

IMPORTANT SAFETY INFORMATION

- ⚠ **WARNING: Important! Read and understand these instructions before using the Graham-Field 1227-1 Otoscope.** 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 is not properly used, personal injury and damage to the otoscope 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 Health Products, Inc. ("Graham-Field") authorized distributor immediately. DO NOT use substitute parts. Unauthorized modification or the use of non-Graham-Field replacement parts could void the warranty and result in serious personal injury. Use this device only with replacement parts recommended by Graham-Field.**
- ⚠ **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: Graham-Field 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.**

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, by a licensed medical professional.

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

1227-1 OTOSCOPE COMPONENTS



The Graham-Field 1227-1 Otoscope, shown above, comes with Case, Handle, Head, and one each 2.4 mm, 3 mm, 4 mm and 5 mm tips. Batteries are not included.

1227-1 OTOSCOPE DESCRIPTION

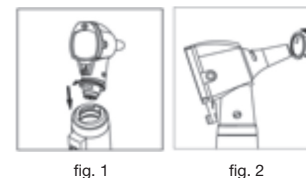


The Graham-Field 1227-1 Otoscope is shown above with features labeled.

SYMBOLS

	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

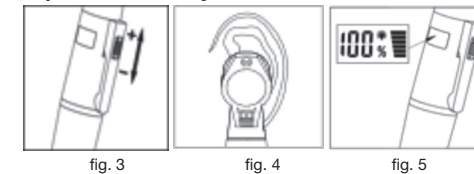
ASSEMBLY



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

OPERATION

- ⚠ **WARNING: Use the otoscope ONLY with a tip attached.**
- ⚠ **WARNING: To avoid burns and damage to device, use the otoscope intermittently.**

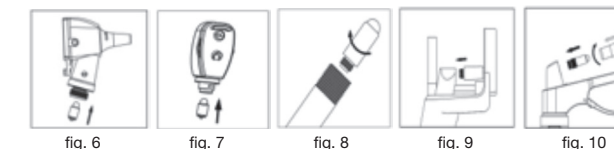


1. Turn the otoscope ON by pushing switch upward as shown in fig. 3.
2. Use the switch to adjust the light level as shown in fig. 3; push switch up for brighter, down for dimmer, and all the way down to turn the device OFF.
3. Insert the otoscope tip **gently** into patient's ear canal as shown in fig.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

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

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

MAINTENANCE



Changing the 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 otoscope 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. 9-10 above.
4. Screw otoscope head onto handle.

Changing the batteries

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

▲ **NOTICE: Always replace both batteries at the same time. Use only AA alkaline 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 AA batteries.
3. Replace with two new AA alkaline batteries. Ensure both batteries' positive ends point to the head as shown in fig.11.
4. Replace the bottom cover.

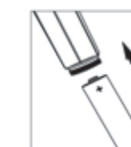


fig. 11

Cleaning and Disinfection

- ▲ **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 with a clean cloth dampened with a 75% isopropyl alcohol solution.
2. Disinfect **only** tips after each use with saturated steam at 273.2°F (134°C) for 10 minutes.

SPECIFICATIONS

Mode of operation	Intermittent	
Illumination	Fiber-optic illumination	
Magnification	3x	
Bulb Electrical Parameter	3.0Vdc 80mA LED	
Luminance	25 Lumen	
Color Temperature	3500°K ±5%	
Included tip sizes	2.4 mm, 3 mm, 4 mm, 5 mm	
Battery	2 x AA alkaline batteries (not included)	
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 battery in accordance with local laws and regulations	

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. Original Purchaser is one who purchases this product new and unused from GF or a Certified GF Dealer/Distributor.

This limited warranty shall only apply to defects that are reported in accordance with the provisions set forth in this warranty document, within the applicable warranty period and which, upon examination by GF or its authorized representative, prove to be a warranty item. (See Obtaining Warranty Service below) This limited warranty is not transferable.

The warranted components and time periods are set forth below:

Otoscope: 1 (one) year

The applicable warranty period shall commence from date of shipment to the Original Purchaser, 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

Contact the Dealer/Distributor from whom the product was purchased. If there is not a Dealer/Distributor,

Failure to abide by the specific directions will result in denial of the warranty claim.

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.

ENTIRE WARRANTY, EXCLUSIVE REMEDY AND CONSEQUENTIAL DAMAGES DISCLAIMER

TO THE GREATEST EXTENT PERMITTED BY LAW, THIS WARRANTY IS GF'S ONLY WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, EXCEPT IN CASES WHERE IMPLIED WARRANTIES MAY NOT BE VALIDLY WAIVED, 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 AND COUNTRIES MAY CONFER ADDITIONAL RIGHTS REGARDING WARRANTIES AND IN THOSE INSTANCES, 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.

NOTES:

- 1) Additional terms and conditions may apply. See GF's General Terms and Conditions
- 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.