

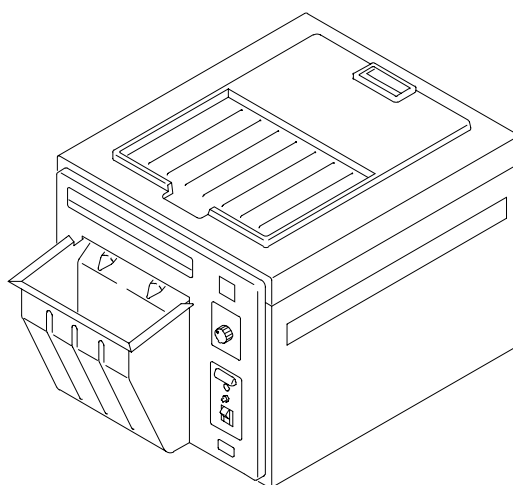


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12/88

INSTALLATION INSTRUCTIONS

for the

KODAK *M35 and M35A* X-OMAT Processors



H112_0089AC

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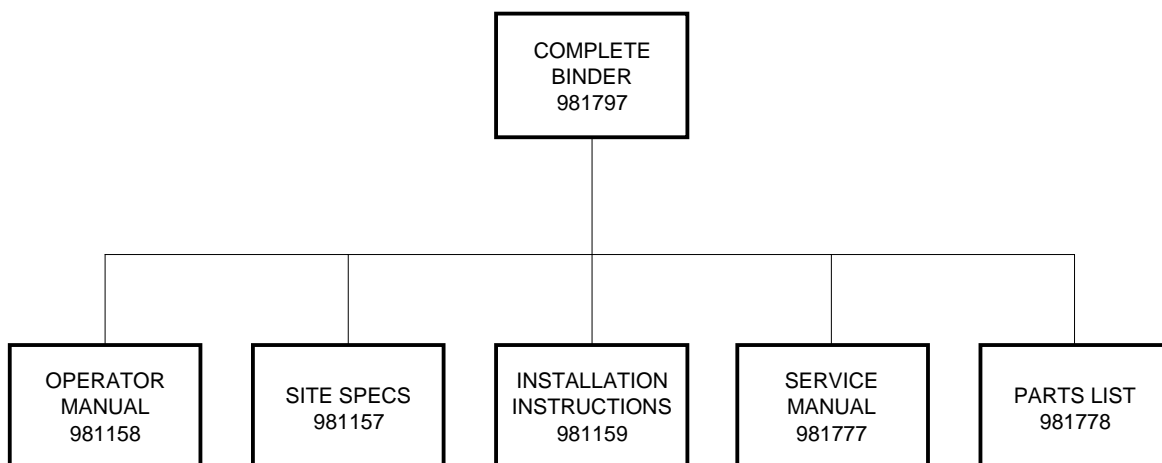
CAUTION



This equipment includes parts and assemblies sensitive to damage from electrostatic discharge. Use caution to prevent damage during all service procedures.

Related Publications for the M35 and M35A Processors

This publication is part of a series of instruction books that provide technical support information on the KODAK M35 and M35A X-OMAT Processors. It is recommended that these publications be kept in the binder provided. If an individual book is misplaced or destroyed, order another copy from your Eastman Kodak Representative using the Publication Part Numbers below.



H112_9002BC

Special Tools Required

Only qualified personnel should install this processor. The following tools are required:

Part No.	Description
TL-2431	Air Meter
TL-1434	Level - approximately 30 cm (12 inches)
TL-1481	Potentiometer Adjusting Tool

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Electrostatic Discharge

Overview

ESD--electrostatic discharge--is a primary source of:

- product downtime
- lost productivity
- costly repairs

While one cannot feel a static charge of less than 3,500 volts, as few as 30 volts can damage or destroy essential components in electronic equipment.

Effective ESD control requires following these guidelines.

Personnel Awareness

Everyone within the organization needs to be aware of ESD, because partial ESD control is no ESD control at all. Please note:

- ESD is a primary source of frustrating equipment failures and intermittent malfunctions.
- ESD affects productivity **and** profitability.
- ESD can be controlled.

General Precautions

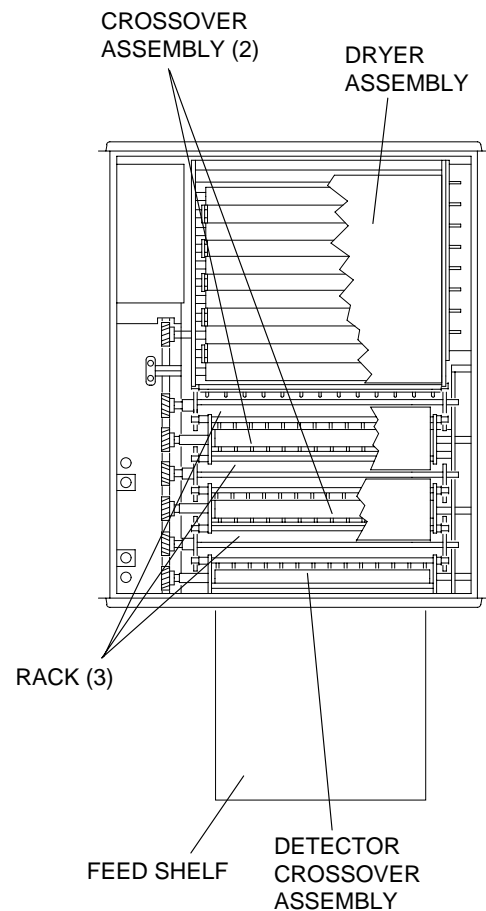
- **Do not** store trash near static-sensitive equipment.
- **Do not** place plastic materials near electronic components. Trash-can liners and styrofoam cups generate static electricity, which can damage or destroy electronic components.

Preventive Measures

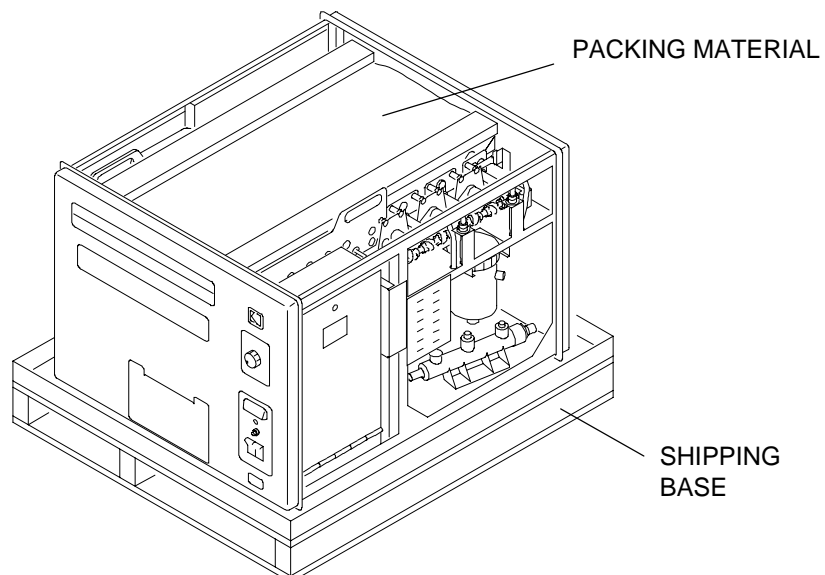
- Always look for an ESD warning label before doing any procedure involving static-sensitive components such as circuit boards. All static-sensitive components are marked with bright graphic labels, which frequently include instructions. Follow all label instructions.
- If the work area is carpeted, spray the carpet with an antistatic solution. In low-humidity environments, spray carpets periodically with an antistatic preparation, available at local stores.
- Wear a grounding strap when handling static-sensitive components. Always make certain that the clip remains attached to a properly grounded, unpainted, clean surface.
- Repair static-sensitive components at an ESD-protected work station or use a portable grounding mat. For help in setting up an ESD-protected work station, contact your Kodak representative.
- When moving static-sensitive components from one area to another, insert and transport the components in ESD-protective packaging. Transparent antistatic bags are available from a variety of manufacturers and will help shield components from ESD damage.

Unpacking the Processor

- [1] Remove the PACKING CARTON.
- [2] Remove and keep the boxes and bags of parts.
- [3] Check the parts with the Packing List as you unpack.
- [4] Remove the:
 - TOP COVER
 - 2 SIDE PANELS
 - PACKING MATERIAL
 - DETECTOR CROSSOVER ASSEMBLY
 - 2 CROSSOVER ASSEMBLIES
 - DRYER ASSEMBLY
 - 3 RACKS



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H112_0066CC



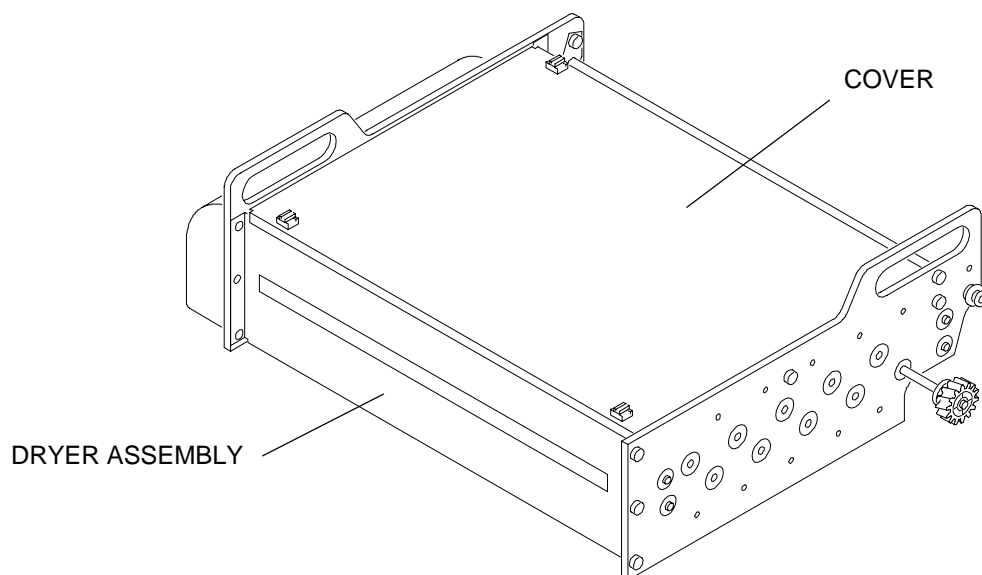
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- [5] From the DRYER ASSEMBLY, remove the:
- top and bottom COVERS
 - PACKING MATERIAL
- [6] Install the top and bottom COVERS on the DRYER ASSEMBLY.

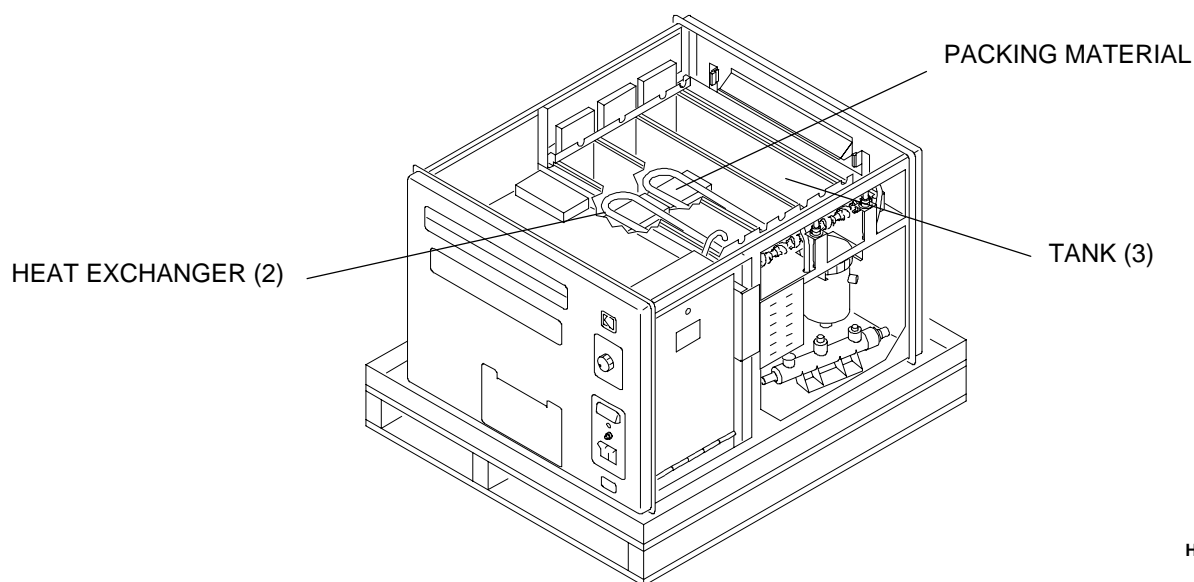
CAUTION

Avoid lifting the HEAT EXCHANGERS when removing the PACKING MATERIAL from inside the TANKS or the fittings may crack.

- [7] **Carefully** remove the PACKING MATERIAL from the TANKS.



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H112_0064BA



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Checking the Parts

[1] Before starting the processor installation, check that you have all the parts listed below.

Packed In or Is Already On the Processor	Quantity
Cover Assembly	1
Side Panel Assembly	2
Detector Crossover Assembly	1
Fixer/Wash Crossover Assembly	1
Developer/Fixer Crossover Assembly	1
Developer Rack Assembly	1
Fixer Rack Assembly	1
Wash Rack Assembly	1
Dryer Rack Assembly	1

Prepack Box	Quantity
Bin - Receiving	1
Deflector - Bin	1
Feed Shelf Assembly	1
Gasket - Light Lock	1
Manual Binder	1
Support - Rack	1
Weir - Developer, red	1
Weir - Fixer, blue	1
Weir - Wash, beige	1

Wrapped in Paper	Quantity
Cover - Evaporation	2
Guard - Splash	1
Tray - Drip	1

Prepack Plastic Bag for an M35A Processor	Quantity
Bolt - Hook	2
Cartridge - Filter	1
Clamp - Hose, large	2
Clamp - Hose, small	6
Elbow - Exhaust	1
Elbow - Hose	1
Fastener - Bin	2
Guide - Film, right	1
Nut - No. 8, 32	3
Nut - No. 10, 32	4
Plate - Floor	4
Receptacle - Polarized	1
Screw - No. 8, 32 x 5/16	1
Screw - No. 8, 32 x $\frac{3}{8}$	3
Screw - No. 10, 32 x $\frac{3}{8}$	2
Screw - No. 10, 32 x $\frac{1}{2}$	4
Sprocket - 19-Tooth, 50 Hz	1
Strainer Assembly	2
Washer - Flat	4
Washer - Hook	2
Washer - Lock, No. 8	3
Washer - Lock, No. 10	6
Washer - No. 8	3
Washer - No. 10	6

Prepack Plastic Bag for an M35 Processor	Quantity
Bolt - Hook	2
Bracket - Strain Relief, 220 volt only	1
Cartridge - Filter	1
Clamp - Hose, large	2
Clamp - Hose, small	6
Elbow - Hose	1
Fastener - Bin	2
Guide - Film, right	1
Nut - No. 8, 32	3
Nut - No. 10, 32	4
Plate - Floor	4
Relief - Strain, 220 volt only	1
Screw - No. 8, 32 x $\frac{3}{8}$	3
Screw - No. 10, 32 x $\frac{3}{8}$	3
Screw - No. 10, 32 x $\frac{1}{2}$	4
Sprocket - 19-Tooth, 50 Hz	1
Strainer Assembly	2
Strip - Data	1
Washer - Flat	4
Washer - Hook	2
Washer - Lock, No. 8	3
Washer - Lock, No. 10	7
Washer - No. 8	3
Washer - No. 10	7
Tie - Wire	2

Preparing the Processor for Installation

Installing the Feed Shelf, the Detector Crossover Assembly, and the Developer Rack

CAUTION

Do not overtighten the SCREWS.

[1] Install the:

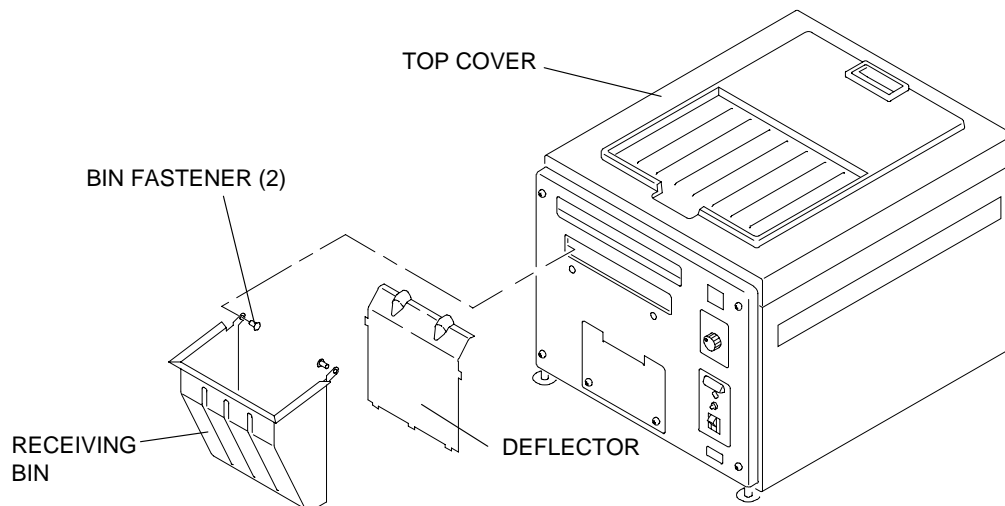
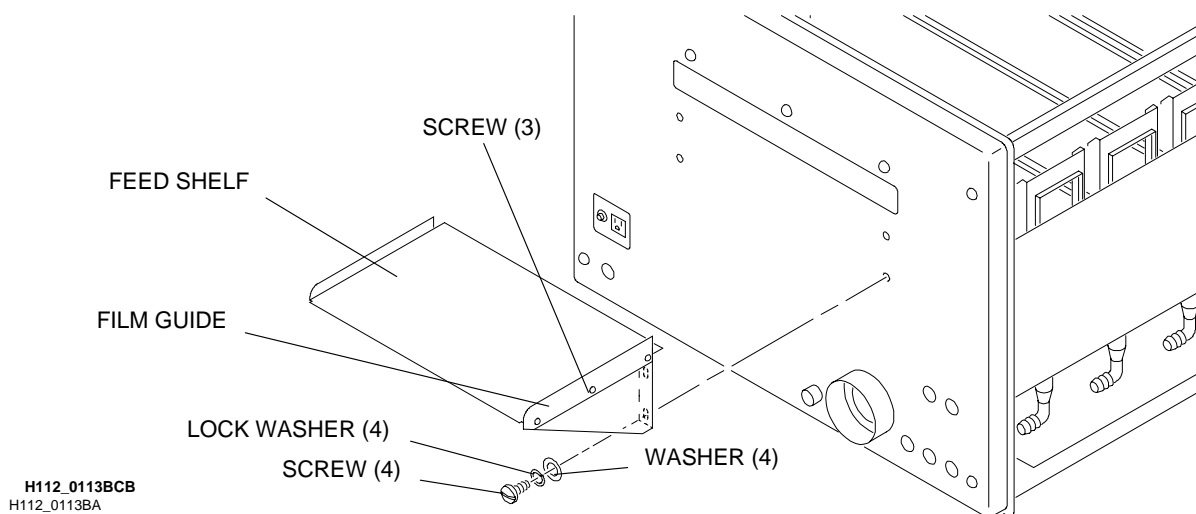
- FEED SHELF
- 4 WASHERS - No. 10
- 4 LOCK WASHERS - No. 10
- 4 SCREWS - No. 10, 32 x 1/2

[2] Install the:

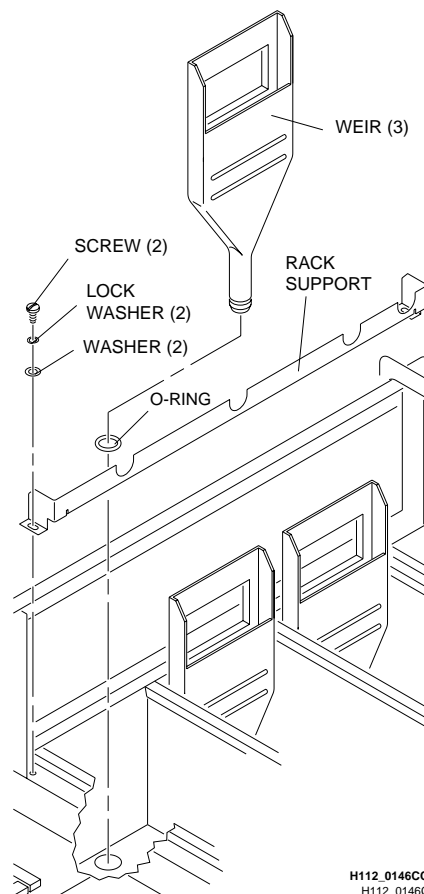
- FILM GUIDE
- 3 SCREWS - No. 8, 32 x 3/8
- 3 WASHERS - No. 8
- 3 LOCK WASHERS - No. 8
- 3 NUTS - No. 8, 32

[3] Install the DEFLECTOR in the RECEIVING BIN.

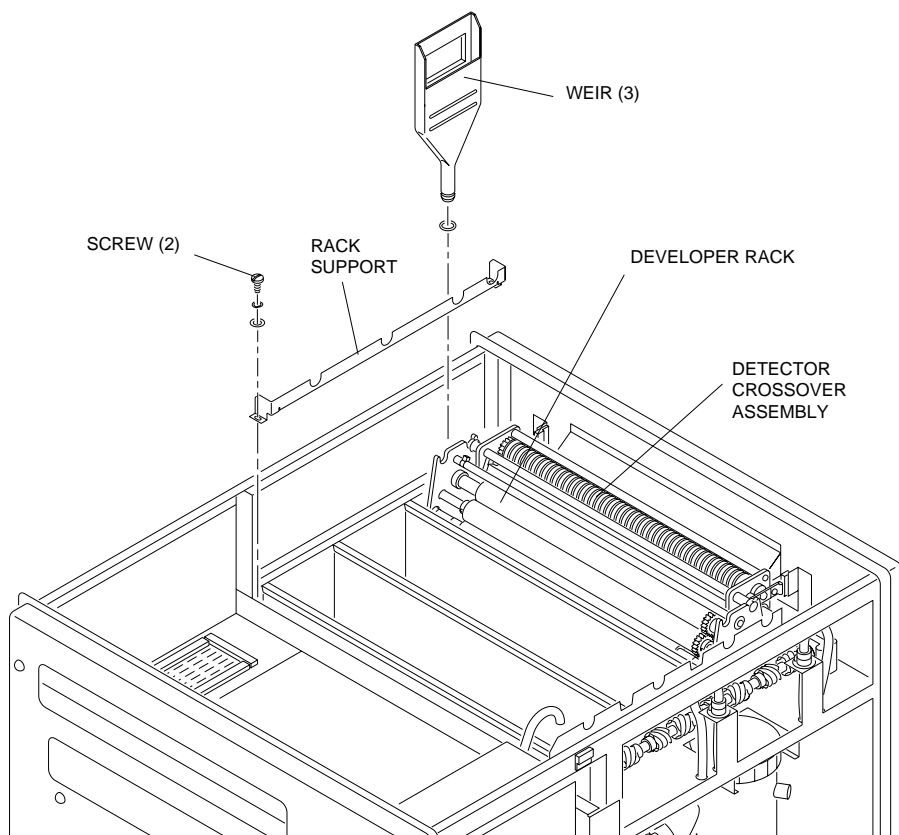
[4] Install the RECEIVING BIN on the processor using the 2 BIN FASTENERS.



- [5] Install the 3 WEIRS.
- [6] Install the RACK SUPPORT on the non-drive side of the processor with the 2 No. 10 WASHERS, LOCK WASHERS, and SCREWS.
- [7] Install the DEVELOPER RACK.
- [8] Pull the RACK SUPPORT to the non-drive side of the processor.
- [9] Check the clearance by removing the WEIRS and the DEVELOPER RACK.
- [10] Move the RACK SUPPORT, if necessary.
- [11] Tighten the 2 SCREWS on the RACK SUPPORT.
- [12] Install the DEVELOPER RACK, the WEIRS, and the DETECTOR CROSSOVER ASSEMBLY.



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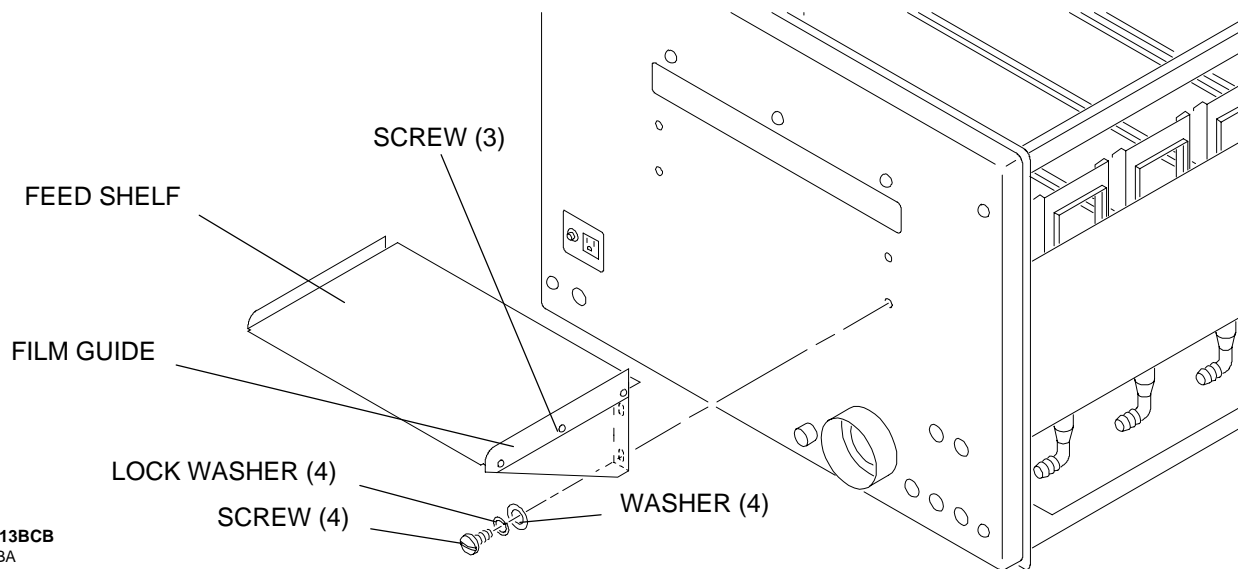
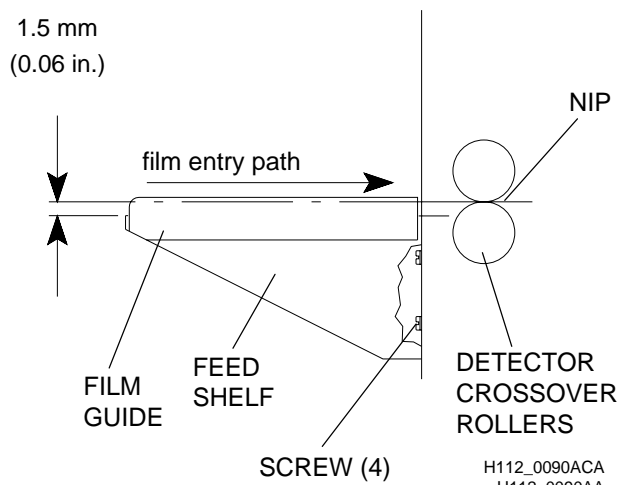
Adjusting the Feed Shelf

- [1]** Adjust the height of the FEED SHELF to approximately 1.5 mm (0.06 or 1/16 in.) below the NIP of the DETECTOR CROSSOVER ROLLERS.

- (a)** Loosen the 4 SCREWS.
- (b)** Adjust the FEED SHELF for the correct height by moving the FEED SHELF up or down.
- (c)** Insert a sheet of 35 x 43 cm film into the NIP of the DETECTOR CROSSOVER ROLLERS.

- [2]** Use the edges of the film to align the FILM GUIDE with the DETECTOR CROSSOVER ROLLERS for squareness.

- [3]** Tighten the 4 SCREWS.



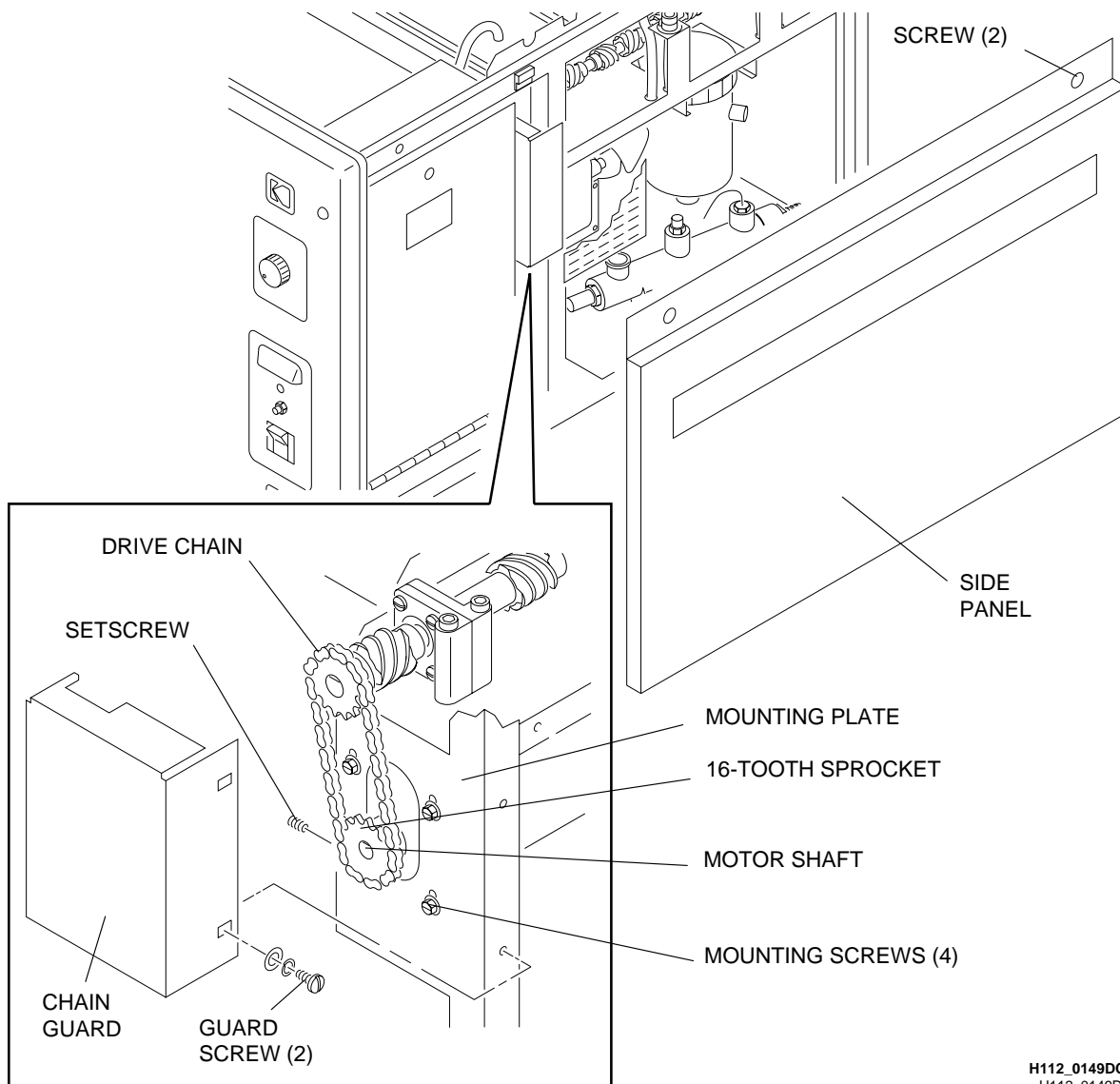
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Changing to 50 Hz Operation

- [1] Loosen the 2 SCREWS and remove the drive SIDE PANEL.
- [2] Remove the 2 GUARD SCREWS and the CHAIN GUARD.
- [3] Loosen the 4 MOUNTING SCREWS.
- [4] Remove the DRIVE CHAIN.
- [5] Loosen the SETSCREW.
- [6] Remove the existing 16-TOOTH SPROCKET from the MOTOR SHAFT.
- [7] Install the new 50 Hz 19-TOOTH SPROCKET on the MOTOR SHAFT.
- [8] Tighten the SETSCREW.
- [9] Install the DRIVE CHAIN.
- [10] Check that the DRIVE CHAIN does not touch the MOUNTING PLATE.
- [11] Tighten the 4 MOUNTING SCREWS.
- [12] Install the CHAIN GUARD and the 2 GUARD SCREWS.
- [13] Install the SIDE PANEL.

CAUTION

Do not overtighten the MOUNTING SCREWS. Tighten only until the RUBBER ISOLATORS, not shown, on the MOUNTING SCREWS are partially seated.



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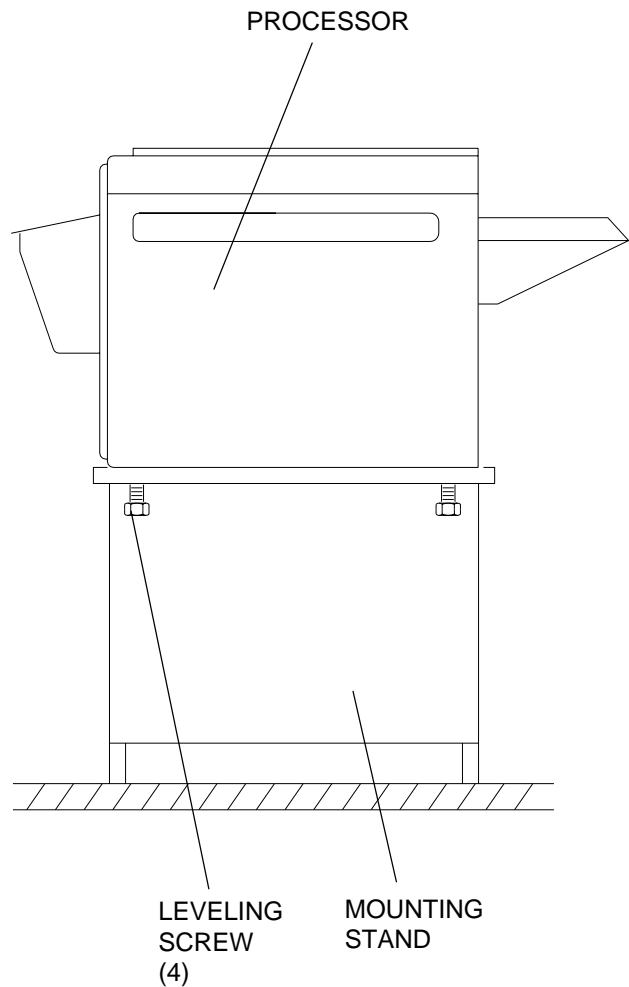
Installing the Processor

Installing the Processor onto a Base

WARNING

The processor weighs 90 kg (200 lb).
Use qualified personnel to install this processor.

- [1] Remove the processor from the SHIPPING BASE. See the illustration on page 5.
- [2] Remove the 4 LEVELING SCREWS from the processor.
- [3] Install the processor on a stable, flat surface or on a KODAK M35 X-OMAT Mounting Stand, CAT No. 808 1176.
- [4] Install the LEVELING SCREWS through the MOUNTING STAND or the stable, flat surface.



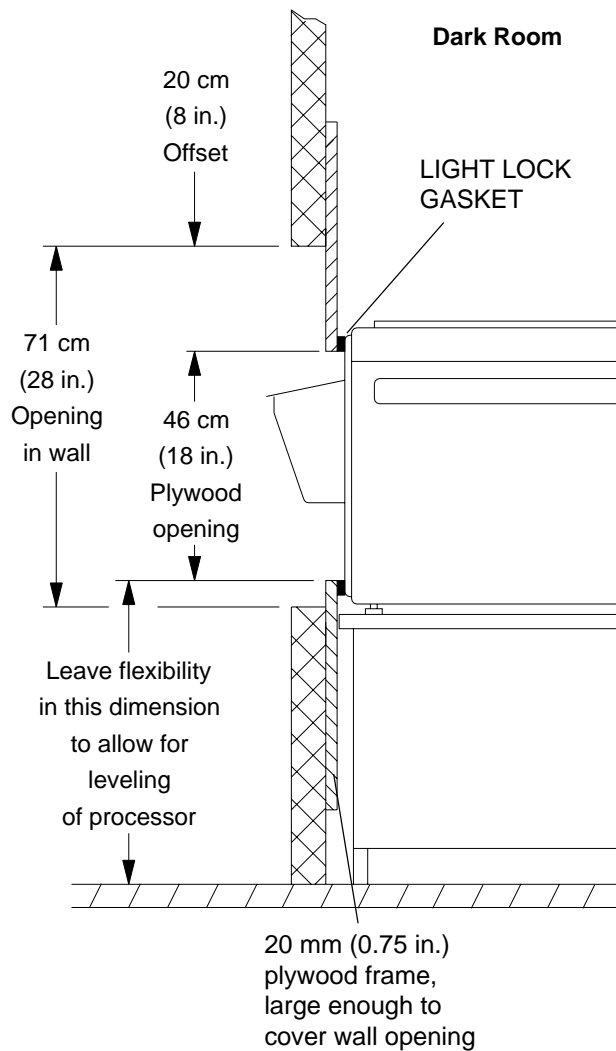
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Installing the Processor Through a Wall

NOTE

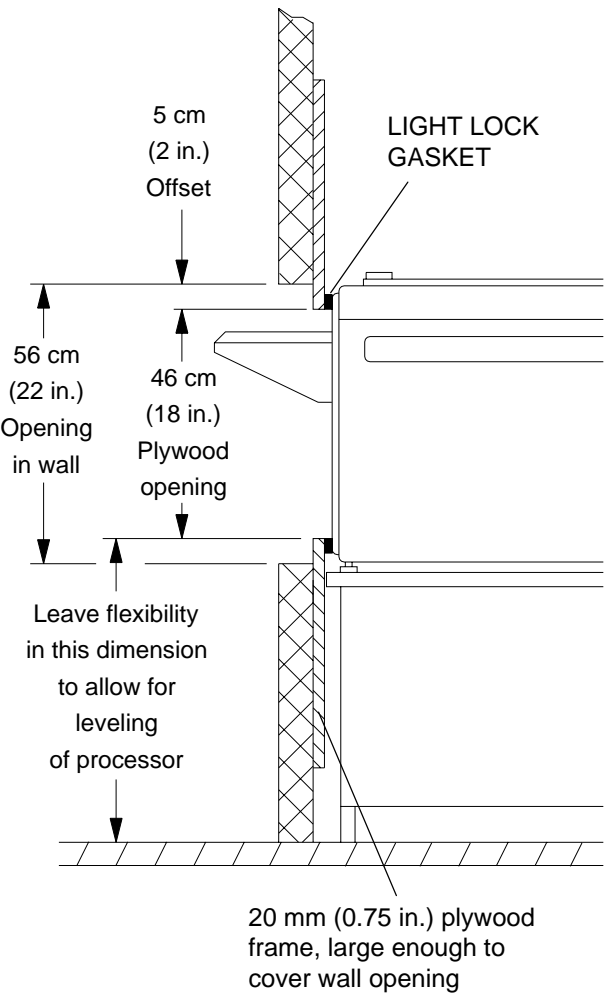
The processor may be installed with either the FEED SHELF or the RECEIVING BIN through the wall.

Dark Room



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**Wall Installation
with the Receiving Bin through the Wall**



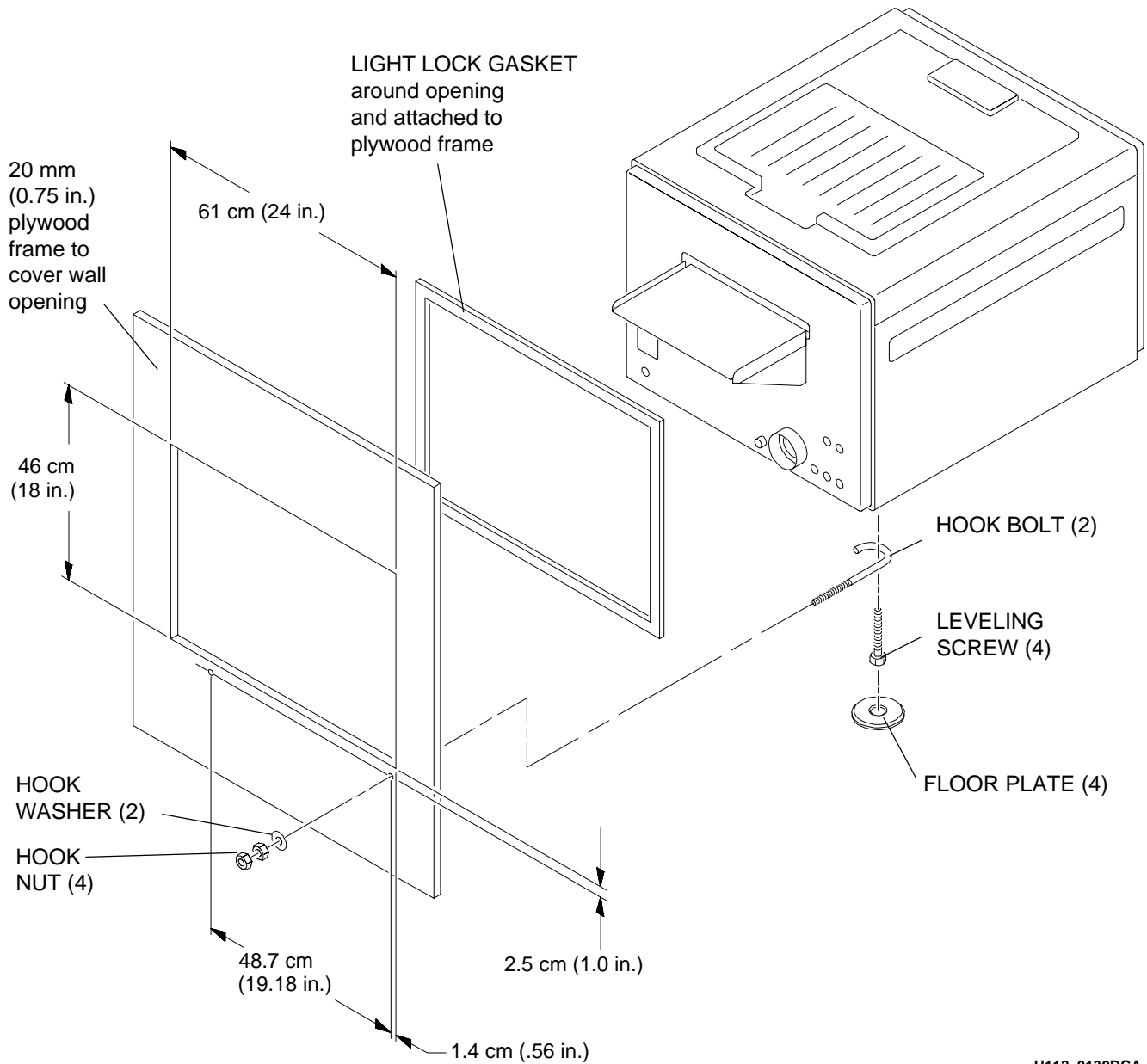
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**Wall Installation
with the Feed Shelf through the Wall**

WARNING

- The processor weighs 90 kg (200 lb). Use qualified personnel to install this processor.
- Do not pull the LIGHT LOCK GASKET too tight.

[1] Install the LIGHT LOCK GASKET to the PLYWOOD FRAME. Do not stretch the LIGHT LOCK GASKET.



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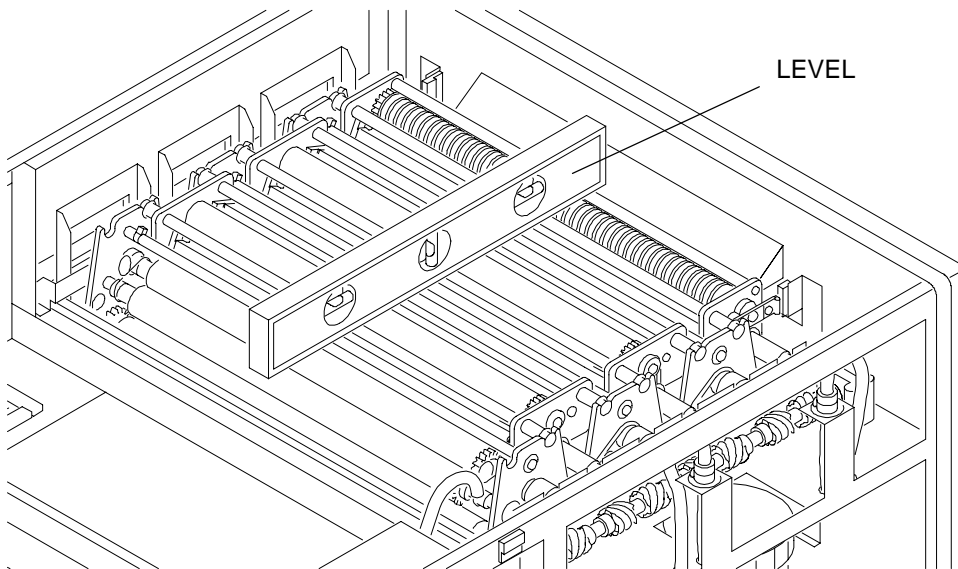
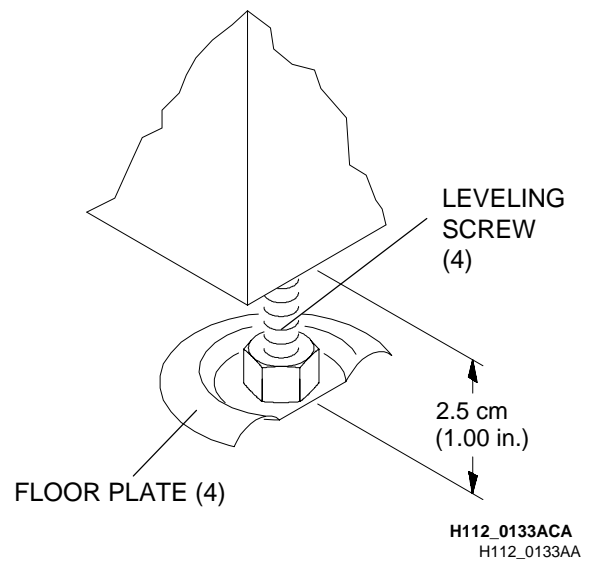
Leveling the Processor

- [1] Move the processor into position.
- [2] Install the 4 FLOOR PLATES under the LEVELING SCREWS or under the MOUNTING STAND.

NOTE

If an M35 MOUNTING STAND is used, bolt the processor to the MOUNTING STAND and level the MOUNTING STAND.

- [3] Level the processor side-to-side and end-to-end.
- [4] Install the 2 HOOK BOLTS around the front 2 LEVELING SCREWS and through the wall. See the illustration on page 15.
- [5] Install the 4 HOOK NUTS and the 2 HOOK WASHERS on the 2 HOOK BOLTS.

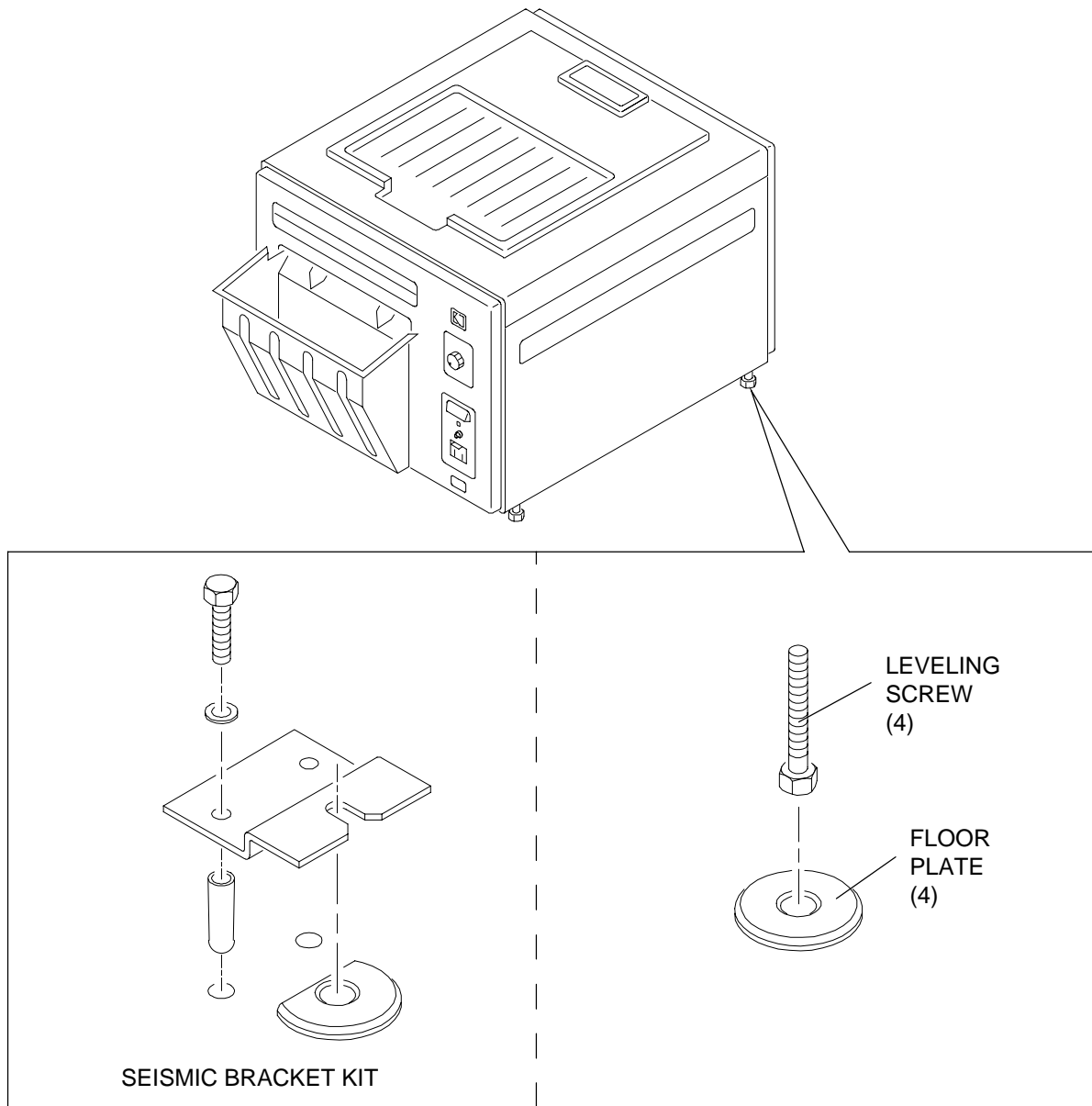


Installing Seismic Brackets

IMPORTANT

Local building codes may require that SEISMIC BRACKETS be used.

- [1]** Install SEISMIC BRACKETS to the processor or to the MOUNTING STAND if required by local codes. A Seismic Bracket Kit, Part No. 261413, is available.



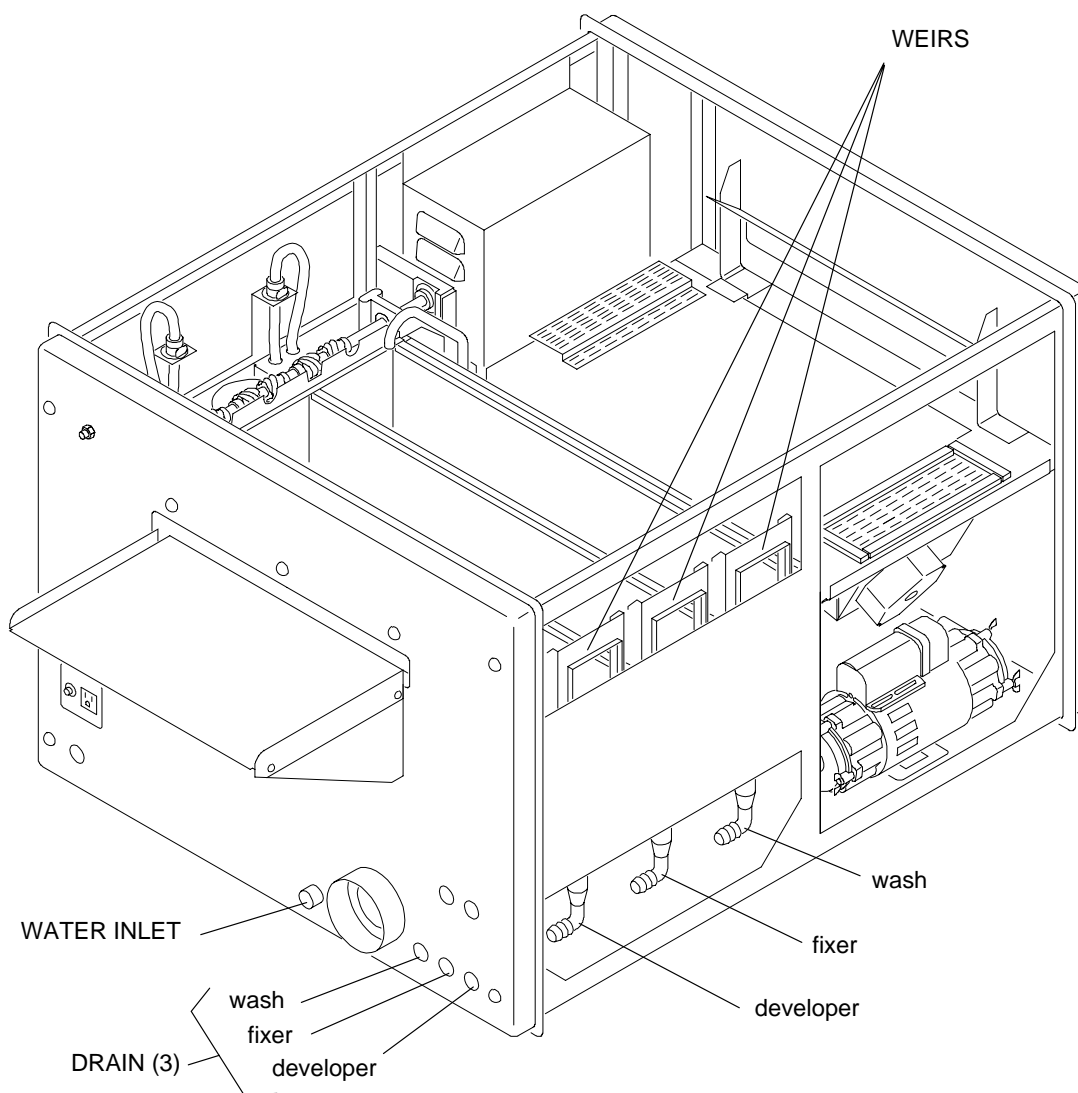
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Connecting the Plumbing

CAUTION

- Use local codes when installing the FLOOR DRAIN.
- Do not use brass or copper for the FLOOR DRAIN. **Use PCV or cast iron.**
- Do not make a solid connection to the FLOOR DRAIN. Use an open FLOOR DRAIN with a minimum clearance of 2.5 cm (1 in.) between the tubing from the processor and the FLOOR DRAIN.

- [1] Check that the developer and fixer WEIRS are installed correctly.
- [2] Use ½-inch (1.27 cm) ID tubing, Part No. 760476, to connect the developer, fixer, and wash DRAINS to the FLOOR DRAIN. See the illustration on page 20. Order the tubing by the foot.
- [3] Connect the incoming water supply to the WATER INLET of the processor.



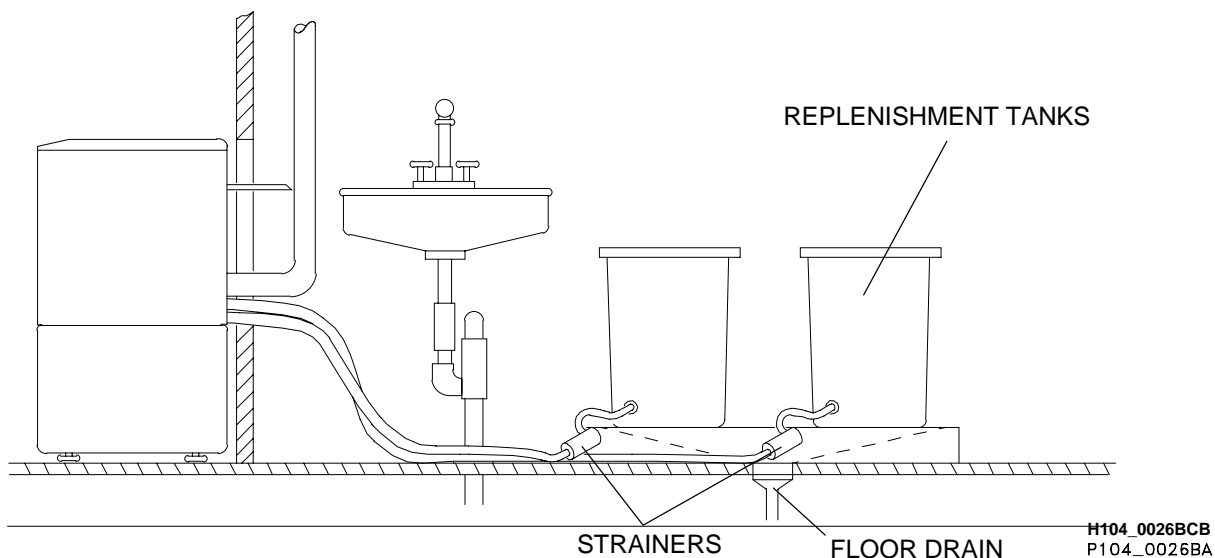
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Connecting the Replenishment Tanks to the Replenishment Pump

CAUTION

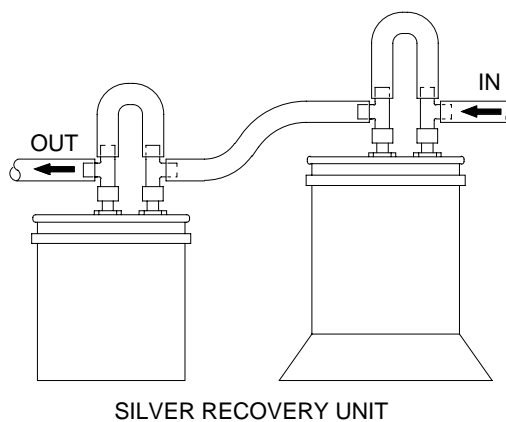
- Do not allow water in the tubing from the REPLENISHMENT TANKS.
- The highest solution level in the REPLENISHMENT TANKS **must be below** the solution level in the processor TANKS.
- Maximum processor solution level is 97 cm (38 in.) with the processor installed on an M35 MOUNTING STAND.

- [1] Check that the connections in the tubing are tight.
- [2] Install the 2 STRAINERS in the tubing between the REPLENISHMENT PUMP and the REPLENISHMENT TANKS. Use the $\frac{3}{8}$ in. (9.5 cm) TUBING supplied.
- [3] Connect the tubing to the processor TANKS.
- [4] Check that the REPLENISHMENT TANKS are connected to the correct processor TANKS.



Installing the Silver Recovery Unit

- [1] Connect the SILVER RECOVERY UNIT to the **fixer DRAIN** with $\frac{1}{2}$ -inch (1.27 cm) ID tubing.



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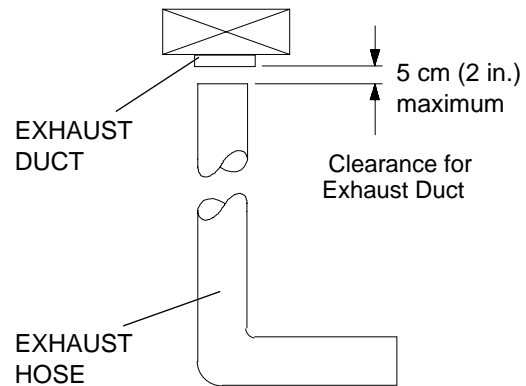
Environmental Requirements

Connecting the Exhaust Hose

CAUTION

The building ventilation system must draw air to the outside of the building, so that no air is reused.

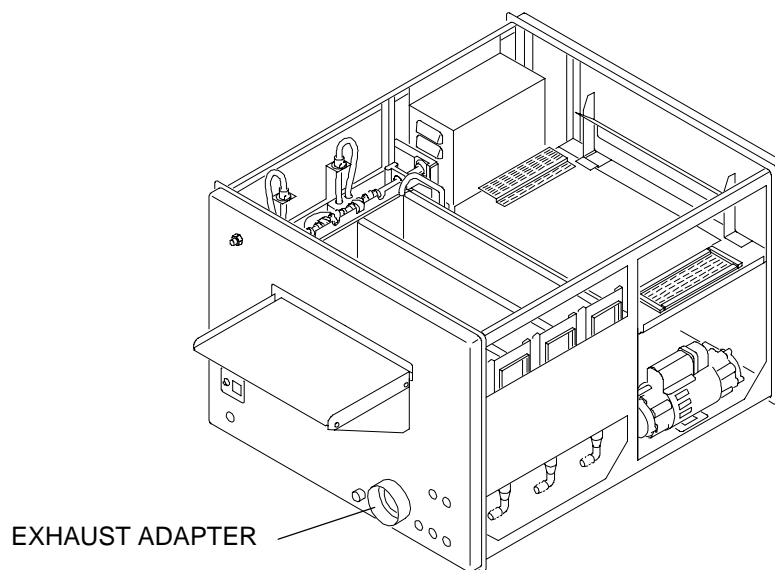
- [1] Connect a 7.6 cm (3 inch) EXHAUST HOSE, not supplied, to the EXHAUST ADAPTER.
- [2] Connect the EXHAUST HOSE to the EXHAUST DUCT from the building ventilation system.
- [3] Leave a 5 cm (2 inch) air gap between the EXHAUST HOSE and the EXHAUST DUCT.



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IMPORTANT

- If the venting is not correct, fumes will corrode equipment and cause artifacts. Do not install the processor or accessories if the venting is not correct.
- The building ventilation system must draw air to the outside of the building, so that no air is reused.
- The AIR FLOW is correct when the fumes are flowing out of the processor through the EXHAUST HOSE. Before installing the processor, or at the next service call, do the following to check that the AIR FLOW is correct.



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H112_0071BA

Checking the Ventilation

Do the following procedure, using an AIR METER TL-2431, to check that the venting is correct.

- [1] If the processor is installed, deenergize the processor.
- [2] Disconnect the EXHAUST HOSE from the processor EXHAUST ADAPTER.
- [3] Place the RUBBER HOSE on the CENTER CONNECTOR of the AIR METER.
- [4] If a replenishment J TUBE, Part No. 592380, is available, do the following. If not, advance to Step 5.
 - (a) Cut off and discard the curved portion of the replenishment J TUBE.
 - (b) Install the tapered end of the replenishment J TUBE into the RUBBER HOSE.
 - (c) Advance to step 7.
- [5] If a replenishment J TUBE is not available, align a HOSE SUPPORT, such as a straightened coat hanger, next to the RUBBER HOSE. The ends of the HOSE SUPPORT and the RUBBER HOSE must be together.
- [6] Place TAPE around the HOSE SUPPORT and the RUBBER HOSE at 3 points. See the illustration.

IMPORTANT

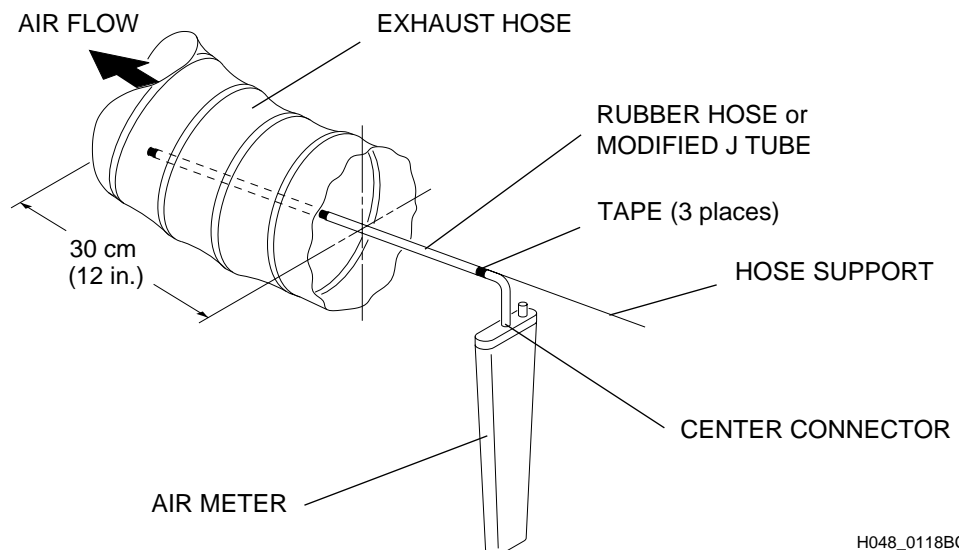
The TAPE should not inhibit the AIR FLOW through the RUBBER HOSE.

- [7] Insert the replenishment J TUBE or the RUBBER HOSE into the EXHAUST HOSE until the end is 30 cm (12 in.) from the end of the EXHAUST HOSE.

IMPORTANT

The RUBBER HOSE or J TUBE must be in the center of the EXHAUST DUCT.

- [8] Hold the AIR METER vertical, and record the average of several readings.



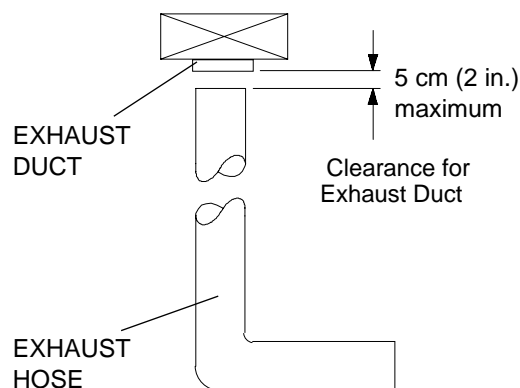
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- [9] Compare the average reading with the table:

Table 1 Measuring the Static Pressure

Duct Diameter	Negative Static Pressure, Water Head	
	MIN	MAX
76 mm (3 in.)	0.76 mm (0.03 in.)	1.02 mm (0.04 in.)
102 mm (4 in.)	0.25 mm (0.01 in.)	0.51 mm (0.02 in.)

- [10] Adjust one of the following to obtain the required reading:
- (a) the damper (or fan) in the building ventilation system or
 - (b) the clearance between the EXHAUST DUCT and the EXHAUST HOSE to 5 cm (2 inches); see the illustration.



- [11] If the AIR FLOW reading is still not correct, contact the sales representative and the customer to correct the venting.
- [12] When the AIR FLOW reading is the same as the measurements in the table, connect all the hoses.
- [13] If the processor has been installed, install the COVERS and PANELS on the processor.

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H104_0005AA

IMPORTANT

- Inform the customer that all COVERS and PANELS must be installed while the processor is energized.
 - If the processor is installed through the darkroom wall, it is most important that the air pressure in the darkroom is greater than the air pressure of the area surrounding the darkroom. For example, the air in a 3 m³ (10 ft³) room should change 10 times per hour.
- [14] Do the following to check the AIR FLOW at the FEED SHELF:
- (a) If the processor is installed, deenergize the processor.
 - (b) Hold a piece of tissue paper in front of the FEED SHELF.

NOTE

The AIR FLOW should be **toward** the processor.

- (c) If the tissue paper moves away from the processor, call Customer Service for Health Sciences Monday through Friday from 8:00 a.m. to 5:00 p.m. Rochester, New York, time at (716) 724-1789. Then press "1".

Connecting the Main Power for an M35A Processor, 120 Volts Only

WARNING

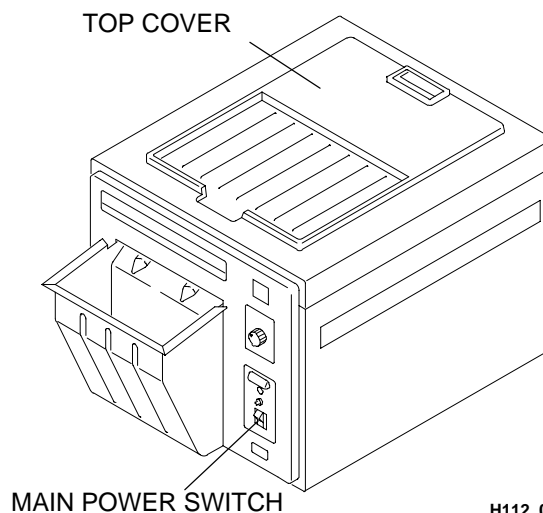
- Dangerous voltage.
- Possible damage from electrostatic discharge.

- [1] Check and use the Local Electrical Codes.
- [2] Consult with the customer about installing the POLARIZED RECEPTACLE.
- [3] Turn off the power to the wall outlet where the POLARIZED RECEPTACLE will be installed.
- [4] Install, or have the customer install, the POLARIZED RECEPTACLE.

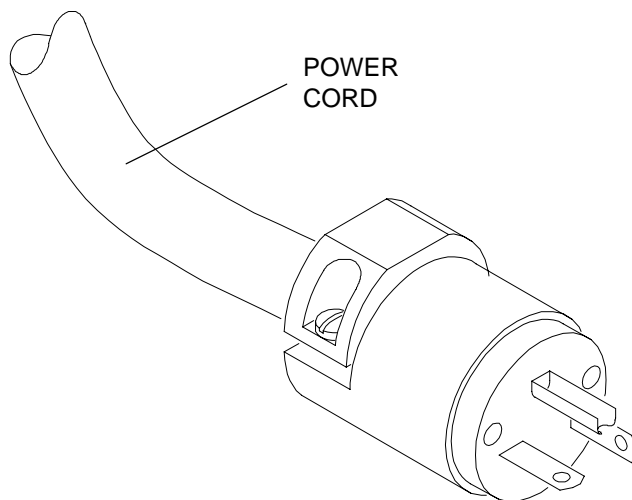
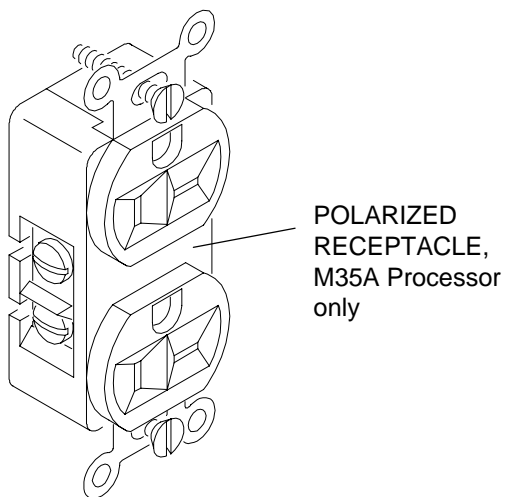
NOTE

The COVER PLATE is not supplied.

- [5] Move the MAIN POWER SWITCH on the processor to the "OFF" position.
- [6] Plug the POWER CORD into the POLARIZED RECEPTACLE.



H112_0089ACB
H112_0089AC



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Connecting the Main Power to an M35A Processor

Connecting the Power Cord on an M35 Processor, 220 Volts Only

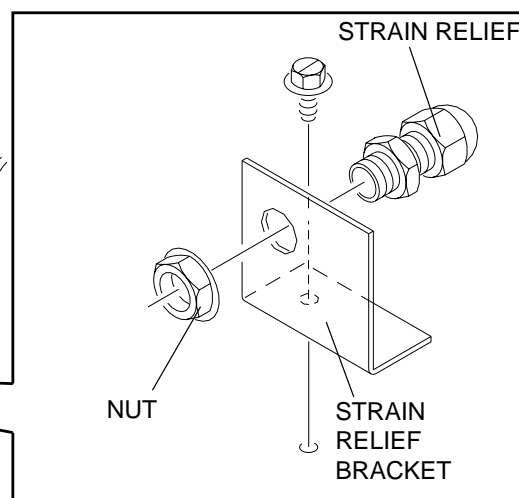
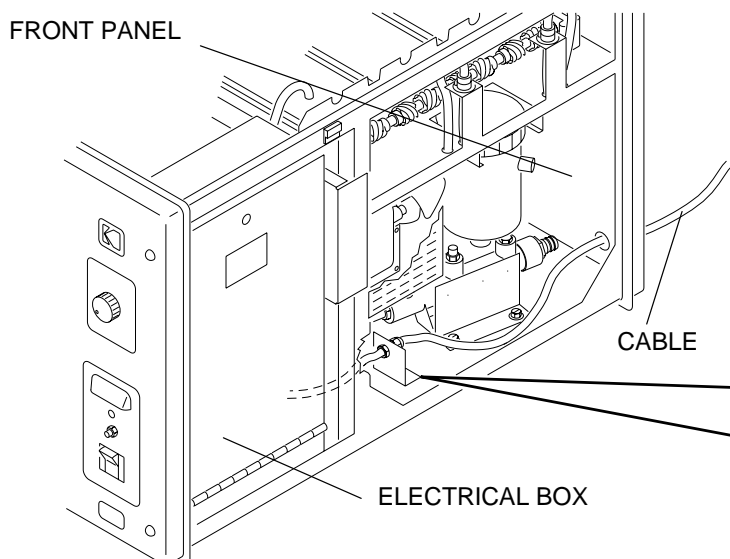
WARNING

- Dangerous voltage.
- Possible damage from electrostatic discharge.

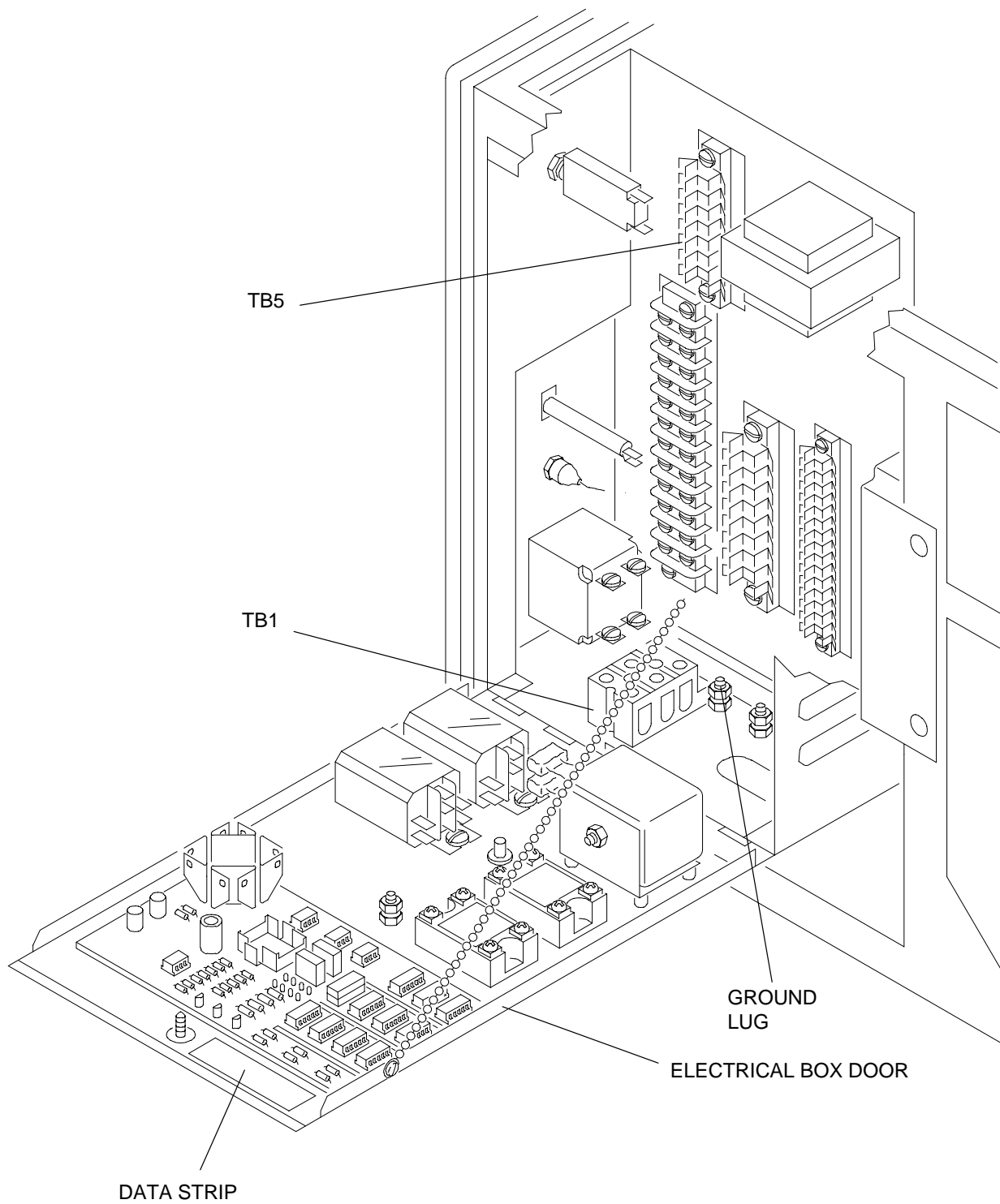
- [1] Check and use the Local Electrical Codes.
- [2] Disconnect the main power at the wall.
- [3] Move the MAIN POWER SWITCH to the "OFF" position.
- [4] Remove the TOP COVER and the drive SIDE PANEL, not shown.
- [5] Open the ELECTRICAL BOX DOOR.
- [6] Move wire No. 8A to the correct terminal on TB5.
- [7] Move JUMPER 8:

Volts	Position of Jumper 8
200 or 208	TB5-2
220	TB5-3
240	TB5-4

- [8] Apply the correct DATA STRIP inside the ELECTRICAL BOX DOOR to indicate the correct supply voltage.
- [9] Install the STRAIN RELIEF BRACKET inside the processor. See the illustration below.
- [10] Feed the CABLE through the FRONT PANEL.
- [11] Insert the CABLE through the STRAIN RELIEF.
- [12] Install the STRAIN RELIEF to the STRAIN RELIEF BRACKET with the NUT.
- [13] Feed the CABLE into the ELECTRICAL BOX.
- [14] Connect the incoming wires to L1, L2, and N of TB1. See the connection charts on the circuit diagrams on pages 29 and 30.
- [15] Connect the ground wire to the GROUND LUG. See the illustration on the next page.
- [16] Install the 2 WIRE TIES to the CABLE and the STRAIN RELIEF.
- [17] Close the ELECTRICAL BOX DOOR.
- [18] Install the drive SIDE PANEL and the TOP COVER.



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H112_0086EC

Connecting the 220 Volt Power Cord

Circuit Diagrams

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Preparing the Processor for Use

Checking the Tubing Clamps, Tanks, and Racks

- [1] Tighten and check all CLAMPS.

CAUTION

Check all CLAMPS 2 - 4 weeks after installing any new tubing. Tighten the CLAMPS if necessary. Although a CLAMP may be tight when tubing is installed, temperature changes or shrinkage of the plastic tubing will cause the CLAMP to loosen.

- [2] Check that the 3 WEIRS are installed and fully seated:

red in the developer TANK
blue in the fixer TANK
beige in the wash TANK

- [3] Fill the 3 TANKS **with water**.

- [4] Run the processor for a few minutes.

- [5] Check for leakage.

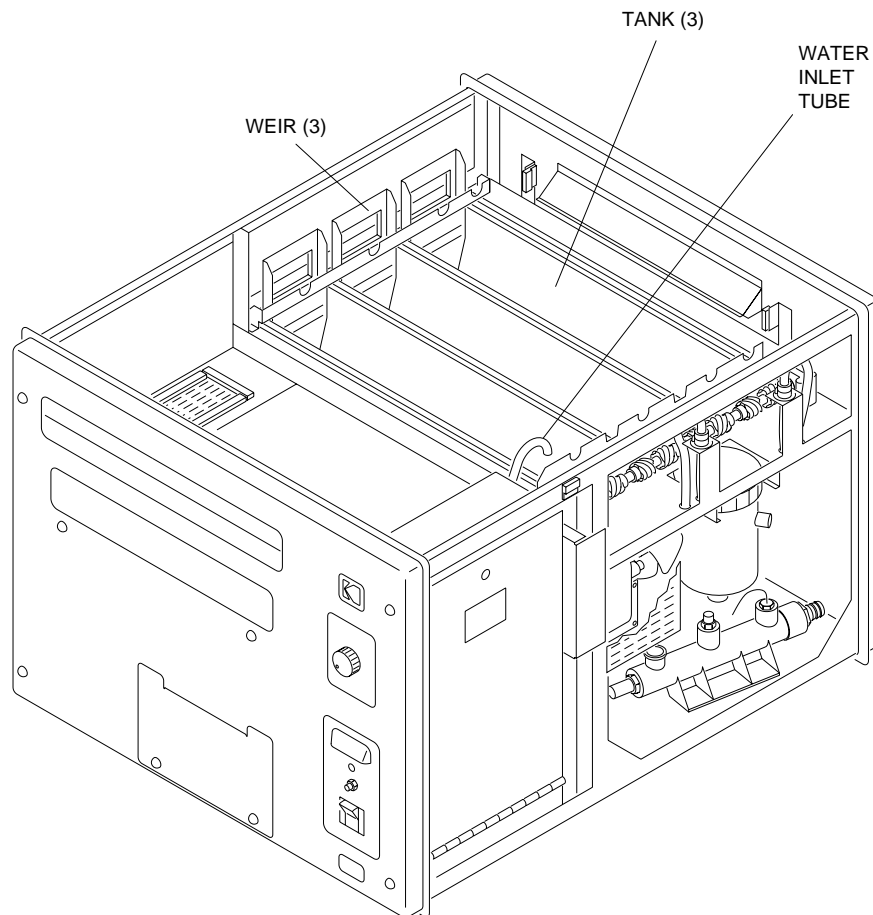
- [6] Drain the processor completely.

- [7] Rinse the DEVELOPER, FIXER, and WASH RACK ASSEMBLIES with warm water.

- [8] Rotate the ROLLERS manually.

- [9] Check that the ROLLERS rotate fully.

- [10] Check that all the moving parts engage correctly.



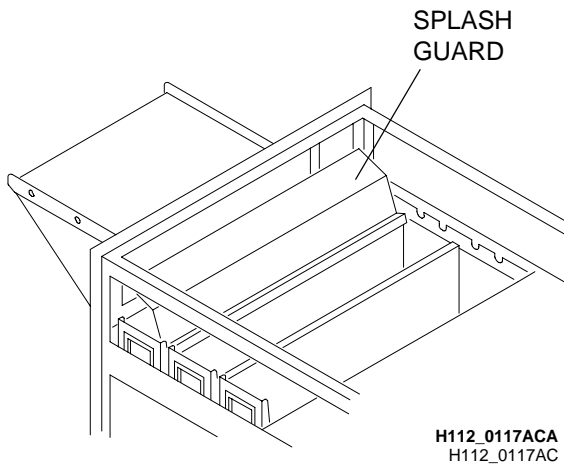
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Filling the Tanks

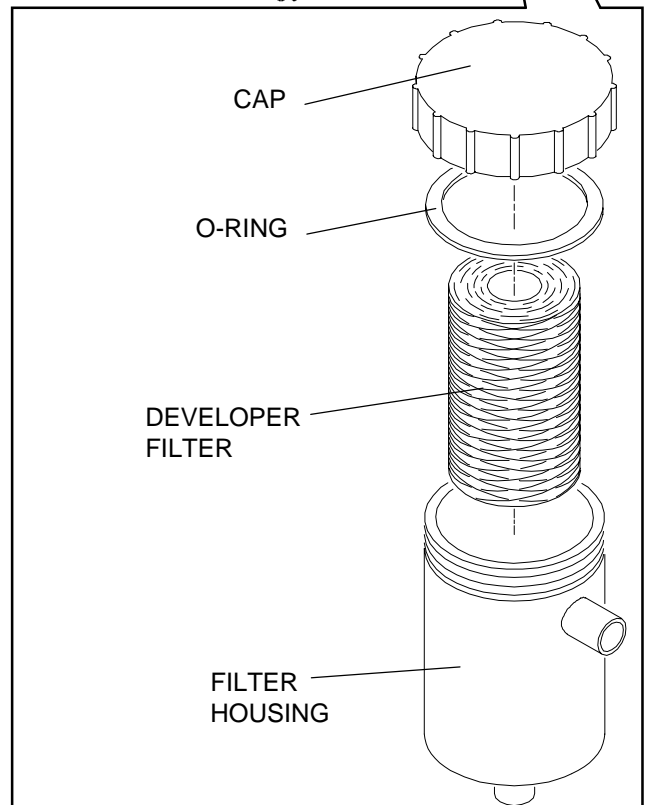
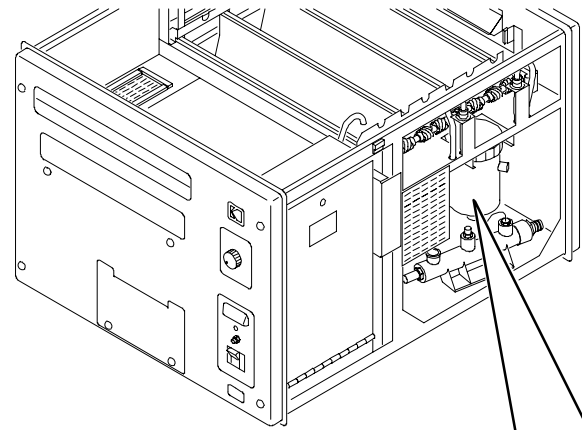
- [1] Soak the DEVELOPER FILTER for 30 seconds in warm water.
- [2] Insert the DEVELOPER FILTER into the FILTER HOUSING.
- [3] Check that the O-RING is seated correctly, or leakage may occur.
- [4] Tighten the CAP and install the FILTER HOUSING in the processor.
- [5] Check that the tubing is not kinked.

CAUTION

- Mix the developer first, then the fixer.
 - Wash the mixing equipment thoroughly between solutions to avoid contamination of the solutions.
 - Rinse the mixing and filling equipment before each use.
 - Fill the FIXER TANK first.
- [6] Install the SPLASH GUARD between the DEVELOPER TANK and the FIXER TANK.

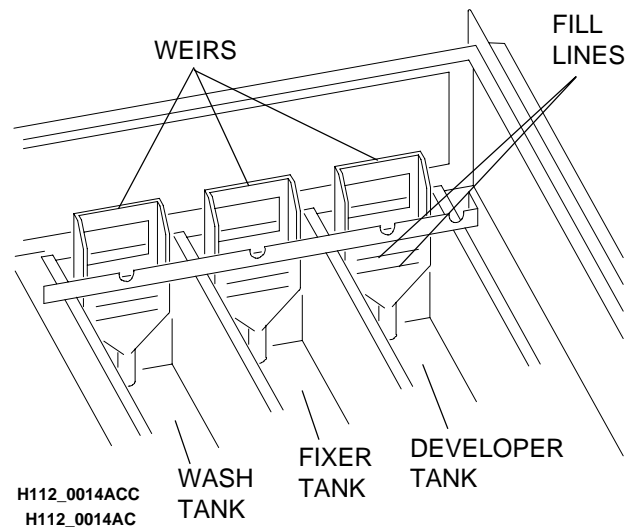


Splash Guard Installed Between the Developer and Fixer Tanks



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H112_0093CA

- [7] To fill the processor FIXER TANK, add fixer replenisher until the solution is at the higher FILL LINE on the blue WEIR.
- [8] Remove and rinse the SPLASH GUARD.
- [9] Install the SPLASH GUARD over the FIXER TANK.
- [10] To fill the processor DEVELOPER TANK:
 - (a) Fill the DEVELOPER TANK **half full** of developer replenisher from the replenishment tank.
 - (b) Add 190 mL (6.5 fl oz) of KODAK *RP* X-OMAT Developer Starter.
 - (c) Fill the DEVELOPER TANK to the higher FILL LINE on the red WEIR with developer replenisher.
- [11] Remove the SPLASH GUARD and rinse thoroughly.
- [12] Allow the developer to reach the operating temperature before processing any film.



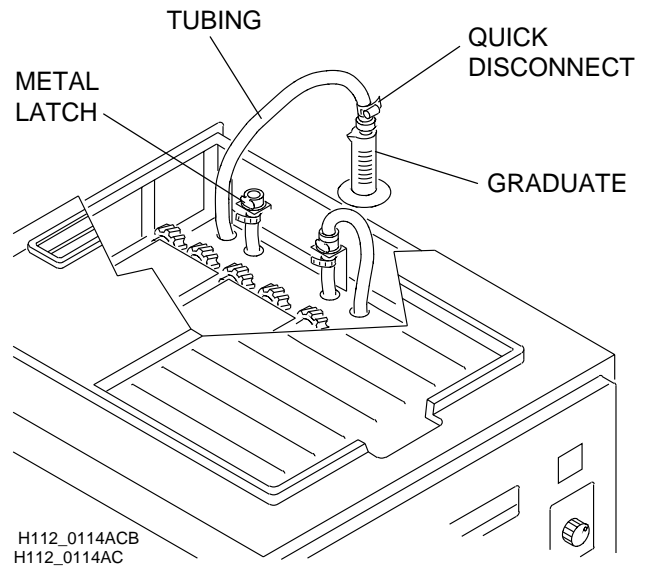
Checking the Replenishment Flow Rates

- [1] Remove the TOP COVER.
- [2] Lift the top DETECTOR ROLLER of the DETECTOR ASSEMBLY.

NOTE

The REPLENISHMENT PUMP will continue to operate for 3 seconds after releasing the DETECTOR ROLLER.

- [3] Check that the replenisher solutions flow freely through the TUBING along the drive side of the processor.
- [4] Press the METAL LATCH of the red QUICK DISCONNECT of the developer to disconnect the developer TUBING.
- [5] Pull the TUBING slightly by rotating the TUBING over the edge of the frame.
- [6] Insert the TUBING into a GRADUATE.



Checking the Replenishment Flow Rates

- [7] Lift the top DETECTOR ROLLER of the DETECTOR ASSEMBLY for the correct time, for 28 or 34 seconds. See the table below.
- [8] Check that the amount of developer in the GRADUATE is the same as in the table below.
- [9] Adjust the REPLENISHMENT PUMP if necessary. See page 36 for the adjustment procedure.
- [10] Repeat steps 7 - 9 if necessary.
- [11] Connect the QUICK DISCONNECT.
- [12] Repeat this procedure with the fixer TUBING to check the flow rate of the fixer.

Film Size Processed	Use Condition	Average Amount of Film per 8 Hours of Processor Operation	Replenishment Flow Rate			
			mL per 35 cm (14 in.) 28 sec of Film Travel		mL per 43 cm (17 in.) 34 sec of Film Travel	
			Developer	Fixer	Developer	Fixer
Only 35 x 35 cm (14 x 14 in.) film	High	90 sheets or more	50	70	.	
	Medium	60 sheets	65	85	--	--
	Low	30 sheets or less	80	100		
Average size film intermix	High	115 sheets or more	50	70	.	
	Medium	80 sheets	65	85	--	--
	Low	40 sheets or less	80	100		
Only 43 x 35 cm (17 x 14 in.) film	High	75 sheets or more			60	85
	Medium	50 sheets	--	--	80	100
	Low	25 sheets or less			100	120

NOTE

- KODAK *RP* X-OMAT Chemicals are recommended.
- Replenishment rates are based on one sheet of film.
- Film feeding orientation should be consistent for best results.
- Slight sensitometric changes will occur as subsequent films are processed through a freshly started process. This is known as "seasoning" and is normal with any photographic process. Process control aims may have to be adjusted slightly to compensate.
- For 30 sheets or less, flooded replenishment is recommended.

Adjusting the Replenishment Pump

- [1] Remove the TOP COVER and the RECEIVING BIN.
- [2] Loosen the 2 SCREWS and remove the PUMP COVER.
- [3] Actuate the DETECTOR SWITCH by lifting the top DETECTOR ROLLER of the DETECTOR CROSSOVER ASSEMBLY until the ADJUSTMENT SCREW is visible through the hole in the BRACKET.
- [4] Loosen the SETSCREW.

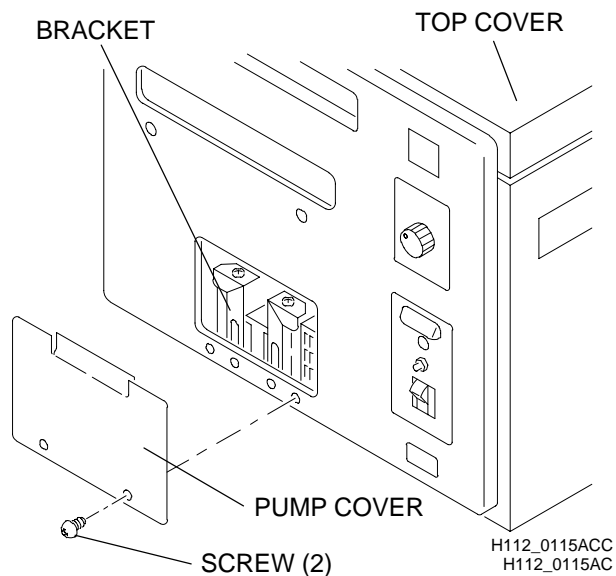
CAUTION

Do not adjust the LOCKNUT on the other end of the ADJUSTMENT SCREW.

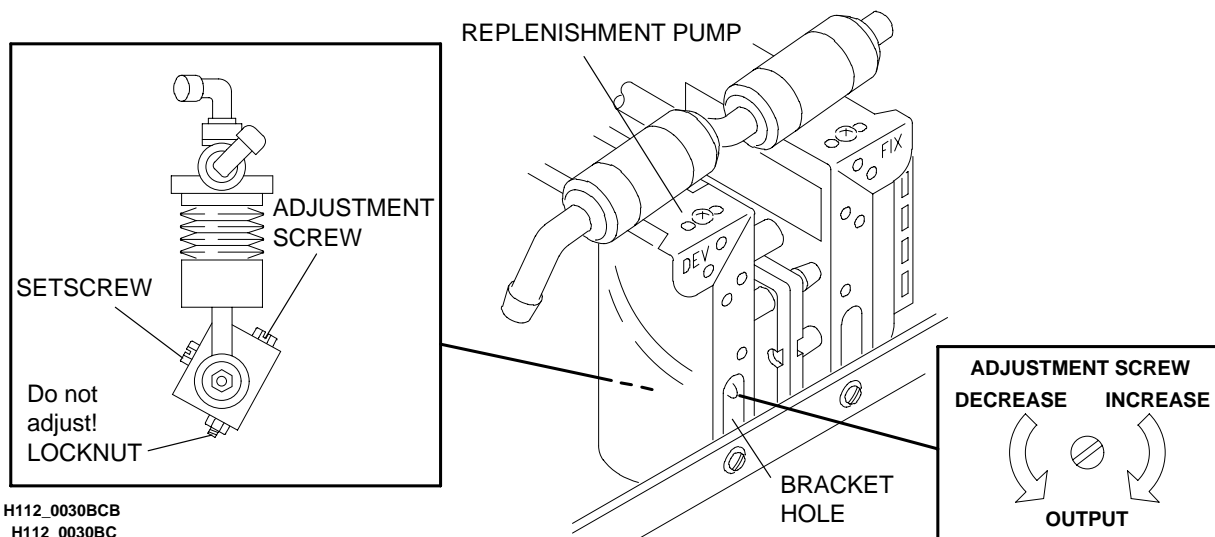
- [5] Rotate the ADJUSTMENT SCREW to adjust the flow rate.

clockwise ↻	to	increase the flow rate
counterclockwise ↺	to	decrease the flow rate

- [6] Tighten the SETSCREW.
- [7] Check the flow rates and do steps 2 - 6 again if necessary. See the table on page 35 for various replenishment rates.



- [8] Install the TOP COVER and the PUMP COVER.
- [9] Feed a sheet of film into the processor to check that the REPLENISHMENT PUMPS operate correctly. See the adjustment procedure for the Detector Switches in the Service Manual, Part No. 981777, if necessary.



Installing the Racks

CAUTION

Use the DRIP TRAY and SPLASH GUARD when you install or remove the RACKS. Lower the RACKS slowly.

- [1] Install the RACKS in the correct TANKS. Seat them firmly.

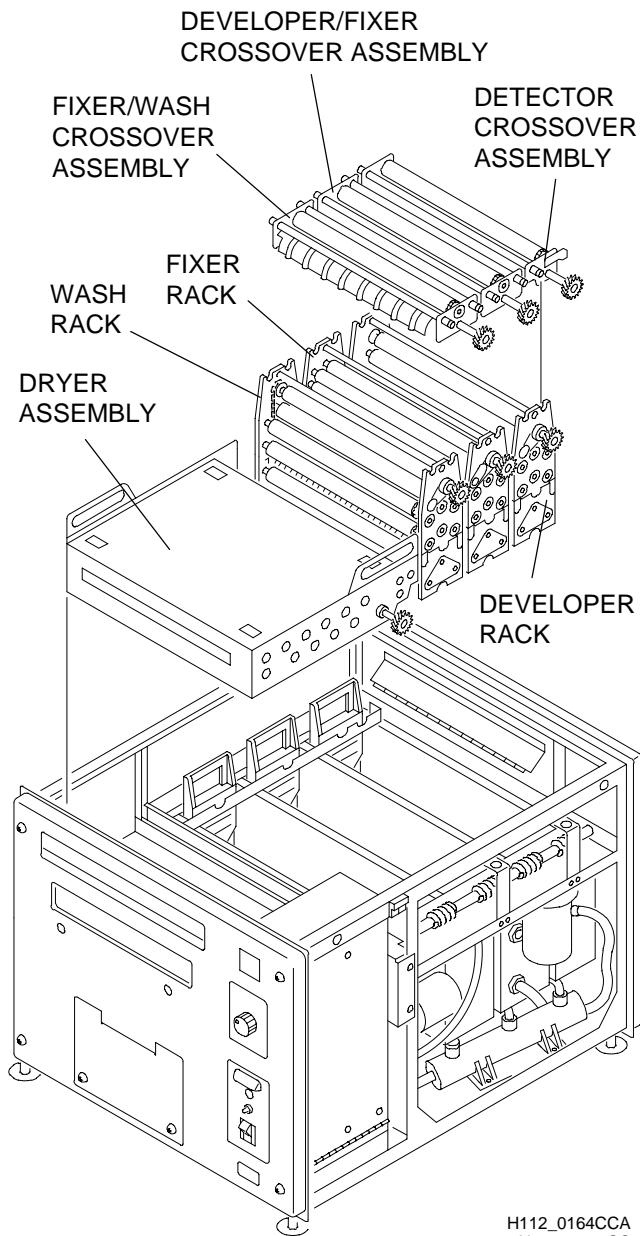
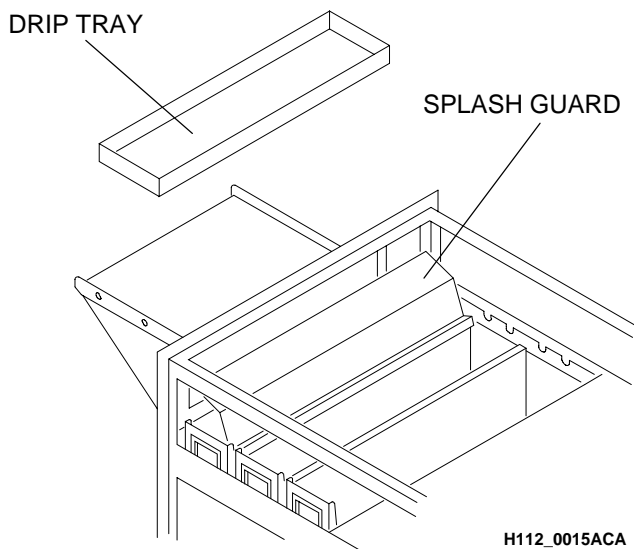
NOTE

The WASHER on the top of the drive side of the DEVELOPER RACK has a "D" on it. The one on the FIXER RACK has an "F". The RACKS may also have red, blue, and white wire ties for easy identification.

red	DEVELOPER RACK
blue	FIXER RACK
white	WASH RACK

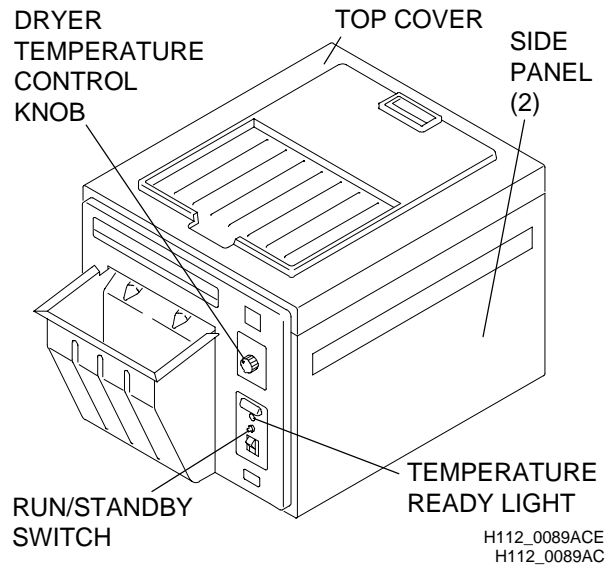
- [2] Install the:

- DEVELOPER/FIXER CROSSOVER ASSEMBLY
- FIXER/WASH CROSSOVER ASSEMBLY
- DETECTOR CROSSOVER ASSEMBLY
- DRYER ASSEMBLY
- EVAPORATION COVERS, not shown



Checking the Operation of the Processor

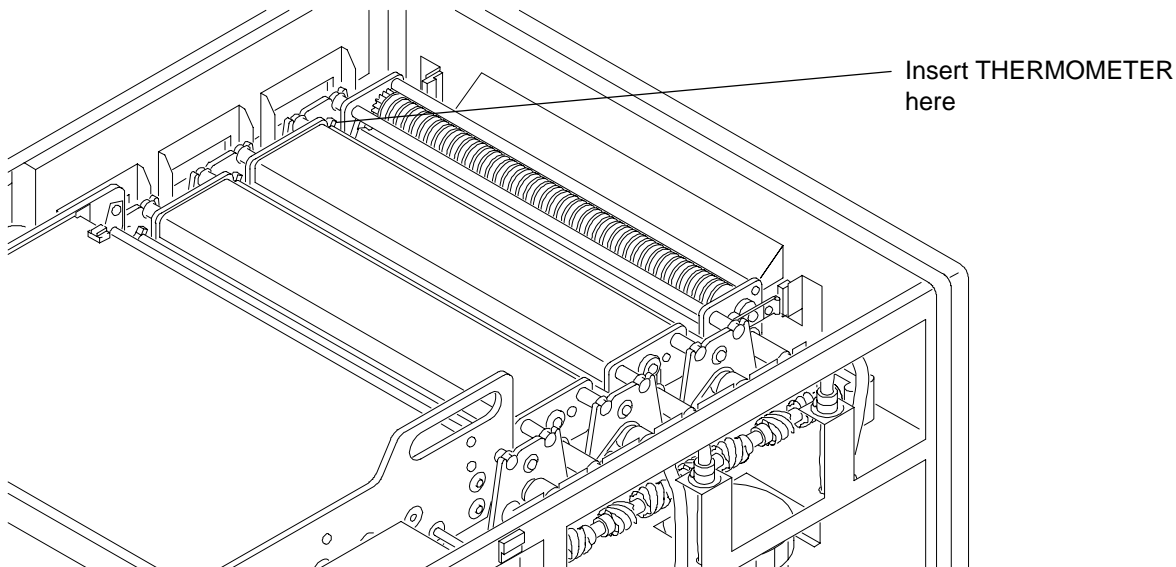
- [1] Turn on the water supply.
- [2] Energize the processor.
- [3] Check that the:
 - Developer and fixer have agitation
 - No leakage occurs
 - Solutions overflow into the WEIRS
 - Water flows into the processor
- [4] Install the 2 SIDE PANELS and the TOP COVER.
- [5] Check the operation of the RUN/STANDBY SWITCH.
- [6] Set the DRYER TEMPERATURE CONTROL KNOB to the minimum temperature necessary to provide dry film.
- [7] Check that warm air is coming out of the exhaust.



NOTE

The processor is now in the run mode.

- [8] When the TEMPERATURE READY LIGHT blinks, insert a THERMOMETER of known accuracy, such as Part No. 761217, into the DEVELOPER TANK on the non-drive side between the SIDE PLATE of the DEVELOPER RACK and the RACK SUPPORT.



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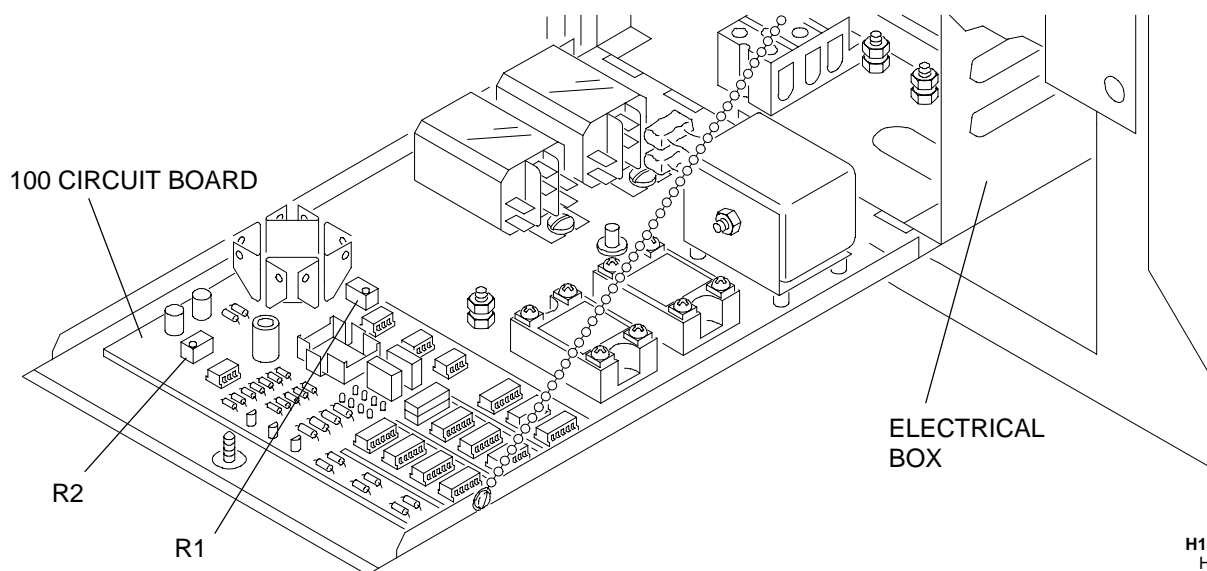
CAUTION

Possible damage from electrostatic discharge. Use the POTENTIOMETER ADJUSTING TOOL TL-1481 to prevent damage to the 100 CIRCUIT BOARD.

- [9] Check that the temperature is 33.3°C (92°F). If not, use TL-1481 to rotate R2 on the 100 CIRCUIT BOARD:

clockwise ↻	to	increase the temperature
counterclockwise ↺	to	decrease the temperature

- [10] With the DRYER and developer at the correct temperature, feed 3 or 4 test films to check the operation of the DETECTOR SWITCHES and the REPLENISHMENT PUMP.



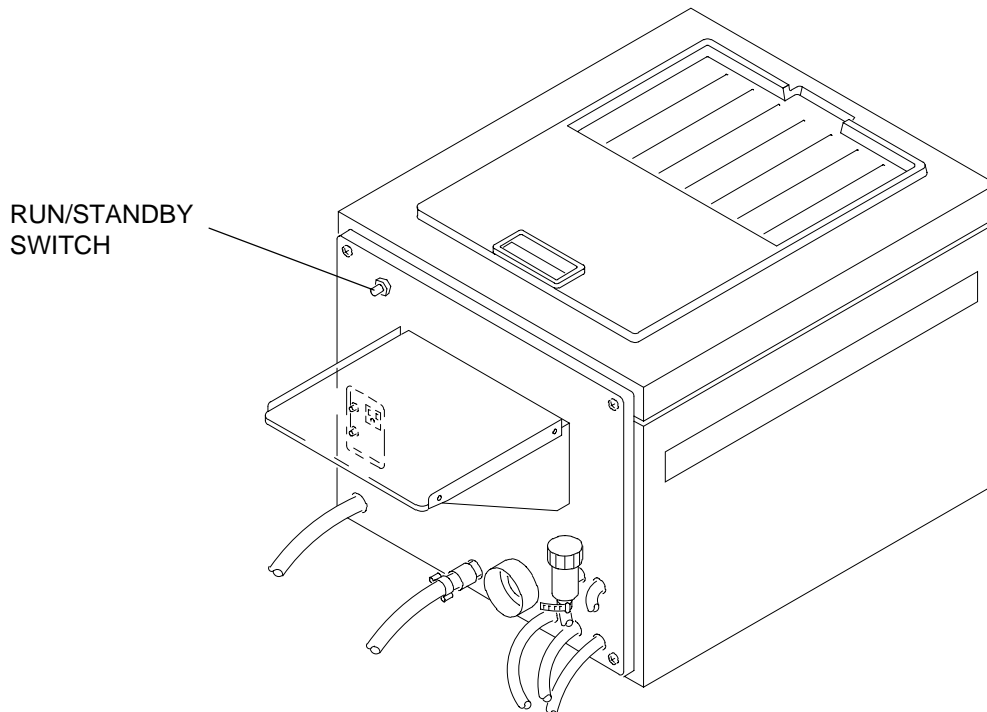
H112_0087BCB
H112_0087BC

Adjusting the Developer Temperature

- [11] To check the time required to process a sheet of film (Clear Time) do the following:
- (a) With the TEMPERATURE READY LIGHT blinking, press one of the RUN/STANDBY SWITCHES.
 - (b) The processor should operate (run mode) for 3 minutes.
 - (c) If an adjustment is necessary, turn R1 on the 100 CIRCUIT BOARD **clockwise** ↻ to **increase** and **counterclockwise** ↺ to **decrease** the cycle.

NOTE

The processor will remain in the standby mode when not in use, but will go into the run mode every 8 to 10 seconds if the temperature in the DRYER is not at the reading of the THERMOSTAT.



H112_0002DCA
H112_0002DC

New Equipment Warranty

Kodak warrants this KODAK M35 or M35A X-OMAT Processor to function properly for 6 months from date of initial installation, when installed within 1 year from the date of shipment.

Warranty Repair Coverage

If this equipment does not function properly during the warranty period, the Dealer in KODAK X-OMAT Processors who sold the equipment will provide or arrange for repair of the equipment during the dealer's normal working hours. Such repair service will include any necessary adjustments and/or replacement of parts necessary to maintain your equipment in good working order.

How to Obtain Service

Should equipment require service, refer to the sales contract for details on whom to call for service, or contact the Dealer in KODAK X-OMAT Processors who sold the equipment.

Limitations

Warranty service is limited to the contiguous United States, the island of Oahu in Hawaii, and certain areas of Alaska.

This warranty does not cover: circumstances beyond Kodak's control; misuse; abuse; any attachments, accessories, alterations not marketed by Kodak, (including service or parts to correct problems resulting from the use of such attachments, accessories or alterations); failure to follow Kodak's operating instructions; or supply items.

Kodak makes no other warranties, express, implied, or of merchantability for this equipment.

Repair without charge is Kodak's and the Dealer's only obligation under this warranty. **Kodak will not be responsible for any consequential or incidental damages resulting from the sales, use, or improper functioning of this equipment even if loss or damage is caused by the negligence or other fault of Kodak.** Such damages for which Kodak will not be responsible, include, but are not limited to, loss of revenue or profit, downtime costs, loss of use of the equipment, cost of any substitute equipment, facilities or services or claims of your customers for such damages.

This limitation of liability will not apply to claims for injury to persons or damage to property caused by the sole negligence or fault of Kodak or by persons under its direction or control.

Publication Change Table

Rev. Date	ECO No.	PCN No.	Pub. No.	Affected Pages	Description
September 1992	4014-318	1	981159	All	Supersedes Publications No. 635817 and 635038. The previous installation instructions for the M35 and M35A Processors were combined into one manual, and the information updated.

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Health Sciences Division

