

FUTURA 3000/4000

INSTALLATION INSTRUCTIONS

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OPERATING INSTRUCTIONS

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WARNINGS

- **DO NOT ATTEMPT TO INSTALL OR OPERATE THIS FILM PROCESSOR UNTIL YOU HAVE READ AND UNDERSTOOD THIS MANUAL PROVIDED WITH THIS UNIT. BE ALERT TO ALL CAUTION AND WARNING NOTICES.**
- **DO NOT DISCARD THE SHIPPING CONTAINER IF DAMAGE IS NOTED UPON RECEIPT. RETAIN THE SHIPPING CONTAINER AND TAKE PICTURES OF THE DAMAGE AND THE CARTONS. BY LAW AS THE SHIPPER, FISCHER CANNOT HANDLE, PROCESS, OR INITIATE ANY DAMAGE CLAIMS ON YOUR BEHALF. ONLY YOU AS THE RECIPIENT MAY FILE A SHIPPING DAMAGE CLAIM.**
- **THE PROCESSOR IS HEAVY, EVEN WHEN THE RACKS ARE NOT INSTALLED AND THERE IS NO FLUID IN THE TANKS. IT IS RECOMMENDED THAT THE PROCESSOR BE REMOVED FROM THE SHIPPING CARTON WITH PROPER LIFTING EQUIPMENT OR WITH AT LEAST TWO PEOPLE. LIFT WITH YOUR LEGS, NOT WITH YOUR BACK.**
- **THE PROCESSOR SHOULD NEVER BE MOVED WITH LIQUID INSIDE. SHIFTING LIQUIDS INSIDE THE TANK MAY DAMAGE THE TANK. SHIFTING LIQUIDS MAY RESULT IN SPILLS ONTO SENSITIVE MECHANICAL, ELECTRICAL, AND ELECTRONIC COMPONENTS THAT COULD CAUSE SEVERE OPERATIONAL DAMAGE. IN ADDITION, SHIFTING LIQUIDS MAY RESULT IN CROSS-CONTAMINATION OF CHEMICALS IN THE TANKS. IF THAT SHOULD OCCUR, THE TANKS SHOULD BE DRAINED AND FLUSHED. ALWAYS DRAIN A FISCHER PROCESSOR BEFORE ATTEMPTING TO MOVE IT.**
- **DO NOT OPERATE A PROCESSOR WITHOUT DEVELOPER, FIXER, AND WATER IN THE TANKS. OPERATING A DRY PROCESSOR WILL RESULT IN SEVERE OPERATIONAL DAMAGE. THE DEVELOPER, FIXER, AND WASH SECTIONS OF THE TANK MUST BE PROPERLY FILLED BEFORE TURNING THE PROCESSOR ON. THE WATER SOLENOID HAS BEEN DESIGNED FOR REPLENISHMENT ONLY.**
- **IN SOME MUNICIPALITIES, LOCAL ENVIRONMENTAL LAWS PROHIBIT THE DISPOSAL OF DEVELOPER, FIXER, AND WASH WATER INTO THE SEWER SYSTEM. CHECK WITH YOUR LOCAL EPA (Ministere de l'industrie, Direction generale des strategies industrielles) ON ACCEPTABLE DISPOSAL METHODS.**
- **ALWAYS TURN THE PROCESSOR TO THE "OFF" POWER POSITION WHEN SERVICING.**
- **THERE ARE MOVING PARTS INSIDE OF THE PROCESSOR INVOLVED IN THE OPERATION OF THE PROCESSOR. USE EXTREME CAUTION WHEN CLEANING.**
- **CERTAIN PARTS OF THE PROCESSOR OPERATE AT ELEVATED TEMPERATURES. PARTS LIKE THE HEAT EXCHANGER, DEVELOPER HEATER, DRYER PLENUM, AND INFRARED DRYERS ARE HOT DURING OPERATION. WAIT 20 MINUTES AFTER SHUTDOWN BEFORE TOUCHING ANY HOT PARTS PRIOR TO SERVICING OR CLEANING. USE EXTREME CAUTION.**
- **NEVER DISCONNECT THE FLOATING LEVEL SENSOR IN A 3000SV. SERIOUS DAMAGE COULD RESULT.**

RECEIVING CHECKLIST:

Upon unpacking all cartons, please check to insure the following has been received.

BASIC SYSTEM:

A	Futura 3000/4000 Automatic X-Ray Film Processor		
B	Developer Rack		
C	Fixer Rack Assembly		
D	Wash Rack Assembly		
E	Dryer Rack Assembly		
F	Film Catcher (ME 92 E4)		
G	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">FUTURA 3000</p> <p>Developer and Fixer Replenishing Assemblies</p> <ul style="list-style-type: none"> ◆ 2 – Five-gallon Tank (KE 50 A1) ◆ 2 – Replenishment Tube (KE 52 A1) ◆ 2 – 3/8" Hose Clamp (KB 77 A1) </div>		
H	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">FUTURA 4000</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Developer Replenishing Tank Assembly, Color-coded Red (KE 92 A3) Consisting of:</p> <ul style="list-style-type: none"> ∪ 1 – Ten-gallon Tank (KA 50 A4) ∪ 1 – 1/4" x 3/8" Tubing (KA 55 A7) ∪ 1 – Replenishing Spout (KB 21 A1) ∪ 1 – Tubing Extension (KB 21 A3) ∪ 1 – Floating Lid (KB 52 B1) ∪ 3 – 3/8" Hose Clamps (KB 77 A1) </td> <td style="width: 50%; vertical-align: top;"> <p>Fixer Replenishing Tank Assembly, Color-coded Blue (ME 92 A4) Consisting of:</p> <ul style="list-style-type: none"> ∪ 1 – Ten-gallon Tank (KA 50 A4) ∪ 1 – 1/4" x 3/8" Tubing (KA 55 A9) ∪ 1 – Replenishing Spout (KB 21 A1) ∪ 1 – Tubing Extension (KB 21 A3) ∪ 3 – 3/8" Hose Clamps (KB 77 A1) </td> </tr> </table> </div>	<p>Developer Replenishing Tank Assembly, Color-coded Red (KE 92 A3) Consisting of:</p> <ul style="list-style-type: none"> ∪ 1 – Ten-gallon Tank (KA 50 A4) ∪ 1 – 1/4" x 3/8" Tubing (KA 55 A7) ∪ 1 – Replenishing Spout (KB 21 A1) ∪ 1 – Tubing Extension (KB 21 A3) ∪ 1 – Floating Lid (KB 52 B1) ∪ 3 – 3/8" Hose Clamps (KB 77 A1) 	<p>Fixer Replenishing Tank Assembly, Color-coded Blue (ME 92 A4) Consisting of:</p> <ul style="list-style-type: none"> ∪ 1 – Ten-gallon Tank (KA 50 A4) ∪ 1 – 1/4" x 3/8" Tubing (KA 55 A9) ∪ 1 – Replenishing Spout (KB 21 A1) ∪ 1 – Tubing Extension (KB 21 A3) ∪ 3 – 3/8" Hose Clamps (KB 77 A1)
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I	High Pressure Hose, Black (KA 55 A8)		
J	Rack Cover (ME 92 A5)		
K	Switch Activator (KM 52 C1)		
L	<p>Small Package, Containing:</p> <ul style="list-style-type: none"> ∪ 1 – 20 Amp Receptacle (FE 82 A12) ∪ 1 – Warranty/Warranty Card ∪ 1 – Manual (Operations/Installation) ∪ 2 – 90° Hose Clamps (KB 55 A6) ∪ 1 – Spare Parts Kit (KB 100 A14), Containing: <ul style="list-style-type: none"> • 3 – Bushings, Flanged, 1/2" (KA 56 A1) • 3 – Bushings, 5/16" (KA 56 A4) • 3 – Bushings, Retaining, 1/2", for Dryer (KA 56 A5) • 3 – Rings, "O" (KA 67 A5) • 3 – Springs, Garter (KA 77 A1) • 3 – Pins, Spring, 1/8" (KA 77 A6) • 1 – Gauge, Feeler (KB 59 A3) 		

OPTIONS:

A	Processor Stand (KB 92 E23)
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INSPECT FOR DAMAGE

First, examine the Processor carefully to be sure no shipping damage has occurred. If you see or suspect any shipping damage, you must contact the delivering carrier yourself to request inspection of any damage.

NOTE:

WE THE SHIPPER, CANNOT HANDLE, PROCESS OR INITIATE ANY DAMAGE CLAIMS ON YOUR BEHALF. BY LAW, ONLY THE RECIPIENT OF GOODS MAY CLAIM DAMAGES, AND ONLY THE RECIPIENT MAY FILE A SHIPPING DAMAGE CLAIM.

BE SURE TO RETAIN THE DELIVERY CARTONS, AND IF POSSIBLE, TAKE PHOTOS OF BOTH THE DAMAGE AND THE CARTONS.

I INITIAL INSTALLATION

A Site Selection

The Processor must be operated in a totally light-free darkroom to ensure light security. While the film is being processed, the least amount of light there is near the Processor, the less chance for light to fog the film.

Some form of AMBIENT TEMPERATURE CONTROL is also required. Often, darkrooms become excessively warm, causing premature evaporation of the chemistry or over-developed films from overheated chemistry. The darkroom temperature should not exceed 75F (23.8C). Use of a ventilating fan or separate thermostatic control is recommended for warm darkrooms.

The Processor can be adjusted to minimize overheating and excessive chemical odors depending on darkroom size. The adjustments are made through the dip switch settings on the microprocessor. Please consult the table below for some adjustment suggestions.

Darkroom Size	Switch 1	Switch 2	Switch 3	Standby	Run
LARGE	OFF	OFF	ON	3 min.	3 min.
	OFF	ON	ON	4 min.	4 min.
	ON	OFF	ON	5 min.	5 min.
	ON	ON	ON	6 min.	6 min.
SMALL	OFF	OFF	OFF	3 min.	1.5 min.
	OFF	ON	OFF	4 min.	2 min.
MEDIUM	ON	OFF	OFF	5 min.	2.5 min.
	ON	ON	OFF	6 min.	3 min.

Factory Preset

B Height and Surface Area

The Processor should be placed on a stable, flat, and level bench or table at a height of approximately 20" to 22" from the floor, **(or on the optional Processor Stand, KB 92 E23)**.

The minimum required surface area for the Processor is 24" long and 24" wide.

When selecting a location be sure the area will facilitate the workflow and provide adequate access for operating and maintaining the processor.

C Electrical Supply

The Processor is available for either 120V or 230V, but not both. The Processor requires a **dedicated** power source:

either 120V, single phase, 60Hz power outlet fused at 20 Amps,

or 230V, three phase, 50Hz power outlet fused at 10 Amps.

The outlet must be situated no further than six (6) feet from the rear of the Processor

D Water Supply

The water inlet is located in the back of the Processor. The Processor is connected to the water supply with the Black High Pressure Hose, KA 55 A8 (or a washing machine hose).

A cold, clean water supply is required:

The water temperature, should be between 35°F (1.6°C) and 75°F (23.8°C), or 10°F (5.5°C) less than the developer temperature. If the water available in the area contains excessive rust, particle matter, or other contaminants, is highly acidic or highly alkaline, an appropriate commercial filtration system must be employed.

THE REPLENISHMENT SYSTEM

FUTURA 3000/4000

The Futura 3000/4000 color codes for chemicals and hoses are:

Red = Developer

1 – ¼” Replenishment Hose, **KA 55 A7**

Blue = Fixer

1 – ¼” Replenishment Hose, **KA 55 A9**
1 – ½” Drain Hose, **FE 55 A2**

Clear = Water

1 – ¾” Drain Hose, **KA 55 A3**

Black = Water Inlet

1 – High Pressure Supply Hose, **KA 55 A8**

- **Chemical Replenishment System**

The *Developer* and *Fixer* Replenishment Tanks should be located under the Processor.

Or, they may be located up to 6 feet away from the Processor.

Make certain the tops of the tanks are no higher than the bottom of the Processor.

DEVELOPER:

The ¼” **red hose** protruding from the back of the Processor should be placed down into the Replenishing Tank, and into the developer.

If you are using a 10 gallon tank, you may place the floating lid (KB 52 B1) on the top of the developer, and then replace the lid to the 10-gallon tank. A metal spout and extension tube is supplied to facilitate the routing of the hose into the bottom of the 10 gallon tank.

FIXER:

The ¼” **blue hose** protruding from the back of the processor should be placed down into the Replenishing Tank, and into the fixer.

If you are using a 10 gallon tank, a metal spout and extension tube is supplied to facilitate the routing of the hose into the bottom of the 10 gallon tank. Make sure to replace the lid to the 10-gallon tank.

- **Electronic Controls**

While the film is activating the film feed switch, the Replenishing Pump will run, replenishing the Developer and Fixer Solutions. Replenishing stops when the film no longer activates the switch. This is a permanent setting that cannot be changed.

Dip switch number 4 on the microprocessor controls a feature called Flood Replenishment. This is a feature that can be changed. When switch number 4 is turned “ON” (factory preset), Flood Replenishment is enabled, meaning that every time the processor is turned on, replenishment will occur for approximately 3 minutes. When switch number 4 is turned “OFF”, Flood Replenishment is disabled, meaning that replenishment will only occur when film is being fed or if the Floating Level Sensors (if installed) call for replenishment.

Floating Level Sensors are an option. If installed, they will control replenishment if chemistry levels drop too low. They can be disconnected by unplugging their harness on the NDS of the processor. **Never disconnect the 3000SV Floating Level Sensor.** It is a safety shutdown circuit for the heater and has nothing to do with replenishment.

III CABINET POSITIONING and ASSEMBLY

FUTURA 3000/4000

- A. Place the Processor on the site selected.
Make sure the table is level before placing the Processor on the table.
All Processor legs should be screwed in an equal distance before placing the Processor on the table.
After placing the Processor on the table, check the level of the Processor by placing a level on the 2 side panels across as well as front to back.

NOTE:

THE PROCESSOR LEGS SHOULD BE ADJUSTED SO THERE IS APPROXIMATELY 1" CLEARANCE FROM THE BOTTOM OF THE PROCESSOR TO THE TABLETOP SURFACE.

- B. Be certain that the seal washers are seated securely in the connectors on the Black High Pressure Hose (KA 55 A8). Attach one end of this hose to the cold water supply; attach the other end of this hose to the blue Solenoid Connection at the rear of the Processor. Insert the clear ¾" drain hose (KA 55 A3) protruding from the back of the Processor into a standpipe, floor drain, or container for proper disposal. Consult the local EPA office or your X-ray dealer.
- C. With the Processor turned "off," test the Water Inlet Hose by turning the water on at full pressure.

NOTE:

DO NOT ALLOW THE DRAIN TUBING TO SAG AND TRAP WATER. KEEP A CONTINUOUS DOWNWARD SLOPE TO THE DRAIN.

DO NOT ALLOW THE DRAIN TUBE FROM THE PROCESSOR TO COME INTO CONTACT WITH THE WATER IN THE DRAIN LINE.

- D. The film exit is located under the front panel in the frame of the Processor.
The Film Catcher, ME 92 E4, should be attached to the table under the Processor with the support Bracket, ME 54 D5.

IV TRANSPORT RACK INSTALLATION

The Roller Transport System consists of 4 racks:

DEVELOPER RACK { FIXER RACK { WASH RACK { DRYER RACK

The film path through each of the solution racks consists of a line of 2" center rollers and a line of 1" outside rollers. The gear-driven 1" and 2" rollers move in opposite directions.

The film travels in a vertical path down and up each rack. This change of direction is accomplished at the bottom by film guides.

The film is guided into and out of each rack at the top by use of film guides used in a similar manner as with the turnarounds at the bottom of each solution rack.

The top exit film guide is a swing away, or adjustable, guide. In its normal down position, the film is deflected into the next rack. For testing, this guide can be placed in the top position (open), which will allow the film to exit that rack and film inspection after completion of that particular stage.

When the film leaves the wash rack it goes directly into the dryer rack, which consists of two vertical rows of opposing rollers that are both gear-driven and chain-driven. Surface moisture is removed at this stage by 2 squeegee rollers at the entrance to the dryer rack. When the film initially enters the dryer rack, it is deflected straight down by a film guide and exits from the bottom. Heated air is directed to both sides of the film as it travels through the dryer.

NOTE:

EACH TRANSPORT RACK SHOULD BE VISUALLY INSPECTED AND CLEANED PRIOR TO ANY OPERATIONS CHECK OR PRIOR TO PLACING THEM INTO CHEMISTRY.

- A. Each transport rack should be visually inspected for loose screws or broken components, such as side plates, rollers, gears, etc.
- B. Thoroughly wash off all solution transport racks with warm water. Make certain that all rollers turn freely.

NOTE:

BEFORE INSTALLING THE TRANSPORT RACKS, FILL THE TANKS WITH WATER TO THE LINE ON THE INSIDE OF THE TANK.

- C. Install the transport racks into the Processor. The racks are marked on the drive-side of the Side Plate.

“D” is for Developer;

“F” is for Fixer ;

“W” is for Wash.

Make sure the racks hang evenly in the tanks and the rollers do not touch the tank walls.

NOTE:

CARE SHOULD ALWAYS BE TAKEN TO INSURE THAT RACKS ARE HANDLED SAFELY. DO NOT TWIST, BEND, OR DROP THE RACKS. RACKS SHOULD ALWAYS BE “SQUARED” PRIOR TO PLACING THEM INTO THE PROCESSOR. TO SQUARE THE RACKS, PLACE THEM UPSIDE DOWN ON A LEVEL SURFACE, PRESSING DOWN ON THE 4 CORNERS SO THAT THE RACK SITS LEVEL. LOOSEN AND RE-TIGHTEN THE TIE BAR BOLTS IF NECESSARY.

If any of the rollers touch the tank walls, perform the following:

1. Square the racks that seem to be out of alignment.
2. Double-check the leveling of the Processor.

If any of the rollers still touch the tank walls, excessive shock in shipment may have occurred, causing a slight frame misalignment. Call the manufacturer for assistance.

Final leveling can be done with water in the tank using the tank and Roller pins as guides. This will assure minimum stress on the machine base from an unlevelled mounting surface.

- D. Install the Dryer Rack in the same manner, making certain it is properly seated in the Dryer section (i.e., it is not teetering or wobbling)
- E. Place the Film Switch Activator (KM 52 C1) over the Entry Film Guide (KM 47 B3) on the Developer Rack. Manually push the activator to make sure it is hitting the switch. Be sure to position the swing-away Film Guide (KA 41 B3) in to the lower position on the Exit side of the solution racks.

WARNING

**DO NOT OPERATE AN EMPTY PROCESSOR! (i.e. WITHOUT DEVELOPER, FIXER AND WATER)
OPERATING A DRY PROCESSOR WILL CAUSE SEVERE OPERATIONAL DAMAGE.
THE DEVELOPER , FIXER, AND WASH SECTIONS OF THE TANK MUST BE
PROPERLY FILLED BEFORE TURNING THE PROCESSOR ON.
THE WATER SOLENOID HAS BEEN DESIGNED FOR REPLENISHMENT ONLY.**

V OPERATIONS CHECK

NOTE:

THE PROCESSOR SHOULD BE WATER TESTED PRIOR TO FILLING WITH CHEMISTRY. THIS IS TO INSURE EVERYTHING IS INTACT AND WITHOUT LEAKS AFTER SHIPMENT.

WARNING

NEVER MOVE THE PROCESSOR ONCE IT HAS BEEN FILLED. THIS WILL PREVENT ACCIDENTAL SPILLAGE FROM CONTAMINATING THE CHEMISTRY AND PREVENT SPILLAGE ONTO THE COMPONENTS INSIDE OF THE PROCESSOR WHICH COULD CAUSE SEVERE OPERATIONAL DAMAGE. ALWAYS DRAIN THE PROCESSOR BEFORE ATTEMPTING TO MOVE IT.

- A. The main power switch should be in the “OFF” position.
Plug the line cord into the electrical receptacle and verify the water supply is on.

B. First, place:

- The ¼” **Red Developer Hose** onto the **replenishing spout** in the **developer replenishment tank**.
- The ¼” **Blue Fixer Hose** onto the **replenishing spout** in the **fixer replenishment tank**.

Then, place:

- The ½” **Blue Fixer Drain Hose** in its respective location (for Silvery Recovery **or** Drain).
- The ¾” **Clear Drain Hose** in its respective drain location (Standpipe, Floor Drain, Approved Container).

NOTE:

IN SOME MUNICIPALITIES, LOCAL ENVIRONMENT LAWS DO NOT ALLOW THE DISPOSAL OF DEVELOPER, FIXER, AND WASH WATER INTO THE SEWER SYSTEM. TO DISPOSE OF THE DEVELOPER, FIXER, AND WASH WATER PROPERLY, CHECK WITH THE LOCAL EPA OFFICE OR WITH YOUR X-RAY DEALER.

- C. Fill the Developer, Fixer, and Wash sections of the Processor tanks until the solutions begin to flow over the tops of the overflow drain tubes in the tanks.

NOTE:

MAKE SURE THERE ARE NO RESTRICTIONS IN THE DRAIN HOSES.

- D. Turn the Processor on.

When the Processor is first turned on, the Drive Motor (KB 92 D9), the Dryer Blowers (KB 92 D8), the Dryer Heaters (KB 87 C1), and the Water Solenoid (KE 80 A2) will be activated and the Processor will continue on a 20-25 minute warm up cycle. After the initial warm up cycle has been completed, the Processor will automatically go into standby.

NOTE:

IT IS IMPORTANT TO REMEMBER THAT THE ORIGINAL THE WARM UP CYCLE BEGINS WHEN THE PROCESSOR IS TURNED ON. IF THE PROCESSOR IS TURNED OFF AND THEN BACK ON DURING THAT TIME, THE 20-25 MINUTE WARM UP CYCLE WILL START AGAIN, EVEN WHEN THE PROCESSOR IS ALREADY AT TEMPERATURE.

- E. At the same time the Processor is turned on, the 4 ½ minute on and off cycle timer starts. If the 4 ½ timer is in the OFF mode and a film is inserted, the timer will be reset and the ON mode started, to allow the film to transport through the Processor. The 4 ½-minute ON mode starts when the tail end of the film leaves the film feed switch activator.

- F.** Place the top covers on the Processor and feed a film into the processor. While the film is activating the film feed switch, the metering pump will operate to replenish the developer and fixer solutions.

When the film leaves the film feed switch activator, 2 time delays are started. After the first time delay, the beeper will sound and the front panel Film Feed Light will turn on. This will notify the operator when it is safe to turn on the lights or leave the dark room. The other time delay maintains the 4 ½ minute run cycle.

NOTE:

THE 3000SV DOES NOT HAVE A BEEPER.

- G.** The Developer Temperature is set at: **92°F for the Futura 3000S;**
 94°F for the Futura 3000ST;
 94°F for the Futura 3000SV*;
 92°F for the Futura 4000M;
 95°F for the Futura 4000MT.

*Th 3000SV has no digital temperature display.

- I.** Control of Developer and Fixer temperatures is accomplished with the Heat Exchanger (KP 92 D1), mounted directly under the tank (except for the 3000SV, which uses an in-tank heater). Models that have a heat exchanger continuously pump the developer and fixer solutions through the heat exchange by means of recirculation pumps. Incoming cold wash water also is routed through the block to cool the solutions and provide temperature stability. In all models, the temperature is sensed by a probe in the developer tank which controls electrical current applied to the heating element.
- J.** Secondary safety thermostats are mounted on the Heat Exchanger block and are wired in series with the heater. One safety thermostat acts as a high limit switch, assuring the block temperature does not exceed the design temperature in the event of a pump failure or absence of cooling water or solution. The second safety thermostat is a manual reset, and is provided to protect all components from excess heat if failure of any of the plumbing or heating components were to occur or the Processor were to be run dry.
- K.** The 3000SV utilizes a safety float circuit wired in series with the heater. If the developer levels drop too low, the float circuit will disable the heater and a red light will illuminate on the front panel.

DO NOT DISCONNECT THE FLOAT CIRCUIT!

- L.** After the film has exited, and it is determined the Processor is operating properly and that there is no leaking, turn the Processor off. Drain the water from the Developer and fixer sections of the processor. Dispose of the water in the Replenishment tanks.
- M.** Be sure the Replenishing Tanks are cleaned before filling them with chemistry. Fill the replenishment tanks with fresh developer and fixer. Fill the 3000 Series Processors by hand with 1.25 gallons (4.7 liters) of developer and fixer. Fill the 4000 Series Processors by hand with 2.33 gallons (8.8 liters) of developer and fixer.

NOTE:

ALWAYS BE CAREFUL WHEN POURING CHEMISTRY INTO ANY PROCESSOR TANK. ANY CROSS-CONTAMINATION WILL DRASTICALLY AFFECT THE PERFORMANCE OF THE PROCESSOR. IF CROSS-CONTAMINATION OCCURS THE SYSTEM MUST BE THOROUGHLY FLUSHED OUT.

- N.** Turn the Processor. Allow the Processor to warm up and go into standby.
- O.** Be sure the Film Catcher is mounted before beginning the Initial Operation.

VI INITIAL OPERATION

WARNING

DO NOT OPERATE AN EMPTY PROCESSOR (i.e. WITHOUT DEVELOPER, FIXER, OR WATER). OPERATING A DRY PROCESSOR WILL CAUSE SEVERE OPERATIONAL DAMAGE. THE DEVELOPER, FIXER, AND WASH SECTIONS OF THE TANK MUST BE PROPERLY FILLED BEFORE TURNING THE PROCESSOR "ON". THE WATER SOLENOID HAS BEEN DESIGNED FOR REPLENISHMENT ONLY.

Operation of the Futura 3000/4000 simply requires the maintenance of uncontaminated Developer and Fixer, a clean water supply, and an appropriate, dedicated power supply. From the starting point described above (i.e. all plumbing and electrical connections checked and working, with Water in the Wash tank, with Developer and Fixer in the chemical tanks), proceed as follows:

- A. Place the Directional Dryer Rack Cover (MK85A1) over the dryer rack. It will only properly fit one way. The open side should face the front.
- B. Place the top cover (ME54E1) and the light cover (KM56R5) on the Processor. With only the safe light on, feed an **unexposed** film into the Processor. The film will activate the Film Feed switch, bringing the Processor to the RUN mode. The drive motor, the recirculation pumps, the dryer blower and heaters and the Water solenoid will be operating. The replenishment pumps will be operating as long as the film is in contact with the film switch activator.
- C. While the film is entering the developer rack and going over the Film Feed Switch Activator, the light on the front panel marked FEED FILM will be out. After the film has passed the film switch activator a beeper will sound and the light will come back on.
Please note that there is no beeper on the 3000SV, so the FEED FILM light is the only indicator on the 3000SV. When that light is on, another film may be fed into the Processor. The Process time from leading edge-to-leading edge is 90 seconds for all models except for the 3000S at 160 seconds.
- D. When the film exits the Processor, check the cleared film for any exposed areas. Also check for surface scratches.
- E. Expose a film for a few seconds to the room lights and develop. Check the film for total black density and complete drying.
- F. After the tail end of the film leaves the film switch activator, the cycle timer begins. After 4 ½ minutes the Processor will go into standby.
- G. To process film throughout the day, simply place a film on Top Cover and send the film through the Processor.
- H. When the Processor is not being used for extended periods of time, turn it "OFF". This will aid in the longevity of the Processor and will help to repress extreme oxidation of the chemistry.