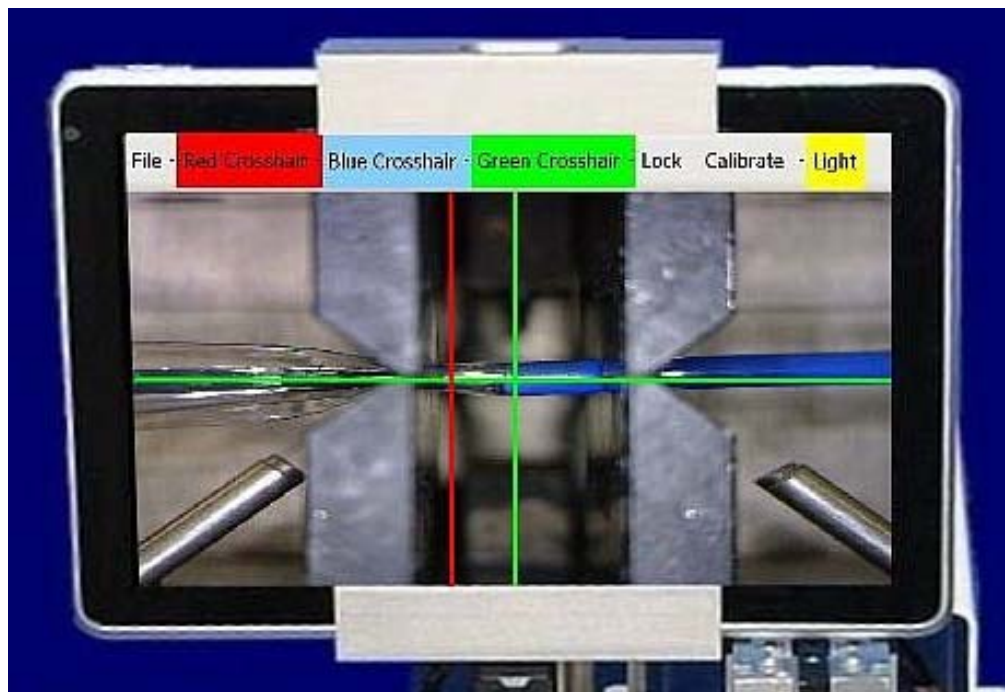


# Interface Catheter Solutions Tubing Welding Machine Model TBW-500 Vision System

Users Guide



Manufactured in the USA  
by



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# OPTIONAL VISION SYSTEM

P/N 724020

## Introduction

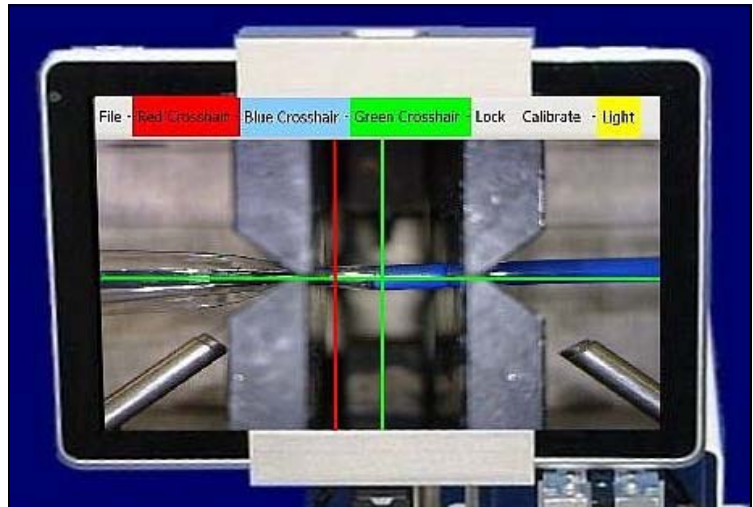
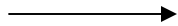
The optional LCD Vision System improves visibility of the welding operation for operator efficiency. The Vision System's display contains a complete Windows 7™ operating system and supports high resolution settings to produce in-depth viewing of the welding process.

**Color Vision System for TBW-500      PN 724020**

## Basic Kit Components:

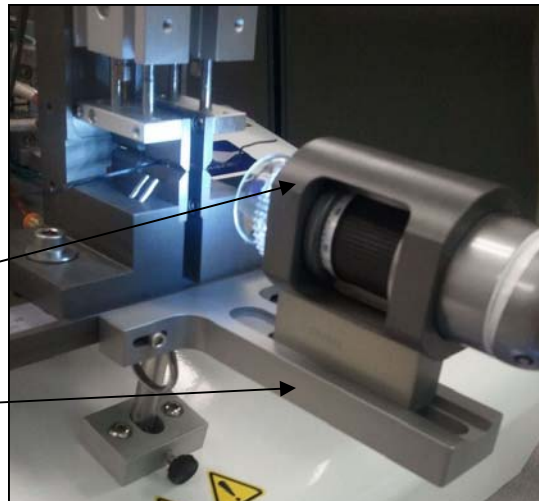
- High Resolution Camera with Connector Assembly
- High Resolution 8" Wide TFT LCD Display with Connector Assembly
- Camera Mount Hardware
- Camera Holder Hardware
- Display Mounting Hardware

**TFT LCD Display  
and Processor**



**Camera Holder**

**Camera Mount**



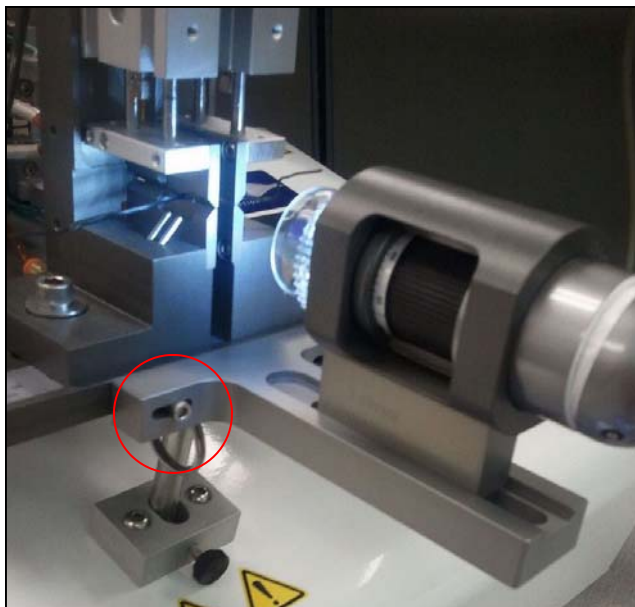
## VISION SYSTEM P/N 724020

### Installation

Step 1. Ensure that the camera is mounted securely inside the camera holder and mount the camera holder on the camera support. Tighten set screw on bottom.



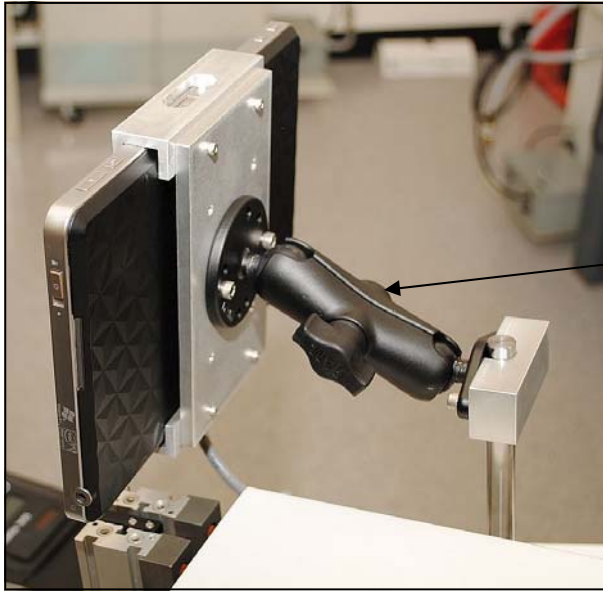
Step 2. Mount the camera holder with bracket on the front of the TBW-500 tilt-plate using two screws provided.



# VISION SYSTEM P/N 724020

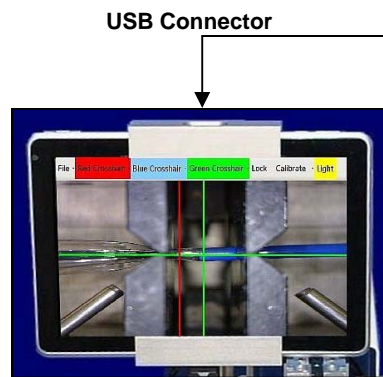
## Installation

Step 3. Install mounting hardware on back of Display as shown below. Mount ball bracket to back vertical support. Tighten positioning arm to secure display.



Positioning Arm

Step 4. Plug the USB Camera connector into the top of the Video Display. Plug in the Video Display power connector into the bottom of the Video Display.



USB Connector

Power Connector



## VISION SYSTEM P/N 724020

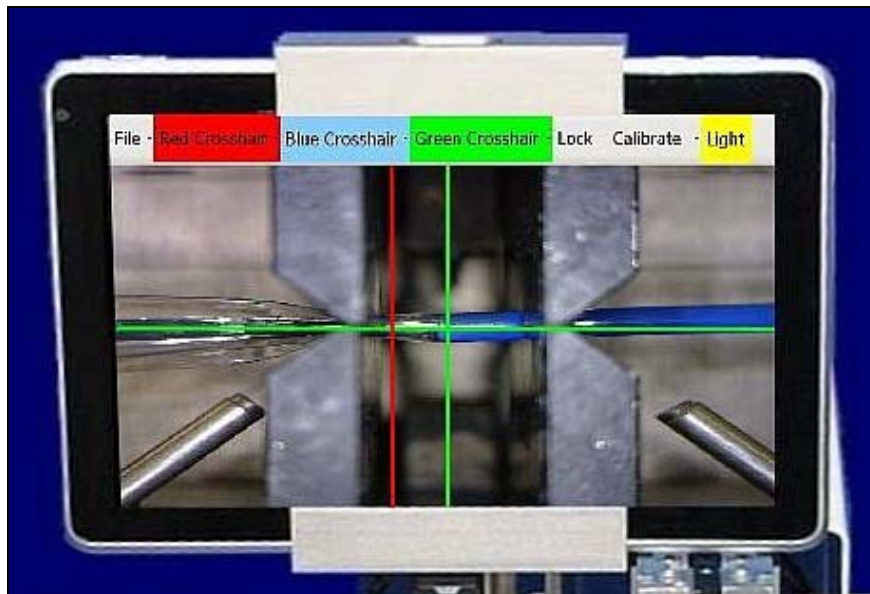
### Installation

Step 5. Apply power to the TBW-500

Step 6. Apply power to the display.



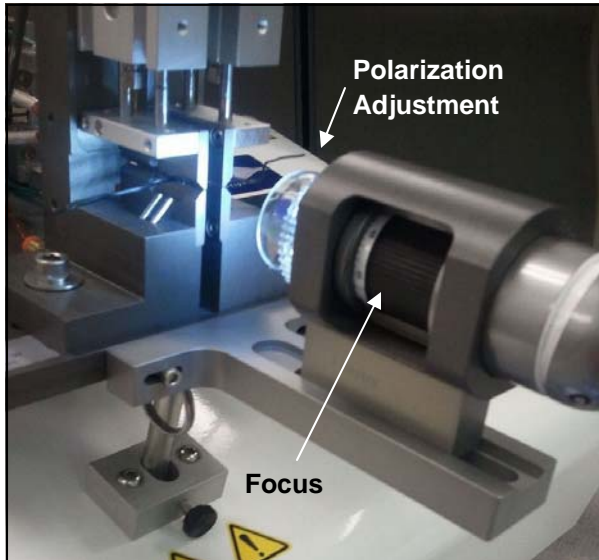
Step 7. The following display appears:



## VISION SYSTEM P/N 724020

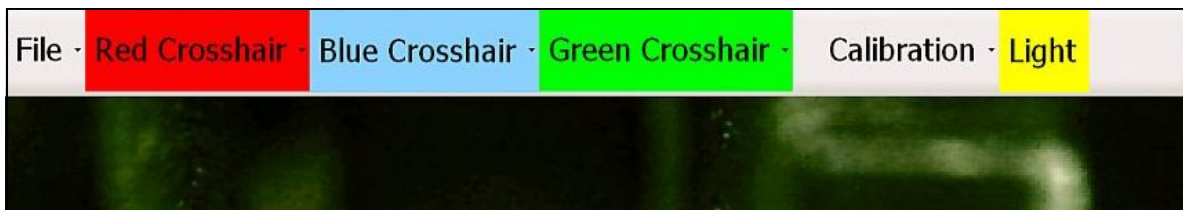
### Setup

The camera has two movable adjustments. The focus adjustment is located on the side of the camera and adjusts the focus accordingly. Polarization adjustment is on the front of the camera and adjusts the amount of light on the welding area.



Camera

### Cross-hair Setup



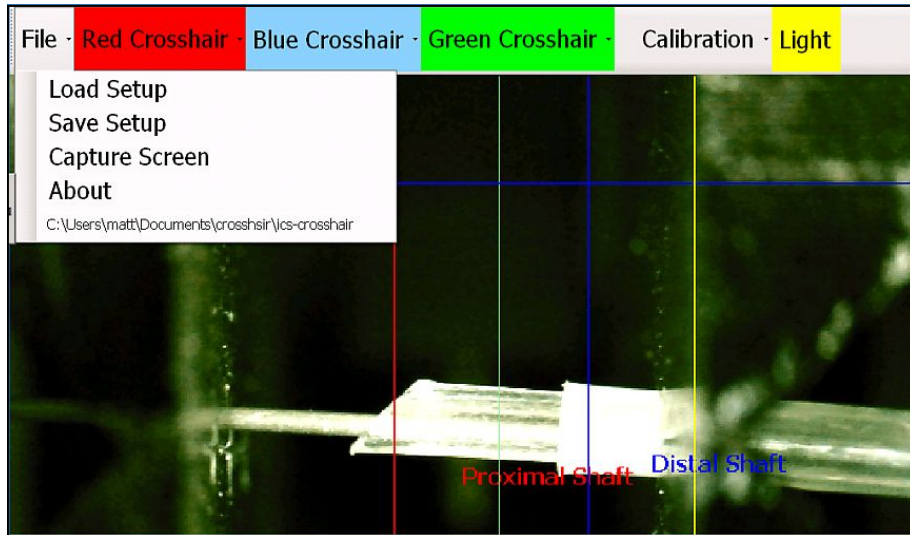
The visual system's display is a touch screen system. A special stylus or finger touch can be used to make settings. Do not use a sharp pointed object such as a pencil as it may damage the display. Objects can be selected and adjusted by touch and drag. Selection is made by simply touching the object, such as save or load etc.

# VISION SYSTEM P/N 724020

## Installation

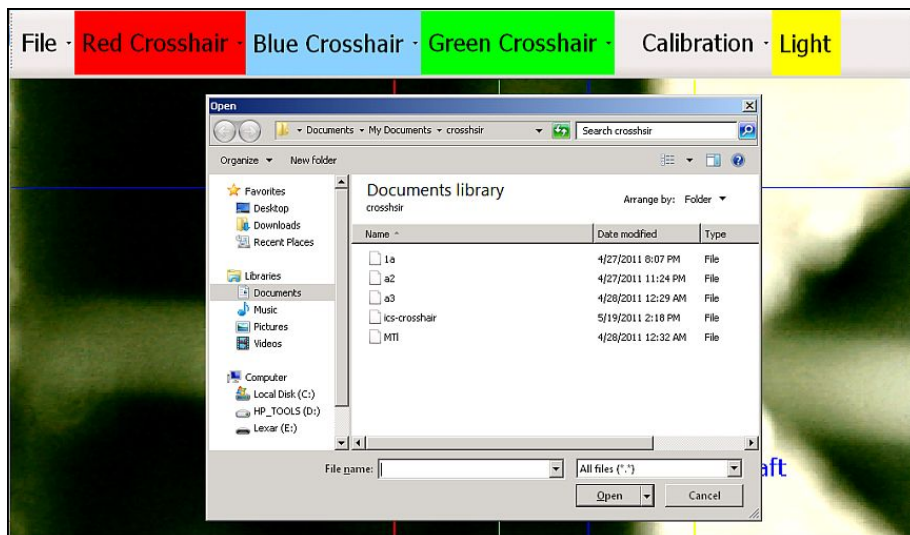
### Crosshair Setup (Contd.)

The following definitions assume that the operator has some familiarity using Windows and can select and save files as necessary.



Touch 'File' on the top menu:

*Load Setup:* Files can be loaded that have been previously saved in a library or any location that is designated.

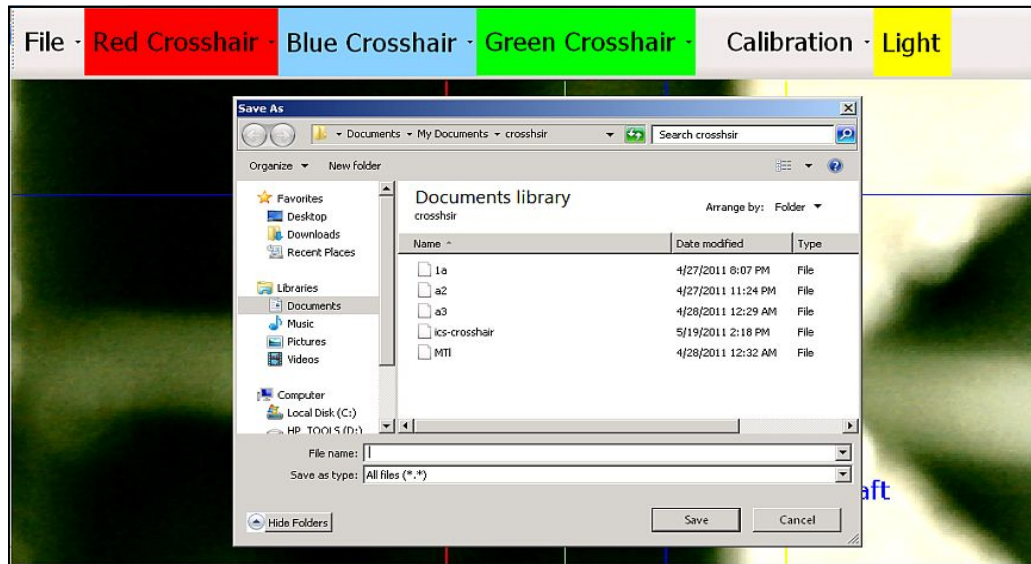


# VISION SYSTEM P/N 724020

## Installation

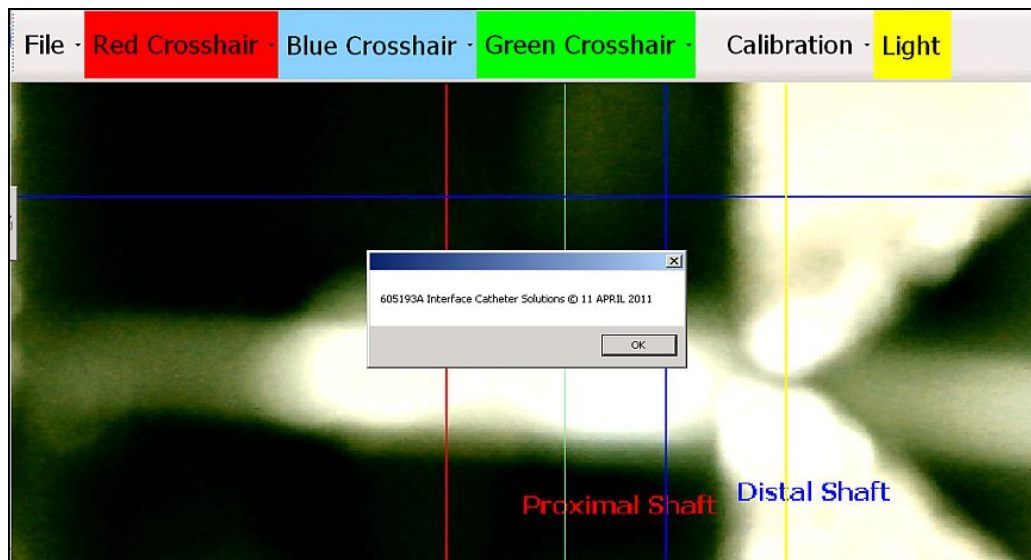
### Crosshair Setup (Contd.)

*Save Setup:* Files can be saved in any directory or location. Select the location by touching the appropriate area and then touch 'Save'.



*Capture : Screen* : Produces an exact copy of what is displayed on the screen. It can be saved in the same manner as a normal save.

*About:* Produces information about the level of software that is in use.

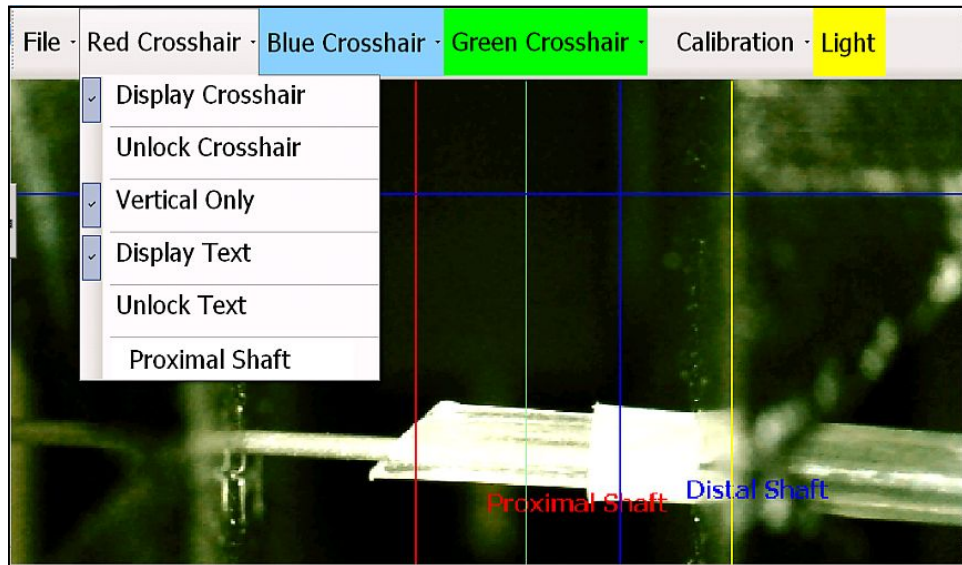


# VISION SYSTEM P/N 724020

## Installation

### Crosshair Setup (Contd.)

Touch 'Red Crosshair' and the following drop-down menu box appears. The same drop-down menu appears for Blue and Green. Touch a selection and the blue box to the left of the selection indicates the status of that selection.



**Display Crosshair:** Displays the Red Crosshair on the screen. Position can be changed by touching the red line and moving it by dragging left or right.

**Unlock Crosshair:** Locks or unlocks the ability to move the red line. Must be selected to move the red line.

**Vertical Only:** Selects the vertical red line only. Deselecting produces the horizontal red line in addition to the vertical. (Drag to position also.)

**Display Text:** Displays the text, in red, to label the red line.

**Unlock Text:** Allows changing the text that is displayed for the red line.

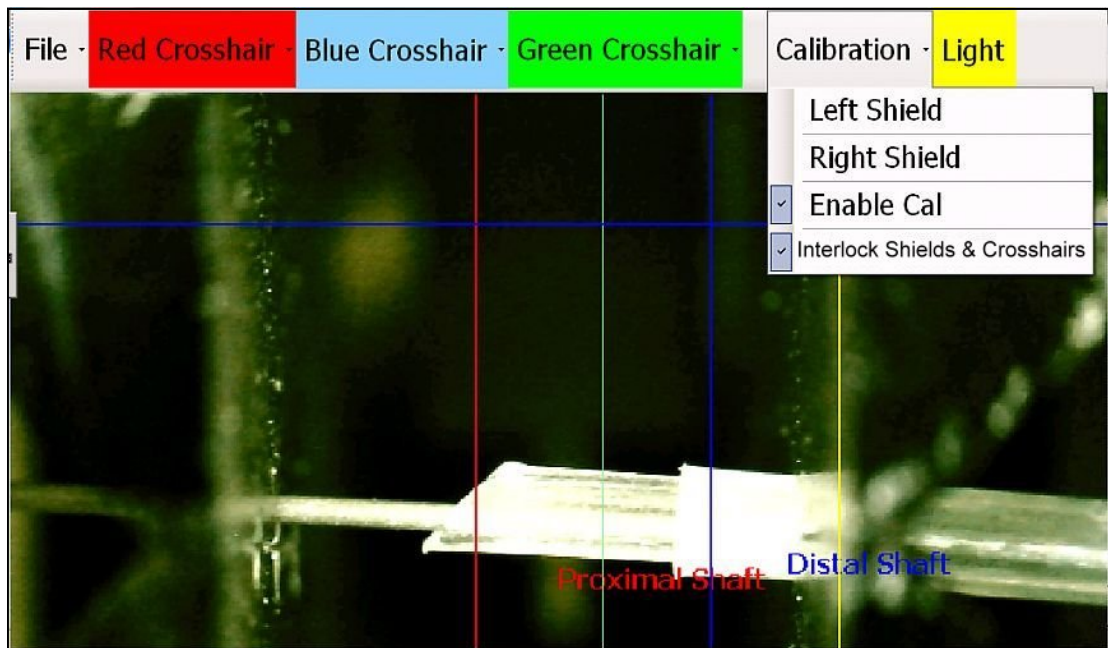
**Bottom Selection:** In the above display 'Proximal Shaft' is displayed. When the bottom box is selected, and 'Unlock Text' is selected, the label can be changed to any desired name. An on-screen keyboard appears for typing. When finished, select save and return to the menu. Touch 'Unlock Text' to change back to locked text.

# VISION SYSTEM P/N 724020

## Installation

### Crosshair Setup (Contd.)

*Calibration:* Touch 'Calibration'. Selecting 'Enable Cal' allows changing the position of the yellow line. Touching 'Left Shield' allows the positioning of the left yellow line. It can be placed on the edge of the left shield for reference. Touching 'Right Shield' also allows the positioning of the right yellow line and can be placed on the right shield for reference. Touching 'Interlock Shields & Cross-hair's locks the position coordinates between the shields and the crosshairs.



*Light:* Touching 'Light' on the menu turns the light on the camera on and off.

## NOTES

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