off for at least five minutes, unscrew and remove head from handle.
2. Unscrew and remove the bulb tube.
3. Pull the old bulb downward to remove; replace with new 3.0VDC 80mA LED bulb as shown in fig. 10 above.
4. Screw Otoscope head onto handle.

Cleaning and Disinfection

▲ NOTICE: DO NOT allow alcohol to touch the viewing window.

▲ NOTICE: DO NOT use corrosive or polishing cleansers on the Otoscope.

▲ NOTICE: DO NOT soak or autoclave the Otoscope, or allow water or other liquids to drip into it.

1. Wipe surface area **only** of Otoscope and Ophthalmoscope with a clean cloth dampened with a 75% isopropyl alcohol solution at least once a week or more often as needed.
2. Disinfect **only** otoscope tips after each use with saturated steam at 273.2°F (134°C) for 10 minutes.

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OPHTHALMOSCOPE DESCRIPTION, ASSEMBLY, OPERATION, AND MAINTENANCE



Ophthalmoscope
fig. 11

The Ophthalmoscope is shown above in fig. 11 with features labeled.

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Ophthalmoscope Assembly



fig. 12

1. Install the head on the handle and screw it on, as shown in fig. 12.
2. If batteries have not been installed, see **Changing the Ophthalmoscope batteries** and follow steps 1, 3 and 4.

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OTOSCOPE OPHTHALMOSCOPE SET LIMITED WARRANTY SCOPE OF WARRANTY

GF Health Products, Inc. ("GF") warrants to the original purchaser only that it will replace or repair components, at GF's sole discretion, that are defective in material or workmanship under normal use and service. All warranties are conditioned upon the proper use of the products strictly in accordance with good commercial practice and applicable GF instructions and manuals, including proper use and maintenance. To the extent that a third party warrants a component, GF conveys all of its rights under that warranty to the original purchaser, to the extent permitted. This limited warranty shall only apply to defects that are reported to GF's customer service team within the applicable warranty period and which, upon examination by GF or its authorized representative, prove to be a warranty item. This limited warranty is not transferable. Within the guidelines set forth in this document, this product is warranted for one (1) year. The applicable warranty period shall commence from date of shipment to the original customer, unless there is an expiration date on the component in which case the warranty shall expire on the earlier of warranty period or the expiration date.

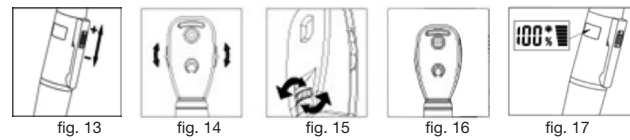
OBTAINING WARRANTY SERVICE

Customers located in the United States who wish to report a warranty issue, must contact GF directly by calling 1.770.368.4700 or by e-mailing a request to cs@grahamfield.com. Customers located outside the United States must contact the Distributor from whom they purchased the products. In both cases, further directions will be provided once the initial contact is made. This limited warranty shall only apply to defects that are reported within the applicable warranty period. Failure to abide by the specific directions will result in denial of the warranty claim.

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Ophthalmoscope Operation

⚠ WARNING: To avoid burns and damage to device, use the Ophthalmoscope *intermittently*.



1. Turn the Ophthalmoscope ON by pushing switch upward as shown in fig. 13.
2. Use the switch to adjust the light level as shown in fig. 13: push switch up for brighter, down for dimmer, and all the way down to turn the device OFF. There are six brightness levels.



fig. 18



fig. 19

3. Scroll the diopter wheel as shown in fig. 14 to select a suitable diopter (fig. 18) for clear observation .
4. Scroll the diaphragm wheel as shown in fig. 15 to desired aperture (fig. 19).
5. Aim the light at desired area of observation as shown in fig. 16.
6. The LCD, shown in fig. 17, shows working position, battery capacity, and lighting level.
7. Turn the Ophthalmoscope OFF by pushing the switch completely downward as shown in fig. 13.

Info: The Ophthalmoscope will automatically power off after 3 minutes without use.

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The warranty does not cover and GF shall not be liable for the following:

- 1) Defects, damage, or other conditions caused, in whole or in part, by misuse, abuse, negligence, alteration, accident, freight damage, tampering or failure to seek and obtain repair or replacement in a timely manner;
- 2) Products which are not installed, used, or properly cleaned and maintained as required in the official manual for the applicable product;
- 3) Products considered to be of a non-durable nature including, but not limited to: filters, fuses, gaskets, lubricants, and charts;
- 4) Accessories or parts not provided by GF;
- 5) Matching of color, grain or texture except to commercially acceptable standards;
- 6) Changes in color caused by natural or artificial light;
- 7) Charges by anyone for adjustments, repairs, replacement parts, installation or other work performed upon or in connection with such products which are not expressly authorized in writing, in advance, by GF;
- 8) Any labor or shipping charges incurred in the replacement part installation or repair;
- 9) Costs and expenses of regular maintenance and cleaning; and
- 10) Representations and warranties made by any person or entity other than GF.

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Ophthalmoscope Maintenance



fig. 20

Changing the Ophthalmoscope bulb

⚠ WARNING: The Ophthalmoscope bulb retains heat! To avoid injury, wait at least five minutes after use before changing the bulb.

1. After Ophthalmoscope has been powered off for at least five minutes, unscrew and remove Ophthalmoscope head from handle.
2. Unscrew and remove the bulb tube.
3. Pull the old bulb downward to remove; replace with new 3.0VDC 80mA LED bulb as shown above in fig. 20.
4. Screw Ophthalmoscope head onto handle.

Cleaning and Disinfection

▲ NOTICE: DO NOT allow alcohol to touch the viewing window.

▲ NOTICE: DO NOT use corrosive or polishing cleansers on the Ophthalmoscope.

▲ NOTICE: DO NOT soak or autoclave the Ophthalmoscope, or allow water or other liquids to drip into it.

Wipe surface area **only** of Ophthalmoscope with a clean cloth dampened with a 75% isopropyl alcohol solution at least once a week or more often as needed.

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ENTIRE WARRANTY, EXCLUSIVE REMEDY AND CONSEQUENTIAL DAMAGES DISCLAIMER

THIS WARRANTY IS GF'S ONLY WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. GF MAKES NO IMPLIED WARRANTIES OF ANY KIND INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IF ANY MODEL OR SAMPLE WAS SHOWN TO THE CUSTOMER, SUCH MODEL OR SAMPLE WAS USED MERELY TO ILLUSTRATE THE GENERAL TYPE AND QUALITY OF THE PRODUCT AND NOT TO REPRESENT THAT THE PRODUCT WOULD NECESSARILY CONFORM TO THE MODEL OR SAMPLE IN ALL RESPECTS. THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PARTS. GF SHALL NOT BE LIABLE FOR AND HEREBY DISCLAIMS ANY DIRECT, SPECIAL, INDIRECT, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO: DAMAGES FOR LOSS OF PROFITS OR INCOME, LOSS OF USE, DOWNTIME, COVER, OR EMPLOYEE OR INDEPENDENT CONTRACTOR WAGES, PAYMENTS AND BENEFITS. CERTAIN STATES MAY CONFER ADDITIONAL RIGHTS REGARDING WARRANTIES AND IN THOSE STATES GF'S LIABILITY AND THE LIABILITY OF GF'S SUPPLIERS, SHALL BE LIMITED TO THE FULLEST EXTENT PERMITTED BY LAW.

The warranties contained herein, together with GF's current Terms and Conditions, contain all the representations and warranties with respect to the subject matter of this document, and supersede all prior negotiations, agreements and understandings with respect thereto. The recipient of this document hereby acknowledges and represents that it has not relied on any representation, assertion, guarantee, warranty, collateral contract or other assurance, except those set out in this document.

For additional information on this product or this warranty, please contact a GF Customer Service Representative.

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CHANGING OTOSCOPE AND OPHTHALMOSCOPE BATTERIES

⚠ WARNING: Dispose of batteries in accordance with local laws and regulations.

▲ NOTICE: Always replace both batteries at the same time. Use only Ni-Mh 2.4v 1600mAh rechargeable batteries in this device.

▲ NOTICE: Always remove batteries when device will not be used for an extended period of time.

1. Unscrew and remove bottom cover from handle.
2. Remove the old batteries.



fig. 21

3. Replace with two new Ni-Mh 2.4v 1600mAh rechargeable batteries. Ensure both batteries' positive ends point to the head as shown in fig. 21.
4. Replace the bottom cover.

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NOTES:

- 1) Additional terms and conditions may apply. See GF's General Terms and Conditions on its website: www.grahamfield.com.
- 2) Freight claims must be notated on the appropriate shipping documents and must be made with immediacy. International, federal and state regulations govern specific requirements for freight claims. Failure to abide by those regulations may result in a denial of the freight claim. GF will assist you in filing the freight claim.
- 3) Claims for any short shipment must be made within three (3) days of the invoice date.

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OTOSCOPE OPHTHALMOSCOPE SPECIFICATIONS

Specification	Otoscope	Ophthalmoscope	
Mode of operation	Intermittent		
Illumination	Fiberoptic illumination	Direct Illumination	
Magnification	3x		
Bulb Electrical Parameter	3.0VDC 80mA LED		
Luminance	25 Lumen	14 Lumen	
Color Temperature	3500°K ±5%		
Included tip sizes	2.4 mm, 3 mm, 4 mm, 5 mm	—	
Battery	Two Ni-Mh 2.4v 1600mAh Rechargeable batteries		
Charging dock	Input	DC 5.0V 500-1000mA	
	Output	DC 3.0V 2x250mA	
Operation Environment	Temperature	50°F ~ 95°F (10°C ~ 35°C)	
	Humidity	30% - 75%	
	Air pressure	700 hPa ~ 1060 hPa	
Storage and Transport Environment	Temperature	-4°F ~ 158°F (-20°C ~ 70°C)	
	Humidity	10% ~ 90% (without condensation)	
	Air pressure	500 hPa ~ 1060 hPa	
Disposal	Dispose of this device and batteries in accordance with local laws and regulations		

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GF Health Products, Inc.
One Graham-Field Way,
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