

Anthony Products  
**APFH-50 Series Fiber-optic  
Headlight Manual**



*APFH-50 Fiber-optic Headlight*  
*APFH-50B Bifurcated Fiber-optic Headlight*

**api**  
anthony products, inc.

## For Optimum Performance

Anthony Products' specially designed fiber-optic headlights produce an illuminance as high as 100,000 LUX in the localized operating field. General lighting in operating rooms must be regarded in conjunction with the exacting work performed there. So as to rule out difficulties of visual adaptation when shifting view between the brightly lit operating field and the surrounding area, the entire room must be illuminated at a level of at least 1,000 LUX, increasing to 2,000 LUX in the outer field encircling the surgical site. Reduced reflection of light by surgical drapes, gowns and dull non-reflecting surfaces of the instruments help to prevent difficulties of the kind mentioned.

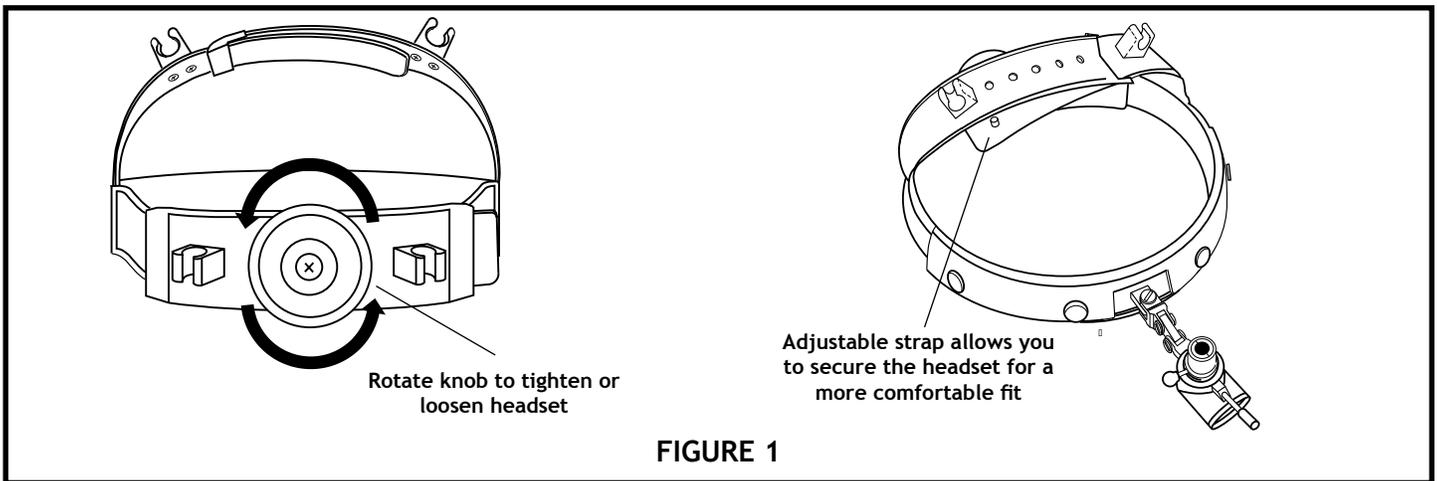
Satisfactory illumination of the outer field and the surrounding room is achieved with luminaries possessing an illumination distribution harmonized with their specific purpose. They are mounted in an appropriate pattern around the operating table to reduce glare and prevent shadowing due to the interruption of light paths by the surgeon's and assistant's bodies. Smooth outer surfaces, electrical enclosure to high safety ratings and chemical resistance of the fixtures fulfill the conditions for efficient cleaning and disinfection.

Anthony Products' dedicated fiber-optic headlights achieve illumination levels of 20,000 to 100,000 LUX according to the required visibility. Visual disturbance caused by shifting view from this strongly illuminated operating field to other parts of the room and back is efficiently diminished by illuminating the outer field at up to 2,000 LUX.

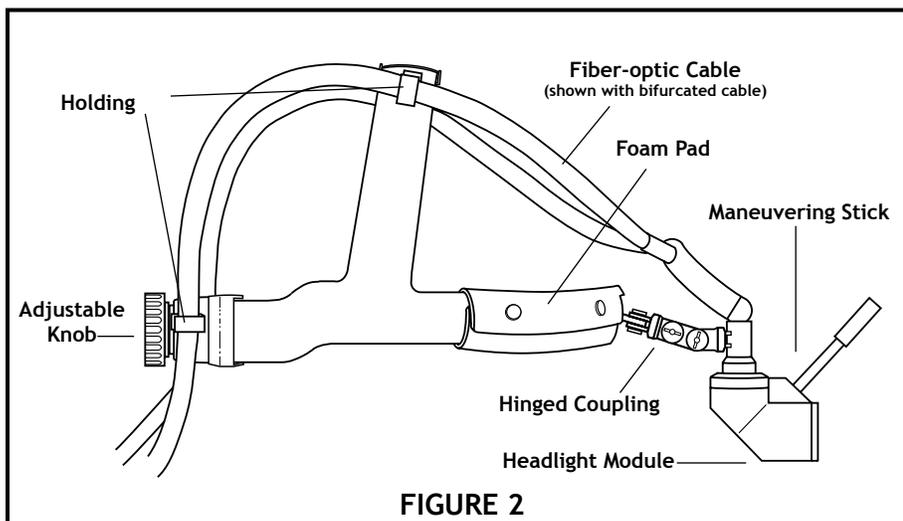
# UNIVERSAL HEADSET ADJUSTMENT INSTRUCTIONS

## Adjusting the Headband (figure 1)

The headband adjust to fit almost any headsize using the rotating knob on the back of the headband. The headband also contains an adjustable tab on the top headband to insure a secure and comfortable fit.



## HEADLIGHT SET-UP



### The APFH-50 Fiber-optic Headlight system has the following attachments:

- One headlight module connected to headset with a hinged coupling
- One maneuvering stick connected to headlight module
- One fiber-optic cable that snaps into the headlamp module and attaches to either 4 holding clamps (APFH-50B) or 2 holding clamps (APFH-50)
- One foam pad
- Adjustable tab
- Adjustable knob

### Attaching the Fiber-optic Cable (figure 3 & figure 4)

- Snap fiber-optic cable to the headlamp module.
- After preselecting a loop, attach fiber-optic cable to the friction holding clamps.
- Use gentleness when you place the fiber-optic cable into the friction holders, avoiding breakage of optical fibers, 50 microns in size, which are housed in a silicone protective sheathing fiber-optic cable.

### Attaching the Fiber-optic Cable Garment Clips (figure 5)

Two garment clips are supplied with the fiber-optic cable for use in relieving the weight of the cable from the headband.

- **UPPER CLIP:** Attach the upper clip to the surgical gown just below the shoulder. The upper Notice how there is enough slack in the cable between the clip and the headband so that, if the surgeon must bend his head, there will be no bending or pulling on the headband.
- **LOWER CLIP:** The lower clip is used when the surgeon enters or moves away from the operating area. The cable detaches from the illuminator and clipped to the surgeon's gown, eliminating risk of dropping or tripping over cable.

### Headlamp Modules & Maneuvering Stick

- The headlamp modules should be placed directly in line of you vision, directly centered above the nose by twisting a loosened headband. When the module is appropriately centered, then tighten the adjusting knob on the back of the headband to the desired tension.
- The headlight module's 10-75mm spot can be adjusted, even during surgical procedures, by adjusting the iris handle, located on the surgeon's right arm side. If so required, the circulating or assisting surgeon or nurse will do the adjustment for the surgeon.
- A specially designed gown clip keeps the weight off the surgeon's head, preventing neck cramps. The modules are only 25mm in width, eliminating the so-called "blocking view", and allow the use of magnifying spectacles.
- If close-in work is required, and especially if there is a co-surgeon, it is recommended using the special purpose low profile fiber-optic cable as provided which was designed for use on a coaxial headlamp.

### Plugging & Unplugging Fiber-optic Cable (figure 6)

To plug or unplug the fiber-optic cable to or from the illuminator, use the strain relief as illustrated.

## CLEANING INSTRUCTIONS

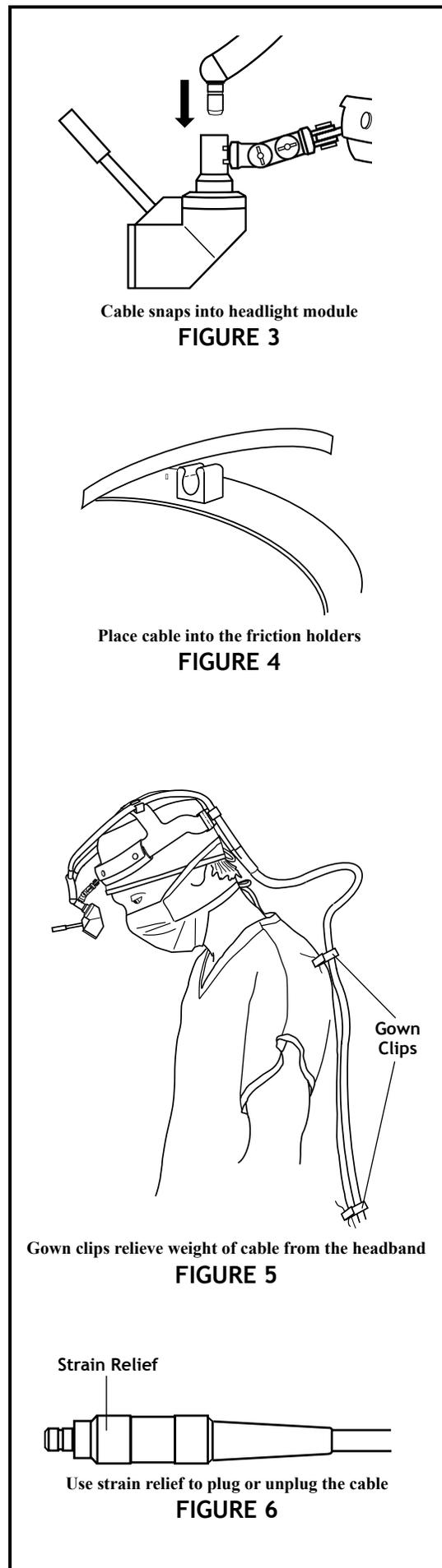
To insure an extended life for your system, Anthony Products recommends to store the entire headlight system in the protective case provided for your convenience.

### Lens Cleaning

Keep the front surface of the objective front lens clean at all times. To clean lens, wipe with a camera type lens tissue, available at camera stores. If blood stains appear, wipe immediately with a damp alcohol cloth.

### Module, Cable & Headband Cleaning

The entire module may be cleaned as described above since the photoetched anodized surface is protecting the entire housing. The same for the fiber-optic cable and headband. Sweatbands should be replaced frequently in accordance with use.



# APFH-50 SERIES FIBER-OPTIC HEADLIGHT 10 YEAR LIMITED WARRANTY

Your Fiber-optic Headlight (APFH-50 and APFH-50B) carry a 10 year warranty from the date of purchase on workmanship and all defects of material, excluding replaceable sweatbands, headband, fiber-optic cable and lamps. Should your product prove to have such defects within ten (10) years of the purchase, **Anthony Products, Inc.** will repair or replace the product or component part without charge. Should your fiber-optic product(s) need servicing under this warranty, you should call **Anthony Products, Inc.** to receive a Return Authorization Number. Then, carefully pack the unit in a sturdy carton, and ship it to the address below. Please include a note describing the defects, your name and a return address. Warranty does not cover equipment subject to misuse, accidental damage, or if transferred to a new owner without authorization from **Anthony Products, Inc.** This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

## POST WARRANTY REPAIRS

You may return your product(s) for repair, shipping prepaid to the address below, with \$10.00 to cover handling. Your product will be inspected and an estimate of the repair charges will be submitted to you for approval. Payment must be received before repairs are completed.



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