



**Use, Care and Maintenance  
Manual for use with the  
Cross Canada® Otoscope  
Ophthalmoscope  
Diagnostic Set**



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Thank you for choosing a Cross Canada® Otoscope Ophthalmoscope Diagnostic Set. We're proud of the care and quality that goes into the manufacture of each and every diagnostic instrument that bears our name. Every component has been carefully designed to maximize performance.

**Latex Statement** - This device and all accessories are not made with natural rubber latex.

**General**

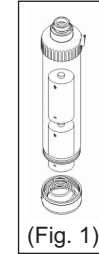
**Ophthalmoscope:** The ophthalmoscope is a handheld, battery-powered device containing illumination and viewing optics intended to examine the media (cornea, aqueous, lens, and vitreous) and the retina of the eye. It is intended to be used by a trained healthcare professional.

**Otoscope:** The otoscope is a handheld battery powered device with magnifying system that provides illumination of the ear canal and tympanic membrane.

**Battery Handle:** This Diagnostic Set is equipped with a "C" cell knurled chrome handle with rotating bezel on/off switch.

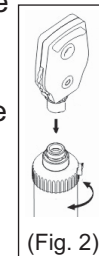
**Use and Maintenance  
Battery Replacement**

Handle requires 2 "C" cell batteries. Remove the knurled cap at the base of the handle by turning counterclockwise. Insert two fresh "C" cell batteries (not included) with the positive (+) polarity towards the instrument head. Replace battery compartment cap by turning clockwise. (Fig. 1).



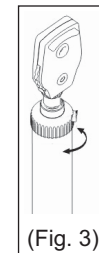
**Removing and Attaching the  
Instrument Head**

All instrument heads feature a bayonet style mount. To remove, push down firmly and rotate counterclockwise gently. To engage, align slots on base of instrument head with tabs on bayonet. Push head and twist clockwise gently until engaged. (Fig. 2).



**Turning the Instrument On**

o illuminate, rotate the rotating bezel on/off switch clockwise until the lamp powers on. Slide the switch in the opposite direction to turn off. (Fig. 3).



**Handle Care and Maintenance**  
Periodically check the condition of the batteries, making sure there is no sign of corrosion or oxidation. Always replace BOTH batteries. Alkaline batteries are recommended. Remove batteries from handle if instrument will not be used for an extended period of time.

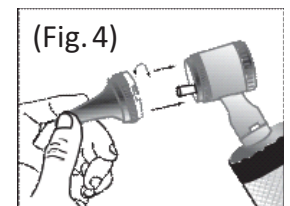
**Instrument Heads**

**Otoscope Head** - This instrument head is designed for examination of the ear canal specifically the external acoustic duct and tympanic membrane. The head comes complete with a 3x removable viewing lens, insufflator fitting, and 3 reusable specula (standard models with 2.5mm, 3.5mm, and 4.5mm specula. Also, included is a disposable specula adaptor and a tube containing five (5) of 3mm and five (5) 4mm disposable specula.

**Attaching the Specula**

Push the flanged end of the desired speculum onto the instrument head aligning the slot in the speculum flange with the rivet at the top of the instrument head and twist clockwise to engage. Reverse procedure to remove. (Fig.4)

**NOTE:** Otoscope must be used with specula.





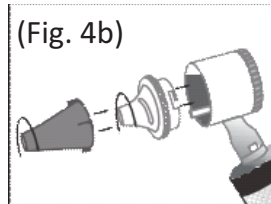
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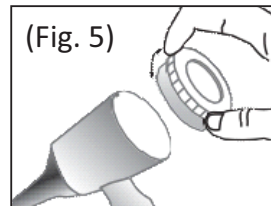
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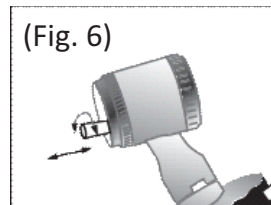
**Using Disposable Specula** Attach the disposable specula adaptor, in the same manner as the reusable specula. Attach disposable speculum by pushing the flanged end of the desired speculum onto the socket and twist counterclockwise to engage (Fig.4b). *Reverse procedure to remove and discard after each use.*



**Removing Viewing lens**  
To remove the Viewing lens during an examination, rotate lens clockwise or counterclockwise. Reverse procedure to attach. (Fig. 5).



**Replacing LED Lamp**  
Remove speculum. Twist lamp counterclockwise to remove. Replace with Cross Canada 11-118 LED Lamp. Reverse procedure to install new lamp. (Fig. 6).



**Insufflator**  
The unit comes equipped with an insufflator fitting already attached. The insufflator bulb and tubing can be purchased separately from Cross Instrument Inc. (Fig. 7).



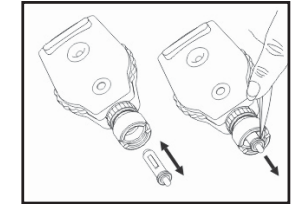
**Ophthalmoscope**  
This instrument head is equipped with 24 lenses from -20 to +15 diopters. (Fig. 8).



**Corrective lens selection:**  
Unit is equipped with 24 corrective lenses from +15 to -20 diopters (negative lenses in red). To select, rotate the corrective lens selection wheel at either side of the instrument head. Selected lenses can be viewed in the illuminated panel on practitioner's side of the instrument. (Fig. 9).



**Replacing LED Lamp:**  
Remove the Ophthalmoscope head by turning counterclockwise. Grab end of lamp from inside base of Ophthalmoscope head and remove. Replace with new lamp (REF: 11-119), taking care not to touch the glass, and align lamp metal guides on side of lamp with grooves in lamp socket. (Fig. 10).



**Cleaning and Disinfection:**  
A. Clean the surface of device with 75% alcohol solution at least once a week, avoiding the magnifying glass (viewing window) in the head. And corrosive or polishing detergent is prohibited.  
B. Disinfect the tips of otoscope with saturated steam for 20 minutes at 134°C.

**Attention:**  
Do not soak, autoclave or let water dip into the device!



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