

VistaCam[®]

ESCORT[™]/MONITOR/PRINTER



OPERATION MANUAL

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TURNING ON THE SYSTEM

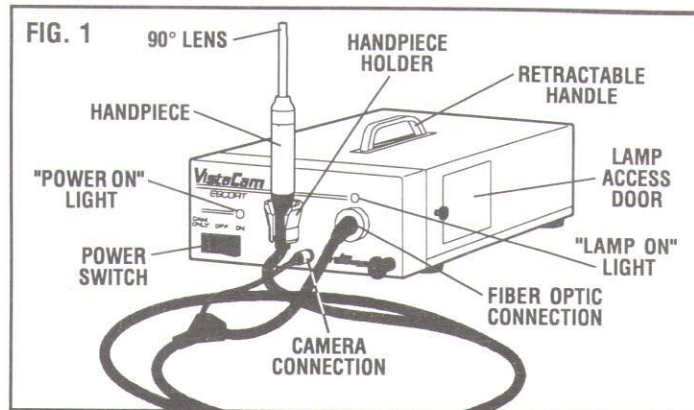
FOR ALL SYSTEMS

If all components share a single power source, turn on the power source. If components are plugged into separate wall outlets, turn on the Escort, the monitor and the printer separately.

- When the Escort is on, the green POWER ON light illuminates. Use either ON or CAMERA ONLY.
- When the monitor is turned on, VIDEO 3 is briefly displayed, indicating that the system is in the correct input mode. If the monitor does not display "VIDEO 3," see MONITOR MANUAL - TO SET THE INPUT SELECTION.

NOTE: The monitor is factory preset to automatically turn on when AC power is connected. If the POWER button on the front panel must be pressed to turn on the monitor, see MONITOR MANUAL - INSTANT ON FEATURE to reprogram if desired.

- When the printer turns on, the green READY light flashes and remains on.



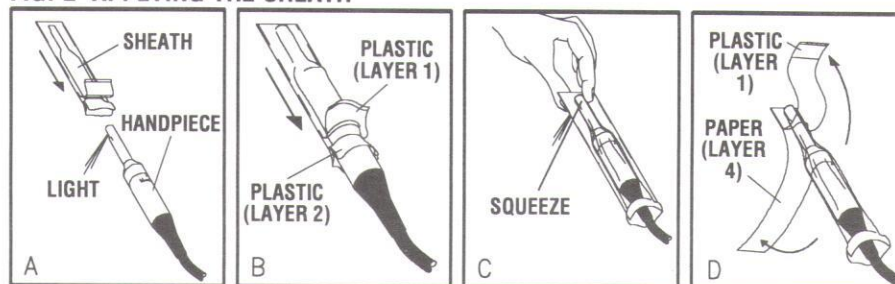
VISTACAM® MULTI-OPERATORY NETWORKS

- Turn on the Distribution Amplifier to activate the video signal.
- Turn on the power to each component in the system, including the printer, the monitor (see NOTE above) and the Escort.
- When transporting the Escort between operatories be sure to plug in the AC line cord and connect the S-Video cable every time. Turn POWER switch on the front of the Escort to ON or CAMERA ONLY.

USING THE HANDPIECE

1. Put the POWER switch on the Escort in the ON position. The fiber optic light source turns on automatically when the handpiece is removed from the holder on the Escort. (Reminder: remove the black plastic cap from the handpiece tip before using.) The light

FIG. 2 APPLYING THE SHEATH



source turns off when the handpiece is returned to the holder and the camera remains on. This auto on/off feature for the light source prolongs the life of the lamp. To deactivate the light source, put the POWER switch in the CAMERA ONLY position.

NOTE: Use the camera without the light source when imaging an x-ray on a lightbox, or when an outside light source is being used.

2. While the 90° lens assembly is fully autoclavable (see CLEANING AND MAINTENANCE), it is recommended that a disposable infection control sheath be used for each patient.
- A. Remove the handpiece from the holder. Insert the handpiece tip between the second and third (attached to the paper layer) plastic layers with the light pointing towards the paper layer. This is important since the optically clear section can only be accessed with the light pointed down toward the paper.

USING THE HANDPIECE

- B. Push the handpiece completely in until the tip is fully inserted into the narrow tip of the sheath.
- C. Gently squeeze the illuminated tip of the handpiece between thumb and index finger to ensure that the clear plastic area of the sheath is flat against the lens tip.
- D. Peel away and dispose of the top plastic layer and the bottom paper layer.

CAPTURING AND PRINTING AN IMAGE

TO FORMAT NUMBER OF IMAGES

The VistaCam printer is preset to capture and print 4 images on a single picture. To change preset format:

- Using the printer footswitch (**FIG. 3**): Press the **FORMAT** button repeatedly to access the display sequence.

DISPLAY SEQUENCE:

- OFF (1 image per picture)
- ONE PIX 4 (4 images per picture)
- ONE PIX 16 (16 images per picture)
- ONE PIX 25 (25 images per picture)

- Using the printer front control panel (**FIG. 4**): Open the control cover on the lower left side of the printer and press **PICTURE** repeatedly to access the display sequence.

For the highest resolution, use the OFF mode (one image per picture) or the ONE PIX 4 mode (four images per picture). In the OFF mode, each new captured image overwrites the previous image. In the multi-image mode (4, 16 or 25 images) every time an image is captured in memory, the printer advances to the next position. To replace an image, press the **SELECT** pedal on the footswitch until the frame surrounds the image to be changed. Position the handpiece, then capture the image (see **TO CAPTURE AN IMAGE**). To use the printer controls, open the control cover on the lower left side of the printer (see **FIG. 4**); press **SELECT (+/-)** until the frame surrounds the image to be changed.

TO SELECT FIELD OR FRAME MODE

A **FRAME** is composed of **FIELD A** and **FIELD B**. Each **FIELD** holds half the visual information which, when combined in the **FRAME** mode, produces the highest resolution image. The VistaCam printer is factory preset in the **FRAME** mode. We recommend that the printer be operated in this mode.

To capture an image, the handpiece must be held still or the image may be blurred. To minimize blurring, capturing an image in the **FIELD** mode may be an option. To change to **FIELD** mode, press **FIELD** on the printer front control panel. To change back to **FRAME**, press **FRAME** on the printer front control panel.

FIG. 3 MULTI-FUNCTION PRINTER FOOTSWITCH

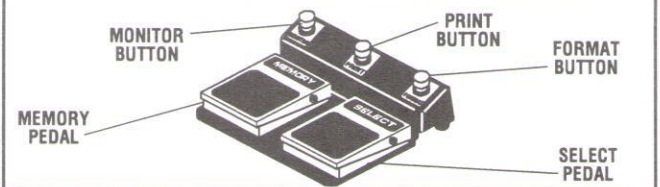
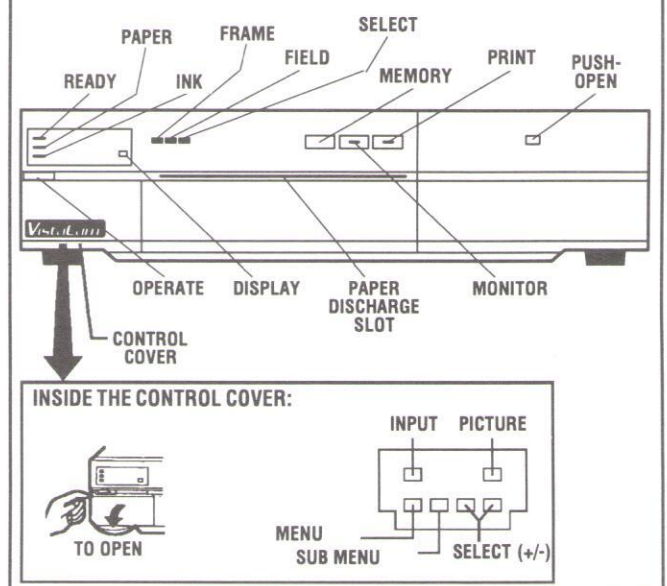


FIG. 4 PRINTER FRONT CONTROL PANEL



INSIDE THE CONTROL COVER:



CAPTURING AND PRINTING AN IMAGE

TO CAPTURE AN IMAGE

Before printing an image, it must first be captured in the printer's memory. An image can be recaptured as many times as needed before printing. This is accomplished by using the printer footswitch, the printer front control panel or the optional remote control. Prior to printing, install the print cartridge and video print paper. (See INSTALLING THE VIDEO PRINT KIT.)

- Using the printer footswitch:

There are two ways to capture an image using the printer footswitch:

MODE 1 - Depress MEMORY to capture the image, release for a "live" image.

MODE 2 - Keep MEMORY depressed for a "live" image, release to capture an image.

To determine which way is more comfortable for you, press the round MONITOR button to switch between the two modes.

- ▶ In MODE 1, the green MONITOR light is off and the image on the monitor is "live". To capture the image in the printer's memory, position the handpiece, hold it still, press MEMORY. The captured image is displayed for one second on the monitor, then the image returns to "live". (To see the captured image again, press MONITOR. Press MONITOR again to return to the "live" image.)
- ▶ In MODE 2, the green MONITOR light is on and the image on the monitor is the last captured image. Press MEMORY and hold it down to switch to a "live" image. Continue to depress MEMORY while you position the handpiece. When you have the area you want to image, release MEMORY and the image will be captured in the printer's memory. Depress MEMORY again to go "live".

- Using the printer front control panel:

The MONITOR and MEMORY buttons function identically to those on the printer footswitch. Follow the directions "Using the printer footswitch" (above).

TO PRINT AN IMAGE

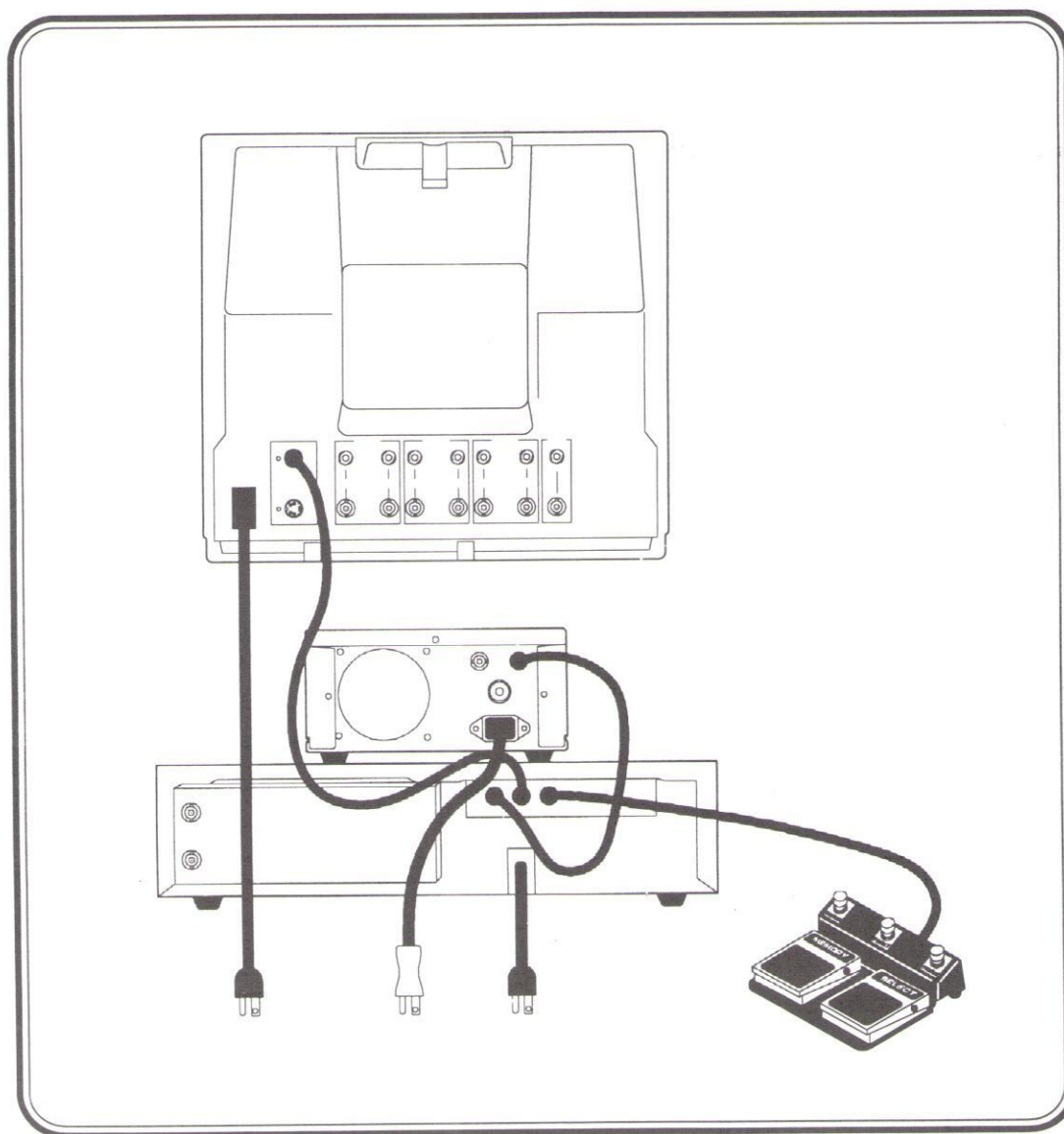
- Using the printer front control panel: Press PRINT
- Using the printer footswitch: Press PRINT

NOTE: It takes 53 seconds to print an image.

VistaCam[®]
VIDEO IMAGING SYSTEM

VistaCam™

ESCORT™/MONITOR/PRINTER



INSTALLATION MANUAL



SETUP AND ASSEMBLY

CONNECTING THE CABLES (FIG. 1 - 2)

CAUTION: THE ON/OFF SWITCH ON THE ESCORT MUST BE OFF DURING INSTALLATION. CONNECTING THE AC POWER LINE CORD INTO AN APPROPRIATE AC POWER SOURCE IS THE LAST INSTALLATION STEP.

HELPFUL HINT: Before connecting the system components, familiarize yourself with the S-VIDEO and Footswitch connectors to avoid bending pins when inserting the connectors into their mating receptacles. Align the keys with the keyways and push gently when inserting connectors. **DO NOT TURN.** (See FIG. 1)

1. Connect all S-Video cables and Printer Footswitch cable as shown in FIG. 2. (If installing on a Cart, also see Mobile Cart Assembly Instructions - included with Cart).
2. Connect the rectangular end of the Escort AC Power Line Cord to the receptacle labeled LINE IN on the rear of the Escort. (See FIG. 2)
3. Connect the Escort, Printer and Monitor AC Power Line Cords into appropriate AC power source. To operate, see Operation Manual.

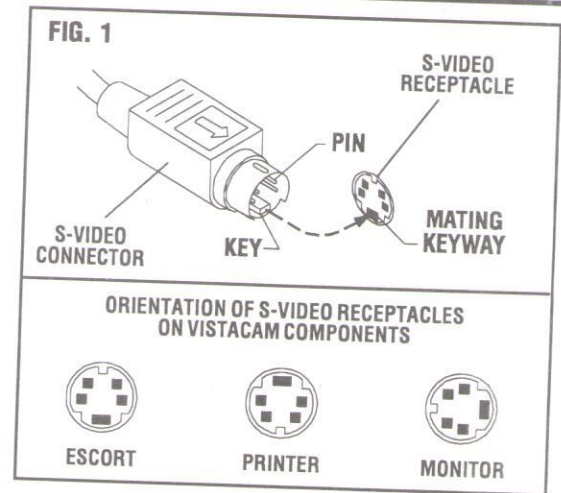
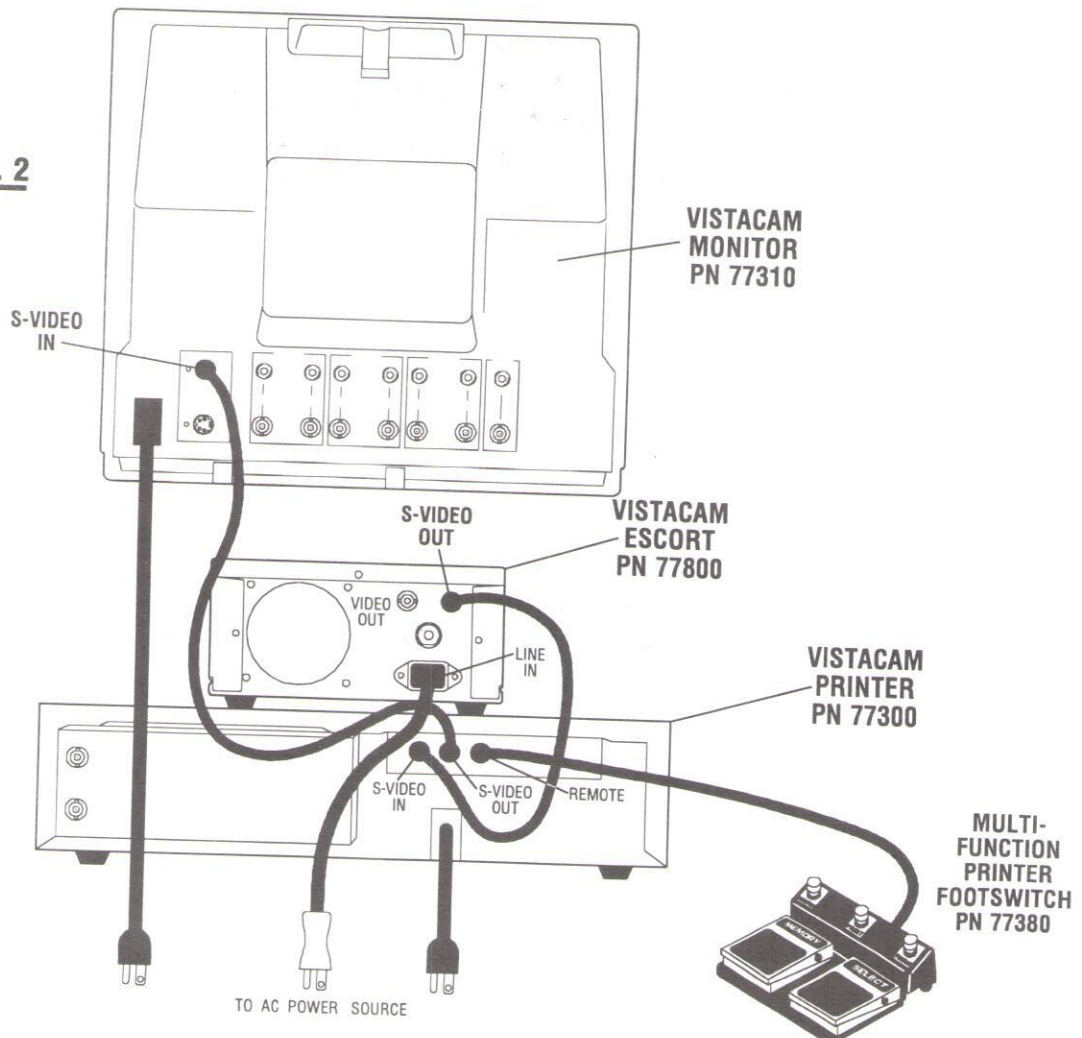
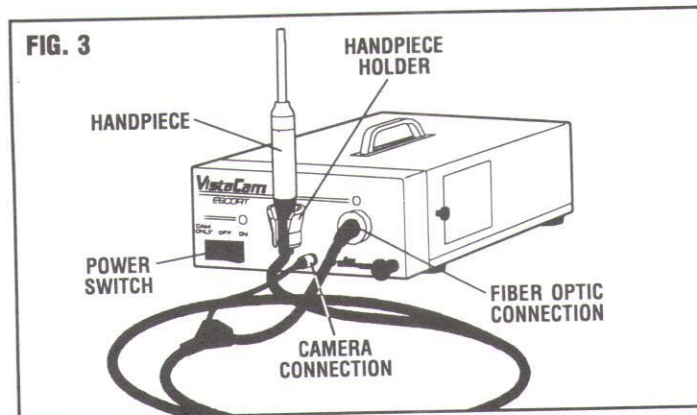


FIG. 2



ESCORT ASSEMBLY

1. The Handpiece/Umbilical Assembly has two connections at the Y end of the umbilical which are inserted into the front of the Escort:
 - Connect the camera side of the umbilical (left side). Orient the connector to match the keyway slot on the top of the receptacle. Rotate the knurled sleeve clockwise until it is snug. Do not overtighten.
 - Connect the fiberoptic side of the umbilical (right side). Slide the connector into the receptacle, gently push until it seats flush.
2. Place the Handpiece into the holder on the front of the Escort. To operate, see Escort Manual and Operation Manual.



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INSTALLING/CHANGING THE VIDEO PRINT KIT

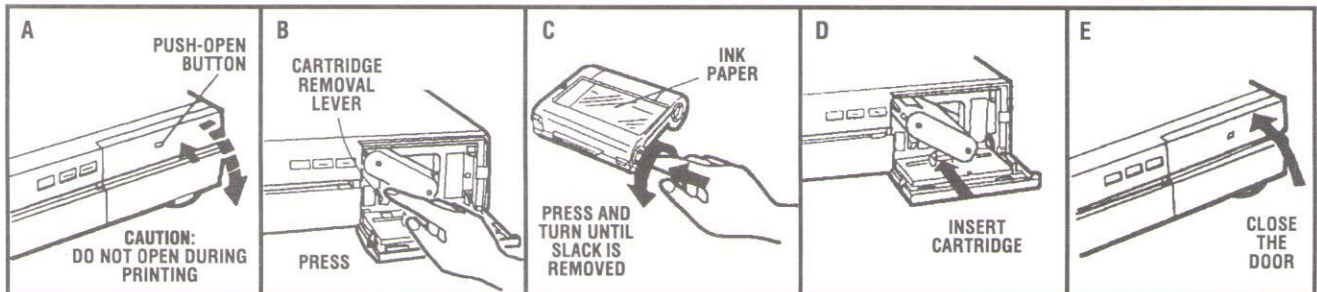
The Video Print Kit contains a video print cartridge and 50 sheets of video print paper. Reorder PN 77150. CAUTION: Do not store the video print kit in a location exposing it to high temperature, humidity, or direct sunlight.

THE PRINT CARTRIDGE

IMPORTANT:

- Before installing the cartridge, remove the styrofoam insert in the compartment. DO NOT DISCARD THE STYROFOAM. When the printer is moved the styrofoam must replace the cartridge to protect the print head.
- Discard a spent video print cartridge. Do not reuse.

FIG. 5 TO INSTALL, FOLLOW THESE ILLUSTRATIONS:



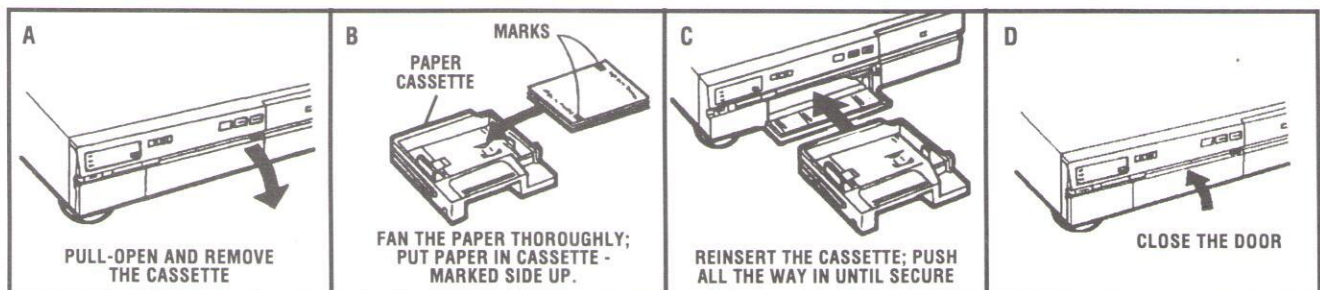
CAUTION: DO NOT INSERT FINGERS INSIDE CARTRIDGE HOUSING

THE VIDEO PRINT PAPER

IMPORTANT:

- Do not turn power OFF or remove the paper cassette while printing is in progress.
- Do not touch the paper's print surface. Fingerprints or dirt on the print surface may produce unclear prints.
- Never load more than 50 sheets of print paper. Overloading can cause jamming.
- Do not use bent, folded or wet video print paper.
- When moving the printer, remove the paper from the cassette.

FIG. 6 TO LOAD PRINT PAPER FOLLOW THESE ILLUSTRATIONS:



USING THE FULL FACE PORTRAIT LENS

IMPORTANT: The full face portrait lens is not autoclavable.

1. Unscrew the 90° lens assembly from the handpiece/umbilical assembly by turning the ring. Detach the lens assembly (**FIG. 7**).
2. Align the pin on the handpiece/umbilical assembly with the hole on the full face portrait lens. Turn the ring to attach (**FIG. 8**).
3. To focus the camera at infinity, screw the ring down until the image is sharp. To focus closer to the patient's face (as close as 3 inches), unscrew the ring until the image is in focus.
4. To detach the full face portrait lens, unscrew the ring all the way. Detach.
5. To clean the full face portrait lens, use alcohol and a cotton swab (see **CLEANING AND MAINTENANCE, FIG. 9**). **DO NOT AUTOCLAVE.**
6. To reattach the 90° lens assembly, align the pin on the handpiece/umbilical assembly with the hole on the 90° lens assembly. Turn the ring until tight.

FIG. 7 DETACHING THE 90° LENS ASSEMBLY

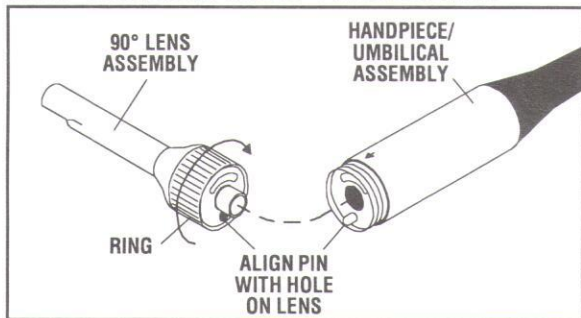
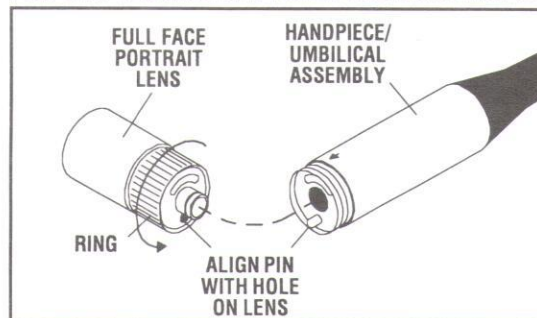


FIG. 8 ATTACHING THE FULL FACE PORTRAIT LENS



CLEANING AND MAINTENANCE

CAUTION: TURN OFF AND UNPLUG THE VISTACAM SYSTEM BEFORE CLEANING.

HOUSING, CART

- Use conventional cleaning methods and water-based solutions. **Do not wipe the surfaces using benzine, thinner, etc. as this may degrade the finish.**

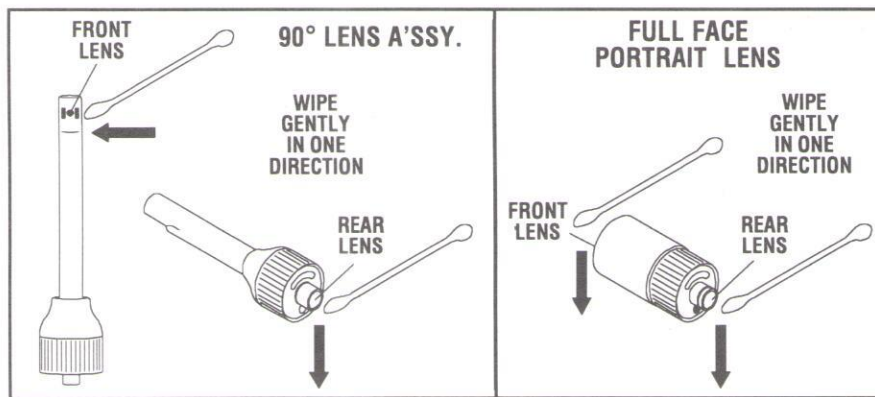
HANDPIECE/UMBILICAL ASSEMBLY

- Following each patient use, the VistaCam handpiece/umbilical assembly can be wiped clean and disinfected with any commercial surface disinfectant following the manufacturer's recommendations.

LENSES

- Routinely check the glass lens located at each end of the 90° lens assembly and the full face portrait lens for debris or spots. Clean each lens with alcohol and cotton swabs as shown in **FIG 9**. Avoid getting fingerprints on the lenses.

FIG. 9



90° LENS ASSEMBLY AUTOCLAVING INSTRUCTIONS

IMPORTANT: ONLY THE 90° LENS ASSEMBLY IS AUTOCLAVABLE. DO NOT AUTOCLAVE THE HANDPIECE/UMBILICAL ASSEMBLY. DO NOT AUTOCLAVE THE FULL FACE PORTRAIT LENS. DO NOT EXCEED A TEMPERATURE OF 270°F (132°C).

- Following patient use and before autoclaving, the 90° lens assembly should be thoroughly cleaned to remove any organic material, blood, or cleaning solutions.
- Unscrew the 90° lens assembly from the handpiece/umbilical assembly by rotating the ring. Detach (**FIG. 7**).
- Use the standard steam procedure recommended by the manufacturer of your autoclave.

REPLACING THE LAMP: ESCORT

CAUTION: THE LAMP IS EXTREMELY HOT. PRIOR TO CHANGING THE LAMP TURN POWER OFF. WAIT AT LEAST 10 MINUTES FOR THE LAMP TO COOL BEFORE TOUCHING.

1. To change the lamp, turn POWER OFF on the front of the VistaCam Escort.
2. Loosen the screw on the right side of the VistaCam Escort, and slide the door towards the rear. (An interlock switch, activated by the door, provides additional safety by cutting power to the lamp.)
3. Pull the lever on the top of the lamp socket towards the door opening until the lamp comes out of the socket (**Fig. 10A, 10B**).
4. Discard the used lamp.
5. Carefully remove the replacement lamp from its container. Take care not to put fingerprints on the lamp or polished surface of the reflector as this will shorten the life of the lamp.
6. Push the lever on the top of the lamp socket inward prior to installing the new lamp (**Fig 10C**).
7. Align the tab on the reflector of the replacement lamp to face the door. Slide fully into socket grooves (**Fig. 10D**).
8. Slide the door closed and tighten the screw.
9. Turn POWER ON.
10. Remove the handpiece from its holder to check that the lamp turns on.

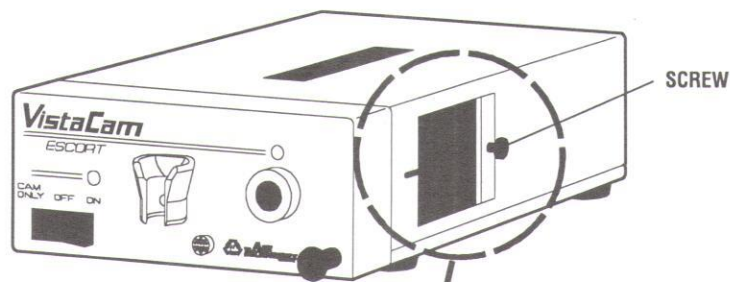
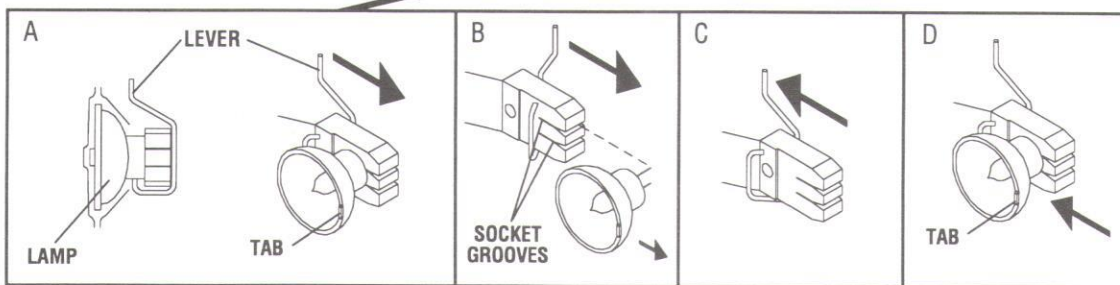


FIG. 10



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