# **SURGICAL LOUPES**

BY SEILER MEDICAL DIVISION





2.5x, 3.0x and 3.5x magnifications. Provides vision not attainable with the naked eye.

HIGH RESOLUTION - highest grade glass for excellent clarity.

WATER SEALED – optics are sealed to prevent dust and moisture.

DOUBLE HINGE FLIP-UP DESIGN – for superior optical alignment.

GREAT DEPTH OF FIELD – comfortably extends the natural accommodation capability of the human eye.

WIDE-FIELD – highly corrected optics that allows the entire mouth to be viewed.

WORKING DISTANCE – Short (340mm or 13.4 inches), Regular (420mm or 16.5 inches), Long (500mm or 19.7 inches).

All Seiler loupes allow the user to set your interpupillary, convergence and declination angle for perfect optical alignment.

#### FRAME STYLES



Lightweight titanium frames allow the user to adapt an RX lens to the loupes.

Available Colors: Metallic Blue Metallic Silver

Metallic Red Black

The Sport Frame is a large durable frame that offers added protection against splash-back and debris.

Available Colors: Metallic Silver Black

#### **MAGNIFICATION LEVELS**

2.5x

The entry level magnification that provides a wide field of view, which is exceptionally easy to get used to and is the most common magnification bought.

3.0x

The intermediate magnification level of which is good for a user that is familiar with loupes or has a need for additional magnification not provided by the 2.5x power.

3.5x

The most powerful loupe level in the Seiler Line of Loupes. This magnification level is used for specialists and users that have a smaller working field.

### **WORKING DISTANCE**

short | 13.4" (340mm) The short working distance is 13.4 inches or 340mm.

regular | 17" (420mm)

The regular working distance is 16.5 inches or 420mm. The regular working distance is the most common working distance.

Long | 19" (500mm)

The long working distance is 19.7 inches or 500mm. The long working distance is generally used by a tall person.



## **LED HEADLIGHT**

The Seiler LED Loupe Light is designed with precision engineering to provide the brightest light available. Additional features are:

- Ultra Lightweight Design.
- Over 50,000 LUX.
- Supplies bright, white, shadow-free light.
- Variable Illumination
- Rechargeable Battery Pack makes this a complete portable, compact unit that allows the user freedom of movement.
- Seiler's high quality LED Light operating life expectancy is approximately 500 charge/ discharge cycles.



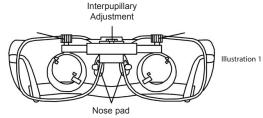
## **HOW TO ADJUST AND WEAR YOUR LOUPES**

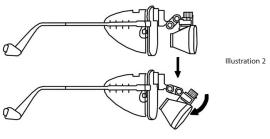
If you require vision correction, use your local optician to place prescription lenses in the eyeglass frames of your loupes. Without prescription lenses, the working distance and depth of field of your loupes could be altered by your uncorrected vision. If you need bifocals, have your distance prescription placed in the top portion and your normal reading prescription placed in the bottom portion of the bifocal. When flipped down, the loupe should align to the lower third of the lenses. Overly strong bifocal prescriptions should not be used.

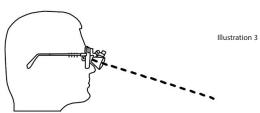
1. Check for Optic/Frame Levelness:

Look at the spectacle frame and hinge. The hinge should be parallel to the edge of the eyeglass frame line. If not, adjust the hinge by flexing it to parallel. It is not uncommon for the optic to shift slightly during shipping. (Illustration 1)

- 2. Angled Hinge Adjustment. Adjust the hinge mechanism so that the optics are angled approximately 30 to 45 degrees below a horizontal line. This will allow for the user to look down into the optics while working, keeping an upright posture. (Illustration 2)
- 3. Place the optics on your head, using the supplied head strap for stability: Your loupes are designed to be worn with the snap-on elastic head strap. These are standard adjusting straps.
- Interpupillary Adjustment. This adjustment is controlled by turning the interpupillary adjustment knob back and forth. Start with the two oculars as far apart as possible and rotate the single knob until the image converges into a circle. (Illustration 4)
  - A. Rotate the interpupillary knob until the two oculars are as far apart as possible.
  - Position yourself at a comfortable working distance, and focus on a white sheet of paper with small print.
  - Rotate the interpupillary knob bringing the two oculars together until you see a clean, singular image.







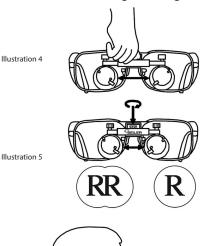
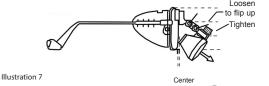


Illustration 6 Loosen



Lock Screw

MED8041 Rev.0 4.9.18

- Working Distance. Your loupes have a preset working distance of either 13.4" (340mm), 17" (420mm) or 19" (500mm). Be sure to position yourself back and forth to find the optional distance for your focusing. (Illustration 5)
- Nose pad Adjustment. The weight of the loupe should be equally distributed across the nose pad. If the nose pad is uncomfortable, flex the nose pad wires until the nose pad conforms to the shape of your nose. Pushing the notepad wires closer together will accommodate a narrower nose and will raise the glasses on your face. Spreading the notepad wires farther apart will accommodate a wider nose, and will lower the glasses.
- 7. Working Angle Adjustment. The correct operating position for most procedures is with the oculars placed at the bottom section of the glasses. The optics should always be positioned as close as possible to the plastic lenses. This position and angle produces the largest field and magnification. (Illustration 6)
- Flip-up Hinge. These loupes are hinged to flip up and down to facilitate magnified and non magnified visualization. The flip-up tension is adjusted by tightening the center lock screw in the hinge. The lower lock screw should always be tightened securely, once the working angle has been set. (Illustration 7)
- When set properly, your loupes will have one clear circle.

#### WARNING FOR HANDLING OF LOUPES

- Do not immerse your loupes in water, cleaning solution or cold sterilizing solution.
- Do not spray cleaner directly into the lenses.
- Do not autoclave or chemiclave the loupes.
- · Do not use products containing glutaraldehydes.